The London School of Economics and Political Science

Trajectories of self-directed violence amongst women of reproductive age in Sri Lanka

Alexis Danielle Palfreyman

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Declaration

I certify that the thesis I have presented for examination for the PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

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The findings of this thesis have been presented three times at global conferences. The main findings of Chapter 3 have been incorporated into Sri Lanka's first National Women's Policy (Prime Minister's Office, 2018). Chapter 3 is under review at a peer-reviewed journal. Chapter 4 has been published under the following peer-reviewed journal reference:

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I declare that my thesis consists of 80,284 words.

Alexis Danielle Palfreyman

Abstract

This thesis contributes to an understanding of the scale of different dimensions of selfdirected violence (SDV) amongst women of reproductive age and the trajectories through which women engage in them, by presenting findings of primary and secondary data collected through extensive mixed-methods fieldwork in Sri Lanka. It responds to the marginalisation of the female experience and the fuller spectrum of SDV, as research has disproportionately invested in understanding the extreme outcome of suicide through a male lens.

Focused in one western district, it capitalised on women's attendance at antenatal services to isolate the prevalence of SDV amongst reproductive age women both before and during pregnancy and its potential correlates using innovative screening measures (n = 1000). Complementing this sub-focus on perinatal women, women's core health service provider – Public Health Midwives (n = 11) – shared in-depth accounts of their experiences of and responses to managing women's SDV. Establishment of a prospective surveillance system in Sri Lanka's second largest public hospital yielded data on trends in women's non-fatal self-harm and first-person accounts of women's pathways to a medically serious event (n = 210); analyses of in-depth interviews with 17 women are presented. Active case finding of known suicides in the district allowed for reflection on the current medicolegal system generating suicide data in this context as well as the insights of 32 women's deaths based on these archival data.

The findings of this thesis highlight high levels of mental distress, (intimate partner) violence and lifetime prevalence of SDV in Sri Lankan women. The particularities of women's gendered position in Sri Lankan society observed throughout this thesis such as sexual and reproductive health and rights, exposure to violence and expectations to embody respectable womanhood, emphasise the value of employing a gendered perspective to assess women's risk of self-directed violence and inform future policy and prevention efforts.

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For the brave and generous women who welcomed me into their stories, and to the dedicated health providers offering much more of themselves than their duties ask

Acronyms and Glossary

ANC	Antenatal care/clinic
aOR	Adjusted odds ratio
BHT	Bed Head Ticket
CNTH	Colombo North Teaching Hospital
CPMD	Common perinatal mental disorder
C-SSRS	Columbia-Suicide Severity Rating Scale
CoDD	Cause of death data
DCS	Department of Census and Statistics, Sri Lanka
EPDS	Edinburgh Postnatal Depression Scale
FHB	Family Health Bureau
FTZ	Free Trade Zone
GBD	Global Burden of Disease
GBV	Gender-based violence
HIC	High-income country/ies
НО	House officer
HSP	Health service provider
ICD	International Classification of Diseases
IPV	Intimate partner violence
ISD	Inquirer into Sudden Death
JMO	Judicial Medical Officer
КАР	Knowledge, attitude, and practice
LAMA	Left/leaving against medical advice
LMIC	Low- and middle-income country/ies
MCH	Maternal and Child Health
МОН	Medical Officer of Health (area)
МоН	Ministry of Health and Indigenous Medicine
MoJ	Ministry of Justice and Prison Reform
МоМСН	Medical Officer – Maternal and Child Health
PAMS	Psychological autopsy of maternal suicides
РНМ	Public Health Midwife/wives
RA	Research assistant (1 & 2)

RDHS	Regional Director of Health Services
REC	Research Ethics Committee
SDV	Self-directed violence
SEAR	Southeast Asia region
SIB	Suicidal ideation and/or behaviour
SI	Suicidal ideation
SRHR	Sexual and reproductive health and rights
UNFPA	United Nations Family Planning Association
UoK	University of Kelaniya
WHO	World Health Organization
WRA	Women of reproductive age (15-49)
YFS	Youth Friendly Service

Glossary

Amma	Mother
Атта	Mother

Denna demahalangeQuarrels between married couples last only until the pot of rice isada dabara bathacookedidenakung vitharai

Lajja / Lajja-baja Shame / Shame-fear

Mithuru PiyasaFriendly abode; Gender-based violence service housed in selectedpublic hospitals; termed Natpu Nilayam in Tamil communities

Pathiwatha A devoted and sexually pure wife

Room 16CNTH service providing Youth Friendly and GBV support for
patients aged below 29 years and women (all ages) affected by GBV

Sudu nona White woman

Key to Excerpts from Interviews

- ... Indicates removed text to shorten quotes; maintains sequence of participant's language
- [] Denotes additional information inserted by me and is not the direct language of participants

Interviews with health service providers are referenced by their clinical setting:

(Rural clinic midwife / Semi-urban and FTZ-serving midwife / Hospital-based midwife)

Interviews with surviving self-harming women and extractions from narratives of family and collaterals of deceased women are referenced with descriptors:

(Pseudonym, age, method of self-directed violence)

Chapter 1. Introduction

1.1 Background

Each year roughly 817,100 people die by suicide, with the vast majority of these deaths being preventable (World Health Organization (WHO), 2014; Naghavi, 2019). For every suicide, an estimated 25 others attempt (Tapola et al., 2015). An unknown number of persons engage in other forms of self-directed violence (SDV), which represent a continuum of thoughts and behaviours, which may or may not be suicidal in nature and may or may not hold fatal consequences (Crosby, Ortega and Melanson, 2011). Non-fatal SDV requiring inpatient or outpatient medical treatment is observed at considerably higher rates than suicide and is increasing in some contexts and subpopulations at tremendous cost to health services and society at large (Hanwella, 2013; Samarasinghe, 2013; Tapola et al., 2015).

Globally, momentum for suicide prevention is growing. In 2013, the World Health Assembly introduced suicide prevention to the global health agenda for the first time, aiming for a 10% reduction in global suicide rates by 2020 (WHO, 2014b). With the inaugural Global Mental Health Action Plan, endorsed by 194 countries, suicide was formally positioned within the burgeoning global mental health movement (Arensman, 2015). This international and high-level commitment to tackle suicide was reaffirmed by the Sustainable Development Goals' inclusion of an ambitious target to reduce global suicide rates by one-third between 2015 and 2030 (Naghavi, 2019). Yet just 3% of committed countries are on track to meet this target given current efforts (Naghavi, 2019).

Despite recognition of suicide's contribution to early and preventable deaths (GBD Collaborators, 2017), challenges persist in accelerating preventive action. Firstly, the current suicide prevention agenda propagates a primary focus on fatalities. While suicide represents the most extreme outcome of self-directed violence as a personal, public health and global tragedy (Fleischmann et al., 2005), it is just one behaviour across the spectrum of self-harming experiences. Our consequently more limited understanding of other dimensions of SDV inhibits prevention efforts as those with intention to end life

who survive non-fatal attempts form a pool from which later suicides come (Fleischmann et al., 2005). Perhaps more importantly, however, this narrow focus minimises the prominence and therefore care given to those suffering from diverse and distressing forms of SDV (Breet, Goldstone and Bantjes, 2018). SDV – beyond just suicide – remains deprioritised by the global public health community, governments and policymakers (Patel et al., 2012; WHO, 2014b).

Secondly, in order to develop informed responses, better mortality and morbidity data in myriad forms are needed. Calls for SDV research and surveillance of non-fatal events presenting to health facilities persist, in light of their impact on health systems and resources (Armstrong and Vijayakumar, 2018). Global efforts like the Sustainable Development Goals' increased investment in tracking injury morbidity and mortality and the Global Burden of Disease study which provides comprehensive annual statistics on self-harm around the world are commendable (GBD Collaborators, 2017; Naghavi, 2019). Yet underreporting and misattribution of SDV to other causes continue to varying degrees globally (Haagsma et al., 2016), and without efforts to ensure quality data in a given setting, "the true urgency of the situation" may be obscured (Pradhan et al., 2010, p.7).

These challenges of narrow focus and poor data are nowhere more pronounced than lowand middle-income countries (LMIC) which observe the double disadvantage of the greatest burden of SDV, with the least evidence. An estimated 79% of suicides occur in LMIC¹ (WHO, 2018). Despite this, more than 90% of the literature reflects studies conducted in high-income countries (HIC) (Phillips, 2004; Saraceno and Saxena, 2004; Pearson et al., 2014). South and Southeast Asia have chronically high rates of suicide (Ahmed et al., 2017), and contrary to declines detected elsewhere, have seen a 25% increase in SDV between 1990 and 2013 (India Suicide Collaborators, 2018). The Southeast Asia region (SEAR), as defined by WHO², is home to 26% of the world's

¹ LMIC member states' contribution to the global population of 81.7% places more people 'at risk' of SDV (WHO, 2014b).

² Sri Lanka is common to both South and Southeast Asian regional categorisations, but for the purpose of this thesis, will be referred to as a SEAR country as suicide-related efforts remain the primary purview of the World Health Organization within the UN system. WHO defines SEAR as 11 Member States: Bangladesh, Bhutan, Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand, and Timor-Leste. South Asia includes Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka as defined by World Bank and Global Burden of Disease. I have indicated where data are specific to a South Asian categorisation.

population, but is the single largest regional block contributing to global suicides, with nearly 40% of all fatalities (WHO, 2014b; Ahmed et al., 2017). SEAR faces elevated rates of suicide in women (13.9 per 100,000³) (WHO, 2014b), and increasing awareness of perinatal suicide's (i.e. suicide in pregnancy through one-year postpartum) contribution to pregnancy-related deaths (Fuhr et al., 2014). With SDV amongst women considered "exceptionally high by international standards" (Armstrong and Vijayakumar, 2018, p.1), women in SEAR, including those in the perinatal period, are a subpopulation in need of focused attention (Beeson et al., 2018). SEAR's female population has been the subject of limited research efforts (Armstrong and Vijayakumar, 2018), with the majority of regional literature concerning India (WHO, 2014b; Ahmed et al., 2017).

Sri Lanka, however, offers a notable opportunity, with over two decades of academic research on suicide on which to build (Pearson et al., 2014). With a growing recognition of SDV amongst its reproductive age and perinatal women, "lessoned [sic] learnt in Sri Lanka would have regional significance" (Pearson et al., 2014, p.96). Synthesising primary and secondary data representing multiple perspectives, this thesis aims to develop a deeper discourse on the magnitude of SDV amongst Sri Lanka's reproductive age women, as well as examining why women in this context may select SDV in the manner they do and at the time that they do in their lives. The remainder of this Introduction frames the thesis, by first presenting global, regional and national evidence on women's self-directed violence, and highlights key substantive and methodological gaps to which this thesis aims to contribute. Empirical analyses of mixed-methods fieldwork in western Sri Lanka are then presented through a series of four papers.

1.2 Existing Evidence and Knowledge Gaps on Women's Self-directed Violence

1.2.1 Trends in Women's Self-directed Violence

Suicides account for 71% of violent deaths in women globally and contribute heavily to premature deaths in women of reproductive age (WRA) (15-49) (WHO, 2014b), ranking

³ The latest GBD study on suicide mortality delineates the South Asia region rather than SEAR. It reinforces South Asia's leading contribution to female suicides maintaining the highest age-specific mortality rate for women of any global region (12.6 per 100,000) (Naghavi, 2019).

as their fourth leading cause of death (Lozano et al., 2012). In recent years, suicide has oscillated as first or second leading cause of death for adolescent girls (15-19 years) (Petroni, Patel and Patton, 2015; WHO, 2017), with more adolescent females dying from SDV globally than males the same age (Naghavi, 2019). In SEAR, roughly 9% of deaths amongst WRA are attributed to suicide, with an unknown degree of underreporting (WHO, 2014b). Bimodality of age-specific suicide rates is observed amongst women in the region unlike elsewhere, as female suicides appear especially pronounced in both young and elderly cohorts (Naghavi, 2019). Evidence on adolescent girls in SEAR positions suicide as their leading cause of death and at higher rates than their male counterparts (at 28 and 21 per 100,000 population respectively) (Jordans et al., 2013; WHO, 2014b). Globally and regionally, women experience the highest rates of suicidal ideation and self-harming behaviours, including attempts, and yet across global contexts suicide, and self-directed violence more broadly, remains viewed as a 'male problem' (Canetto, 2009; Vijayakumar, 2015).

Perinatal women are a particular subpopulation of growing concern given the rising impact of maternal suicides on maternal mortality. As obstetric causes of maternal death continue to fall globally, deaths due to trauma, including suicide, are emerging as significant contributors to preventable deaths in pregnancy and the postnatal period (Romero and Pearlman, 2012). Suicide accounts for approximately 2.19% of pregnancy-related deaths in Southeast Asia (Fuhr et al., 2014). However, the issue receives little attention globally, with no research pre–1990s. Non-fatal dimensions of self-directed violence among perinatal women are explored even less (Fuhr et al., 2014). In LMIC, data on non-fatal suicidal behaviours in perinatal populations have only recently become available (Orsolini et al., 2016; Supraja et al., 2016; Onah et al., 2017).

1.2.2 The Marginalisation of Women in Suicidology

"Complicated, contradictory and uneven" (Jaworski, 2014, p.15) efforts to explore gender in SDV means literature focusing on WRA across contexts, but particularly in LMIC, is scarce. This disenfranchisement of women in suicide-related research dates back to the pioneering work of Emile Durkheim (1951). SDV statistics have historically focused on suicide as the outcome of interest, leading to the near total elimination of empirical findings for generations on attempted suicides and other self-harming behaviours, all of which are predominately associated with women (Kushner and Sterk, 2005).

First, only specific sorts of empirical data determined the interpretation of suicide – and these were based on the actions taken by men. Secondly, without being excluded entirely from the picture, women remained more or less invisible. The problem, however, was not only about who was part of the picture. Instead, statistics...presumed that what was male about suicide was self-evident and neutral...Based on outcome, determined by mortality rates, suicide is male and masculine. To kill oneself is not only a male phenomenon but also a 'masculine type of behaviour'. (Jaworski, 2014, pp.22-23)

Beyond statistics, explorations of motives behind SDV in women are also influenced by gendered assumptions and polarising and pejorative language (Canetto and Lester, 1995), constantly comparing them to men (i.e. the 'norm') rather than exploring their experiences intrinsically. For example:

Emotional weakness and internal turmoil are seen as significant in interpreting women's suicides as a result of relationship breakdowns. In contrast, men's suicides are signs of courage, pride and resistance against external circumstances...the [latter] is a symptom of public social upheavals and the [former] a symptom of individual pathology. Because of these differences, women's motives are not taken seriously enough, and more often than not are seen as irrational, ambivalent and as ploys for attention; ploys that are thus about something else other than suicide. (Jaworski, 2014, pp.25-26)

Suicidology⁴ and related fields, reflecting practices of the global health community, have "largely omitted gender-specific analyses and actions" (Horton, 2019, p.511). Where literature explores the female phenomenon, it develops hypotheses on the basis of the male experience (Canetto and Lester, 1995). This has resulted in "a unidimensional view" of SDV, as with many global health issues (Hawkes, Haseen and Aounallah-Skhiri, 2019, p.499; Horton, 2019). A "lack of attention to serious questions about gender is not a matter of missing the mark, but missing the topic altogether" (Jaworski, 2014, p.30). Canetto and Lester (1995), as leading scholars on gender and suicide, called for a long-overdue concentration on women over 20 years ago, and yet relative to men, the evidence on women's SDV has grown slowly, contributing to a broader abdication of responsibility "for achieving gender justice in health" (Horton, 2019, p.511).

⁴ I.e. the study of suicidal behaviour and suicide prevention, and increasingly non-suicidal dimensions of SDV

1.2.3 Underexplored Factors in Women's Self-directed Violence

Suicidology and other relevant disciplines have explored a variety of issues contributing to SDV in men and women including, but not limited to, demographic and socioeconomic characteristics, physical and psychological conditions, environmental factors and some social circumstances. For LMIC women, however, four areas remain especially underdeveloped.

1.2.3.1 The role of mental health in women's SDV

Efforts to converge discussions on the role of mental health in women's SDV have developed a focus on individual psychological determinants and often assume major psychopathology⁵ (Canetto and Lester, 1995). Driven by research in HIC, evidence contends that more than 90% of all suicide cases involve serious mental disorder (WHO, 2014b), with some studies suggesting a stronger link between poor mental health and suicide in women (Qin, Agerbo, and Mortensen, 2003). The 90% statistic pervades discourse across contexts, despite growing challenges from critical suicidologists questioning its origins from what are increasingly perceived as methodologically flawed studies (Hjelmeland and Knizek, 2017). In LMIC, and Asia specifically, mounting evidence indicates mental disorders are considerably less prevalent in suicides (Colucci and Lester, 2013; WHO, 2014b; Naghavi, 2019). This lower prevalence possibly both reflects and reinforces resistance to mental disorder's role in LMIC suicides, particularly the influence of depression.

Depression is the most common mental disorder associated with suicide, with frequent inference of a causal relationship. Causation is, however, progressively refuted by scholars who observe that 95% of persons with depression do not suicide, making this act an exception, not a rule (Colucci and Lester, 2013). Further, while depression is consistently found to be more prevalent in women globally, suicide rates are persistently higher in men (Adinkrah, 2011). Unclear relationships between suicide rates, treatment and prescribing levels for depression, and presence of psychiatric services exist across settings – paradoxical if depression is causative of suicide (Hjelmeland and Knizek, 2017).

⁵ (Diagnosable) mental disorder or psychological impairment

In SEAR, prevalence of depression in those who die by suicide varies widely (6.9% - 51.7%) (Ahmed et al., 2017), never approaching the 90% statistic, and the mechanisms through which depression may influence self-harming tendencies is unknown (Colucci and Lester, 2013).

Substance misuse is the next commonest mental disorder cited in global SDV literature, as one in five suicides are reportedly affected by alcohol, while illicit drug use is positively associated with multiple dimensions of SDV (Breet, Goldstone and Bantjes, 2018). For women in SEAR, alcohol misuse's correlation to SDV works indirectly – albeit strongly – through male drinking behaviours, partly reflective of women's substantially lower consumption of alcohol (Tyagi and Mehta, 2013; Sørensen et al., 2017). A paucity of studies on substance abuse and SDV persists from low- and lower-middle income nations, particularly in South Asia (Breet, Goldstone and Bantjes, 2018). (Illicit) drug use has been largely ignored in regional literature, as has gender's possible mediating role in substance misuse and SDV. As rates of substance misuse are climbing among men in the region, women's vulnerability to SDV may be similarly heightened (Sørensen et al., 2017).

The majority of research on perinatal suicide, overwhelmingly HIC-focused, isolates prevalence of suicidal ideation viewed principally through the lens of postnatal depression, neglecting the antenatal period and ignoring the possibility of suicidal ideation outside the context of this specific mental disorder. In high-income settings, suicidal ideation is not uncommon and presents similarly between pregnant and nonpregnant populations, suggesting pregnancy does not have a 'protective effect' (Gavin et al., 2011). A small but growing body of research from LMIC shows a tendency towards *higher* rates of suicidal ideation in the perinatal period compared to Western contexts, from 7.6-27.5% in Bangladesh, India and South Africa (Lindahl, Pearson, and Colpe, 2005; Gentile, 2011; Rochat et al., 2011; Supraja et al., 2016; Onah et al., 2017). Rising interest in maternal mental health is encouraging ad-hoc research with LMIC perinatal women, but a focus on postnatal depression and suicidal ideation limits knowledge on other timeframes and dimensions of mental health, beyond the narrow conceptualisation of disorders (Fisher et al., 2012; Orsolini et al., 2016; Patel et al., 2018; Tran et al., 2018). Screening programmes for mental disorders are far less common in LMIC so less is known about the validity and acceptability of Western concepts of mental ill-health including depression and suicidal ideation and other features of perinatal mental health (Coker and Stowe, 2014).

In light of SEAR's inflated observance of SDV among WRA, including perinatal women, its relationship with mental health and specifically mental disorders like depression must be better understood (Ahmed et al., 2017).

1.2.3.2 <u>Women's status, violence and sexual and reproductive health and rights</u> (SRHR)

Women in LMIC and SEAR especially may have heightened vulnerability to SDV given their gender-determined subordinate social standing. In addition to partner's alcohol consumption, religious doctrines practiced regionally and pressures of, "childbearing [and childlessness in marriage], child marriage,...restrictions on partner choice, dowry expectations and reduced earning capacity" (Pradhan et al., 2010, p.49) may impact selfharming risk. Only a handful of studies have been conducted in LMIC on these issues (Adinkrah, 2011; Devries et al., 2011; Kizza, Kinyanda and Hjelmeland, 2012; Canetto, 2015; Sørensen et al., 2017). In Western literature, a protective effect of marriage is observed (though more strongly for men than women) (Payne, Swami and Stanistreet, 2008). However, this is unsubstantiated in LMIC and especially Asian contexts where vulnerability in marriage to issues such as separation from natal families to join patrilocal ones and exposure to gender-based violence (GBV) may outweigh the protective effect (Canetto, 2009; Pradhan et al., 2010; Adinkrah, 2011).

GBV being "both a cause and a consequence of women's low status" (Pradhan et al., 2010, p.54), may be related to SDV indirectly as it holds serious potential consequences for women's mental health. Furthermore, as an entrenched framework within which many women in SEAR function, GBV may limit their ability to recognise the need for support and/or limit opportunities to access it. GBV may also work directly to elicit acts of SDV by redirecting violence on oneself as a coping and situational response (Gentile, 2011). A large-scale multi-LMIC study found strong associations between experiences of violence and suicidal ideation and behaviour (SIB) in women (Devries et al., 2011). The roles of sexual violence, rape and intimate partner violence (IPV) as forms of GBV have been explored to a more limited extent in LMIC (Chowdhary and Patel, 2008; Mahesh, Tamang

and Iqbal, 2011). While little evidence exists on the role of GBV in *perinatal* suicides (Romero and Pearlman, 2012), studies from Nepal identified IPV – chiefly psychological abuse – as commonplace in maternal cases (Pradhan et al., 2010). Contemporary research from LMIC finds IPV is positively correlated with non-fatal SIB in antenatal women (Onah et al., 2016; Supraja et al., 2016; Halim et al., 2017).

LMIC evidence suggests there are negative impacts of operating within traditionally patriarchal systems and family structures, common to South and Southeast Asia, on women's SRHR (Mattebol et al., 2016). Additional issues of SRHR potentially relevant to women's SDV include abortion, childbirth outside of marriage, unplanned pregnancy, and giving birth to devalued children (e.g. those with disabilities), though very little literature addresses them outside HIC (Canetto, 2008; Adinkrah, 2011). Considering having an abortion has been linked with suicidal ideation (da Silva et al., 2012), and women who have an induced abortion may be up to six times more likely than women who delivered in the previous year, and twice as likely as those who experienced a miscarriage, to attempt suicide (Gentile, 2011; Miranda-Mendizabal et al., 2019). Post-abortion suicide attempts may be acts of desperation, though this needs further investigation (Gentile, 2011). Abortion is often associated with unplanned pregnancy, but research presents conflicting evidence, with some concluding it is not 'meaningfully' linked to SDV (da Silva et al., 2012).⁶ In HIC, suicidal ideation is associated with stillbirth or admission to a psychiatric ward resulting in separation from one's infant (Romero and Pearlman, 2012). Finally, links between contraceptive use, sexual risk taking, sexually transmitted infections and HIV, trafficking and sex work with SDV receive insufficient investigation (Houck et al., 2008; Shahmanesh et al., 2009; Zimmerman, Hossain and Watts, 2011; Keyes et al., 2013).

The constellation of issues related to SRHR, women's status, and experiences of violence all require further attention.

⁶ Abortion remains illegal in Sri Lanka with exceptions made in extreme circumstances of saving a woman's life. This additional dimension of legal restriction and the potential role of illegal and/or unsafe terminations for women's mental health warrant consideration.

1.3 Self-directed Violence in the Sri Lankan Context

Having historically had one of the world's highest recorded suicide rates at 47/100,000 population by the mid-late 1990s (Pearson et al., 2014), Sri Lanka's suicide phenomenon:

...has been analyzed from a wide range of disciplinary perspectives including medical, sociological, cultural, historical, as well as a range of sectoral perspectives comprising health, agriculture, and development. (p.90)

Yet gaps and disagreement in the literature persist.

1.3.1 Trends in Self-directed Violence in Sri Lanka and WRA

Though deaths by suicide have decreased considerably since the late 1990s (Knipe, Gunnell and Eddleston, 2017), this has been largely due to restricted access to means⁷ and improved treatment of particular forms of self-poisoning⁸ (Pearson et al., 2014). Over this same period, non-fatal self-harm continued to rise (Knipe, Metcalfe and Gunnell, 2015). SDV endures as the country's second leading cause of life years lost to premature death, surpassing diabetes and road traffic accidents (GBD Collaborators, 2017), and contributes to SEAR's considerably higher levels of self-harm than elsewhere in the world (India Suicide Collaborators, 2018; Naghavi, 2019). In 2017, WHO ranked Sri Lanka among the five countries with the highest suicide rates globally, and in the top three countries for female suicide, alongside Guyana and South Korea (WHO, 2014b). However contestation over WHO's estimates grew, cautioning their use due to concerns over data quality, and stressing the limitations of modelling built on data affected by underreporting, missingness, and weak information systems for methods other than poisoning. WHO's prevailing statistics have since been overturned through the introduction of new evidence, developed using advanced methodologies. Analyses of police data from 1975–2012 found years of over-estimation had grossly misrepresented Sri Lanka's suicide epidemic by up to 26% (Knipe, Metcalfe and Gunnell, 2015). Sri Lanka

⁷ E.g. Banning of WHO Class I pesticides began in 1984 and continued with the most recent full banning of paraquat, dimethoate and fenthion in 2011 (Knipe et al., 2017a)

⁸ E.g. Improvements have been noted in treatment of certain pesticides, plant and biological substances (Rajapakse, Griffiths and Christensen, 2013)

now ranks nearer 27th position globally for suicide incidence at a rate of 14 per 100,000 population (Knipe et al., 2017a; WHO, 2018).

The range of reported female suicide rates is broad and conflicting, from 7.9 (Knipe et al., 2017a) to 17.8 per 100,000 (Koslow, Ruiz and Nemeroff, 2014). No estimates are without flaws, and district-level statistics have not been made public in years (Widger, 2014a). An average of 808 known female suicides was reported annually in police data from 2005-2018⁹ (Sri Lanka Police, 2019), but rates for women are expected to be underestimated to a greater extent than men (Knipe et al., 2014a). In contrast to other contexts (except China), Sri Lanka observes its highest female suicides in younger age groups (Knipe et al., 2014a), with 20-25% of female suicides in girls below 21 years (Senadheera, 2013; Sri Lanka Police, 2019).

There is general consensus, reaffirmed by recent epidemiological research that SDV is increasing despite falling deaths (Knipe, Metcalfe and Gunnell, 2015). Anecdotal evidence suggests hospital admissions from SDV grew 300% between 1994-2014, with over 93,000 Sri Lankans admitted for poisoning per year (Widger, 2014a). From 2004–2010, poisoning admissions rose dramatically in women (270 to 421 per 100,000) further pressurising an already resource-strapped public health service (Knipe et al., 2014a). For every female suicide an estimated 13 women attempt (Widger, 2014a), and an unknown number engage in other dimensions of SDV which may go unreported. Identifying patterns in women is hindered however by the lack of disaggregated data and years of missing police and national hospital admissions data (Knipe et al., 2014a). There is no national protocol for recording SDV in hospital admissions. Private services are exempt from reporting¹⁰ and some parts of the country have weaker information systems¹¹.

While statistics and epidemiological data on suicide in the general population were being debated, perinatal suicide surfaced as a key concern amongst the maternal health community in Sri Lanka (WHO Sri Lanka, 2018b). By 2014, those responsible for reaching

⁹ Police data were not made available for public use for calendar years 2010, 2012, 2013

¹⁰ There are 82 private facilities in Sri Lanka offering 4210 inpatient beds (5-10% of total inpatient capacity). More than half of these are concentrated in Colombo, while other parts of Western Province and urban areas host most of the rest. Private health facilities notably account for more than 50% of outpatient services (World Bank, 2014). ¹¹ E.g. Northern and Eastern Provinces

internationally agreed targets to reduce maternal mortality and deliver broader improvements in maternal health under the Sustainable Development Goals – to which Sri Lanka has committed – took notice (Agampodi et al., 2014; WHO, 2016b). In 2016, the Ministry of Health's Family Health Bureau (FHB), through its Maternal and Child Morbidity and Mortality Surveillance System, introduced a new specialised process for investigating maternal suicides. However, findings of these confidential inquiries are not disseminated and aggregate findings from all-cause maternal death inquiries are only periodically publicly shared (Jayaratne, 2018).

Literature on Sri Lanka has focused on rural sectors and pesticide poisoning as the historically preferred method of SDV (Pearson et al., 2014). Substantial investments have been made to evaluate two large-scale prevention initiatives addressing both regulation and safe storage of lethal pesticides (Pearson et al., 2015; Knipe, Gunnell and Eddleston, 2017). However, method substitution has occurred in recent years, with sharp decrease in pesticide use and an upturn in hanging and – among women – prescription and medical self-poisoning. Other methods include drowning, firearms, cutting/stabbing, self-immolation and jumping from a height or in front of vehicles or trains (Knipe et al., 2014a), but these too receive scant attention in the evidence base. As method preferences change to those less amenable to such interventions (e.g. hanging), maintaining this emphasis to the neglect of emerging and currently underexplored patterns in women has stalled progress – observed by women's more intractable suicide rates (Knipe et al., 2014a).

1.3.2 Context and Psychosocial Factors in Women's SDV in Sri Lanka

Of 149 studies conducted 1970–2008, only 11 explored issues of gender (Pearson et al., 2014), highlighting a clear gap in "social sciences research exploring the sociological, psychological and other underlying dimensions" (Pearson et al., 2014, p.95) related to WRA. For Sri Lanka's perinatal suicides, only two publications exist, and neither reflects on the role pregnancy or motherhood may have played in these incidents (Fernando, 2011; Agampodi et al., 2014). SRHR more broadly, GBV, and issues of early and newly married women have almost no presence in the literature. Other factors highlighted by the literature for further research include the role of migration in women's SDV (Knipe et

al., 2017c; Widger, 2014b); shifting gender roles (Marecek, 2006) and potentially related issues of shame, honour and hierarchy (Rajapakse, Griffiths and Christensen, 2013); class, socioeconomic status and religion (Widger, 2014b); and intent (Marecek, 2006; Widger, 2009; Senadheera, 2013).

1.3.3 Mental Health's Controversial Role in SDV in Sri Lanka

Despite Sri Lanka's leading efforts as a LMIC scaling up mental health policy and practice, efforts specifically addressing mental health's role in SDV are restricted (Mental Health Directorate, 2005; Williams and Mendis, 2011). Sri Lanka's literature tends to take a firm position for or against mental health's relevance to SDV, or ignores it entirely, with some researchers declaring imposition of Western-conceived notions of mental disorder and others suggesting that as services are limited and poor in many parts of the country, mental disorder's role is under-detected, undertreated and poorly understood (Pearson et al., 2014; De Silva et al., 2016). In 2018, Sri Lanka's College of Psychiatrists took a public position at their annual conference declaring themselves the most appropriate profession to lead national suicide prevention efforts. Yet perspectives of the mental health sector are underrepresented in Sri Lanka's SDV evidence base (Samarasinghe, 2013). There is no evidence in Sri Lanka on the role of chronic stressors¹², hopelessness and very little on family history of suicide (Rajapakse, Griffiths and Christensen, 2013), all highly relevant in other settings. In the only two psychological autopsy studies conducted, both report a prevalence of 37% moderate to severe depression, high levels of alcohol abuse (49% among men), and some psychiatric - particularly anxiety disorders, none of which were diagnosed while decedents were still alive (Abeyasinghe and Gunnell, 2008; Samaraweera et al., 2008). A single study on depression among those with non-fatal suicide attempts by self-poisoning found 51.1% demonstrated presence of depression (Rajapakse et al., 2014).

With regard to WRA, screening for postnatal depression is the *only* mental health issue inscribed in national policy under the current pregnancy care programme (Agampodi and Agampodi, 2013). However, the extent to which this is implemented is questionable and

¹² E.g. Lack of social support, deprivation, chronic illness, etc.

currently unsubstantiated by research. Mental health of women during pregnancy is not systematically assessed and only one international publication exists on antenatal depression (Agampodi and Agampodi, 2013). This is potentially crucial given at least 48% of maternal suicides occurred *during* pregnancy from 2002–2010 (Jayaratne, 2013) and antenatal depression holds consequences for trajectories of pregnancy, labour and delivery, postnatal mental health and children's health and development into their own adolescence (Fisher et al., 2012). Minority populations of perinatal women including Tamil-speaking women and those with low literacy have been entirely overlooked by national research. Systematic assessment for suicidal ideation and previous suicidal behaviours has no feature in the literature amongst women or perinatal women specifically. Given the controversy in current conceptions of mental health and its potential relevance to SDV, scholars have called for development of a more emic psychological framework (Widger, 2014a), further efforts to consider the relevance of Western screening tools, and a broader public health approach that explores mental health as *an* issue in women's SDV, rather than *the* issue (Armstrong and Vijayakumar, 2018).

1.3.4 Methodological and Disciplinary Approaches in Research

Gaps exist in terms of methodological and disciplinary approaches in suicidology, with specific consequences for understanding the female phenomenon. Research across the broader spectrum of SDV from both epidemiological and socio-cultural perspectives is lacking (Gavin et al., 2011). The vast majority of scholarship, including that exploring perinatal women, focuses on suicide as the outcome of concern or estimating prevalence of suicidal ideation, employing epidemiological and clinical approaches in HIC (Lindahl, Pearson and Colpe, 2005). Qualitative and sociological research looking 'beyond the numbers' has been considerably side-lined (Fincham et al., 2011; Hjelmeland and Knizek, 2017). Less than 3% of all published articles in the three leading suicide research journals 2005–2007 were qualitative (Hjelmeland and Knizek, 2010), and editors of a leading academic journal in suicidology – *Suicide and Life-Threatening Behavior* – have openly refused to publish qualitative evidence (Hjelmeland and Knizek, 2017). The intentional exclusion of qualitative research delegitimises not only an entire epistemology of knowledge on SDV, but the paradigm of qualitative enquiry altogether (Hjelmeland and

Knizek, 2017). Additionally, of 30,000 published papers on suicide from 1980–2009, only 400 incorporated sociological approaches (Agerbo, Stack and Petersen, 2009). Psychosocial approaches exploring the duality of both individual and social issues are rarer still (Fincham et al., 2011). The continued prioritisation of positivist and fatality-focused research limits generation of much-needed evidence:

As long as studies continue to emphasize fatal suicidal behavior instead of suicidal [or self-harming] behavior in general, we will continue to be trapped in a maze of circular reasoning in which the result of <u>some</u> [emphasis original] self-destructive behavior is relied on to explain the causes for <u>all</u> [emphasis original] self-destructive behavior. Certainly, if we wish to understand why similar circumstances do not always result in a suicidal act, we must examine suicidal behavior, not just the outcome. (Canetto and Lester, 1995, p.29)

As a consequence of restricted methodological and disciplinary approaches in suicidology, first-person narratives contributing to developing discourse have also been largely omitted – presented as both unreliable and unscientific (Hjelmeland and Knizek, 2017; Bantjes and Swartz, 2019). In Sri Lanka specifically, Pearson and colleagues' (2014) systematic review of national evidence found only 11% of studies used any qualitative methods, just 16 studies explored any social aspect of the phenomenon, with none taking a psychosocial approach. Psychological autopsy has been applied twice, however both studies' data are somewhat dated (1997; 2007), focused on rural sectors, and have methodological or ethical limitations (Abeyasinghe and Gunnell, 2008; Samaraweera et al., 2008). First-person accounts are exceedingly rare (Marecek, 2006; Marecek and Senadheera, 2012), with calls for research to prioritise lived experience (De Silva et al., 2016). The majority of studies are retrospective with little information gathered prospectively or on non-fatal events of SDV (Samarasinghe, 2013; DCS, 2017; Knipe et al., 2017b; 2018). This absence of more mixed approaches examining all dimensions of SDV (i.e. not just suicide), marginalises the materiality of the self-harming life and those it affects in Sri Lanka and beyond.

1.4 Theoretical Framing: Feminist Critical Realism

The enduring debates over the role of mental health in SDV in Sri Lanka and elsewhere, and the limited methodological and disciplinary approaches commonly employed in SDV

research are partly a consequence of researchers' metatheoretical orientations to the subject. Much SDV research lacks clarity on researchers' ontological (relating to reality) and epistemological (relating to knowledge) perspectives or leaves readers to infer researchers' orientations based on their selected methodology, discipline and/or language.

Historically, the polarised positions of positivist or constructivist philosophies have presented explanations of mental (ill-)health and suicide in the form of biological and sociological research respectively (Bergin, Wells and Owen, 2008; Patel et al., 2018). The biomedical perspective in particular has dominated mental health and SDV research and discourse evidenced by the preponderance of quantitative, experimental studies that assume minimal researcher influence (Lincoln and Guba, 2005; Bergin, Wells and Owen, 2008; Hjelmeland and Knizek, 2017). This is especially so for research on the origins of and treatments for depression. Under the biomedical paradigm, developed in Western and high-income countries, perinatal depression, for example, is believed to derive from physiological changes that occur in pregnancy and/or the postnatal period and include, but are not limited to women's nutritional status and micronutrient deficiencies, hormonal changes, and over- or under-production of neurotransmitters (Klainin and Arthur, 2009). Suicide and suicide attempts have been tethered to the biomedical model by way of the 90% statistic stating that more than 90% of those who die by suicide exhibit depression and/or other serious mental disorder(s) at the time of death (WHO, 2014b), i.e. depression is presented as 1) a prerequisite for suicidal behaviour and 2) is biological and modifiable within the individual alone. However, growing criticism of the positivist orientation from scholars and health providers asserts that it discounts and even disallows for human agency (Houston, 2001), and that the biomedical view of depression as a concept is "vague", "inadequate", and "deficient for a full investigation of the social and political circumstances that contribute to 'human misery'" (Bergin, Wells and Owen, 2008, p.175). Consequently, the 90% statistic faces mounting scrutiny by critical suicidologists, particularly those representing LMIC (see 1.2.3.1) (Hjelmeland and Knizek, 2017).

In Asia's LMIC, the biological standpoint on (perinatal) mental health and SDV has been comparatively less developed, with context specific research more heavily emphasising life circumstances and psychological factors, further challenging the 90% statistic (Klainin and Arthur, 2009; Colucci and Lester, 2013). This alternative viewpoint, offering sociological and psychological theories such as "cognitive, behavioural, learned helplessness, and self-control models" (Klainin and Arthur, 2009, p.1356), more commonly represents researchers aligned with a social constructivist orientation, in which reality is viewed as subjective and conclusions about the nature of SDV, depression and mental health are mediated by experience and interpretation, including the researcher's (Lincoln and Guba, 2005). Yet mental health and SDV research underpinned by this orientation has also been criticised for being too relativistic, ignoring or minimising structural, institutional and material – including biological – realities of those experiencing poor mental health and SDV such as physical pain and suffering, which may operate independently from an individual's thinking (Bergin, Wells and Owen, 2008).

Based on review of the evidence, neither of these competing paradigms is sufficiently able to achieve inclusivity of the dual subjective and objective realities that may be relevant to women's experiences of SDV and potentially associated matters of mental health. Furthermore, current extant – and chiefly positivist – research is "dominated by males... [which misses] many of the issues specific to women... [and presents] theories... [which] distort the experiences of women in the accounts that are collected" (Robson, 2011, p.384). Finally, neither paradigm is bent toward action (Lincoln and Guba, 2005), i.e. they fail to use the research process to move the marginalised experiences of women to the centre of SDV discourse. As such, this thesis employs a feminist critical realism as an alternative metatheory that "allows various understandings and explanations for gender, mental health and [SDV] to coexist and avoids the incomplete positions of positivism and constructivism" (Bergin, Wells and Owen, 2008, p.177).

Roy Bhaskar's critical realism "builds on the constructivist insight that all knowledge is a product of its social context, but has overcome the relativist trappings of naïve or 'strict' constructionism by taking account of the effects of objective reality" (Houston, 2001, p.852). This metatheoretical framing holds that a reality exists regardless of whether it is (knowingly) subjectively experienced, and that it is shaped over time by "social, political, cultural, economic, ethnic, and gender values" or 'structures' (Bhaskar, 1978; Lincoln and Guba, 2005, p.165). Critical realism strives to achieve depth of understanding and

explanation of the mechanisms through which power, social structures/values, and human agency are activated to produce particular patterns or 'tendencies' (Houston, 2001; Lincoln and Guba, 2005). In this thesis, this concerns the pathways pushing or pulling women towards self-directed violence. Bhaskar claims that research is not value-free and "requires social scientists to adopt a critical, methodical and systematic approach... to understand and explain behaviour [such as SDV]... [and] (re)discover the causal mechanisms within the person, their social networks and wider society which give rise to suffering and oppression" (Houston, 2001, pp.851-853).

This emancipatory nature of critical realist research in which oppression and social structures contributing to human distress should be identified and critiqued also reflects the principles of feminist research. Feminist theorising at its core aims to redress power imbalances and end the marginalisation of women's lived experience (Robson, 2011). This study explicitly responds to this evident need given the limitations of previous SDV research and the shifting perspectives of key stakeholders championing mental health and suicide prevention, such as the *Lancet* Commission on Global Mental Health (Patel et al., 2018) and the United Nations:

Regrettably, recent decades have been marked with excessive medicalization of mental health... including in the treatment of depression and suicide prevention. The biased and selective use of research outcomes has negatively influenced mental health policies and services. Important stakeholders... have been misinformed... Biomedical interventions will remain as an important treatment option for [some]... however, we should not accept... biomedical interventions be commonly used to address issues which are closely related to social problems, unequal power relationships, violence and other adversities that determine our social and emotional environment. There is a need of a shift... from focusing on "chemical imbalances" to focusing on "power imbalances" and inequalities. (Pūras, 2017)

Acknowledging criticism that feminist theory can risk essentialising women (Sprague, 2016), this thesis is underpinned by a modified feminist critical realism that does not assume a totalising or uniform oppression of patriarchy (Houston, 2001) and encourages intersectional analyses to better understand why women's trajectories through SDV may differ despite operating within a confluence of similar social structures.

My chosen metatheoretical framework, acknowledging methodological and substantive overlaps between feminist and critical theory (Sprague, 2016), supports this thesis' overarching research objective to identify, analyse and explain the individual and social mechanisms contributing to multiple dimensions of self-directed violence amongst women of reproductive age in Sri Lanka. Both qualitative and quantitative research methodologies are valued by this framework, as are mixed designs which may encourage a more comprehensive and cumulative explanation of SDV in this context (Lincoln and Guba, 2005; Bergin, Wells and Owen, 2008). My selection of feminist critical realism, recognising the role of human agency including that of women, health service providers, family and others in actively transforming and being transformed by women's trajectories through SDV, further emphasises that first-person accounts are an "indispensable starting point of social enquiry" (Houston, 2001, p.851).

1.5 Research Objectives and Questions

This thesis views self-directed violence as a continuum of thoughts and behaviours (Crosby, Ortega and Melanson, 2011), and explores women's experiences of each dimension of this spectrum (Figure 1), responding to the substantive and methodological gaps presented.

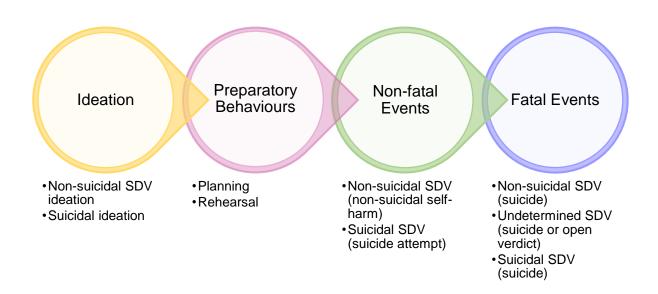


Figure 1. Continuum of self-directed violence

Three primary research questions drove this thesis:

- 1. Amongst an antenatal population in Gampaha District, Sri Lanka: (Chapter 3)
 - a. What is the prevalence of depressive symptomology indicative of depression?
 - b. What is the lifetime and current pregnancy prevalence of suicidal ideation and/or behaviour (SIB)?
 - c. What is the relationship between depression and SIB?
 - d. What correlates of depression and SIB can be identified?

- 2. For WRA who have engaged in self-directed violence, what is the incidence of fatal and non-fatal events?
 - a. What is the incidence of suicide among WRA, including perinatal women, in Gampaha District? (Chapter 5)
 - b. What is the incidence of non-fatal SDV among WRA, including perinatal women, in Colombo North Teaching Hospital? (Chapter 6)

These first two questions worked to establish the prevalence of common mental health and SDV-related issues in an antenatal population, and incidence of both suicides and non-fatal SDV in WRA in a focused geographic area of the country. This contributes to improved understanding of the magnitude of women's SDV in this context. Answering the first two research questions required active case finding and identification of relevant health service providers (HSP), enabling the third research question, and qualitative component of the study, to be addressed:

- 3. What are the pathways through self-directed violence amongst Sri Lankan WRA, as understood
 - a. By health service providers? (Chapter 4)
 - b. Through the lived experience of women themselves? (Chapter 6)
 - c. Through the narratives of surviving families/collaterals¹³? (Chapter 6)

1.6 Thesis Structure

This thesis is presented as a thesis by papers. This Introduction (Chapter 1) situated the thesis within the global, regional, and national evidence base on women's self-directed violence. Chapter 2 provides details of the mixed-methods fieldwork undertaken to generate data on which Chapters 3-6 are based. The thesis is concluded in Chapter 7, synthesising findings from the empirical and methodological pillars of this work. Each chapter is briefly outlined below.

¹³ Collaterals are those unrelated to the decedent, but who had a close relationship as to warrant knowledge of the decedent's life circumstances and relevant information about the event in question.

Chapter 2 provides an expanded view of the methodology employed to generate primary data and gather secondary data over a 14-month period in western Sri Lanka. Herein, I rationalise the use of mixed-methods for this research and reflect on the challenges and qualities of selected methods that are not addressed in the empirical papers' shorter methods sections (Chapters 3-6).

Chapter 3 addresses the absence of existing data on common perinatal mental disorders and SIB among LMIC and antenatal women. This chapter is the first-known research to use the Columbia-Suicide Severity Rating Scale with perinatal women. From a sample of 1000 pregnant women, I present the prevalence of antenatal depressive symptomology, lifetime- and current pregnancy SIB and their correlates, and discuss opportunities for improved detection of psychosocial vulnerabilities through the antenatal platform.

Chapter 4 presents the first published research exploring midwives' understanding of and responses to self-directed violence amongst women. Given their critical role as health providers for women globally and in Sri Lanka specifically, the response of midwives to women engaging in or at risk of SDV may affect women's care and treatment outcomes. Informed by in-depth interviews and focus groups with 11 Public Health Midwives, this chapter presents midwives' perceptions of and experiences with SDV-practicing women, and reflects upon their potential to help or harm in light of capacities, mentalities, and resourcing in this low-resource setting.

Chapter 5 explores how Sri Lanka's suicide inquest files are gathered, packaged, and made available for use as a commodity of research. In LMIC, deaths due to suicide are especially challenging to accurately deduce, with implications for quality of cause of death data that shape our understanding of suicide mortality patterns and provide a critical resource for health policy and planning. To date, suicidology has given little attention to discussions of suicide data provenance in any particular context. Using Sri Lanka as a case study, this chapter documents a local model commodity chain for generating suicide inquest files. It explores the capacities and limitations of these data, how they are situated in relation to other local sources of suicide data, and their political, informational, and research significance for understanding female suicide in Sri Lanka.

Chapter 6 contributes to theory building by developing an emic conceptual framework to understand women's trajectories through SDV in urbanising western Sri Lanka. Limited research explores SEAR women's experience of SDV despite their sizeable contribution to global SDV statistics, and calls persist for targeted research on reproductive age women to inform gender-sensitive prevention efforts. This chapter analyses primary data from 17 in-depth psychosocial interviews with surviving SDV-practicing women and narratives from 20 suicide inquest files on WRA applying Interpretative Phenomenological Analysis.

Chapter 7 concludes the thesis by summarising each of the substantive chapters, followed by a highlighting of this study's contributions to knowledge gaps, with an emphasis on the centrality of gender, and issues of violence, sexual and reproductive health and rights, economic hardship and mental health. Policy, programmatic and legal implications are presented, and opportunities for future research proposed.

Chapter 2. Research Design and Fieldwork Methodology

To answer the research questions, I conducted fieldwork to generate new evidence and isolate potentially fruitful existing data sources on the female experience of self-directed violence, employing a feminist critical realist approach. A substantive theory of SDV was not pre-selected as although critical realism can support the use and critique of extant substantive theory, feminist perspectives query matters of power and representation within existing SDV explanatory frameworks (Bergin, Wells and Owen, 2008; Robson, 2011; Sprague, 2016). Further, the under-developed evidence base both topically and contextually rendered *a priori* hypotheses-testing ill-suited to structure the study's design and fieldwork (Robson, 2011).

This chapter presents the research methodology, with focused reflection on the formative and field-based activities. Intentionally detailed, it provides rich description of the choices and circumstances that converged to yield the study's original data and their rationalisation. Detailed descriptions and justification of data analyses are contained in the individual empirical chapters (3, 4, and 6). Additionally, active case finding of suicides in the study district emerged as a particularly complex issue and, given its previous neglect in the literature, is explained in depth in Chapter 5. The current chapter supplements the concise methodological information contained in the paper-based empirical chapters which disallow for expanded discussion on fieldwork and methodology.

2.1 Use of Mixed Methods

The outstanding and varied questions regarding women's SDV in Sri Lanka relate to issues of scale, features and experiential trajectories. No one methodological approach could address them effectively. Most published SDV research (roughly 97%) takes a quantitative approach (Hjelmeland and Knizek, 2010), and mixed methods have rarely been used in Sri Lankan SDV research, despite repeated calls for qualitative contributions by relevant scholars (Pearson et al., 2014; Sørensen et al., 2017; Knipe et al., 2018).

Multi-strategy studies are methodologically congruent with feminist critical realism given its inclusive ontology supportive of combining "both intensive and extensive research practices" (Lincoln and Guba, 2005; Bergin, Wells and Owen, 2008, p.176). They can offer more complete understandings of complex phenomenon like self-harm and suicide and may be better-suited to addressing multiple related research questions than a single methodology. Mixed methods can also be combined in a variety of ways, prioritising one over the other or in a more balanced capacity. This qualitatively-led study comprises of three core fieldwork components applying psychosocial methods to explore both the individual and the social, offering multiple perspectives on the SDV experience in women (Fincham et al., 2011) and includes 1) Antenatal Screening, 2) Active Case Finding, and 3) Qualitative Inquiry. Within this dual paradigms approach, quantitative and qualitative methods were introduced in phases, ultimately interconnecting and operating concurrently.

Figure 2 presents the timing of each component of data collection throughout 2016, and visually conveys their interrelatedness. This deliberate complementarity was employed, "to ensure that different aspects of [the] investigation [could] be dovetailed" (Fincham et al., 2011, p.42), with evidence generated as the study progressed informing subsequent decisions and supporting triangulation of findings (Robson, 2011).

Research question	Data collection methods	Data analysis methods	Location within the thesis
Component: Antenatal Scr	eening		
 Amongst an antenatal population in Gampaha District, Sri Lanka: a. What is the prevalence of depressive symptomology indicative of depression? b. What is the lifetime and current pregnancy prevalence of SIB? c. What is the relationship between depression and SIB? 	Survey with women 15- 49 years attending selected antenatal services in Gampaha District screening for presence of depressive symptomology, suicidal ideation and previous self-harming behaviours	Descriptive, bivariate and multivariable logistic regression analyses (aided by SPSS v21, IBM)	Chapter 3

Table 1. Method matrix

d. What correlates of depression and SIB can be identified?			
Component: Active Case F	Finding		
For WRA who have engaged in self-directed violence, what is the incidence of fatal and non-fatal events, including perinatal women?	Active case finding through District suicide inquest files and prospective surveillance of WRA presenting to Colombo North Teaching Hospital for (non-fatal) SDV	Descriptive statistics, e.g. frequencies and sociodemographic characteristics (aided by SPSS v21, IBM) Feminist commodity chain analysis (aided by NVivo	Chapters 5 and 6
	307	11, QSR International)	
Component: Qualitative Ind	quiry		
What are the pathways through self-directed violence amongst Sri Lankan WRA, as understood by affected families/collaterals, women themselves and health service providers?	In-depth interviews applying modified psychosocial autopsy methods or brief narrative interviews with surviving patients and families affected by SDV Semi-structured in-depth interviews or focus group discussions with health service providers	Application of Interpretative Phenomenological and Thematic Analyses for women's and health providers' data respectively (aided by NVivo 11, QSR International)	Chapters 4 and 6

The pluralism of critical methods in both data generation and analyses makes a methodological contribution as well as supporting the substantive aims to explore the magnitude and materiality of experiences of SDV in women, and the way in which SDV is understood by those it affects (Bergin, Wells and Owen, 2008; Fincham et al., 2011) (see Table 1). First, Antenatal Screening utilised attendance at antenatal clinics (ANC) to estimate the number of currently-pregnant WRA with lifetime experiences of SDV including during pregnancy and explored potential mechanisms of risk for this experience. Second, Active Case Finding was staggered and identified confirmed suicides in the district through the use of archived suicide inquest files, and women experiencing non-fatal events of SDV through primary data collection in a selected tertiary facility. This component yielded quantitative and qualitative data with the latter explicitly informing the third component. Last, primary data collection applied a hybrid narrative and psychosocial autopsy method with surviving self-harming women, and in-depth discussions with health service providers (HSPs) encountering self-harming patients to explore a) the contexts and circumstances in which women select SDV and b) their passage through self-harming experiences.

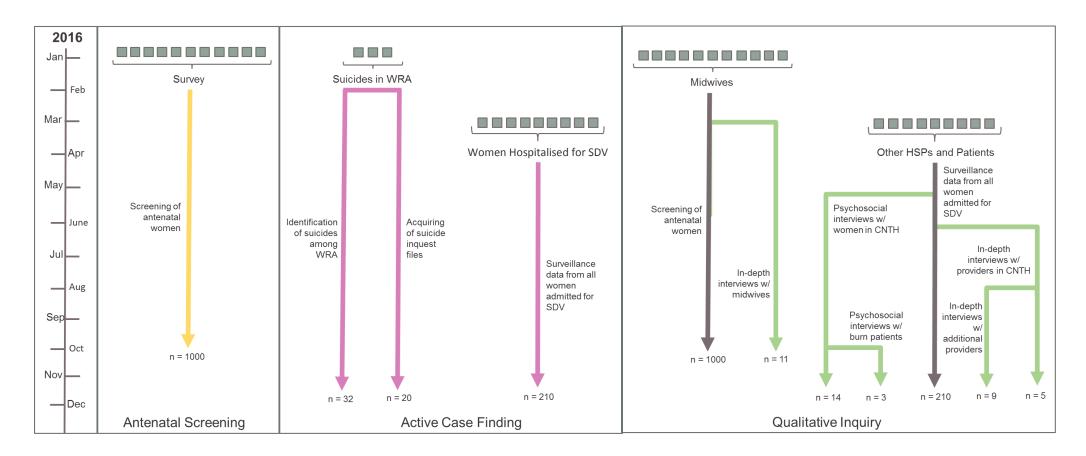


Figure 2. Phasing and interrelatedness among research components

Fieldwork underscored the value of incorporating both qualitative and quantitative approaches as they repeatedly informed one another throughout the study's lifecycle. For example, preliminary analysis of themes emerging from brief narrative interviews with surviving self-harming patients, identified through Active Case Finding, contributed to refinements in the psychosocial autopsy tool intended for Qualitative Inquiry with surviving families and subsequent patients. Qualitative Inquiry also helped to highlight the challenges of quantitative tools, for example, cultural adaptation of pre-existing measurements such as the Demographic and Health Survey GBV module that formulated part of the Antenatal Screening tool. Early descriptive analysis from Antenatal Screening also helped to shape areas of investigation among providers and patients.

2.2 Pre-fieldwork Preparation

2.2.1 Study Context: Gampaha District

One of the smallest of Sri Lanka's 25 districts, Gampaha (Western Province) is the second most populous after Colombo with 2.4 million residents (DCS, 2019b) (Figure 3). Western Province is the most densely populated of the nine provinces with the highest concentration of urban and peri-urban local areas. Levels of migration into Gampaha are amongst the highest in the country, partially driven by its three Free Trade Zones (FTZ) (Katunayake, Biyagama, and Wathupitiwela) employing 100,000+ workers each, 80% of whom are young, unchaperoned women (Jordal et al., 2015). FTZs impact population structure and health outcomes; over-crowding, environmental pollution, rises in chronic diseases, and reproductive health of young female labourers are cited as particular cause for concern and additional strain on health services (DHS Western Province, n.d.a). Further, this district is the second highest contributor to emigration – primarily to the Middle East – where 82% of female emigrants are temporarily contracted domestic workers; the role of migration in women's SDV is unexplored (Knipe et al., 2014a; Weeraratne, 2014; SLBFE, 2018).

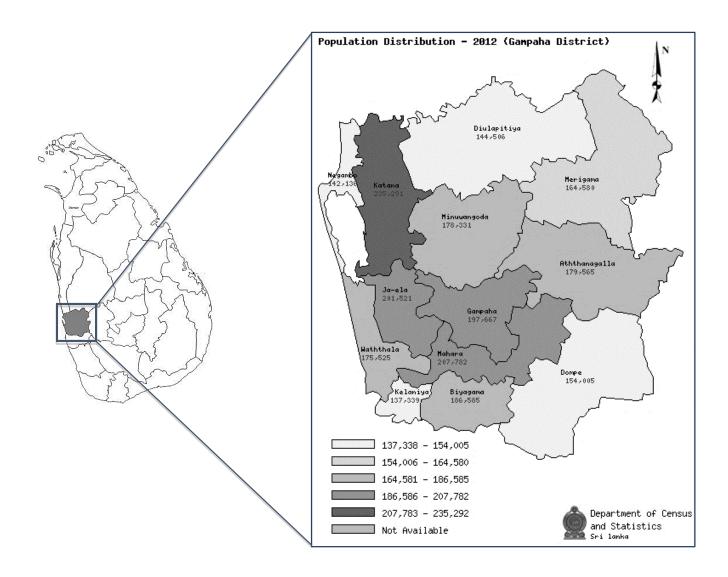


Figure 3. Gampaha District, Western Province (left) and population distribution of Gampaha District (2012¹⁴) (right)

Gampaha's population differs from Sri Lanka as a whole, and more importantly from almost wholly rural areas of the country that have been the focus of previous research. Method mix employed by SDV-practicing women here was likely to be different from heavily-researched rural districts (Rajapakse, Griffiths and Christensen, 2013)¹⁵, offering an opportunity to explore why women selected their method(s), particularly those other

¹⁴ Although the population has evolved somewhat since the 2011 Census (DCS, 2012a), visual mapping of its distribution has not been updated nor have more recent statistics on demographic characteristics been made publicly available.

¹⁵ I anticipated more cases of medicine-based self-poisoning, hanging, self-immolation, and self-asphyxiation commonly found in urban settings elsewhere in Asia (Chavan et al., 2008; Parkar, Nagarsekar and Weiss, 2009; Rajapakse, Griffiths and Christensen, 2013).

than pesticide-poisoning. Gampaha has comparatively more ethnic Sinhalese (90.6%) than the national average (74.9%), and thus a considerably smaller Tamil community (of both Sri Lankan and Indian origin). However, it has higher than national average populations of Burgher and Malay (DCS, 2012b), though these communities are small. This translates into differences in the religious makeup of the community compared to the national picture, with similar proportions of Buddhists as the national average, but considerably fewer residents identifying as Hindu or Muslim (reflecting the lower proportion of Tamils). Importantly, noticeably more Roman Catholics reside in Gampaha at 19.3% compared to 6.1% nationally (DCS, 2012c). These differences in the population are likely partially related to the high levels of migration and FTZs.

Gampaha is host to a number of high quality health services and is recognised by the Ministry of Health (MoH) as having a larger concentration of private HSPs (along with Colombo) compared to the rest of the country (DHS Western Province, n.d.b). As private facilities do not report admissions data to the national level, it is unknown how many SDV-practicing women are seen in their services. However, the established infrastructure of these higher quality services was conducive to this study. Gampaha is also home to the country's second largest public hospital – Colombo North Teaching Hospital (CNTH) – which was selected as a primary site for this research and is affiliated with the University of Kelaniya's (UoK) Faculty of Medicine. I had a pre-existing professional relationship with the then-Dean of the Faculty, which supported a necessary and reliable partnership for fieldwork.

Finally, this district historically has one of the lower suicide rates in the country (Widger, 2014a), perhaps due to its superior concentration of health services that may be better able to treat those with more serious injuries. However, declines have plateaued (Knipe et al., 2017c), and along with the highest number of maternal deaths in Sri Lanka (tied with Colombo), it ranks 7th of 25 districts for perinatal suicides (Jayaratne, 2013; 2017).

A scoping and partnerships visit was held in January 2015 with UoK's Faculty of Medicine involving several departments: Forensics, Medicine, Obstetrics & Gynaecology, Psychiatry, and Public Health. During this visit, individual agreements between the departments and myself were developed to clarify roles, responsibilities and expectations on both sides of the partnership in addition to an informal institutional partnership agreement with the Faculty.

2.2.2 Methodological Training

I completed expert training on psychological autopsy methods delivered by the American Association of Suicidology in February 2015. This comprehensive training provided theoretical and practical guidance on the use of verbal autopsy methods, with a focus on psychological autopsies, contributing towards accreditation as a Certified Psychological Autopsy Investigator. This programme is, to my knowledge, the sole formally certified training offered for psychology autopsy methods. I completed a short course on narrative research methods at the Centre for Narrative Research (University of East London) in spring 2015.

2.2.3 Language Training

Although professional level and government workers are often functional in English, this is not the predominant language used in daily life for the majority of Sri Lankans (Widger, 2009). As such, I embarked on 17 weeks of Difficult Language Training, supported by the Economic and Social Research Council with the aim of developing basic speaking and comprehension in Sinhala. This pre-data collection, in-country time was used to learn key terminology I anticipated encountering during data collection. As fieldwork progressed, I consulted my language instructor and research assistants (RA) to acquire further study-specific language. My Sinhala skills were insufficient to lead qualitative engagement with non-English speaking participants without the presence of RAs. However, my basic speaking skills supported rapport building with participants, gatekeepers, and the research team; lessened my dependence on RAs; and off-set some of the limitations inherent in conducting research in a foreign language (e.g. quality assurance of RA translation, ability to read participants' during interview, improved probing, etc.) (Winchatz, 2006; Krzywoszynska, 2015).

2.2.4 Cross-cutting Ethical Considerations

Designing and maintaining an ethically robust study was fundamental to this research and an iterative continuous process. Time and attention were given to enacting strategies prior to and throughout fieldwork and data preparation to minimise any potential risks inherent in sensitive research with potentially vulnerable participants. The concept of sensitive research and how it should be ethically managed is often ill-defined. I drew on Lee and Renzetti's (1990) understanding of sensitive research as enquiry which poses some threat of consequences for those participating. In practice, this required consideration for the varying perceptions of risk of numerous stakeholders involved in this research, acknowledging that different groups would interpret their engagement with this topic at varying levels of sensitivity. Effort spent early on to listen to concerns and requirements of stakeholders meant that the delicacy of investigating SDV in this setting generally reduced with time spent 'inside' the topic (Goyder, 1987). The ethical considerations affecting all components of the study are described below; componentspecific issues are presented by sub-section.

2.2.4.1 <u>Research ethics committees (REC)</u>

I undertook a two-stage process for formal ethical approval, first completing the London School of Economics' Research Ethics Review, submitted to and approved by their REC without amendments in June 2015 (see Appendix 2). A second set of required materials were reviewed and approved by UoK's Faculty of Medicine REC prior to departure for fieldwork (see Appendix 3) on the basis of draft English-language materials which were then translated, resubmitted for REC approval in-country, and finalised for use in the field. UoK's REC required that a local supervisor be appointed for the lifetime of the study to oversee protocols and facilitate stakeholder relations. A senior professor in UoK's Forensics Department acted in this role.

2.2.4.2 <u>The role of language</u>

As one of my critiques of previous research on SDV in Sri Lanka has been of marginalisation of minority and illiterate individuals, inclusivity was ethically and methodologically paramount. All materials were made available in Sri Lanka's three operational languages: English, Sinhala and Tamil. As the majority of the population are

proficient in either Sinhala or Tamil, translation of materials into these two languages and functional working ability of the research team in oral and written communication in at least two of the three national languages was necessary.

RAs were fluent in Sinhala and skilled in English. Tamil language support was utilised on an as-needed basis, reflecting the significantly smaller proportion of Tamil speakers in the study district. Although female literacy is high in Gampaha (98.2%) (DCS, 2014), the research team developed materials and procedures with the possibility of participants with low literacy in mind. A comprehensive approach was established and rehearsed prior to data collection to maximise equal rights to research participation (Shaw, 2014).

One of the many challenges in SDV research has been a lack of consistency in nomenclature or definitional clarity for different types of self-harming experiences (WHO, 2014b). This ambiguity has resulted in over- and under-identification of those deemed at risk thus presenting false negatives and false positives in research (Posner et al., 2014). In order to avoid the methodological fallacy of conflating ideation with behaviours (Posner et al., 2014), to the best extent possible, and recognising the critical role of intent in SDV (Clark, White and Violanti, 2012), this study utilises the Center for Disease Control's categorisations for self-directed violence (Crosby, Ortega and Melanson, 2011). SDV as a term is comprehensive, encapsulating suicidal and non-suicidal dimensions, allowing for ambivalence or changeability in intent, with less emotive connotations than other commonly used terminologies. Finally, language, particularly that which 'actions' SDV (e.g. suiciding and suicided) is drawn from the American Association of Suicidology and reflects an active, not passive, role of those engaged in this particular form of self-directed violence. For full definitions see Appendix 1.

2.2.4.3 <u>Avoiding deception and informed consent</u>

Deception was not employed in this study. To support transparency in the research, participants were presented with written informed consent forms containing information on the purposes of the research, risks, benefits, confidentiality and anonymity of data, conditions under which confidentiality would be limited, planned outputs from the research, how participant information would be utilised, information

about the research team, and contact details for additional mental health and support services. Forms were available in participants' preferred language (Sinhala, Tamil or English). All participants were given sufficient time to read the document privately before deciding whether or not to take part. We emphasised each person's right to choose whether or not to participate. No incentives and no compensation were given for participating in this study. Those who chose to take part provided written informed consent and kept information forms as a take-home resource, unless otherwise specified¹⁶.

2.2.4.4 <u>Confidentiality and its limitations</u>

Confidentiality and anonymity were key concepts to operationalise and reassure participants the study was a safe environment in which to share personal information. Empirical research suggests that in SDV studies, people often disclose information for the first time to the research team (Gibson, Benson and Brand, 2012; WHO, 2014b). To the fullest extent possible, the research team honoured a commitment of confidentiality, anonymity and removal of any identifiable information so that participants' identities or that of the person about whom they were speaking could not be known. This was emphasised in informed consent processes. However, this had to be carefully balanced with a duty of care to participants who revealed imminent risk of self-harm, otherinflicted harm, or harm to others. The UK National Patient Safety Agency requires participants in SDV research be informed that upon disclosure of plans to selfharm/suicide, their anonymity would be broken in order to connect them with health services even without their permission (Gibson, Benson and Brand, 2012). Taking such a position in this study could have discouraged individuals from participating altogether, and risked not offering equal right to participation for all interested persons (i.e. those with intentions to self-harm who wished to take part may have felt disempowered altogether or restricted in what they disclosed if confidentiality was limitable). However, there is not a legal right or obligation in the UK to report someone's risk of suicide (Gibson, Benson and Brand, 2012), and clear guidance in Sri Lanka is absent.

¹⁶ Bedside interviews with admitted patients were exempt from written consent with rationale provided later in this chapter

Prior to fieldwork, I considered carefully how best to balance participant safety in the event serious risk to self was disclosed, given the overall aim of the research is towards a prevention agenda, with the ethical challenge of needing to set limits to what I would do *without* a participant's permission. In clinical care and research, the known possibility of breaking confidentiality may actually increase risk to a participant in the sense that she/he may not disclose honestly and therefore the researcher (or provider) cannot accurately detect risk in order to support the participant into appropriate care (Gibson, Benson and Brand, 2012). As such, I instituted steps to maintain a commitment to confidentiality during data collection proportional to any expressed distress including: taking pauses during interview and focusing on positive aspects of the participant's situation, exploring options for voluntarily reaching out to support networks (formal and informal), and in more extreme circumstances offering to accompany the participant to a mental health or hospital service for clinical care (Reynolds et al., 2006). Gibson and colleagues (2012) present the clearest challenge in considering risk and confidentiality:

In undertaking a risk assessment, therefore, it is important to take into account the way in which a decision to restrict confidentiality determines who is and is not heard in suicide research (including the researchers), and what this means for the way in which societies understand and respond to suicide. (p.25)

The research team therefore agreed that if any participant was deemed a serious risk to her/himself or others, she/he would be carefully connected with an appropriate HSP and this possibility was clearly explained during informed consent¹⁷. The actual risk of having to act on limiting confidentiality and anonymity was minimised during fieldwork, however, through component-specific mechanisms discussed below.

2.3 Negotiating Local and Institutional Access for Data Collection

Prior to commencing data collection, focal points in each participating Faculty department helped refine materials and procedures, confirmed in-country protocols for acquiring permissions for data collection, and supported contact with decision-makers and gatekeepers. As this study combined the challenges of my originating from outside the context, sensitive research with potentially vulnerable persons, and access to and use

¹⁷ Further information on the extent to which this occurred and under what circumstances is contained later in this chapter and in subsequent empirical chapters.

of public health facilities and health providers' time, multiple local and institutional permissions were required before data collection commenced.

First, due to a focus on Gampaha District as a contained geographic and administrative area, I pursued clearance from the Regional Director of Health Services (RDHS), whose responsibility it is to oversee the functioning and implementation of public health services operating within the district. A signed letter of approval was granted by this office in February 2016 (Appendices 4 and 5). Second, although CNTH is affiliated with the UoK's Faculty of Medicine, its REC approval was insufficient to access wards and patients. As such, I entered into an oral agreement with CNTH's Director and Deputy Director along with the hospital-affiliated Judicial Medical Officer (JMO), ensuring I would provide findings of the study and keep the Director's office abreast of key developments. Following turnover of the original director, I re-confirmed access with the newly appointed Director who provided a signed letter (Appendix 6) and instructed that I obtain permission from individual ward consultants whose staff and patients were sought for participation. I subsequently met separately with 17 hospital consultants responsible for the participating wards and the selected CNTH clinic for Antenatal Screening. All consultants granted oral consent which was revisited and re-confirmed as data collection progressed. Fourth, I provided documentation of hospital- and ward-level approval to each ward's House Officers (HO), Registrars, and In-Charge Nurses ensuring core staff were informed of the proposed work and could raise practical considerations given their frontline presence in patient care.

Fifth, formal clearance was required by both the RDHS and Gampaha District's Medical Officer of Maternal and Child Health (MoMCH) to conduct Antenatal Screening in Maternal and Child Health (MCH) field clinics; the former granted permission concurrent with clearance for research in CNTH. By February 2016, the Gampaha MoMCH granted District-level approval for research in field clinics, supported with site selection, and provided introductions to Medical Officers responsible for MCH activities at the Medical Officer of Health (MOH) level, of which there are 16 in Gampaha District. As only four MOH areas were selected for Antenatal Screening, only those four responsible Officers were contacted. These Medical Officers further aided in site selection and confirming the study's legitimacy to Public Health Midwives (PHM) and other field staff at each clinic.

This thorough process, though time consuming, guaranteed the appropriate authorities at district, local and individual clinic level were all acquainted with harmonised information about the study, their respective study roles, and me.

Finally, navigating clearance for existing suicide inquest files was the most complex and protracted of the study preparations, and continued throughout the lifecycle of fieldwork. The national MoH's Research Unit confirmed the only official approvals required to access suicide data were REC clearance and the RDHS' letter of approval. However, as suicide inquest files are managed under the auspices of individually appointed JMOs responsible for delivering investigations on unnatural deaths in an ascribed geographic area, and operational procedures and systems vary between JMO offices, specific arrangements had to be made with each of Gampaha's three JMOs. This process, and its consequences, are expanded in depth in Chapter 5.

2.4 Research Team Preparation

2.4.1 Establishing Systems

As this study involved multiple concurrently running components, active systems supporting integrated project management were required. Prior to data collection, I set up a project office within UoK's Forensics Department, as a base for meetings, research team activities (e.g. data entry), and secure storage of data and study materials. Data management systems were developed in advance of data collection, and modified as appropriate. Systems monitoring the research budget and human resources (i.e. RAs and drivers) were in place throughout. Secure copies of data were saved in three separate formats each day new data were entered. Finally, a regular process for documenting field notes, observations, challenges, and otherwise engaging in reflexivity was initiated for the research team in the form of research journals and debriefing records.

2.4.2 Selecting, Training and Working with Research Assistants

The recruitment process focused on identification and hire of appropriately skilled and ethically sound RAs. I selected to recruit females into the research team given the intimate nature of the study content. For Antenatal Screening, I appointed a recently graduated nurse with additional qualifications in midwifery (RA1). RA1 had familiarity with antenatal services in Sri Lanka. She remained in her primary role throughout fieldwork. As Active Case Finding set out to engage with women at a critical and potentially vulnerable moment in their lives, selection of a primary RA2 with apposite skills and personality was imperative including sensitivity to the topic, patients and families and demonstrating patience and discretion. The role initially went to a medical school graduate with familiarity working with self-harming patients in her university's district, but was discontinued following a probationary period. The post was subsequently filled by a UoK medical graduate with elective training in Forensics who remained in post throughout Active Case Finding. As both RAs were in place by the time we embarked on Qualitative Inquiry, I had observed their interpersonal skills and assessed their individual strengths and areas for improvement before assigning responsibilities under this component. Due to the intensity of this task in terms of time and emotional work, and to minimise the risk of burnout (Dickson-Swift et al., 2007), both RAs were required. Although neither RA had conducted qualitative research before this study, both had practical experience of clinical interviewing. RA2's forensics training had also introduced her to the principles of engaging with the bereaved and gathering witness and family statements following unnatural death or injury. As both RAs were clinically qualified and local residents of the district, they were comfortable within health services, confident to engage with health service providers and fluent in sociocultural dynamics, including hierarchies of power within the health system, all of which supported our navigation of access to and interaction with a variety of practitioners. Further, as women of similar ages to the majority of antenatal and CNTH patients, they occupied a space of being nonthreatening to both staff and participants.

Both RAs underwent training during which job descriptions were reviewed, terms of employment agreed, and confidentiality agreements signed¹⁸. One-month probationary periods were used to ensure that RAs and/or I could choose to discontinue work if the arrangement was found unsuitable from either side. Specially drafted handbooks tailored to each role guided RA activities and RAs had access to living electronic records of payment and contracts. Training and preparation focused on 1) empathy during

¹⁸ Terms of Reference for both RA1 and 2 and an example Confidentiality Agreement are available in Appendices 8-10

engagement, 2) communication skills with staff, and 3) documentation and organisational skills. Both RAs demonstrated an interest in and need for a basic foundation in the principles of qualitative research followed by method-specific training on survey, psychological autopsy, and narrative methodologies. Role-playing was used to practice engaging with potential 'types' of patients, family roles, and HSPs the team may encounter through data collection. Understanding the difference between providing translational services and being a co-interviewer was reviewed in depth so that RAs understood their role was not to interpret and expand on participants' narratives, but was to clearly facilitate the exchange of like-for-like ideas between participants and me. The research team also needed to be conversant in one another's roles, able to fill in or support at short notice. Therefore, each RA participated in on-the-job training by observing the other and me on several occasions before providing auxiliary support.

The careful selection and thorough preparation of RAs maximised their roles and intellectual contributions to this study. RAs were instrumental in data collection including negotiating initial access, administering surveys, and translating in in-depth interviews and focus group discussions; took an active role in data inputting and management; and participated in sense-checking through ongoing all-team discussions during fieldwork and as my post-fieldwork analyses progressed. I coordinated data collection throughout fieldwork maintaining a daily hands-on presence, including leading all psychosocial autopsy interviews, in-depth interviews and focus groups with health service providers – including independently – and responding to procedural questions from women participating in Antenatal Screening. Given the concurrent nature of research components, I occasionally had to select to attend to just one activity if schedules disallowed for staggered data collection. This meant that on a minority of days, RA1 gathered survey data alone while I attended other sites for Qualitative Inquiry, and RA2 sometimes gathered surveillance data at Colombo North Teaching Hospital individually if my presence was needed elsewhere or it supported more ethical research practice to remain slightly removed from activities (see Active Case Finding below).

This working structure supported a team-insider approach, i.e. working with nonacademically trained research assistants who originated from the study communities and possessed insider knowledge to "facilitate access, and improve efficiency and insights, into research questions of interest" (Schatz et al., 2015, p.370). Both RAs were central to the intellectual project, contributing their own unique perspectives, helping to "develop" culturally sensitive instruments, clarify and amass essential local terminology" (Schatz et al., 2015, p.372) and demonstrated an ability to access and discuss issues I could not have achieved as an outsider researcher or single-handedly. This model required me to relinquish control over data collection on those occasions RAs worked independently, however routines and relationships were highly developed before either RA worked solo, schedules and roles were always mutually agreed beforehand, both RAs displayed competence in independent working, and my long-term presence in the field supported my ability to assess the quality and plausibility of both RAs' work (Schatz et al., 2015). RAs' positionality, particularly as embedded members of the study district, is acknowledged as an influence on data collection and interpretation in the team-insider approach (Schatz et al., 2015)¹⁹. By selecting RAs with similar characteristics to many participants (e.g. young women and health workers), social distance was lessened. The challenges of balancing their research versus community identities were minimised through ongoing team dialogue and (re)negotiation of roles within the team as needed (Schatz et al., 2015).

2.5 Antenatal Screening of SDV and Depressive Symptomology

2.5.1 Study Design

2.5.1.1 <u>Setting</u>

Antenatal Screening was cross-sectional and conducted across 11 health facilities in Gampaha District amongst women attending hospital- or community-based clinics. The district currently delivers 185 community-based MCH centres providing ANC (RDHS – Gampaha, 2019b), plus hospital-based services²⁰ across 16 MOH areas, including the Board of Investment area of Katunayake which surrounds the country's main airport and operates as an FTZ. The District's MCH services support 24,000 live births each year (DCS, 2019a). Selected ANC from which data collection occurred ranged from small basic open-

 ¹⁹ Considerations of my own positionality are contained in section 2.8 (Reflexivity and Research Relations)
 ²⁰ There are 12 base, divisional and district general hospitals in Gampaha District plus three teaching hospitals. However the total number of ANC clinics delivered through these public services is unknown as is the number being offered through private hospitals of which there are a growing number (RDHS – Gampaha, 2019a).

air facilities delivering MCH services off quiet and rural dirt roads, to Sri Lanka's second largest public hospital, Colombo North Teaching Hospital. Figure 4 below indicates approximate catchment areas covered by our selected ANC²¹.

²¹ The catchment area for CNTH is difficult to estimate due to it serving both immediate and referral populations which may come from long distances.

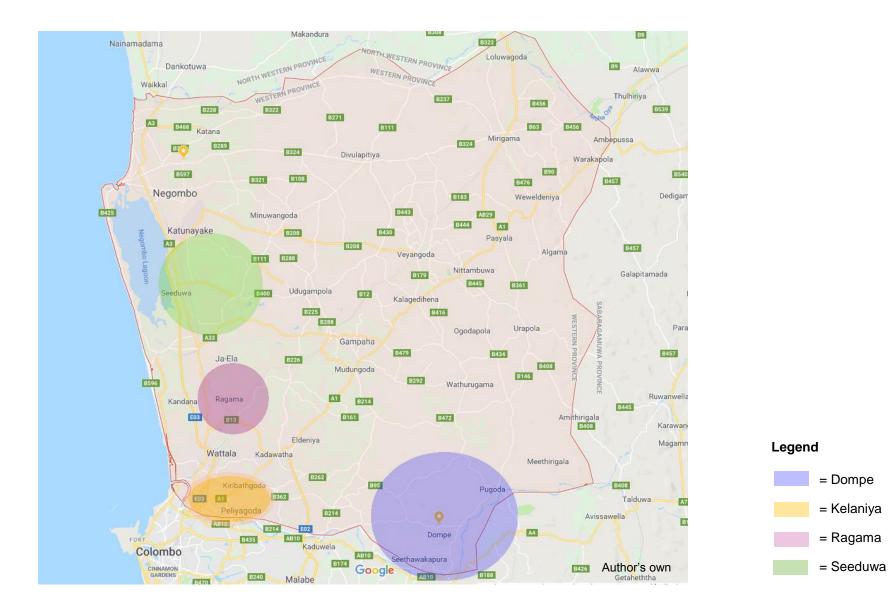


Figure 4. Approximate catchment areas across Gampaha District for selected antenatal clinics

2.5.1.2 <u>Sample size estimation</u>

Informed by regional studies on antenatal depression, a sample size for Antenatal Screening was adequately powered to sufficiently detect a 15-20% prevalence rate (at 95% confidence intervals) (Agampodi and Agampodi, 2013; Howard et al., 2014b; Supraja et al., 2016). Taking the district's population into account, an original sample size of n = 500 was deemed sufficient. However, to ensure a more representative sample that adjusted for design effects²², and one sufficient to allow for local area comparison based on level of urbanisation, a final sample size of n = 1000 antenatal women was set (Lwanga and Lemeshow, 1991).

2.5.1.3 <u>Sampling of participants</u>

Sampling was a three-stage process (Figure 5). Firstly, four of the district's 16 MOH areas were purposefully selected to ensure representation of the District's urban, semi-urban, and rural populations; geographical coverage; distance from referral hospitals; patient loads; and that at least one MOH area contained an FTZ. Selected MOH areas included Dompe, Kelaniya, Ragama and Seeduwa.

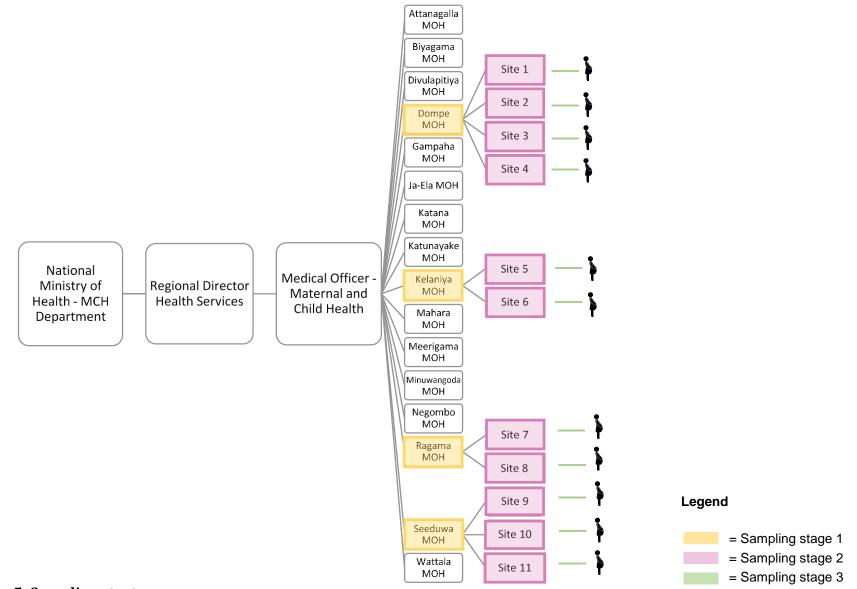
In the second stage, individual field clinics were randomly selected in agreement with the RDHS and MoMCH in Dompe, Kelaniya, and Seeduwa MOH areas, ensuring clinics were not on competing schedules. If selected clinics clashed, another random selection was made until no further conflicts resulted, though this only happened twice. CNTH, in Ragama MOH area, provided the hospital-based clinic. CNTH offers three outpatient ANC including a Professorial Unit affiliated with UoK's Faculty and, as women attending the hospital are assigned randomly based on clinic capacity, the Professorial ANC received an unbiased patient population from which to sample (Wijesinghe, 2015). The mix of community- and hospital-based recruitment was intentional as hospitals often receive higher risk pregnancies referred from field clinics in addition to women from their own immediate catchment areas. Sampling from only one or the other would have potentially skewed the findings. Furthermore, previous research in other LMIC settings has commonly sampled from only hospital-based populations and my choice to include both also served to minimise this limitation (Fisher et al., 2012).

²² Due to potential homogeneity in particular characteristics that may be observed within groups of participants, a larger sample was required to detect differences

Initially, only one ANC was selected in each of the MOH areas, however after approximately six weeks of recruitment, new eligible women were few in number. Additional field clinics were therefore randomly selected in the three field-focused MOH areas as well as CNTH's University-led *inpatient* ANC in Ragama MOH to bolster sample size. This inpatient clinic admits women around their due dates or earlier in the case of monitoring a high-risk pregnancy. The research sampled from 4/14 antenatal clinics within Dompe MOH, 2/7 in Kelaniya, 3/10 in Seeduwa, and both the outpatient and inpatient University-led ANC in CNTH, resulting in 11 antenatal clinics being included across the district (i.e. nine community-based and two hospital-based).

2.5.1.4 <u>Eligibility criteria</u>

At the third and final stage of sampling, all pregnant women attending ANC, aged 15-49 years, regardless of gestation, preferred language or literacy level, were invited to participate. Pregnant minors (i.e. under 18 years) were included without seeking parental consent, in agreement with the RDHS and local MoMCH in each of the four MOH areas, and in line with the concept of 'mature minors' which has been applied to pregnant adolescents as a group for whom observing the standard age of consent may not be in their best interest to support health and wellbeing (WHO, 2014a; Katz, Webb and American Academy of Pediatrics, 2016). Exclusion criteria for this study included being aged 50+ or demonstrating an inability to consent, for example, due to severe learning disability. Exclusions were never required on these grounds. Many women were seen by the research team on multiple occasions across the course of their pregnancies, which supported our ability to follow-up with those identified as vulnerable during screening. Women were, however, only allowed to participate once, usually on the first occasion they attended the clinic at which the research team was present.



2.5.2 Design of Instruments

The use of open-ended questions in assessing suicidal risk is problematic with a tendency to over-detect ideation and under-detect behaviours, whereas use of structured or semistructured tools improves detection of SDV thoughts and behaviours (Holi et al., 2008). Research and screening tools therefore should capture and distinguish between a range of thoughts and behaviours including intent of behaviours, lethality (which can be a proxy measure for intent), intensity and duration of thoughts (Posner et al., 2014). This study made use of two standardised measures that explore perinatal mental health and SDV along with a third new structured questionnaire designed for this study to capture data on participant characteristics and life circumstances. These three data collection tools were combined to form the novel three-part instrument (see Appendix 13²³).

2.5.2.1 Edinburgh Postnatal Depression Scale

The first component of our instrument was the 10-item self-report Edinburgh Postnatal Depression Scale (EPDS) (Cox, Holden and Sagovsky, 1987), which has been validated and applied globally as a screening aid throughout the perinatal period and in other populations including perimenopausal, infertile and non-pregnant, non-postpartum women, and men (Kozinszky and Dudas, 2015). It is considered the most appropriate and accurate tool for screening of antenatal depression in low resource settings because of its easy applicability and interpretation across a variety of settings, by non-mental health professionals, at low cost, all of which are particularly important in LMIC contexts where time and resources are limited and mental health professionals are lacking (Chorwe-Sungani and Chipps, 2017; Onah et al., 2017). A brief low-burden instrument, it requires a literate population as it is intended to be a self-report measure, but as Sri Lanka has high levels of female literacy, it was accessible for the majority of women (DCS, 2014).

Sri Lanka's MoH introduced the EPDS into guidelines for *postnatal* care in 2012, and are in discussion about expanding its use in antenatal services. It was validated using clinical assessment by qualified psychiatrists in line with best practice and found reliable to detect depression among both Sinhala- (Rowel, Jayawardena and Fernando, 2008) and

²³ Appendices of this thesis only include English-language materials. Sinhala and Tamil language materials may be shared upon reasonable request.

Tamil-speaking populations (Benjamin et al., 2005; Suraweera et al., 2013), ante- and postnatally. The majority of PHM appear to be aware of its existence in the Maternal Care Package and should be trained in its application, though no published data exist on training, knowledge, capacity or experience of implementation. As the MoH considers expanding use of the EPDS, this research capitalised on the opportunity to fill existing gaps in data and update experiential evidence on the feasibility of implementing the scale in services, which could inform policy and service development.

The Sinhala validation study has high methodological quality, however antenatal women in their sample were limited to 34 weeks gestation or later (i.e. very late third trimester) (Rowel, Jayawardena and Fernando, 2008; Shrestha et al., 2016). A second pilot study had a small non-representative hospital-based sample of unknown gestation (Hapangama, Kuruppuarachchi and Pathmeswaran, 2014). Thus this research is, to my knowledge, the first to sample antenatal women across the three trimesters in Sri Lanka.

The EPDS is overwhelmingly employed to identify the likely presence or absence of current depression based on a change in recent state in an individual and is a screening rather than diagnostic aid. This framing may consequently be less likely to detect women experiencing more chronic symptoms of depression. A single item (item 10) is also used to assess current presence of self-harming thoughts. This is frequently cited as a measure of current suicidal ideation (SI). However, its wording is broad²⁴ and only asks about thoughts of self-harm in the previous seven days – not explicitly thoughts of killing oneself. This is important as it means data from previous studies have often inappropriately been interpreted as prevalence of SI in ante- or postnatal women, when in fact, they could be reporting thoughts of non-suicidal self-harm. As such, a dedicated tool to isolate SI, suicidal behaviours and – crucially – non-suicidal self-harm in antenatal women was required to unpack the full range of self-directed violence antenatal women may be experiencing.

²⁴ Item 10 reads: The thought of harming myself has occurred to me: 1) yes, quite often, 2) sometimes, 3) hardly ever, or 4) never (referring to the previous 7-day period)

2.5.2.2 <u>Columbia-Suicide Severity Rating Scale (C-SSRS)</u>

The C-SSRS was selected to capture data on prevalence of suicidal ideation and suicidal and non-suicidal self-harming behaviours in antenatal women at two time points: ever in their lifetimes and during their current pregnancies. SI and past behaviours are some of the strongest short- and long-term risk factors for later episodes of self-harm and suicide in the general population in many contexts (Posner et al., 2014). Most tools available either enquire about SI or behaviours and commonly conflate them as one issue (Meyer et al., 2010). Additionally, many screening tools do not enquire about non-suicidal behaviours, which remains an area of debate amongst suicidologists who hold varying positions on the relatedness of differently intended forms of SDV (Kapur et al., 2013; Knipe et al., 2018). The C-SSRS offers a reliable alternative and is one of the most comprehensive instruments available, having been applied in primary care, surveillance, and research. It further benefits from not requiring mental health training to support the administration of the scale and has been successfully applied with lay research assistants or through self-report (depending on which format is most suitable). The C-SSRS has demonstrated an ability to increase detection of suicide attempts in Euro-American Accident & Emergency settings by more than 40% compared to standard chart histories (Arias et al., 2014), and is one of only three instruments with this validity (Brown and Green, 2014). Thus it offered this study potential to explore 'risk assessment' in currently pregnant women based on certain combinations of responses to the measure. Additionally, community-based evidence on the prevalence of lifetime experiences of SDV is limited to one rural study in Sri Lanka (Knipe et al., 2018), with none isolating WRA. As most women bear children in Sri Lanka at some point in their reproductive years (Marecek and Appuhamilage, 2011), application of the C-SSRS through ANC provided the best opportunity to capture reproductive age women in a community healthcare setting to build a picture of their histories of SDV as well as assess their experiences in pregnancy.

The full C-SSRS measures four key constructs including presence, severity/intensity of suicidal ideation, previous self-harming behaviour and lethality of behaviour. It was previously translated in both Sinhala and Tamil using a standardised methodology (Fernandez, Grataloup and Posner, 2008) and made available for this study by Columbia University. Given the setting of often busy antenatal clinics in which multiple women would need to complete the tool concurrently, but limitations of computer literacy among

the general population in Sri Lanka (Knipe et al., 2014b), the electronic self-report version of the C-SSRS was adapted into a paper-based form with expert guidance, including direct support from Columbia University (Mundt et al., 2013; Viguera et al., 2015; Columbia University and DeVylder, 2016). As epidemiological research from HIC has shown that subthreshold psychotic experiences may be associated with higher prevalence of suicidal behaviour, a single item with validity in English-speaking populations was added under the SI sub-scale to explore potential subthreshold psychosis in this antenatal population (Doherty and DeVylder, 2016). This question, drawn from the WHO-CIDI V3 psychosis screen, focuses on auditory and visual hallucinations as they are deemed the two primary indicators of psychotic experiences (DeVylder, Lukens and Link, 2015). Neither the WHO-CIDI V3 nor the single item on subthreshold psychotic experience has been validated in Sri Lanka, rendering this particular item exploratory in this study and an additional contribution to the evidence base.

The existing Sinhala and Tamil researcher-administered C-SSRS tools (Research Foundation for Mental Hygiene, 2008) were modified to align with the self-report version and to incorporate the additional item on psychosis, and back translated to check for consistency in concept and interpretation across all three languages. There are no other known publications on the application of the C-SSRS in Sri Lanka or confirmation of its validation in a Sri Lankan population. Additionally, there are no known applications of the C-SSRS in the English-published literature from perinatal populations despite increasing concern about this group. This study is thought to be the first to publically report findings using the C-SSRS amongst both Sri Lankan and perinatal women from anywhere in the world.

2.5.2.3 Life Circumstances

It was important to explore sociodemographic and contextual data about antenatal women in order to support identification of potential unique and shared correlates of depressive symptomology and SDV. Drawing on evidence from LMIC and Sri Lanka specifically, a third questionnaire incorporating a combination of known risk factors like family history of mental disorder (Hapangama, Kuruppuarachchi and Pathmeswaran, 2014) and understudied factors, such as financial, education and employment status, social support and marital status (Fincham et al., 2011), was developed for this research. Questions about attitudes towards and experiences of violence, in particular intimate partner violence (IPV), were incorporated as evidence from both HIC and numerous LMIC settings indicate an association between violence and SDV in perinatal women (Devries et al., 2011; Rahman et al., 2013; Coker and Stowe, 2014; Halim et al., 2017). Items were drawn from the Demographic and Health Survey violence module (n.d.)²⁵ due to its inclusion of multiple forms of abuse not consistently found in other commonly selected instruments²⁶. These items were further supplemented by experiential questions on physical, sexual, emotional, and financial IPV previously validated in a pilot study led by Sri Lanka's Family Planning Association. More recent evidence from Sri Lanka encourages further research to explore alcohol use and those in early stages of marriage, both of which were addressed in this questionnaire (Sørensen et al., 2017).

2.5.3 Piloting

Our three-part instrument was piloted until no indications that either the content or the process of the research presented difficulty for participating women (n = 21). This required two rounds of re-working specifically the C-SSRS and Life Circumstances questionnaires. Women were asked for feedback about the screening process, given an opportunity to voice any concerns or confusion they had regarding particular items included in the instrument, remark on ease of use, and make any additional suggestions to the research team to improve the main study and future participants' experience. The C-SSRS' construct on lethality was removed due to feedback that it presented challenges of recall, was difficult to interpret and risked over-burdening participants. Further, according to Columbia's latest guidance (Nilsson et al., 2013), the subscale on lethality is not factored in to analysing an individual's risk, and thus it was reasoned superfluous for this study. Formatting of the tool and minor wording changes were required for the Life Circumstances questionnaire until no further requests for clarification were raised by

²⁵ The IPV module was applied in Sri Lanka's 2006 Demographic and Health Survey, and again in 2016, although findings from these studies were unavailable at the time of instrument design and fieldwork for this research (WHO Sri Lanka, 2018a).

²⁶ Most IPV instruments fail to recognise controlling behaviours and financial abuse as dimensions of violence against women. WHO's survey on women's health and life events, while comprehensive and inclusive of a section on financial autonomy, does not, for example, consider this as a type of violence, choosing instead to focus on physical, sexual and emotional dimensions (Garcia-Moreno et al., 2005). Instruments omitting these issues were considered insufficient for this study.

pilot participants and women were able to complete the screening as a self-report measure in full. No women displayed difficulty with the local language EPDS and no changes were made. Following piloting, 1013 antenatal women completed the three-part screening instrument, for a total of 1034 participating women.

2.5.4 Data Collection Process

The research team consisted principally of RA1 and myself, while RA2 supported on an as-needed basis. PHM were introduced to the research team in site visits ahead of piloting. Each clinic's chief midwife proposed a workable approach to introducing the study to potential participants. Midwives were overwhelmingly supportive of the study and the research team and instrumental in achieving the goals of data collection.

At each antenatal clinic, PHM introduced the research team and informed women of their right to participate or decline, after which we could directly approach attending pregnant women. Clinics involved a series of stations through which mothers moved (e.g. taking blood pressure and urine samples). This provided the research team with suitable windows of time in which to address eligible women and gain informed consent as they waited for the next station in their visit.

2.5.4.1 <u>Promoting inclusive participation</u>

Almost all women were able to self-complete the questionnaire without additional support. However, a small number of women with low literacy (~ 10) were supported by the research team to participate through oral administration of the instrument. RA1 sat with these women in private spaces where they could not be overheard and asked each question, offered the selection of responses from which to choose, and marked the forms with the woman's preferred response. The research team felt strongly that inclusion of women with low literacy was critical ethically and because the two previously published studies exploring antenatal depression in Sri Lanka had not made accommodations for these women. Additionally, these studies only included Sinhala-speaking women, and did not allow Tamil- or English-speaking mothers to take part (Agampodi and Agampodi, 2013; Hapangama, Kuruppuarachchi and Pathmeswaran, 2014). Thus this study supported the inclusion of previously neglected women's experiences.

Forms were then discreetly spot-checked by the team for completeness and any indications that women were currently in distress. Instruments were returned to women with a request to finalise responses if any questions were missed, though nearly 90% submitted fully completed questionnaires.

2.5.4.2 <u>Participant safety</u>

Cox et al. (1987) do not raise concerns for risk to participants ahead of screening by the EPDS, but reinforce its use in flagging women who may then require further clinical review. The EPDS and C-SSRS are accepted as safe ways to open up discussions about emotions with participants. WHO and PATH's (2005) guidance on researching GBV suggests self-report measures can support more accurate disclosure of violence than personal interviews, that women are more likely to disclose in the presence of appropriately trained female research assistants, and when IPV questions are sensitively introduced in the survey process following rapport-building and honest informed consent processes, as in this study. However, for all three aspects of women's wellbeing, clear referral pathways are recommended. As such, women who reported thoughts of self-harm in the previous 7-day period (item 10 on the EPDS), any time SDV (on the C-SSRS), and women reporting current IPV (in the Life Circumstances) were noted by the research team. These were considered appropriate circumstances in which to consider limiting confidentiality, and we spoke privately with women exhibiting problematic responses. As appropriate, PHM responsible for individual women's care were informed and often reassured women they would monitor their needs going forward or that women could raise concerns directly at house calls or future ANC visits. Screening responses were not shared in full with PHM, but rather notice of previous or current risk of harm was.

Managing concerns around IPV was a regular part of the data collection process, more so than managing past or present SDV. Although not wholly unexpected given high rates of IPV in Sri Lanka (reports ranging from 20-72%) (Guruge et al., 2015), we spent considerably more time in a support role than originally anticipated. Referrals and materials signposting to GBV/IPV²⁷ and mental health services were provided (see

²⁷ IPV is recognised as just one form of GBV. As women were experiencing violence from perpetrators other than husbands/partners, I employ these terms deliberately and to accurately define the behaviour being referenced.

Appendix 14). We understood that provision of information on IPV could *increase* a woman's risk at the hands of her partner in the immediate term if this information was revealed (Bianchi, Cesario and McFarlane, 2016). However, partners were largely absent from the clinic setting itself and given the continued dominant cultural perception that pregnancy is 'women's business', partners were unlikely to review pregnancy folders containing these materials (Weekrakkody et al., 2013). Women's preference to take GBV brochures suggested their relative comfort with possessing this information. Leaflets were also provided to all clinic staff to distribute on our non-attendance days. Throughout this process, women's privacy and safety was prioritised and PHM and clinic doctors appeared to respond discreetly and empathetically to support women's options for help-seeking.

2.5.4.3 <u>Gifts of thanks for participation</u>

Individual women were not incentivised to participate in Antenatal Screening. However, as clinics and midwives were instrumental in establishing relationships with attending pregnant women and in supporting recruitment for this research, institutional gifts of thanks were provided to primary clinics where data collection occurred. Six thousand rupees (approximately £30 at the time of gifting) per clinic were allocated and clinic doctors and midwives were invited to suggest what the research team could contribute towards, with the requirement being that gifts should benefit everyone in the service to the best extent possible (e.g. water filters and playground equipment).

2.5.5 Quality Control and Data Management

I accompanied RA1 on almost all data collection days, especially in the first two months. As data collection progressed, she occasionally attended independently in quieter clinics with attentive PHM. For heavy participant-loads, RA2 provided additional support. Forms were returned to the study office daily and stored in a locked cabinet to which I held the sole key. Data inputting on a dedicated and secure laptop was a primary responsibility of RA1. Twenty percent (n = 200) of surveys were double-entered by me across the study period in order to assess completeness and accuracy of data entry; none required corrections.

2.5.6.1 <u>Managing refusals and compromised data</u>

Fewer than five women declined to participate from any of the nine field ANC across Dompe, Kelaniya and Seeduwa MOH areas. Fewer than 25 declined to participate in CNTH outpatient ANC citing lack of time, lack of interest, or on several occasions, disapproval of their partner, parent or in-laws despite their own interest²⁸. Three women with reading and/or learning difficulties did not wish or were unable to be supported by RA1 to complete the screening. The overall participation rate exceeded 95%. Refusals in CNTH were insufficient to warrant concerns of a biased sample.

CNTH outpatient ANC was the only setting in which family members were not always separated from women during appointments. Initially, this mixed seating presented some challenges ensuring confidentiality of women's responses if partners or other family members wished to read or input into women's responses. Two surveys were compromised and excluded because husbands altered responses to IPV questions. Given the primacy of gender and generation as axes of power in Sri Lanka, RA1 felt unable to confront meddling family, while my outsider status allowed me to directly request their cooperation and any perceived 'impertinence' was forgiven as a lack of cultural literacy. Adjustments were made however with the clinic staff to ensure women were separated from their family members to the best extent possible from informed consent through completion of the screening. With a new system in place with clinic staff, no further interference was observed for the remainder of data collection. Recruitment continued steadily until a minimum of 250 women were sampled from each of the four MOH areas.

2.5.6.2 <u>Flooding and the cyclonic storm</u>

In May 2016, Sri Lanka was hit by a severe tropical storm which resulted in rapid rainfall, floods and landslides. The Kelani River, which separates Colombo from Gampaha District, was unable to cope and Gampaha, especially bordering the river, was heavily affected. Selected ANC were shut or used as shelters in Kelaniya and Dompe, as roads were impassable and staff and pregnant women were unable to safely travel. Due to safety and

²⁸ Exact numbers are not stated as midwives supported recruitment and could not always report declines to participate.

logistics, data collection was postponed for several weeks, until water levels receded and clinics returned to normal service delivery. This acute stressor was taken into consideration in subsequent analyses.

2.6 Active Case Finding and Brief Interviews with Women Admitted to CNTH

Active case finding is heavily shaped by the context and systems through which suicides and self-harm are recognised and registered in Sri Lanka. As the processes for deaths and (initially) non-fatal episodes are different, the methodologies need to be described separately. This section isolates the work undertaken to prospectively identify SDV patients in CNTH. Chapter 5 instead focuses on deaths by suicide and includes a methodological mapping and reflection on the commodity chain of suicide inquest files, and the approach to and role of Active Case Finding in acquiring them.

At the national level, Sri Lanka currently lacks a systematic process to record episodes of SDV that result in hospitalisation, but not death. Although the National Poisoning Information Center has protocol in place to record self-poisoning data, not all hospitals maintain records on patient admission, and those that do operate under a paper-based and antiquated system. Thus the reliability and quality of these data are dubious (Widger, 2014a). Critically, National Poisoning Information Center data also fail to capture events employing methods other than poisoning. This study therefore established its own data collection system in order to prospectively identify women with (initially) non-fatal SDV, taking guidance from previous studies and expertise within UoK (Eddleston et al., 2006). The hospital surveillance system was able to identify non-fatal and fatal events, however those who died following admission for SDV were allocated to cases of suicide (Chapter 5).

2.6.1 Study Design

2.6.1.1 <u>Setting</u>

Colombo North Teaching Hospital has a 1442 in-patient bed capacity, with an estimated 1000+ patients in the outpatient department each day, and over 350 new daily admissions (CNTH, 2019). CNTH is where UoK medical students are clinically taught,

Faculty conduct academic research, and encompasses the District Hospital, Nurse Training School in Kandana, and rehabilitation hospital. It offered a supportive environment as an institution regularly engaged in research and from the perspective of individual clinicians interested in the specifics of this study. As it caters to a district populace of over 2.4 million it sees a varied patient population (DCS, 2019b), receiving local admissions and transfers from around Gampaha District. The hospital is situated in Ragama, an urban town serving a socio-economically mixed population of roughly 31,000 people. Ragama MOH area hosts a local population of 76,000 which triages into CNTH for medical needs beyond primary care (Perera et al., 2011).

2.6.1.2 <u>Sampling strategy</u>

A sample size was not determined *a priori* as the key aim of this component was to prospectively identify the number of all-method SDV-practicing WRA admitted to the hospital over a set period (seven months), as estimates nationally, sub-nationally and at hospital-level were unknown. A two-stage sampling process was involved. First, adult wards were selected for the surveillance system:

- Medical wards (x3 female; x3 male²⁹)
- Surgical wards (x3 female; x4 male)
- Obstetric wards (as needed; x2 female)
- Psychiatric wards (x1 female; x1 male)

At the time of data collection, standard practice was that adult wards admitted patients aged 12 years and up (Eddleston et al., 2006), ensuring even younger female patients would be identified in the sample than typically included in the WRA definition. Therefore, paediatric wards did not contribute to the sample. Second, all women admitted for SDV to the selected wards were included. Women admitted for 'unclear' reasons (i.e. doctors suspected SDV, but injury may have been other-inflected, homicidal or accidental in nature) were also included for initial investigation and ruled in/out accordingly.

²⁹ An explanation of male wards' inclusion in the study can be found later in this chapter.

In addition to simply enumerating SDV admissions to CNTH, a secondary goal was to gather background characteristics on patients to enhance knowledge about trends. To that end, a brief patient information sheet was designed to be filled out by the research team for each woman admitted to selected wards as a record of the incident and patient (Eddleston et al., 2006) (see Appendix 16). This form required personal data, information on method(s) employed, severity, reported intent, and history of SDV amongst other things. Outcome of treatment and admission and discharge dates were included to calculate length of stay and case fatality rates for different methods. In order to identify possible perinatal cases from within the sample, an additional module on pregnancy history was added. Drawing on the literature and expert Faculty input, the form was modified to suit the needs of this study. Finally, in addition to structured items suited to quantitative analyses, a single open-ended and qualitative question was included ('*Can you tell me about how you came to end up in hospital [today/yesterday/x days ago]?*').

2.6.3 Ethical Considerations Particular to Hospital-based Surveillance

There were specific ethical considerations for this component of the study.

2.6.3.1 <u>Confirming ability to consent</u>

The research team reviewed eligible patients' Bed Head Tickets (BHT) (i.e. bedside medical notes) and sought permission from HOs before approaching patients. Women were then assessed by us for demonstrable coherence and presence of mind. Discussions only progressed if women were considered well enough to understand the intentions of the research team, and followed up or left altogether if women were not in a state to consent. For any females under 18, the legal age of adulthood in Sri Lanka³⁰, permission was sought from HOs and parents or guardians. If guardians were absent, HOs were

³⁰ This is the legal age of adulthood for Sinhalese and Tamil women. Legal age for marriage can be a proxy measure for legal recognition of adulthood (Skanthakumar, 2003). The Muslim population operates under a controversial and increasingly debated separate legal framework (Muslim Family Law equivalent to Shariah law) which has no minimum marriage age for girls, nor any requirement for consent. Quazi, or all-male Muslim family judges preside over individual marriages, which do not have to be registered with the Registrar General's office as with Sinhala and Tamil marriages (Marsoof, 2019). Despite this subpopulation's ambiguous definitions of adulthood, I applied the threshold of 18 for all participating girls/women in line with the globally- (and Sri Lankan) endorsed UN Convention on the Rights of the Child which defines children through 17 years (UNICEF, 1989).

within their legal remit to (dis)allow access from the research team. Girls were then subject to the same confirmation of assent and wellness assessments as adult women.

2.6.3.2 Limiting confidentiality

In addition to risk of SDV, I made further decisions regarding limiting confidentiality in the event of disclosure of GBV and child abuse/neglect. In line with both British and Sri Lankan national guidelines on child protection, the research team reported knowledge of child abuse and/or neglect to HOs responsible for the patient's care and supported efforts to act on this knowledge (SLCP and Plan Sri Lanka, 2014). Reports of child maltreatment by participating women were not uncommon. In cases of IPV, women's (i.e. 18+) permission and preferences were sought before we took further action to either inform staff or provide information and other support.

2.6.3.3 Patient safety

This study was designed on the basis of prior research and an empirical consideration of what was likely or probable, and maintained a balanced view of benefits versus potential risk (Dyregrov et al., 2011). Empirical research on SDV suggests participants may experience feelings of worry prior to interviews and feelings of insecurity, sadness, guilt and anger during. However, considerable distress is very rarely documented in the literature (Henry and Greenfield, 2009) and refusal rates for these types of studies are very low.

For women presenting to hospital with non-fatal SDV, WHO asserts that, "rather than encouraging suicidal behaviour, talking openly can give an individual other options or the time to rethink his or her decision, thereby preventing suicide" (WHO, 2014b, p.65). There was a small, but not insignificant risk that reflecting on suicidal feelings would cause the participant to revisit those feelings, however it was judged unlikely that this would be experienced as more than momentary discomfort. Negative feelings while participating are also unlikely to lead to increased SDV behaviour post-participation (Reynolds et al., 2006).

Nevertheless, referral mechanisms were in place in agreement with stakeholders. These mechanisms aimed to minimise stress upon participants and included:

- Information on informed consent forms about SDV support services such as local Medical Officer of Mental Health and Sumithrayo (a national suicide prevention and befriending service)
- Local language leaflets on women's support services for GBV donated to us by Sri Lanka's Family Planning Association
- Faculty focal points from Psychiatry for mental health support, and Forensics and JMO for cases of suspected abuse
- Assessment by CNTH psychiatric staff and initial appointment with CNTH's Youth Friendly Service (YFS) (≤28 years) and GBV service³¹ (*Mithuru Piyasa*³²) (all ages)

Finally, safety and support was in place for the research team through a clinical psychologist, based in Colombo, with clinical practice and training in both Western and Sri Lankan services. She remained on-call for debriefing and external advice on an asneeded basis throughout fieldwork.

2.6.4 Piloting

Piloting for the hospital surveillance system ran for one consecutive month, from April 25 – May 22, 2016, with numerous amendments throughout this period.

2.6.4.1 <u>Changes to the patient information sheet</u>

Additions, removals and rewording of the form were necessary. Additions included an item on 'severity' of the injury (e.g. number of pills), exploring whether the participant engaged in any planning before SDV, and asking what the patient thought the outcome of her behaviour would be, which could be a proxy for intent (Posner et al., 2014). Removals and rewording regarding attending physician and prior SDV were addressed respectively.

³¹ This was not consistent and is discussed under Reflexivity, Positionality and Challenges below

³² This term translates to 'friendly abode' and draws on a one-stop GBV crisis centre model. In predominately Tamil communities, these centres are termed *Natpu Nilayam*

2.6.4.2 <u>Justification for broadening to women of all ages</u>

Although this study set out to examine WRA, confirmation of patients' ages was necessary often enough due to staff or admissions' book mistakes to require all women with SDV be included. Additionally, during piloting, older women (50+) were encountered in the surgical wards with more serious injuries, while WRA were found in medical wards. I wished to explore whether women's behaviour changed in severity with age. We also found older patients were interested to continue speaking with us. Taking this into consideration, the benefits of comparative data that would possibly offer insight into behaviours at different ages and clarity on the proportion of reproductive age and perinatal women all warranted expansion of the sample.

2.6.4.3 <u>Justification for broadening to men</u>

I made the unanticipated decision to expand data collection to include male SDV patients primarily driven by the need to maintain positive relationships with gatekeepers. CNTH's Director expressed the hospital would benefit from male data. Recognising the importance of the Director's office in granting access for this research, it was viewed a reasonable condition of reciprocity (Broadhead and Rist, 1976). As these data were not core to the current research, we agreed they would be analysed and disseminated following completion of this thesis.

These data provide a useful comparative picture to female data³³ and the research team benefitted its understanding of women's stories and its own wellbeing in coping with them by hearing the male side of the phenomenon as well. We acquired a broader and more nuanced understanding of the household and social stressors affecting women by listening to what men expressed about their own lives. From mid-pilot we commenced data collection among all females and males ages 12+ in the 17 selected adult wards.

2.6.4.4 <u>Justification for expanding to psychiatric wards</u>

Initially we were advised we did not need to include the psychiatric wards at CNTH. However, by week three of the pilot, I found some patients almost immediately

³³ Throughout data collection, only one married couple presented simultaneously to CNTH and offered a 'matched' story; all other men and women were independent of one another.

transferred to psychiatric wards for treatment. Without permission to access these wards, patients were being directly discharged into the community and missed entirely, defeating the purpose of the surveillance system. Participating wards took different positions on psychiatry's relevance for SDV patients. Some referred all SDV patients regardless of their own clinical impressions, while others appeared to allow HOs and registrars to conduct their own assessment as to whether psychiatric referrals were appropriate. Overall ward staff appeared to have limited capacity and specialised training to assess mental health issues and even further limited capacity to support social problems, increasing the likelihood of referring patients to psychiatry. This reinforced the need to obtain clearance from psychiatric wards to better understand this branch of the patient care pathway and minimise missed patients.

2.6.5 Patient Care Pathway

Through piloting, I was able to identify a variety of pathways through which patients entered and ultimately exited the CNTH system, summarised in Figure 6.

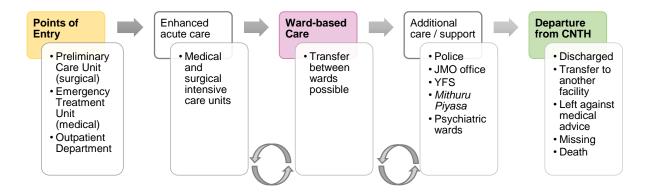


Figure 6. SDV patient pathway from entry to departure from Colombo North Teaching Hospital³⁴

³⁴ All patients moved through the coloured steps, while only some patients moved through white-coloured steps along the pathway which represent enhanced or additional care.

All patients were assessed by clinicians at one of the three points of entry before being moved forward in their patient care journey. It is possible that some SDV patients would have been misdiagnosed at any one of these three entry points as having acquired harm by other means. Minimally harmed patients may have been rapidly discharged from point of entry and we were unable to estimate the frequency with which this occurred. Some patients would have entered CNTH in severe acute states transitioning immediately into the Intensive Care Unit or Medical Intensive Care Unit for self-poisoning patients, but many patients were clinically stable enough to transition directly to ward-based care. If patient condition worsened while in the ward, they would cycle back into medical/intensive care units and return to the ward once stable again. During wardbased care, patients were under the care of a consultant, and ward transfers were sometimes necessary due to capacity issues. Generally, transfers were kept to a minimum, and overly crowded wards with two or more patients per bed were not unusual. It is at this point in the patient care pathway that the research team gathered data with SDV patients.

Some, but not all patients, could then transition into receiving additional care and support depending on their circumstances. This could involve the police, JMO office, *Room 16* (housing both the YFS and *Mithuru Piyasa* service)³⁵, and for those considered in need of acute mental health treatment, transfer to the psychiatric wards. Patients often remained attached to the wards during this additional care and left wards only for brief appointments with these other services. Patients who transitioned to psychiatric wards could be directly discharged by their Consultant Psychiatrist, while others cycled back through ward-based care. Finally, SDV patients left CNTH through a variety of exit points most commonly being discharged once ward consultants deemed them clinically and (mentally) stable. However, some SDV patients were transferred to other health care facilities in and out of Gampaha District depending on capacity, form of harm (e.g. self-immolation³⁶), and patient/family preferences. Still others left against medical advice (LAMA) or went missing altogether at various points along the care pathway. At the

³⁵ Within CNTH, *Room 16,* as it is commonly referred to, provides two concurrent services including counselling and support for men and women 28 years and below with psychosocial needs (YFS), and a GBV service for women experiencing various forms of violence. The *Mithuru Piyasa* accepts women of all ages.

³⁶ Sri Lanka has only one specialised burn unit equipped to manage serious and complex cases. This unit is housed at the National Hospital in Colombo and overseen by a single consultant – the only operating in the country.

extreme, SDV patients left the CNTH system as suicides (i.e. deaths). These exit pathways are discussed further under this sections' Reflexivity, Positionality and Challenges.

2.6.6 Data Collection Process

Data collection was the same for all participants in the surveillance system, however as this thesis is concerned with women (and specifically WRA), the following description only refers to female patients.

2.6.6.1 <u>Establishing relationships with ward staff</u>

Establishing and maintaining positive relationships with multi-level clinical teams was critical for the surveillance system, as these gatekeepers facilitated or inhibited identification and access to patients. I stressed my wish to be as minimally invasive for staff as possible. Initially, some wards preferred we rely on checking the admissions book or calling the hospital exchange for patient information, while others proposed we contact individually selected doctors. I encouraged personal contacts and identified project 'allies' as part of a risk reduction strategy to avoid missing patients; they became central to the system's success.

2.6.6.2 <u>Establishing a routine and understanding admissions schedules</u>

The research team invested a considerable amount of time in the early weeks to concretise a routine for checking wards, however, as admission schedules were complex and changeable, we employed a combination of identifying in-the-know clinicians to establish upcoming casualty days, and regularly checked in with other wards on 'off' days just to ensure no swaps or exceptions were made for patient admissions. Visiting hours for family occurred thrice daily and we avoided overlapping with these hours due to lack of privacy and patients understandably preferencing visitors over researchers.

2.6.6.3 Ward rounds

Every Monday through Saturday from 25 April – 11 November 2016, the research team conducted ward rounds across the 15 standard wards; seven of which were female³⁷,

³⁷ Obstetric wards were only included when known patients were under their care due to the need for foetal monitoring, giving a total of 17 eligible wards, nine of which treated women.

with morning rounds occurring consistently between 6:30-7:30am over the 200 days of surveillance. Ward rounds were not held on Sundays as it was considered unreasonable to not provide RA2 with one day off each week. By visiting wards before consultants, we confirmed presence or absence of (new) eligible women and either gathered data from them at that time, or noted basic information from the BHT³⁸ and HOs with a plan to return later to see the patient.

The research team combined checks with HOs with review of admissions book – large hand-written books maintained by ward nurses – looking for entries with SDV-relevant labels under 'reason for admission'. Admissions books occasionally failed to document SDV patients, or incorrectly documented their basic information. Documentation varied by ward as there was no hospital-wide standard in terminology to identify and label SDV, requiring continued learning on our part when scrutinising admissions books. Both mechanisms were always used each day of surveillance, as it was possible for doctors to be mistaken or for admissions books to hold incomplete or inaccurate information, though this seemed infrequent.

2.6.6.4 Approaching potential SDV patients

Once potentially eligible women were identified, we confirmed patient bed numbers, and asked HOs for permission to approach the patient at that time and whether there were plans for patients to be sent outside the ward for additional care (as indicated by Figure 6). This was necessary to ensure patients who were not in their beds could be followed up before likely discharge or women could be informed by us that our discussion would likely be followed by (the offer of) additional support, improving the surveillance system and supporting continuity of care. If HOs expressed concerns about a patient's current condition, we made plans to return at a later time in hopes of finding women in improved health but before discharge.

³⁸ BHTs could not always be found. Sometimes they were with clinical teams at doctors' stations being reviewed or in preparation for discharge, and other times they had been moved by staff for other, sometimes unclear, reasons. Scouring wards did sometimes turn up 'missing' BHTs, but other times BHTs were never found by the research team. This was more common for patients without beds. On other occasions, BHTs contained no information beyond a patient's name and were unhelpful in yielding confirmatory or additional data on patients.

We assessed women's general condition before speaking to them and established presence/absence of family or chaperones³⁹ who may impact a woman's ability to participate. On busy casualty days, particularly in medical wards, it was not uncommon for patients to be sharing beds; laying on reed mats under beds, in ward and hospital corridors; or sitting in chairs in and around wards, complicating the process of identifying where potential participants were⁴⁰. Discussions with patients were held in the wards, most often at their bedsides as practical and medical restrictions of transporting patients to a fully private space were too numerous to render it safe or feasible. Recognising the drawbacks of ward-based brief interviews, we strove to establish methods to minimise impact of the surrounding patients and goings-on.

Women provided oral consent only, reducing attention on them and supporting confidentiality as to why these particular patients were being approached by us, especially as I was an obvious outsider (Robson, 2011). We began by asking women to tell us how they ended up in hospital. Participating women were then able to provide as much or as little of their story as they wished, with the aims of 1) making women feel in control, 2) allowing women to self-select where their narrative should begin as relevant to their experience, and 3) encouraging women to foreground the issues they perceived most pertinent to their self-harm. Often items from the patient information sheet were naturally covered in these stories, but were otherwise systematically asked until none were missed. Discussions lasted anywhere from 10-40 minutes, guided by women themselves. Some women declined initial interviews due to tiredness or ill-health and asked us to return later. Patient information sheets were populated using their BHT data in case of discharge, and we aimed to return before BHTs could be removed from the

³⁹ Chaperones were hospital-provided individuals who accompanied patients and often stayed with them in hospital through their care. Chaperones could be provided for children (i.e. under 18 years), but were also present for adult patients if they did not have family or family were unavailable or unwilling to attend the hospital to visit or care for their loved one. For example, if a woman's husband could not afford to miss work, chaperones were sometimes paid for by the family and provided by the hospital. Family, and in their absence, chaperones, are required to provide basic care for patients in the Sri Lankan system including providing food (unless a patient is on a specialised medical diet), bedding, toiletries, clothing and contribution towards medical supplies.

⁴⁰ Patients were allocated beds on a first come first serve basis, but also based on severity of injury or illness and special status. For example, relatives of hospital staff, nuns, monks, and being part of selected professions could ensure or boost a woman's chance of being given a bed and crucially, one in a prime position in the ward, usually toward the front near the doctors' station where changes in condition were most likely to be observed quickly. It was not unusual for SDV patients to sit overnight in chairs or ward floors for treatment due to lack of bed space and their relative position amongst patient conditions.

ward. Almost no women declined⁴¹ and of those who did, some changed their minds and later asked ward nurses if they could see us⁴².

2.6.6.5 <u>Providing emotional support</u>

The research team built in strategies to support participants during data collection. Only two women requested to end interviews while others took small breaks and continued talking. The nature of this component demanded we embody a secondary, but no less important role as social workers as we were often the first to receive disclosures of IPV, sexual violence, child abuse/neglect within the family, and other significant issues of health and safety (von Benzon and van Blerk, 2017). Integral to the data collection process, we offered immediate emotional support, but also practical options such as leaflets on GBV, and the possibility to link women to the police, JMO office, *Mithuru Piyasa*, psychiatric support, etc., and women's permission was sought before we acted. In cases of child abuse/neglect, we informed women of their duty of care to protect the child(ren) in question, followed by informing HOs⁴³. A direct line was in place to selected consultant psychiatrists and the local JMO office for urgent advice and matters of safeguarding.

2.6.6.6 <u>Managing bystanders</u>

Generally, families and other bystanders were limited to visiting hours. The wards allowed chaperones under certain circumstances, and families in the event of imminent death of a patient. This minimised the number of 'extra' bodies on the wards and potential for influence on patients whether to participate or during data collection itself. For minors, chaperones and most often mothers were present with them most of the time. Parents or guardians (not chaperones) of minors had a right to refuse to temporarily vacate wards during interview; none enacted this right. Bystanders of adult patients vacated during interviews without issue. No significant issues were experienced during brief interview data collection.

⁴¹ Two women declined to take part entirely, while an additional three women initially declined but changed their minds later in their hospital stay.

⁴² This sometimes occurred by patients requesting to "*see the foreigner*" or *sudu nona* (white woman) as they could perhaps more easily remember how to ask for me than the RA who could have passed for any other doctor in the ward as she was young and from the local area like many of the other HOs.

⁴³ Our team was operating under Sri Lanka's National Guideline for the Management of Child Abuse and Neglect (SLCP and Plan Sri Lanka, 2014) and therefore had an obligation to report known or suspected concerns to at least HOs.

2.6.6.7 <u>Participant compensation</u>

As participants were met by the research team during their stays in CNTH and while in receipt of ward-based care, it was inappropriate and unnecessary to incentivise or compensate their participation, in line with ethical requirements of studies conducted by UoK's Faculty of Medicine.

2.6.7 Quality Control and Data Management

All patient information sheets were carried through wards in opaque folders to safeguard patient data. We emulated common clinical behaviour with our approach to form filling and thus did not raise unwanted attention in wards. As soon as interviews ended, RA2 removed herself from the ward to document the participant's story of SDV in as much and as exact detail as possible including quotes, as we could not record interviews in busy wards. All forms were stored in a locked cabinet in the team's office and were never shared outside the research team.

Data underwent pseudonymisation and de-identification to ensure no one beyond the research team could know which women participated and which data belonged to whom (Affleck and Carrigan, 2018). Recognising anonymisation means different things to different people, the data entry and storage for this component aimed to support secure data that would be difficult for outsiders to re-identify (Robson, 2011; Elliot et al., 2018). Data were saved after each data entry session in three separate locations on a dedicated and secure laptop.

2.6.8 Reflexivity, Positionality and Challenges to Active Case Finding in CNTH

2.6.8.1 <u>The impact of my presence in the hospital</u>

CNTH is located in an area unfrequented by tourists and away from foreign residences in the capital. As a result, the majority of staff and patients had limited or no real-life exposure to foreigners. I was therefore an obvious addition to the hospital campus and was acknowledged in a variety of ways from security guards, minor staff, patients, visitors and clinical teams, the latter largely unfazed by me after regular interactions. My presence drew considerable attention from patients and bystanders in wards⁴⁴. While this was often unproblematic, on busy casualty days it sometimes meant heightened curiosity of others coupled with sheer number of bodies in a restricted space could compromise confidentiality. In such situations, I modified my attendance, removing myself from the ward or not entering at all, and RA2 attended ward rounds independently.

2.6.8.2 <u>Distinguishing among SDV, other-inflicted and accidental injuries</u>

As SDV-relevant labels in admissions books were not always clear (e.g. 'cut injury'), we had to check with staff and sometimes directly with patients to clarify the source of harm. Additionally, HOs and other ward staff were sometimes unsure as to the source of harm, perhaps because contextual information was lacking, stories did not align, or patients were suspected of intentionally lying. Still on other occasions, we disagreed with HO's conclusions and investigated further to clarify. For example, HOs sometimes labelled injuries accidental, while my instinct and subsequent confirmation attributed injuries to assault, highlighting the challenges in producing accurate statistics on SDV. We therefore became involved in helping hospital teams interrogate their own perceptions and confirm likeliest sources of harm across a wide variety of patients. As we were not part of women's clinical care, women were often more likely to disclose to us than to ward doctors, and doctors regularly asked for our support because of this. We helped to identify many cases of attempted homicide, severe GBV, and accidental cases.

We also found patients labelled by HOs as self-harming who enthusiastically denied the intentionality of their behaviour, arguing their experience be seen as accidental. For example, a young woman who swallowed ten paracetamol explained she was unaware of their potential for serious harm and thought her migraine was so severe she should and could take more pills without risking overdose. In these instances, we were forced to reflect upon whether this lack of knowledge rendered the event accidental or whether intentionality was, in some ways, irrelevant because the act was objectively risking harm to self. As I selected the Center for Disease Control's uniform definitions of SDV for this study, we concluded that patients must have understood the risk of self-harm from their

⁴⁴ My attendance elicited different – and more challenging – responses in male wards that are not addressed here.

actions to qualify as having engaged in SDV (Crosby, Ortega and Melanson, 2011). However, this again underscores the complexity of how SDV as a concept is operationalised (Hasley et al., 2008), affecting how data are defined, who is counted and who is not, and why data may over- or under-count experiences.

2.6.8.3 <u>Training challenges and changes in human resources</u>

From early in the piloting period, RA2 required training and support to address practical performance issues. However, I encountered the greater challenge of addressing attitudinal issues which increasingly appeared to compromise data quality and completeness. For example, I worked with RA2 to try to channel feelings of anger and exasperation at women's stories – often towards male characters featured in narratives – into empathetic listening and action to provide further social support for participants. As this role was to also support Qualitative Inquiry, I selected to discontinue this RA2 following the probationary period coinciding with piloting. The replacement RA2, being a graduate of UoK's Faculty was already familiar with hospital processes, ward consultants and HOs, who were helpfully only one year senior to her in medical school, supporting continued relationships. The new team developed a quick and positive bond⁴⁵ and data quality improved from the main study period onwards. There was no gap in data collection between post-holders as piloting ended May 22 and main data collection commenced with the new RA2 on May 23, 2016 through 11 November 2016.

2.6.8.4 <u>Competing research agendas</u>

Another significant challenge to this component of the study involved the unexpected arrival of a foreign research team. Approximately six weeks into surveillance, two Western first year medical students arrived to commence a short-term project also involving self-harming patients at CNTH, brought to my attention through informal routes. I met with the visiting team to learn more about their project's aim, methods, and likelihood of overlap and impact on the now well-running hospital surveillance system. Despite my best efforts, I was increasingly concerned about negative impact on my own research for a multitude of reasons, most importantly due to evidence of unsound ethics

⁴⁵ We discovered early into the new three-person team that the RAs had in fact attended Reception together and loosely recalled one another from primary school days. This remembered connection quickly bonded the RAs and the two maintain a supportive and friendly dynamic to date.

impacting patient experience. Their brief project was duplicative in some aspects, and from a methodological perspective two concurrent studies risked impacts on recruitment, social desirability and rehearsal effects for women participating more than once, research fatigue and potentially re-traumatisation of patients (Clark, 2008). Further, they 1) lacked clearance at ward level from consultants, 2) attempted to piggyback on this study's data collection, 3) lacked experience in research practice and ethics, 4) operated poor systems for confidentiality and data protection, 5) created considerable confusion amongst ward staff about each study, and 6) reneged on agreed data collection schedules. Most worryingly, this team jointly visited with all patients to gather data (i.e. a minimum of an RA and two foreigners including a male), which drew significant attention from patients and bystanders and undermined efforts to protect patient's privacy as no modifications were made by them including on casualty days. This culminated in a particularly distressing experience accessing a pregnant patient in the obstetrics ward, where they lacked permission to operate, putting my clearance in jeopardy as CNTH Director's office was unaware the incident was not caused by my team. After a series of discussions with stakeholders, permissions for the other team to continue their research in its current form were rescinded. Follow up meetings with the REC helped ensure lessons were learned from this experience and that in future duplicative study approval should be minimised. I was given full support of the CNTH ward staff and Director's office to continue with hospital surveillance.

2.6.8.5 <u>Missing data: Uncovered days</u>

Throughout surveillance, Sundays were not systematically covered due to available human resources and as my Sinhala was not proficient enough to conduct interviews alone with most patients. Partial data were gathered for those admitted between Saturday afternoons (post-Saturday ward rounds) and discharged before Monday morning ward rounds by consulting BHTs and ward staff. While this weakens ability to explore weekend trends, key information such as patient age, method and severity was documented. Qualitative Inquiry was not possible with any Sunday-only patient. Flooding minimally impacted data collection as RA2 resided near CNTH (north of the Kelani River) and she was able to reach the hospital, although I was not.

2.6.8.6 <u>Acquiring supplementary data for discharged-before-seen and missing</u> <u>patients</u>

In total, 40 eligible women (19.0%) were not directly engaged by us. This was due to scheduling challenges and varied practices between wards resulting in discharges before our ward rounds (n = 9), patients going 'missing' (n = 13) or LAMA (n = 7). The distinction between these last two is that staff were aware of LAMA patients, whereas for missing patients, staff were unsure when they left the ward and to where they went. Patients under this category were noted as 'missing' in admissions books. The only method available to us to obtain partial data was to confirm a patient's discharge date by consulting the discharge book - complementary to the admissions book - which provides a patient's BHT number. We could then request the relevant BHT from ward nurses to review its content. When patients had not long been discharged or LAMA/gone missing, BHTs were often still somewhere in the ward and, with patience, found in one of the many piles of paperwork at doctors' and nurses' stations. However, if more than a couple of days had passed, BHTs were often removed from the ward and filed by staff. Requesting boxes in which BHTs were stored in no decipherable order was labour- and timeintensive and found to be ineffective much of the time when weighed against the data available from the document. This again stresses the complexity of establishing a comprehensive surveillance system to capture all cases of a selected event thoroughly. All patients' discharge dates were followed up by us by checking the discharge book on a regular basis. This allowed us to approximate patients' lengths of stay.

2.6.8.7 <u>The impact of patient deaths on the research team</u>

Despite my recognition that SDV patients could succumb to injuries during the study, I was surprised by my reaction to our first patient death one month into data collection. We were unable to speak with this patient and her sole visiting family member due to the severity of her self-immolation injuries. Several other patients who went 'missing' during their stays at CNTH were in such fragile states that staff feared they would have perished within a short period after leaving the hospital had they not sought help elsewhere, perhaps in private facilities. We were left with an ethical choice to either phone family members to enquire as to their wellbeing, or to follow staff procedure which involved no follow up. I chose to avoid over-stepping boundaries, and instead waited to see if subsequent suicided women's names matched previous patients.

2.6.8.8 <u>Obtaining permission to access psychiatric ward patients</u>

Once I decided psychiatric ward access was necessary, I acquired approval from the wards' split leadership in MoH and Professorial Units (i.e. UoK-affiliated). MoH-side approval was immediate while clearance for the Professorial Unit took several weeks; both approved our study and patient access before piloting ended.

2.6.8.9 Lack of knowledge about additional services and patient referrals

Early in piloting, I observed women disclosing issues of extreme household violence, IPV and child abuse, and that doctors were sometimes aware of these issues, but not acting on information to provide referrals or other forms of support beyond ward-based care. I enquired about patient referrals to *Room 16* or police in cases of disclosed child abuse, and found some doctors unaware of *Room 16* and its services, specifically that a GBV service operated in the hospital. In response to this, I invested in distributing laminated informational flyers from the *Room 16* team to all doctors' stations in the study's 17 wards to support closing this knowledge gap.

2.7 Qualitative Inquiry of Women's Self-directed Violence from Multiple Perspectives

Qualitative Inquiry sought to combine the insights of three separate, but related populations engaged with the issue of SDV in this setting including: 1) surviving family and collaterals of suicided WRA, 2) women with a recent episode of non-fatal SDV, and 3) health service providers whose job it may be to respond to and/or prevent these tragic incidents. Each section below explicates the methods and actions of the research team to generate data, delineating by each group of interest where differing approaches were required.

2.7.1 Study Design

2.7.1.1 <u>Setting</u>

Qualitative Inquiry required engagement with participants across the entire geographic area of Gampaha District at community and health-facility level. The only identified site for recruitment of participants at the outset of the research was CNTH due to its preselection for Active Case Finding of SDV-practicing patients. As cases of confirmed suicides occur most often in communities, families and collaterals' locations were scattered – sometimes outside of the district. As the study progressed, health providers representing diverse specialities were recruited, which necessitated the involvement of differing levels and types of formal and informal health facilities around Gampaha and one site in Colombo. Data collection therefore occurred in homes, health facilities, coffee shops and other locations preferable to those participating in this study.

2.7.1.2 <u>Sampling strategy</u>

Although qualitative research does not, as a matter of course, necessitate minimum sampling, target sample sizes were set at design stage for two of the three participant groups to ensure the inclusion of diverse perspectives (Robson, 2011). I aimed to speak with a minimum of five suicide-affected families/collaterals, and 20 health service providers. As the incidence of suicide and non-fatal SDV was unknown prior to the study, I did not set a target for women identified through Active Case Finding.

Using our ever-growing provider networks, HSPs were purposively sampled between June and November 2016. Informed by research on HSP characteristics influencing attitudes towards SDV (Conlon and O'Tuathail, 2012; Cleaver, 2014), we deliberately sought participation from differing specialities, years of experience, ages, genders, and likely exposure to and responsibility for women experiencing fatal and non-fatal SDV. A final sample of 25 HSPs included medical and surgical doctors, psychiatrists, psychologists, obstetricians, community- and hospital-based midwives, coroners and [MOs, Youth Friendly and GBV specialists, and traditional healers. The majority (n = 16) were directly familiar with the study from previous components, supporting rapport and positive uptake of invitations to participate (see Figure 2). The two exceptions were traditional healers (n = 2) and Colombo-based specialists treating complex SDV cases referred from around Sri Lanka (n = 2). The former were identified through community informants (e.g. local residents and drivers), while the latter were revealed from the referral pathway of a CNTH patient. Recruitment continued on a rolling basis until no new perspectives emerged (Carminati, 2018). While our sample of HSP was intentionally heterogeneous, Public Health Midwives emerged as a standalone group of interest; Chapter 4 focuses specifically on this important provider group.

A subset of women from CNTH were invited to participate in in-depth interviews between May and November 2016. These longer and more structured discussions aimed to complement the brief interview data generated during Active Case Finding from all female patients. As the surveillance system was prospective in nature, we could not predict characteristics to set firm sampling targets, however a heterogeneous sample for in-depth interviews was desired, including women of different ages, life circumstances and varying method selection. This was to avoid developing insights limited to one particular 'type' of SDV patient as has been done in previous Sri Lankan research (e.g. adolescents or pesticide-poisoning patients only) (Rajapakse, Griffiths and Christensen, 2013; Pearson et al., 2014; Rajapakse et al., 2014). Women were sampled from different wards, including psychiatry, obstetrics, medicine and surgery. Part way through recruitment, I recognised perspectives of self-immolation patients were limited, and to include them would require a deliberate search. Additionally, evidence on selfimmolation in Sri Lanka is extremely thin (de Alwis, 2012). I thus extended participation to women receiving treatment for self-inflicted burns at a separate health facility outside the district. In total, 17 women aged between 17-43 years contributed to this aspect of the study.

All families/collaterals of identified suicide cases (i.e. WRA in Gampaha District suiciding between January 2015 and November 2016) for which we had contact details (n = 20) were invited to participate in psychosocial autopsy interviews with our team. Starting with the most recent cases, provided a four-month bereavement period was observed by us (Samaraweera et al., 2008), requests for participation were made, with the research team working backwards to previous cases. Unfortunately no family/collaterals of suicided women took part in this aspect of the research, for reasons expanded upon under Reflexivity.

2.7.2 Design of Instruments

2.7.2.1 <u>Topic guides for health service providers</u>

HSPs are an essential part of the circumstances within which self-harming WRA find themselves. Their insight into processes of identifying and working with SDV-practicing women could shed light on some of the challenges and future opportunities with quantitative data, as well as informing potential health systems responses (Eddleston et al., 2006; Fincham et al., 2011). However, given the exploratory nature of this aspect of the study in light of limited culturally transferable research (Senarathna et al., 2008), preexisting instruments for engaging with HSP were not directly applicable to our setting. Instead, this study's topic guide drew on the existing literature to compile potentially relevant domains contained across multiple knowledge, attitude and practice surveys of HSP in HIC with additional and culturally salient issues highlighted in the wider Sri Lankan evidence base on suicide (e.g. religion) (Domino, Su and Shen, 2000). My interests lay not just in their hypothetical and abstract views on SDV, but also in HSP's lived experiences responding to it in their roles. As such, semi-structured categories were developed to explore a variety of issues. Within our heterogeneous sample, it was evident certain specialities were regularly encountering SDV prior to in-depth interviews and thus would be able to speak concretely about first-hand experience, while exposure to SDV among other roles such as midwives and traditional healers was unknown given a total absence of research globally. Further, some HSPs were only encountering women surviving SDV, while other medicolegal providers were focused almost wholly on the deceased. As a result, slightly modified versions of the interview guide were required for each group. All doctors are functional in English in Sri Lanka, however midwives, lowerlevel health workers, coroners and traditional healers are not, necessitating Sinhala informed consent and topic guides which underwent forward and backward translation (see Appendices 16 and 17).

2.7.2.2 <u>Psychosocial autopsy tool for surviving family/collaterals and women</u> <u>experiencing non-fatal SDV</u>

In the case of suicide, where the decedent is unable to speak for herself⁴⁶, insight of those who knew her most intimately is the next best source of information. Psychological autopsy has been applied to the study of suicide across a range of contexts since the 1950s. It "remains the only validated approach to explicate the psychological and contextual circumstances near to suicide (i.e. proximal risk factors)" (Conner et al., 2011, p.595) through the use of systematic in-depth interviews with families and other

⁴⁶ Communications left by decedents are the only known form of direct data from those who die by suicide. These can include suicide notes, but in modern times this can also include video and voice messages left by decedents in advance of their passing. Chapters 5 and 6 consider these direct communications from women in our sample.

knowledgeable informants, sometimes capitalising on archival records of the deceased where available. Efforts to advance culturally appropriate methods in Asian contexts have been explicitly called for, in part as, "data on features of mental disorders that confer suicide risk in non-Western samples in particular are needed" (Conner et al., 2011, p.598). Its use in Western contexts as a means for retrospectively diagnosing mental disorder in decedents formed the commonly cited statistic that 90% of suicide decedents are clinically depressed at the time of death. This conclusion is vociferously debated in non-Western contexts, and use of psychological autopsy in LMIC is encouraged to consider more than just the psychological (Hjelmeland et al., 2012). Though methodological issues abound⁴⁷ (Pouliot and De Leo, 2006; Conner et al., 2012), including standard tools' lack of a gendered perspective, it still offered this study an opportunity to explore dimensions of SDV that would otherwise have been side-lined.

Complementing psychological autopsy, *sociological* autopsy has emerged as an additional approach to incorporate often-neglected elements of the social circumstances within which SDV-practicing persons have lived (Cavanagh et al., 2003; Fincham et al., 2011). This moves beyond the psychological and the individual by attempting to draw some conclusions about the social circumstances of someone's life and death (Fincham et al., 2011). While neither psychological nor sociological autopsy has been applied by name to living persons with a history of self-directed violence themselves, they have been used with living control subjects in case-control suicide studies across cultural and developmental contexts (Fang and Zhang, 2010; Zhang, Lamis and Yuanyuan, 2012; Sun and Jia, 2014). As the principle of both methods is to reconstruct how one may have felt and acted over a particular time preceding the act of SDV and why, I aimed to apply them in combination to both living and deceased women's experiences.

Perspectives of living women who have experienced SDV and those affected by women's suicides have innate value as a form of 'lay knowledge' in their narratives (Greenhalgh and Hurwitz, 1999; Gavin and Rogers, 2006; Bullis, 2012). It is possible that the pool of

⁴⁷ Methodological criticisms include, but are not limited to: focus on the medical model paradigm, poorly defined and non-standardised instruments, timing between death and interview, variation in participant characteristics, and bias in both interviewers and collaterals (Hjelmeland et al., 2012). Strategies have been developed to address these criticisms, and were applied to our instrument design, sampling and procedures.

localised knowledge and beliefs that inform collaterals' understanding of why or how a woman has come to engage in SDV is the same pool from which women themselves base their decisions to utilise SDV as a personal strategy. Thus it was imperative to explore popular cultural ideas about causation, motivation, etc. (Fincham et al., 2011). Additionally, as overriding criticisms in the literature on women and SDV find an absence of lived experience (De Silva et al., 2016; Hjelmeland and Knizek, 2017) and preoccupation with pathologising women, introducing a narrative element in this study's methodology, "to one that searches for and examines the meanings, the interpretations, and the constructions within the accounts of those with close proximity to [self-harming] events" (Gavin and Rogers, 2006, p.141) broadened and enhanced in-depth analyses. This research therefore combined narrative, psychological and sociological autopsy methods, taking a more holistic and gendered view in shaping instruments for this much-needed case-based research (Fincham et al., 2011). Drawing on the literature, two previous psychological autopsy studies in Sri Lanka (Abeyasinghe and Gunnell, 2008; Samaraweera et al., 2008), expertise of the American Association of Suicidology, and formative fieldwork from Active Case Finding in CNTH, I developed a comprehensive psychosocial autopsy instrument (Appendix 21).

In addition to designing the instrument(s) to be used with women and surviving families, informed consent was carefully constructed, as was an introductory letter for use as first contact with survivors of suicided women in line with best practice (Appendices 18 and 19)⁴⁸. All materials were prepared in English and Sinhala, and informed consent was also prepared in Tamil. Translation and back-translation were critical as almost all in-depth interviews were expected to operate in two languages, requiring materials be accurate and easily interpretable by RAs using them as a reference.

2.7.3 Piloting

Two versions of the HSP topic guide were piloted in June 2016 with a midwife and one pair of medical doctors. Two items originally differentiating between moral and religious beliefs about SDV were viewed redundant in this context, with morality and religion

⁴⁸ Introductory letters are encouraged as best practice by the American Association of Suicidology

regarded synonymous; these items were merged. The psychosocial autopsy instrument was piloted with two women in CNTH in April 2016. No modules or individual items were removed, however amendments to the ordering of modules and use of branching logic were made. No families or collaterals participated in piloting or subsequent data collection.

2.7.4 Data Collection Process

HSPs were initially identified through our networks in CNTH and antenatal clinics, with additional specialities operating outside CNTH identified later in the data collection process (see Figure 2). Arrangements were made in advance of focus group discussions and in-depth interviews to confirm a time and place convenient for HSP. Given workloads and the unpredictability of particular roles such as coroners and surgeons, discussions were occasionally rescheduled or done over two sessions. All invited HSP accepted and participated. Some HSPs preferred to be interviewed with colleagues due to time constraints and familiarity with one another creating focus group dynamics rather than one-on-one interviews. Most HSPs (n = 22) were interviewed in private spaces within their respective health facilities, while traditional healers (n = 2) were interviewed in their homes, which operated as treatment spaces for clients, and one psychiatrist was interviewed in a coffee shop during quiet hours.

The subsample of WRA participating in psychosocial in-depth interviews were selected on a rolling basis, and fitness to participate and approaching of participants followed the same process as Active Case Finding. Rather than being asked to participate in the brief bedside discussion, women were invited for longer discussions in private rooms. No women declined, and most interviews at CNTH took place in doctors' break rooms attached to wards, which ensured consultant visits or other treatments would not be missed if patients were called back to their beds. Break rooms were never used by clinicians during our interviews and privacy was respected. One psychiatric patient at CNTH and all self-immolation patients were interviewed in private exam rooms in their respective wards. All 17 interviews began by asking women to describe a typical day which provided, "an entrance to understanding larger issues, such as…how [women] organise their lives" (Sørensen et al., 2017, p.2). This was followed by an open-ended question: Can you tell us how you ended up in hospital [date]? Women naturally covered modules of the psychosocial instrument, however we introduced and probed issues as necessary.

Qualitative Inquiry with HSPs and women continued until we reached information redundancy (Carminati, 2018)⁴⁹. Discussions were led by me in English and supported by RAs as needed, translating discussions with non-English speaking participants. Only two HSPs (both traditional healers) required translational support, while four women spoke proficient enough English to be directly interviewed by me. Interviews with HSPs and women lasted between 35 minutes and three hours, were audio-recorded, and supplemented by field notes. I populated psychosocial autopsy instruments for each participating woman as interviews progressed, and developed summaries with RAs immediately following interviews.

All key persons providing statements for acquired suicide inquest files (n = 20), including family members, witnesses to the suicide, lovers and other collaterals with documented addresses and phone numbers were contacted by our research team. We began by drafting individual letters, which we attempted to hand deliver to last known address for those based in Gampaha District; if we were uncertain of the property's current occupants, letters were not left. Letters were followed by introductory phone calls which were also used in cases where informants resided outside the study district. Operational phone numbers and addresses were few (n = 8 cases), and several attempts were made to contact potential participants from these cases. Informants from five cases including boyfriends, estranged husbands and fathers initially expressed interest in participating, but ultimately declined to arrange interviews. I decided to terminate efforts to recruit family and collaterals affected by our sample of women's suicides, reflecting on this challenge below.

⁴⁹ I.e. data saturation

2.7.5 Quality Control and Data Management

Dictaphones, populated psychosocial instruments, and field notes were kept in the research team's secure office. Data were inputted into appropriate digital formats (e.g. women's interviews were transformed into a variable-based SPSS dataset as well as transcripts). English-only interviews were transcribed verbatim by me. Bilingual interviews' English-language segments were transcribed by me, while Sinhala portions were transcribed and back-translated into English by two independent professional Sinhalese transcriptionists for both women's and HSP interviews and focus group discussions, with exception of one interview with a traditional healer which was transcribed and translated by RA2. Transcripts were exchanged between transcriptionists to assess translation accuracy, and discrepancies clarified with RA2. All transcripts were quality checked by me against audio-recordings and field notes to produce cohesive narratives combining the advantages of each of these data formats before analyses commenced (Tessier, 2012).

2.7.6 Reflexivity, Positionality and Challenges to Qualitative Inquiry

2.7.6.1 Inability to recruit family and collaterals affected by suicide

Despite sensitive and creative perseverance, we were unable to conduct psychosocial autopsy interviews with any identified person affected by the confirmed suicides among WRA in Gampaha District. While disappointing, our experience foregrounds the challenges in conducting ethical research with those bereaved or otherwise affected by suicide. The previous two psychological autopsy studies in Sri Lanka may have been successful in recruiting participants as they were conducted in rural areas where people's whereabouts would be easily known by neighbours and extended family. Furthermore, interviews were conducted within as little as two weeks of death (Abeyasinghe and Gunnell, 2008; Samaraweera et al., 2008). I intentionally chose to avoid this recruitment approach to respect the traditionally practiced three-month mourning period among Buddhist and Hindu communities and in light of evidence on acute bereavement and its impact on people's readiness and ability to consent to early interviews (Samaraweera et al., 2008).

Two key factors affected our recruitment. First, all telephone numbers recorded in suicide inquest files were for mobile phones, and most numbers were invalid or in use by another, unrelated person by the time our team made contact. In LMIC, mobile phone use is leapfrogging landlines (Labrique et al., 2017), however research shows high turnover of mobile numbers in these settings as SIM cards are more frequently changed and handsets replaced altogether, often when people are unable to pay for calls or charging devices (Arie, 2015). Shared mobiles are also common and may change primary user, and mobile company directories following users to newly assigned numbers are absent (Labrique et al., 2017). Without a stable line of communication, backtracking to locate informants was largely impossible. Recruitment in health research using mobile technologies reports similar challenges of high dropout rates and costly efforts to recruit participants (Labrique et al., 2017). This presents a relevant shortcoming in the documentation for suicide inquest files as authorities would also be unable to re-contact informants if further formal inquiry was required.

Second, many informants appeared to have been living in rented or otherwise temporary accommodation, and had moved since the death event. This may be a partial consequence of Gampaha's high migration rates, where many families are not residing in their natal communities. However, this and mobile phone number deactivation may also be a sign of what suicidologists have called the "change of address book phenomenon" (American Association of Suicidology, 2015). This reflects deeply felt or perceived stigma by suicideaffected persons, especially those viewed close to decedents. Suicide can be socially injurious to surviving family and associates of the deceased in all contexts (Osafo et al. 2018). This may be particularly so following women's suicides as women are culturally proscribed to consider others – often before themselves, especially in interdependent or kinship-based societies like Sri Lanka (Osafo et al., 2011; Marecek and Senadheera, 2012). Their suicides therefore may signal a failure on the part of families, for example, to ensure women's proper conduct, creating shared shame and dishonour (Osafo et al., 2011; Marecek and Senadheera, 2012). Families and collaterals may find themselves socially ostracised and unwelcome in previously accepting social networks, or may desire to reestablish themselves post-suicide in new locations and/or within new – and uninformed - social circles.

This was exemplified by one husband with whom we met in person to speak informally and at length about his decision *not* to participate. His daughter was engaged to be married in their village through an arrangement between both sets of parents at the time of his wife's suicide, and the engagement was swiftly terminated by the groom's parents upon hearing the manner in which the woman had died. Suicide can cast dishonour over a family, affecting marriage prospects of daughters in Sri Lanka (Marecek and Appuhamilage, 2011). To avoid further stigmatisation of his daughter, the pair relocated to his sister's village elsewhere in Gampaha District, which is where we met with him. The daughter was introduced in the village as the aunt's own daughter, attributing her previous absence to overseas employment and she referred to the aunt as Amma (mother) in our presence. The father lived in a separate house down the road and now acted in the role of uncle. The daughter was by then engaged under a new arrangement and the father explained his disinclination for us to conduct formal interviews to ensure this second match would not be compromised and that the circumstances of his wife's death remained a secret from the intended marital family. It was our observation at this visit the daughter was unwell, being severely underweight, slow to respond and unable to make eye contact. It was our interpretation she was struggling with the loss of her mother and her new family arrangements and possibly experiencing major depression as many months had passed beyond acute bereavement. Within the limits of our ability and the ethics of this deeply affective moment for both sides, we provided resources and signposting primarily out of serious concern for the daughter, and respectfully left.

2.7.6.2 <u>Family confrontation and management</u>

A second and final difficulty experienced by our team involved several brief, but uncomfortable confrontations from women's families. On two occasions, members of women's families who observed us leaving wards before visiting hours followed us and requested details of our discussions with women. It was evident these enquiries were not concerned with women's wellbeing or ascertaining some deeply sought rationale for why women had engaged in SDV which might offer comfort or clarity. Instead, these confrontations appeared aggressive, prioritising reputation management and pronouncements of innocence in effort to absolve themselves of responsibility for women's distress; in both cases IPV and violence by siblings-in-law were disclosed in women's interviews. Families were firmly informed that we were not part of women's clinical care teams and any and all enquiries should be directed to them; further, we reassured both women that nothing was disclosed to families and that our visits were presented to families as standard and non-specific to them. A final confrontation involved the grandmother of one of our youngest patients who wished to access the ward and remove her granddaughter. The young woman shared serious allegations of domestic violence including homicidal threats by the grandmother. As such we supported her request for safeguarding by bringing in JMO officials to establish a protection order and a legal mechanism for her to be discharged only to her mother. On this occasion we were requested by ward staff to endorse a narrative that the granddaughter was not a patient in the ward to deter the grandmother's entry. Recognising the seriousness of protecting the minor's welfare with her explicit request, we obliged and the grandmother's attempts to access this participant were abandoned.

2.8 Reflexivity and Research Relations

Drawing on Richardson's (1997) imagery of crystallization of social data, this study aims to provide "a deepened, complex, thoroughly partial understanding of [women's SDV]" (p.92). Feminist critical realism acknowledges that objectivity throughout the research process is an impossibility (Lincoln and Guba, 2005), that not all experiential accounts are equal, perceptual distortion is possible – even likely, and no participant of research, including the researcher, can arrive at a fully formed and "accurate picture of the social world" (Houston, 2001, p.851). The knowledge produced through this study is thus constrained by a multitude of structural, inter- and intrapersonal influences, including "factors that are often invisible to existence, not capable of being measured or not expressed by the researched" (Bergin, Wells and Owen, 2008, p.173). Accepting these limitations, the authenticity and trustworthiness of my (partial) understanding of SDV and concomitant phenomena for women in this setting was partly supported by operating in a reflexive mode, principally of the self (Houston, 2001).

Reinharz (1997) asserts that researchers embody three types of identity in the field including the researcher, the personal and the social self brought *to* the field, and the self that is created *in* the field. These identities co-exist and are underpinned by one's values. The values of altruism and a belief in the empowering potential of shared knowledge

created by research, in both its intrinsic value and possible contributions to social change, influenced my selection of this study topic, my critical feminist framing and methods, the selection of Sri Lanka as the study setting, and my approach to analyses and presentation of this work (Lincoln and Guba, 2005). My personal identity, i.e. the brought self, as a Western, middle-class, formally educated Caucasian woman indicates a privileged worldview, but has also been heavily shaped by a familial expectation to participate in activism, even on the smallest scale, from childhood and for causes in which I often operated in a socially transgressive role to support a social justice agenda. My relative comfort in occupying both a critical and outsider position directly shaped my interests in gender justice and global health, with a particular drive for advancing sexual and reproductive health and rights and elimination of gender-based violence across diverse and resource-limited geographic and sociocultural settings. Consequently, my identity as a critical feminist researcher developed through my participation in and advocacy for these issues, and was encouraged by occupational expectations for research to which I contributed to facilitate tangible, identifiable positive change for beneficiaries (Houston, 2001). This research is borne out of a historical professional encounter with high levels of SDV amongst women in Nepal – an issue I continued to monitor for the (lack of) response from relevant stakeholders over many years. I subsequently developed a sustained interest in exploring the extent to which this experience was affecting women elsewhere across the Global South, and whether and how this suffering was being acknowledged and prioritised as one marker of communities' valuing of women and girls.

These personal and professional identities and my particular and historic interest in women's SDV converged in this study to create a third identity, one of human-asresearch-instrument in the field (Lincoln and Guba, 2005). In this role, I was aware of my expectation or hope for the research to be 'useful' and enriching for participants in some form (e.g. socially, emotionally, professionally), i.e. for this research to be dialogical, not extractive. This intention informed decisions about both the kind of knowledge produced and how it would be generated. Central to this was my prioritisation of ethics in the research team's every day practice, particularly in our efforts to establish trusting research relations with all participating actors. Throughout this mixed-methods research, I was acutely aware of my positionality in relation to all stakeholders including gatekeepers and participants, many of whom presented to us with complex needs and assumptions, partially shaped by their perceptions of me. At times my foreign and thus outsider status may have been beneficial as certain stakeholders appeared to value that a foreign researcher would take such an interest in their work, health facility, or lived experience. Certain SDV patients expressed curiosity to engage in conversation with someone from outside their social network, and may have perceived me as a less threatening person with whom to disclose selected experiences than others responding to their SDV (Frey et al., 2018). My position as a young female of similar age to most participating women may also have presented me as relatable and enough of an 'insider' in this regard to foster trust evidenced by female participants' queries into my personal relationships, experiences and sometimes explicitly through seeking my (relationship) advice. My comparatively young age, thenunmarried status and gender were also seemingly deemed non-threatening to the majority of stakeholders who were considerably older and primarily male and clinical. Yet my foreign status – and perhaps my gender – seemed to be viewed as intrusive by several male gatekeepers who presumed that I could and would not ultimately understand the phenomenon of SDV in this context. Linguistic barriers prohibiting direct discussions with some gatekeepers and participants may have contributed to such presumptions. While this aspect of my outsider status presented an additional challenge, and mediated some of my interpretations of social circumstances and interactions, the multitude of criticisms of conducting research without proficiency in the source language were fore during my design, implementation and reflection upon fieldwork (Winchatz, 2006; Krzywoszynska, 2015).

Finally, my interpretation and attribution of vulnerability, which is partially socially constructed and contextual (von Benzon and van Blerk, 2017), evolved over the course of fieldwork and in relation to each data collection moment, particularly with surviving self-harming women. These moments occurred in an intersubjective space in which participants collaborated *with* me to generate data (Winchatz, 2006). Throughout fieldwork I intentionally selected to embrace my own vulnerability in the field, to minimise power differentials and foster relational equity, further reflecting my values as a feminist researcher (von Benzon and van Blerk, 2017).

While imperfect, this critical self-awareness has encouraged me to identify, acknowledge and consciously distinguish between my voice and that of those participating in this research alongside me (Lincoln and Guba, 2005). My continuous engagement in methods supporting reflexivity such as maintaining a detailed and thorough research journal, and constant discursive work with RAs, gatekeepers, participants and the literature has enhanced the fieldwork process and subsequent analyses and interpretation of Sri Lankan women's SDV.

2.9 Summary

This chapter has thoroughly described the practicalities, processes, instruments and methodologies implemented throughout 14 months of fieldwork across Gampaha District. It presented my rationale for selected approaches and reflection on how the research team affected and was affected by our data collection throughout Antenatal Screening, Active Case Finding, and Qualitative Inquiry. Chapter 3 now turns to the findings of our Antenatal Screening and their implications for identifying and responding to multiple psychosocial vulnerabilities in perinatal women in this evolving context.

Chapter 3. Addressing Psychosocial Vulnerabilities through Antenatal Care – Depression, Suicidal Ideation and Behaviour: A Study among Urban Sri Lankan Women⁵⁰

3.1 Introduction

Globally, antenatal care (ANC) provides a unique opportunity to identify and support women at risk of poor maternal health outcomes, and has demonstrated effectiveness in reducing multiple health and social vulnerabilities (WHO, 2016b; Benova et al., 2018). In low- and middle-income countries (LMIC), where most maternal mortality and morbidity occurs (Fisher et al., 2012), ANC may be the first and/or primary mechanism for women to connect with formal health services (Metheny and Stephenson, 2017). Maternal health programmes have tended to focus on obstetric causes of mortality and morbidity. However, recent evidence suggests common perinatal mental disorders (CPMDs) such as depression and anxiety are among the commonest morbidities experienced by perinatal women. As a result, maternal health programmes have missed large subsets of women experiencing CPMDs and – although rarer – those experiencing symptoms of psychosis, self-harm and suicide (Onah et al., 2017). Stakeholders are increasingly looking to introduce or improve mental health screening, referral and treatment in maternal health services including by non-mental health specialists (Rahman et al., 2013; Shrestha et al., 2016; Patel et al., 2018). Several high-income countries (HIC) have invested in routine screening and/or issued guidance recommending universal screening of perinatal women in primary care (Howard et al., 2014a).

In LMIC, however, perinatal mental health problems remain under-identified and undertreated in part because data on the prevalence and correlates of CPMDs and suicidal ideation and/or behaviours (SIB) are lacking (Fisher et al., 2012; Gelaye et al., 2016), particularly for the antenatal period. As of 2016, 20 LMIC countries had published evidence on antenatal depression with half the studies originating from just three countries (Brazil, South Africa and Turkey) (Gelaye et al., 2016). Prevalence estimates for CPMDs – which include mood disorders, anxiety, alcohol and substance abuse – vary

⁵⁰ This chapter is currently under review at a peer-reviewed journal

widely across contexts and differ depending on when women are screened, how measures are administered (e.g. self-report versus clinical assessment), and in what environment (e.g. community versus hospital). In HIC, 10% and 13% of ante- and postnatal women experience depression and/or anxiety respectively (Fisher et al., 2012). Limited LMIC evidence suggests perinatal women experience double the prevalence of CPMDs compared to their HIC counterparts, with 16-25% antenatal and 20% postnatal prevalence of CPMDs respectively. Across all settings, antenatal depression is a recognised predictor of postnatal depression (Fisher et al., 2012; Gelaye et al., 2016).

As obstetric causes of maternal death have fallen, deaths due to suicide have emerged as significant if not leading contributors to preventable deaths in perinatal women, including during pregnancy (Romero and Pearlman, 2012). With the postnatal period too late for intervention, there is an urgent need to identify antenatal women at risk of SIB. Existing data are rare, however, and similarly weighted by evidence from HIC (Gelaye et al., 2016; Mangla et al., 2019). Maternal suicides reflect a double disparity in LMIC where local evidence is most limited, but incidence is highest. In LMIC, where 79% of all suicides occur (WHO, 2018), a pooled prevalence rate of between 0.65% and 3.55% of maternal deaths is attributed to suicide (Fuhr et al., 2014). Further, suicide represents only part of SIB, which also encompasses suicidal thoughts, planning and preparatory behaviour, and suicide attempts. Most research on perinatal women has focused on suicidal ideation, with global prevalence estimates ranging from 5.0-27.5% (Lindahl, Pearson and Colpe, 2005; Gausia et al., 2009; Rochat et al., 2011; Supraja et al., 2016; Onah et al., 2017). Evidence from LMIC suggests higher rates of suicidal ideation in perinatal women compared to HIC contexts, from 14.0–27.5% (Lindahl, Pearson and Colpe, 2005; Gentile, 2011; Rochat et al., 2011). Data on suicidal behaviour in perinatal women in LMIC have only recently begun to emerge (Orsolini et al., 2016; Supraja et al., 2016; Onah et al., 2017).

While methods exist to assess some aspects of perinatal mental health, none of the currently deployed antenatal tools are sufficiently comprehensive to explore multiple vulnerabilities. The most commonly employed tool for CPMDs is the Edinburgh Postnatal Depression Scale (EPDS) (Cox et al., 1987), a 10-item self-report measure applied throughout the perinatal period, and considered reliable and valid in multiple LMIC to

identify depressive and anxious symptomology (Shrestha et al., 2016). However, no dedicated tools for perinatal women have been designed to assess SIB. Current methods are not fit for purpose as they commonly embed questions on self-harm that inappropriately assume suicidal intent into tools for depression, preventing exploration of SIB in the absence of CPMDs (Orsolini et al., 2016). Some methods explore suicidal behaviour through branching logic only if suicidal ideation is reported, missing behaviours that occur under more sudden circumstances (Giddens and Sheehan, 2014). These tools' limitations have shaped available data which is especially problematic for LMIC where the manifestation of CPMDs and links between mental disorders and SIB are less established. For example, SIB in the antenatal period may be predictive of postnatal depression, but reliable data are absent (Orsolini et al., 2016). Identifying correlates of SIB in LMIC antenatal women, particularly factors related to their life circumstances and the role of pre-conception mental health⁵¹, may reveal common risk factors to CPMDs or unique variables, which could inform early intervention for CPMDs and SIB (Onah et al., 2017).

ANC in LMIC is a critical point in a woman's care-seeking to intervene for those experiencing or at risk of poor psychosocial outcomes. Coverage of ANC is nearly double that of postnatal care and roughly 83% of women attend at least one clinic during pregnancy in LMIC (Kearns et al., 2016; UNICEF, 2018). While increasing levels of contact between pregnant women and providers are promising in LMIC, deficiencies in global guidance (Lattof et al., 2019), and content and quality of visits mean ANC is an underutilised platform to generate more complete data on maternal mental health and, with the right tools, women's psychosocial vulnerabilities more broadly (WHO, 2016b). This study capitalises on the strengths of Sri Lanka's well-established ANC system to examine the data dearth on CPMDs and SIB among LMIC antenatal women. The Government of Sri Lanka recognises perinatal suicides as an important public health challenge, but evidence on SIB in perinatal women and excluded minority and low literacy subpopulations (Agampodi and Agampodi, 2013). This research aimed to identify the prevalence of lifetime and current-pregnancy SIB, antenatal depressive

⁵¹ In this thesis, I employ this term to refer to women's mental health before their current pregnancy and it accounts for time periods in women's lives in which some women were already mothers to previous children.

symptomology and their correlates among Sri Lankan women. Through the application of an innovative screening tool, this is the first study, to my knowledge, to report findings from an antenatal population in Sri Lanka inclusive of minority women and those with low literacy, and one of the few to do so from LMIC.

3.2 Methods

3.2.1 Case Selection and Study Setting

This cross-sectional study was conducted in Gampaha District, Western Province, Sri Lanka. Gampaha was selected as although it has historically lower suicide rates than other parts of Sri Lanka, these rates have been intractable (Knipe et al., 2017c). The district ranked 7th of 25 districts for perinatal suicides in 2010 (Jayaratne, 2013) and continues to have a higher maternal mortality ratio than the national average (41.2 versus 33.7 per 100,000 live births respectively) (FHB, 2019). Gampaha is the second most populous district with 2,409,000 people and hosts a more urban, non-agricultural and migratory population than elsewhere in the country and differs from the largely rural populations that have centred in previous Sri Lankan research on suicide (DCS, 2019b). Sri Lanka as a whole displays persistently high suicide rates with more limited declines in women (Knipe et al., 2017c).

Gampaha District currently delivers 185 community-based antenatal clinics (ANC) in addition to hospital-based services. ANCs selected for data collection for this study ranged from small basic centres delivering maternal and child health services, to Sri Lanka's second largest public hospital, Colombo North Teaching Hospital. The combination of community- and hospital-based ANC improves representativeness (Fisher et al., 2012), as hospitals often absorb higher risk pregnancies from community clinics, potentially skewing findings of hospital-only studies.

3.2.2 Sample and Procedures

A sample size of 1000 women was sufficiently powered to detect 15% antenatal depression (at 95% confidence intervals), in line with regional studies (Agampodi and

Agampodi, 2013; George et al., 2016), and adjusted for design effects (Lwanga and Lemeshow, 1991). Sampling was a three-stage process with local health authorities, antenatal services, and individual women. Firstly, four of the District's 16 Medical Officer of Health (MOH) areas were purposefully selected to ensure representativeness of the District's population density, geographical coverage, distance from referral hospitals, and patient volume. Secondly, individual community clinics were randomly selected for three MOH areas. Patient load and urbanisation varied across MOH areas resulting in selection of eleven ANC services across Gampaha. Colombo North Teaching Hospital provided the hospital-based clinic in the fourth area. Thirdly, all pregnant women aged 15-49 presenting for ANC at one of the study sites, regardless of gestation, preferred language or literacy level were invited to participate. Women could participate only once, usually on the first occasion they attended the clinic when the research team was present.

3.2.3 Measures

Three data collection tools were combined in succession to form a novel three-part instrument (see Appendix 13):

3.2.3.1 Edinburgh Postnatal Depression Scale

The Edinburgh Postnatal Depression Scale – producing a score between 0-30 (Cox et al., 1987) – has been validated to reliably detect recent depressive symptomology among both Sinhala- and Tamil-speaking populations, ante- and postnatally (Benjamin et al., 2005; Rowel, Jayawardena and Fernando, 2008). Based on local validation studies recommending cut-off scores of eight and nine for Tamil and Sinhala-speaking populations respectively, a conservative threshold of nine and above was applied to indicate current depressive symptomology for possible antenatal depression (i.e. dysthymia through major depressive disorder). The EPDS is not a diagnostic tool, and this thesis does not apply the term 'depression' as a diagnosis, but rather as a shorthand descriptor of elevated intensity and number of symptoms indicative of possible depression. Women endorsing 'hardly ever', 'sometimes' or 'yes, quite often' were considered positive for past-week presence of self-harming thoughts (item 10).

3.2.3.2 <u>Columbia Suicide Severity Rating Scale (C-SSRS)</u>

This study is the first to adapt the C-SSRS for a perinatal population. The C-SSRS captured data on prevalence of suicidal ideation and suicidal and non-suicidal self-harming behaviours for two time periods: women's lifetimes and current pregnancies. The C-SSRS was selected because it avoids conflating suicidal ideation with behaviours, is one of the most comprehensive instruments available and may be applied with lay researchers or through self-report to measure four key constructs at two selected time points: 1) presence of suicidal ideation, 2) severity and intensity of suicidal ideation, 3) previous self-harming behaviour, and 4) lethality of that behaviour. The C-SSRS was previously translated into Sinhala and Tamil (RFMH, 2008), but required modification for this setting into a paper-based self-report version. Women responded to the same set of questions for both lifetime and current pregnancy and each time period was scored independently; established best practice guided scoring⁵² (Nilsson et al., 2013).

3.2.3.3 Life Circumstances

To identify potential correlates of depression and SIB, a third questionnaire on life circumstances was developed following a review of evidence and included demographics, pregnancy and motherhood, alcohol and marriage characteristics (Rocca et al., 2010; Knipe et al., 2017b). A gap in evidence exists on attitudes towards and experiences of intimate partner violence (IPV) in Sri Lanka generally and among perinatal women specifically. IPV has been identified in other LMIC as a correlate of CPMDs (Gelaye et al., 2016), while its relationship with perinatal SIB has been explored in a handful of LMIC studies using very narrow definitions (Devries et al., 2013). This study incorporated the Demographic and Health Survey violence module (n.d.) and locally developed and validated questions assessing both justification and experience of multiple forms of IPV. To my knowledge, this is one of the most comprehensive explorations of IPV's relationship to CPMDs and SIB from any LMIC.

⁵² Consistent with guidance from Columbia University, suicidal ideation was classified as answering "yes" to any one of the six suicidal ideation questions (items 1-6); suicidal behaviour was classified as answering "yes" to any one of the four suicidal behaviour questions (items 13, 15-17); non-suicidal SDV was classified as answering "yes" to item 14; and suicidal ideation and/or behaviour was classified as answering "yes" to any one of items 1-6, 13, 15-17. Scoring was applied for each respective time period (i.e. lifetime and current pregnancy).

The C-SSRS and Life Circumstances components were translated and back-translated by native Sinhala and Tamil speakers with expertise in psychometrics and social science research, while the EPDS was used in its current Sri Lankan Government-endorsed format.

3.2.4 Piloting

The instrument was piloted in February 2016 and no modifications were required for the EPDS. The lethality subscale of the C-SSRS was removed after piloting due to time constraints and as its items were deemed unessential for the aims of the research. Formatting and minor wording changes to retained subscales were required for both the C-SSRS and Life Circumstances components to facilitate reliable unaided self-reporting.

3.2.5 Data Collection and Ethics

At each ANC, Public Health Midwives (PHM) introduced the research team to attending women. Written informed consent was provided in women's preferred language (Sinhala, Tamil or English). Participants were given sufficient time to read the document privately and to ask any questions before deciding whether to participate (response rate > $95\%^{53}$). Questionnaires were distributed to participants concurrently, but were self-completed privately unless support was required. Women with low literacy ($n \sim 10$) participated through oral administration of the questionnaire. Nearly 90% of women submitted fully completed forms which were spot-checked by the research team for completeness and indications that any participants were currently in distress (i.e. at risk of harm to self or others and/or experiencing IPV). Women indicating risk were discreetly connected by the research team to their individually responsible midwife, gender-based violence or mental health services as appropriate. Neither incentives nor compensation was given for participation. The London School of Economics and University of Kelaniya's Research Ethics Committees granted ethical clearance. Between February and September 2016, 1013 antenatal women completed the questionnaire (excluding the pilot), with a minimum of 250 women from each of the four MOH areas.

⁵³ As PHM assisted in recruitment an absolute number of refusals could not be confirmed.

3.2.6 Data Analysis

All data were analysed using SPSS v 21.0 (IBM Corp, 2012). Thirteen cases were removed due to significant omissions. Missingness analysis concluded these cases did not show common variables or systematic errors which could have biased the remaining sample. Of the remaining 1000 observations, 868 had complete data. As the dataset was 99.7% complete at the variable level, it was inefficient and potentially biased to proceed with analysis based on complete cases alone (Horton and Kleinman, 2007). Multiple imputation was not employed in this instance in alignment with scoring guidelines (Nilsson et al., 2013).

Internal consistency of the selected scales was assessed using Cronbach's alpha with coefficients of 0.80, 0.91, and 0.81 for the EPDS, C-SSRS, and IPV scales respectively. These coefficients are sufficiently strong to suggest each scale exhibited adequate internal consistency and reliability in the study sample, and redundancy of items avoided (Kozinszky et al., 2017). Normality of data was examined using the Shapiro-Wilke's test. Data were explored for outliers and skewness to inform appropriate test selection of parametric tests. Presence of multicollinearity was assessed. Bivariate analyses applying Fisher's exact or chi-square test of independence, post-hoc analyses using the Bonferroni correction and accounting for cells with few observations, were run in order to inform selection of variables for multivariate analyses.

A second set of multivariate analyses were conducted using logistic regression to examine risk factors for antenatal depressive symptomology and current-pregnancy SIB and variable selection based on bivariate analyses. Analyses sought to achieve the most parsimonious models informed by *a priori* and *a posteriori* factors. A threshold for statistical significance was set as *p* value less than 0.05; variables demonstrating significance in bivariate analyses were retained in multivariate models. Hosmer-Lemeshow's test and Nagelkerke's R² were used to assess goodness of fit for the logistic regression model for depressive symptomology. Due to sparse data bias for the outcome of SIB in pregnancy, traditional methods of logistic regression risked producing a biased model. Based on the literature, Firth logistic regression was selected to address this issue (Firth, D., 1995; Greenland et al., 2016).

3.3 Results

3.3.1 Sample's Life Circumstances

Table 2 presents an overview of the total sample's life circumstances. One thousand antenatal women, ranging from 16 to 42 years, participated. The majority were at least 26 years of age (66%), Sinhala Buddhist (75.9%) and achieved a minimum of some secondary school education (78.2%). Marriage was nearly universal in our sample (96.5%), and 17.7% of women married before age 20. Child marriage (i.e. < 18 years) was reported by 55 (5.5%) women. Over a quarter of women engaged in part- or full-time work outside the home (27.8%), while 44.3% were housewives. Eighty-two percent of women had partners in part- or full-time employment. One in four women had household debt, and 11.5% (n = 115/251) of those with debt reported that it caused worry or stress. Aside from debt, 13.3% of women reported their general household financial situation caused worry. Average gestation was 21 weeks (SD = 9.4), however women were sampled between 2-40 weeks gestation. Nearly half (45.8%) of women were attending ANC for their first pregnancy. Some women expressed ambivalent or changeable feelings about the pregnancy and did not intend (12.5%) or want (9.1%) the pregnancy. Two-thirds of women reported that their husbands drank alcohol (n = 617), nearly 13% of these women qualified this drinking as problematic.

A high proportion of women (43.3%) justified wife beating for at least one of five possible scenarios (see Appendix 13). Women's reported experiences of different types of IPV in their current partnership varied widely, with 1 in 4 women reporting both jealous/angry behaviour from their partner if they spoke with other men (23.7%) and partners insisting on knowing their movements at all times (25.9%). One in six women reported emotional abuse (n = 164), while physical abuse affected 12.8% of women. Financial violence and other controlling behaviours such as limiting contact with friends and family were less commonly reported. Forced sex and physical harm during the current pregnancy were disclosed by 2.4% and 2.9% of women, respectively.

		Total sample (n = 1000)
	Variable	N (%)
Demographics	Age of women (mean, SD)	28 (± 5.4)
	Religion	20 (2011)
	Buddhist	759 (75.9)
	Catholic	132 (13.2)
	Hindu	42 (4.2)
	Other	66 (6.6)
	Missing	1 (0.1)
	Ethnicity	1 (0.1)
	Sinhalese	897 (89.7)
	Tamil ¹	65 (6.5)
	Minority group ²	36 (3.6)
	Missing	2 (0.2)
Marriage and family	Marital status	2 (0.2)
viarnage and ranning		24(24)
	Single Married	34 (3.4)
	Divorced	965 (96.5) 1 (0.1)
	Widowed	1 (0.1) 0 (0.0)
		0 (0.0)
	Social support	42 (4 2)
	No support	42 (4.2)
	One source of support	478 (47.8)
	Two or more sources of support	480 (48.0)
	Living situation	
	Alone	6 (0.6)
	Nuclear family	509 (50.9)
	Extended family	482 (48.2)
	Missing	3 (0.3)
Socioeconomic factors	Stressed by debt	
	No	136 (13.6)
	Yes	115 (11.5)
	Household finances cause worry	
	No	538 (53.8)
	Yes	458 (45.8)
	Missing	4 (0.4)
Pregnancy and motherhood	Trimester	
	1st trimester	235 (23.5)
	2nd trimester	459 (45.9)
	3rd trimester	294 (29.4)
	Missing	12 (1.2)
	Pregnancy intendedness	
	Intended to get pregnant	833 (83.3)
	Intentions kept changing	37 (37.7)
	I did not intent to get pregnant	125 (12.5)
	Missing	5 (0.5)
Personal and family health	Family history of mental disorder	
	No	968 (96.8)
	Yes	30 (3.0)
	Missing	2 (0.2)
	Spousal use of alcohol	
	Never	382 (38.2)
	Sometimes	588 (58.8)
	Often	29 (2.9)
	Missing	1 (0.1)
IPV	Justifies at least one scenario of IPV	. ,
	No	555 (55.5)

Table 2. Description of study participants

Yes	433 (43.3)
Missing	12 (1.2)
Experienced at least one	
No	456 (45.6)
Yes	539 (53.9)
Missing	5 (0.5)
Physical IPV in pregnanc	y
No	958 (95.8)
Yes	29 (2.9)
Unsure	11 (1.1)
Missing	2 (0.2)

¹ Includes Sri Lankan and Indian Tamil

² Includes Burgher, Malay, Moor, Other

Table 3 presents life circumstances of women reporting antenatal depressive symptomology indicative of antenatal depression (i.e. EPDS score of nine or more) and SIB in pregnancy (i.e. ideation only, behaviour only, and both ideation and behaviour). Risk factors identified through bivariate analyses are indicated in bold and described by mental health outcome in the following sections.

		Antenatal depression (n = 296)	Suicidal ideation and/or behaviour in pregnancy (n = 74)		
		Depressive group [†] (n = 296)	Suicidal ideation (alone) (n = 41)	Suicidal behaviour (alone) (n = 10)	Suicidal ideation and behaviour (n = 23)
	Variable	N (%)	N (%)	N (%)	N (%)
Demographics	Religion				• •
	Buddhist	212 (71.6)	27 (65.9)	8 (80.0)	14 (60.9)
	Catholic	50 (16.9)	9 (22.0)	0	4 (17.4)
	Hindu	18 (6.1)	5 (12.2)	0	2 (8.7)
	Other	16 (5.4)	0	2 (20.0)	3 (13.0)
	Missing	0	0	0	0
	Ethnicity				
	Sinhalese	256 (86.5)	32 (78.0)	8 (80.0)	19 (82.6)
	Tamil ¹	27 (9.1)	4 (9.8)	2 (20.0)	3 (13.0)
	Minority group ²	13 (4.4)	5 (12.2)*	0	1 (4.3)
	Missing	0	0	0	0
Marriage and					
family	Marital status				
	Single	10 (3.4)	3 (7.3)	2 (20.0)*	3 (13.0)*
	Married	285 (96.3)	38 (92.7)	8 (80.0)*	20 (87.0)
	Divorced	1 (0.3)	0	0	0
	Widowed	0	0	0	0
	Social support				
	No support	22 (7.4)***	6 (14.6)***	1 (10.0)	3 (13.0)

Table 3. Bivariate distributions for antenatal depressive symptomology and SIB inpregnancy

	Yes Unsure Missing	19 (6.4) ** 8 (2.7) * 1 (0.4)	6 (14.6) ** 0 0	2 (20.0) ** 0 0	6 (26.1) ** 0 1 (4.4)
	Physical IPV in pregnancy No	268 (90.5)**	35 (85.4)**	8 (80.0)*	16 (69.6)**
	No Yes Missing	88 (29.7)** 207 (69.9)** 1 (0.4)	6 (14.6)** 35 (85.4)** 0	0* 10 (100.0)* 0	0** 23 (100.0)** 0
	Missing Experienced at least one form of IPV	2 (0.7)	0	0	0
	No Yes	152 (51.3) 142 (48.0)	18 (43.9) 23 (56.1)	4 (40.0) 6 (60.0)	7 (30.4)* 16 (69.6)*
IPV	Justifies at least one scenario of IPV			-	-
	Sometimes Often Missing	170 (57.4) 20 (6.7)** 1 (0.4)	22 (53.7) 7 (17.1)** 1 (2.4)	5 (50.0) 1 (10.0) 0	11 (47.8) 4 (17.4) ** 0
	Spousal use of alcohol Never	105 (35.5)	11 (26.8)	4 (40.0)	8 (34.8)
	No Yes Missing	286 (96.6) 9 (3.0) 1 (0.4)	36 (87.8) 5 (16.7) ** 0	9 (90.0) 1 (10.0) 0	22 (95.7) 1 (4.3) 0
Personal and family health	Missing Family history of mental disorder	3 (1.0)	0	0	0
	I did not intent to get pregnant	50 (16.9)**	15 (36.6)**	3 (30.0)	10 (43.5)**
	Intentions kept changing	17 (5.7)	2 (4.9)	0	3 (13.0)
	Pregnancy intendedness Intended to get pregnant	226 (76.4)**	24 (58.5)**	7 (70.0)	10 (43.5)**
	3rd trimester Missing	94 (31.8) 3 (1.0)	11 (26.8) 1 (2.4)	4 (40.0) 0	12 (52.2) 0
	1st trimester 2nd trimester	68 (22.9) 131 (44.3)	7 (17.0) 22 (53.8)	1 (10.0) 5 (50.0)	1 (4.3) 10 (43.5)
Pregnancy and motherhood	Trimester				
	Yes Missing	141 (47.6) 0	17 (46.0) 0	7 (70.0) 0	14 (60.9) 0
	finances cause worry No	155 (52.4)	24 (58.5)	3 (30.0)	9 (39.1) 14 (60.0)
	No Yes Household	235 (79.4) 61 (20.6) **	32 (78.0) 9 (22.0)	8 (80.0) 2 (20.0)	14 (60.9)** 9 (39.1)**
Socioeconomic factors	Stressed by debt				
	Extended family Missing	137 (46.3) 1 (0.4)	17 (41.5) 0	7 (70.0) 0	8 (34.8) 0
	Alone Nuclear family	3 (1.0) 155 (52.3)	1 (2.4) 23 (56.1)	1 (10.0) ** 2 (20.0)	1 (4.3) 14 (60.9)
	support Living situation	128 (43.2)	18 (43.9)	3 (30.0)	7 (30.4)
	support Two or more sources of	146 (49.3)	17 (41.5)	6 (60.0)	13 (56.5)

Antenatal mental	Antenatal				
health outcomes	depression				
	No	-	9 (22.0)	3 (30.0)	2 (8.7)**
	Yes	-	32 (78.0)**	6 (60.0)	20 (87.0)**
	Missing	-	0	1 (10.0)	1 (4.3)
	Suicidal ideation				
	in pregnancy				
	No	263 (88.8)**	-	-	-
	Yes	32 (10.8)**	-	-	-
	Missing	1 (0.4)	-	-	-
	Suicidal behaviour	. ,			
	in pregnancy				
	No	288 (97.3)	-	-	-
	Yes	6 (2.0)	-	-	-
	Missing	2 (0.7)	-	-	-
	Suicidal ideation	、			
	and behaviour in				
	pregnancy				
	No	275 (92.9)	-	-	-
	Yes	20 (6.8)**	-	-	-
	Missing	1 (0.3)	-	-	-

¹ Includes Sri Lankan and Indian Tamil

² Includes Burgher, Malay, Moor, Other

⁺ Scores of 9 or more on the EPDS qualified women as depressive, i.e. indicating likely presence of antenatal depression

Bolded items are significant where $*p \le 0.05$, $**p \le 0.01$, $***p \le 0.001$

Note: Antenatal depression and SIB categories are reported separately in this table. Women qualifying as depressive could also be experiencing some dimension of SIB and vice versa. Co-morbidity is captured through antenatal mental health outcomes. Supplementary results of bivariate analyses for mutually exclusive categories (depression, current SIB, and co-morbid depression and SIB) can be found in Appendix 15.

3.3.2 Prevalence and Correlates of Antenatal Depression

Nearly one in three women (29.6%) reported depressive symptomology indicative of antenatal depression (n = 296). Mean EPDS score was 6.6 (SD = 5.0; variance 0-26), and there was a significant difference in the mean total score between women qualifying as depressed (mean total score 12.7, SD = 3.7) versus non-depressed (mean total score 4.0, SD = 2.5) (p < 0.05).

Drawing on results from bivariate analyses (Table 3), logistic regression identified risk factors of antenatal depression. Table 4 presents adjusted odds ratios (aOR) (95% confidence intervals). Women with secondary education were 34% less likely to have antenatal depression compared to women with only primary education (p = 0.05). Women were significantly more likely to have depression if their spouse was unemployed (aOR 4.57, p < 0.05), and being stressed or worried by debt was on the cusp of being

significantly associated (aOR 1.61, p = 0.06). Family history of mental disorder and justifying IPV in particular circumstances rendered women *less* likely to have depression, while all forms of experienced IPV, except forced sex (i.e. marital rape), were significantly correlated with depression (p < 0.05). Women who felt their husbands engaged in problematic drinking were twice as likely to qualify as having antenatal depression (aOR 2.21, p < 0.001). Spousal unemployment along with lifetime history of suicidal ideation, suicidal behaviour, or both experiences were the strongest correlates of depressive symptoms. Those with a lifetime history of both suicidal ideation and behaviour were nearly nine times as likely to qualify as having antenatal depression as women without (p < 0.001).

Variables	aOR	95%	% CI	<i>p</i> -value
		Lower	Upper	
Age				
15-19*				
20-25	0.96	0.47	1.95	0.91
26-34	1.15	0.58	2.27	0.69
35-49	1.04	0.48	2.29	0.91
Ethnicity				
Sinhalese*				
Tamil (SL or Indian)	1.48	0.77	2.87	0.24
Minority group (Burgher, Malay,				
Moor, Other)	0.49	0.18	1.32	0.16
Education				
Primary*				
Secondary	0.66	0.44	1.00	0.05*
Higher education	0.61	0.34	1.10	0.10
Worried by debt	1.62	0.99	2.67	0.06
Spouse's employment				
Full- or part-time employed*				
Unemployed	4.57	1.20	17.50	0.03*
Other	0.73	0.46	1.16	0.18
Spouse's drinking problematic				
No*				
Yes	2.21	1.47	3.34	0.00*
Unsure	0.80	0.34	1.88	0.62
History of mental health				
Family history of mental				
disorder	0.31	0.11	0.87	0.03*
Lifetime history of only SI	3.49	2.27	5.36	0.00*
Lifetime history of only SB	9.09	1.95	42.27	0.01*
Lifetime history of both SIB	8.73	4.79	15.92	0.00*
Justifies IPV in event of perceived child				
neglect				
No*			0.00	0.00+
Yes	0.64	0.44	0.92	0.02*

Table 4. Risk factors of antenatal depressive symptomology (adjusted odds
ratios) (n = 296)

Unsure	1.08	0.62	1.87	0.79	
Spouse is jealous or angry					
No*					
Yes	1.69	1.14	2.51	0.01*	
Unsure	1.16	0.66	2.04	0.60	
Spouse limits family contact					
No*					
Yes	3.09	1.34	7.16	0.01*	
Unsure	2.82	0.67	11.86	0.16	
Spouse doesn't trust her with mon	iey				
No*					
Yes	2.12	1.24	3.62	0.01*	
Unsure	2.04	0.77	5.42	0.15	
Experienced physical IPV					
No*					
Yes	1.75	1.04	2.93	0.03*	
Unsure	2.63	0.28	24.71	0.40	
Experienced forced sex by spouse	Э				
No*					
Yes	0.36	0.11	1.12	0.08	
Unsure	1.58	0.16	15.82	0.70	

*Denotes reference category. Significance $p \le 0.05$ for bolded and starred items. Hosmer-Lemeshow Chisquare is 8.28 and p = 0.41 (> 0.05). Nagelkerke R² is 0.29. The model correctly classifies 77.5% of cases.

3.3.3 Suicidal and Non-Suicidal Ideation and Behaviours in Women's Lifetimes and Current Pregnancies

A quarter of women had a lifetime history of SIB (i.e. ideation only, behaviours only, or the combination of both experiences) (25.7%), while current pregnancy prevalence of SIB was 7.4% (n = 74). Lifetime and current pregnancy suicidal ideation which did not escalate to subsequent behaviour was reported respectively by 14.9% and 4.1% of women. Women reporting only suicidal behaviours (i.e. without the co-occurrence of suicidal thoughts) were disaggregated to explore potential 'sudden' acts: 12 women (1.2%) reported this in their lifetimes and 10 (1.0%) during their current pregnancy. Nearly 11% of women reported at least one form of suicidal behaviour in their lifetime (n = 108) including a suicide attempt (n = 86), interrupted (n = 43) or aborted attempt (n = 51) or preparatory/rehearsal behaviours (n = 39). Non-suicidal self-harm was reported in 6.4% (n = 64) of women ever in their lifetime. Current pregnancy prevalence of at least one form of suicidal behaviour stood at 3.3% (n = 33), 24 of which were suicide attempts, while 1.9% of pregnant women (n = 19) disclosed non-suicidal self-harm in their current pregnancy.

Prevalence of any form of self-directed violence – whether suicidal or non-suicidal in nature – was therefore higher than looking at categories in isolation, with 12.9% and 4.0% of women endorsing self-harming behaviour regardless of intent in their lifetimes and pregnancies respectively. Ultimately 11.7% of women (n = 117) required urgent referral based on endorsement of intent and plans to act on suicidal ideation (n = 64), endorsement of EPDS item 10 (n = 95), and/or reporting of a suicidal or non-suicidal self-harming episode in their current pregnancy.

Bivariate analyses explored women's life circumstances as potential correlates of SIB in pregnancy, with younger age (p < 0.001), being an ethnic minority (p < 0.05), being unmarried (p < 0.001) and whether the woman was married as a child (p < 0.001) all significantly related. Husband's employment status was not associated with SIB in pregnancy. The household being in debt (p = 0.05), perceived stress from both debt and general household finances (p < 0.01), perceived total lack of social support (p < 0.001), living alone (p < 0.05), unplanned and/or unwanted pregnancy (p < 0.001), husbands drinking 'often' (p < 0.001) and drinking being viewed as problematic (p < 0.001) were associated with SIB in pregnancy. Family history of mental disorder and a lifetime history of SIB were significantly correlated with SIB in the current pregnancy, as was EPDS question 10 and total EPDS score (all p < 0.001). As with depression, justifying wife beating in the event of a wife arguing with her husband (p < 0.05) and all forms of experienced IPV were strongly related to women's current SIB.

Table 5. Risk factors of suicidal ideation and/or behaviour in pregnancy (adjusted
odds ratios) (n = 74)

Variables	aOR 95%		S CI	<i>p</i> -value
		Lower	Upper	
Education				
Primary*				
Secondary	0.55	0.24	1.27	0.16
Higher education	0.27	0.06	1.22	0.09
History of mental health				
Family history of mental disorder	3.56	2.25	15.629	0.09
Lifetime history of both SIB	10.69	4.47	25.56	0.00*
Antenatal mental health outcomes				
Antenatal depression present [†]	1.90	0.84	4.34	0.13
Self-harming thoughts in past				
week	9.61	4.26	21.70	0.00*

Current pregnancy non-suicidal					
self-harm	17.27	3.08	96.84	0.00*	
Experienced any form of IPV	4.36	1.33	14.35	0.02*	

^{*}Denotes reference category. Significance $p \le 0.05$ for bolded and starred items. Hosmer-Lemeshow Chisquare is 11.18 and p = 0.19 (> 0.05). Nagelkerke R² is 0.60. The model correctly classifies 95.1% of cases. † Scores of 9 or more on the EPDS indicate likely presence of antenatal depression

Multivariate analyses using Firth logistic regression isolated risk factors of SIB in pregnancy (Table 5). Women's overall EPDS score was not significantly associated with current pregnancy SIB in our sample (aOR 1.90, p = 0.13), however responses to item 10 on the EPDS indicating presence of self-harming thoughts in the previous week (aOR 9.61) and disclosure of non-suicidal self-harming behaviours in the current pregnancy (aOR 17.27) were strongly correlated with SIB in pregnant women (p < 0.001). Women who experienced at least one form of IPV in their current partnership were four times as likely to report current SIB (p < 0.05) and lifetime history of suicidal ideation, suicidal behaviour or both increased risk of SIB in pregnancy by 11 times (p < 0.001).

3.4 Discussion

Viewing women's ANC attendance as a window of opportunity to explore multiple psychosocial vulnerabilities in women, this study revealed depression and SIB in antenatal women in urban Sri Lanka to be common. I found that nearly one in three women demonstrated high depressive symptomology, which is above the 16-25% pooled prevalence of antenatal depression observed across LMIC (Gelaye et al., 2016) and substantially higher than previous studies in Sri Lanka (Rowel, Jayawardena and Fernando, 2008; Agampodi and Agampodi, 2013; Hapangama, Kuruppuarachchi and Pathmeswaran, 2014). This finding may reflect this study's more representative sample which included Tamil-speaking mothers, those with low literacy and from all trimesters previously excluded from Sri Lankan research and both hospital- and community-based women. Community ANC is nearly universal in Sri Lanka, and women attend an average of 5.7 appointments per pregnancy in Gampaha (FHB, 2018b). Furthermore, the urban context of this study where migration levels are high may play an underlying role in the high rates of depression observed compared to more traditional and rural parts of Sri

Lanka where extensive social support networks may be more accessible due to women's proximity to their natal homes (Agampodi and Agampodi, 2013).

Correlates of depression identified in this study have been found among perinatal populations in other LMIC: lower education (Hapangama, Kuruppuarachchi and Pathmeswaran, 2014; Gelaye et al., 2016), lack of social support (Gausia et al., 2009), and having an unplanned and/or unwanted pregnancy (Fisher et al., 2012). Growing evidence explores the role of poverty and deprivation in perinatal mental health and SIB (Iemmi et al., 2016). Researchers have measured this evidence objectively and subjectively by socioeconomic status, income, occupation, food insecurity, assets and debt (Knipe et al., 2017b; Onah et al., 2017; Maselko et al., 2018). In this study, women's depression was associated with husbands' unemployment and the subjective experience of being worried by debt and broader household financial difficulties in line with other LMIC research (George et al., 2016). In Sri Lanka, the role of deprivation in perinatal women's mental health has not previously been explored, but unemployment is associated with SIB in men (Knipe et al., 2017b). As women are heavily financially dependent on men in South(east) Asian contexts, spousal employment may indirectly affect women's mental health in pregnancy. Husbands' alcohol use and women's perceptions of problem drinking in a spouse were associated with depressive outcomes which has also been found in other LMIC and non-pregnant women in Sri Lanka (Ariyasinghe et al., 2015). Alcohol consumption among women is exceedingly low in Sri Lanka, while rates of alcoholism in men are high for SEAR and rising (Katulanda et al., 2014). There is evidence that alcohol abuse in men works indirectly to impact women's mental health by exacerbating other life stressors (Sørensen et al., 2017). I did not find age, marital characteristics, ethnicity, living arrangement, son preference or parity to be related to antenatal depressive symptoms although these have been observed elsewhere (George et al., 2016). Sri Lanka does not have a strong history of son preference nor sex-selective abortion as seen in other Asian contexts. As abortion remains heavily restricted in Sri Lanka, disclosure rates in this sample were too low to meaningfully explore its role in women's mental health outcomes.

The innovative use of the C-SSRS during the antenatal period contributes to the literature in four ways. Firstly, as a separate instrument, the C-SSRS independently assessed

prevalence of suicidal ideation, suicidal behaviour, both experiences and non-suicidal self-harming behaviour in women, without conflating them with depression or reducing them to just one item – unlike commonly used screening tools. Total EPDS score was not significantly associated with antenatal SIB once other factors were taken into account. Although the majority of women experiencing SIB in pregnancy reported co-morbid depression (see Appendix 15 for more), one in five women exhibiting current SIB did so in the absence of antenatal depressive symptomology. The possibility of SIB exclusive of depression echoes recent research from South Africa, but contrasts with evidence from HICs indicating SIB only occurs in the context of major mental disorder (Onah et al., 2017). These results suggest separate dedicated tools are preferable to assess both phenomena independently to ensure women experiencing SIB without co-morbid CPMDs are not missed.

Secondly, as the C-SSRS captures risk from two time points, it maximises the opportunity of women's attendance at ANC to generate data on their mental health from outside the pregnant experience by screening for lifetime SIB, addressing a gap in evidence on community-based samples of reproductive age women in Sri Lanka. It cannot be assumed that 25.7% lifetime prevalence of SIB is representative of all women of reproductive age in this context, as there may be differences in SIB between women who go on to become mothers and those who do not. However, like many LMIC, most women in Sri Lanka bear children as childlessness remains stigmatised while achieving motherhood fulfils gendered marriage expectations, with pressure to conceive soon after wedding (Marecek and Appuhamilage, 2011; Sørensen et al., 2017).

Thirdly, by exploring two time points, significantly lower prevalence of SIB in pregnancy (7.4%) is observed compared to women's whole lives (25.7%), suggesting pregnancy may be 'protective' against SIB in this context (Orsolini et al., 2016). This protective effect has not been observed in all settings, in particular HIC where suicidal ideation presents similarly between pregnant and non-pregnant populations (Gavin et al., 2011). Previous LMIC research found higher prevalence of perinatal suicidal ideation (14.0–27.5%) compared to this study's sample (Lindahl, Pearson and Colpe, 2005; Gentile, 2011; Rochat et al., 2011; Onah et al., 2017), however, this study closely mirrors recent research from a similar cultural context in urban south India (Supraja et al., 2016). The variability in

prevalence seen across contexts is likely due to selected instruments and definitions of SIB employed in studies, among other contextual factors. Despite this possible pregnancy protective effect, nearly 12% of the sample required urgent referral based in part on current risk from self-harming ideations and/or behaviours. Finally, lifetime SIB was strongly correlated with both depressive and current pregnancy SIB outcomes as seen in other LMIC (Supraja et al., 2016). This supports global evidence that a history of suicidal ideation and particularly behaviour is a critical factor identifying those most at risk of later suicide, and that women's experience during pregnancy and beyond may be influenced by pre-pregnancy difficulties (WHO, 2017; Molyneux, 2018). Inclusion of items on women's history of SIB and past and present non-suicidal self-harm would likely improve upon currently employed screening tools for perinatal mental health.

This study reports the first estimates for Sri Lanka of the prevalence and role of IPV in antenatal depression and SIB, which emerged as a critical vulnerability in antenatal women. Multiple forms of IPV were associated with antenatal depressive outcomes as seen in a range of settings (Gausia et al., 2009; Fisher et al., 2012; Gelaye et al., 2016). Women exposed to IPV were four times more likely to report SIB in pregnancy, as in other LMIC (Gausia et al., 2009; Surpraja et al., 2016; Onah et al., 2017). Prevalence of physical abuse during the current pregnancy was lower (3%) than expected based on recent lifetime rates from Sri Lanka of 25-35% (Guruge et al., 2015), but mirrors low prevalence observed in a single study exploring physical violence in pregnancy in rural south-eastern Sri Lanka (4.7%) (Moonasinghe and Rajapakse, 2004). However, all 33 women reporting suicidal behaviour during pregnancy experienced IPV, as did 85% of women with antenatal suicidal ideation. It may be that pregnancy affords women some respite from violence in their relationships in this context, which may or may not return post-delivery. Experiences of forced sex were associated with depression in bivariate analyses, but not once other factors were considered, in part because women were more likely to say they were 'unsure' whether they had experienced forced sex. This might reflect current cultural and legal frameworks in Sri Lanka, as marital rape is unpunishable under law. Sex within marriage is still commonly viewed as the 'right' of the husband, although changes to the Penal Code are being considered (Marecek and Appuhamilage, 2011; WHO Sri Lanka, 2018a). Justifying wife beating in particular circumstances appeared to reduce the likelihood of observing antenatal depression. This may reflect deeply entrenched

marriage norms to excuse inappropriate behaviour of husbands and silently tolerate conflict (Sørensen et al., 2017), minimising recognition or disclosure of violence's impact on mental health. As IPV appeared strongly associated with maternal mental health and holds consequences for adverse outcomes for both mother and child (Metheny and Stephenson, 2017), this study advocates for routine assessment of IPV in the antenatal period.

This study has several limitations. Although it had an over 95% response rate, it is possible that non-responders were qualitatively different from those who accepted. No studies have been done in Sri Lanka to validate the full or abridged version of the C-SSRS nor has it been validated among perinatal women in any global context. However, this study's self-report version underwent a thorough adaption and piloting process with guidance from Columbia University. The small proportion of women experiencing any form of SIB during pregnancy did not support multivariate analyses disaggregated by dimension. Finally, this study was cross-sectional, so postnatal mental health outcomes could not be assessed. Future research would benefit from longitudinal exploration of women's outcomes, specifically to assess relapses in risk for IPV and SIB.

3.5 Conclusion

My analyses point strongly to the need for more comprehensive assessment of women's psychosocial vulnerabilities in pregnancy in LMIC and contribute to emerging research on methods to explore psychosocial distress among women in LMIC (Chandra et al., 2018). Given ANC's effectiveness in delivering integrated services and its high rates of use in LMICs and Sri Lanka in particular, it is a potentially powerful platform through which to provide psychosocial screening inclusive of validated measures for CPMDs, SIB and IPV. The act of screening itself has demonstrated multiple positive impacts on maternal mental health in antenatal women in LMIC (Marsay et al., 2018), but should be done with the intention of onward referral to relevant support. Recognising limitations facing resource-strained health systems across LMIC and patient- and provider- level barriers to ANC and appropriate screening programmes (Byatt et al., 2013; Metheny and Stephenson, 2017), the Sri Lankan experience highlights opportunities to systematically respond to maternal mental health.

As of 2012, the EPDS was incorporated in the national pregnancy care programme for the postnatal period, and discussions are underway to expand its use in antenatal women. Though implementation of postnatal screening is still piecemeal, awareness of the essentiality of supporting maternal mental health is growing (WHO Sri Lanka, 2018b). Drawing on trauma-informed models of care (Spangaro et al., 2016), screening for IPV and maternal mental health could be explored as an additional component of routine ANC visits. While this integration is not without its challenges, it is first and foremost about providing women with a safe and empathetic environment in which to disclose past or present distress. Building on the strengths of the antenatal platform, service providers may explore sensitive and pragmatic mechanisms to support improved maternal mental health and psychosocial outcomes for women and their families.

3.6 Summary

This chapter provides new evidence of the magnitude of mental ill-health and selfdirected violence among the antenatal population in an increasingly urbanising part of Sri Lanka, and offers insight into likely trends for reproductive age women outside the pregnancy experience. It draws out particular life circumstances which appear to influence women's likelihood of experiencing mental distress. An understanding of the scale of the challenge and its potential contributors will support readers in interpreting the first-hand experiences of health providers, women, and affected families and collaterals of women deceased by suicide. In Chapter 4, I present the experiences of Public Health Midwives with whom women are so intimately engaged across the life course.

Chapter 4. Helping or Heightening Vulnerability? Midwives as Arbiters of Risk for Women Experiencing Self-directed Violence in Urban Sri Lanka⁵⁴

4.1 Introduction

Low- and middle-income countries (LMIC) face the greatest and growing burden of suicides, accounting for nearly 80% of self-inflicted deaths globally (World Health Organization [WHO], 2018). These deaths represent the most extreme outcome on a continuum of self-directed violence (SDV). SDV includes ideations, planning and preparatory behaviour, and/or acts of self-harm, both fatal and nonfatal, which may or may not be suicidal in their intent (Crosby, Ortega and Melanson, 2011). Suicide is the second leading cause of death among girls aged 15 to 19 years globally (WHO, 2017), fourth leading cause of death among women aged 15 to 49, and occurs at higher rates among younger women than their male counterparts in some LMIC regions including Southeast Asia. Nonfatal SDV including thoughts and behaviours – whether suicidally intended or not – is disproportionately observed in females globally (WHO, 2014b).

Women's SDV in its various forms can lead to contact with the health system – often at a point of crisis. Health providers are an essential part of, with potentially crucial roles in, the nexus of circumstances within which self-harming women find themselves. The attitudes and practices of health providers interacting with those engaging in SDV have affected care and treatment in high-income countries (HIC), with negative responses (re)producing stigma and feelings of rejection (Anderson and Standen, 2007). In LMIC, stigma between health providers and patients may be worse (Hagaman et al., 2013). Evidence from those who have survived episodes of SDV but received negative reactions to their disclosure finds they are less likely to disclose in future, consequently affecting help-seeking behaviours (Frey et al., 2018). In LMIC, where help-seeking through health services and disclosure rates are both thought to be lower compared with HIC (Hagaman et al., 2013), women without alternative sources of support or with

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poor experiences with the health system may be more vulnerable to subsequent episodes of SDV. Thus, LMIC health providers' understanding of the phenomenon, attitudes toward, and experiences of working with SDV-practicing women are critical to informing local health system responses, thus, affecting the health of women engaged in SDV.

The majority of previous research on health providers' understandings, attitudes, and responses to SDV is quantitative, using knowledge, attitude, and practice (KAP) questionnaires, which were not developed in nor adapted for LMIC settings. Only one existing attitudinal scale was developed from a LMIC perspective, and no HIC tools have been formally validated prior to use in LMIC (Ghasemi, Shaghaghi and Allahverdipour, 2015). Current tools do not allow for a gendered perspective to better understand health providers' attitudes and responses, fail to take into account perceived competence that may impact provider attitudes, and restrict opportunities to understand why providers respond as they do. Qualitative methodologies are needed to generate emic cultural and gender-relevant perspectives (Jones et al., 2015). There is also a paucity of data from LMIC. Hagaman et al. (2013) note that, "lay and clinical interpretations of suicidal ideation and intent determine the availability and type of support for persons reporting suicidal thoughts" (p.61), which applies to the spectrum of SDV. Existing health provider research primarily focuses on professional groups in HIC with frequent contact with self-harming patients, including doctors and nurses in Accident and Emergency Rooms and mental health practitioners. The latest systematic review on provider KAP toward SDV identified only three studies from LMIC (Saunders et al., 2012). Additional evidence has been generated since, but with comparatively few contributions from LMIC contexts (Jones et al., 2015), and deeper insights into the role of local cultural and religious beliefs on negatively skewed KAP observed among LMIC health providers are needed (Saunders et al., 2012).

In LMIC, the perspectives of community health workers who facilitate access to care, and can take primary and preventive services directly to community members, may be more insightful than specialised facility-based providers. However, literature incorporating community health workers' perceptions of SDV is sparse (Hagaman et al., 2013). Evidence on community health workers as "non-specialists" in responding to mental health needs in LMIC communities has sometimes framed SDV as one of many mental health issues they may address (van Ginneken et al., 2013), while at other times has overlooked SDV and its potential relationship with mental health in low resource settings (Surjaningrum et al., 2018). The positioning of SDV as a matter of mental health, however, remains contentious in LMIC where nonsuicidal self-harm and suicidal behaviours are less commonly preceded by psychopathology (Colucci and Lester, 2013; WHO, 2014b).

For LMIC women, the role of midwives as providers of both community and facilitybased care may be particularly relevant to the prevention of and response to SDV for several reasons. First, midwife-led antenatal care is often the first and/or principal mechanism linking women with LMIC health systems (Metheny and Stephenson, 2017), after which women may continue to be under the care of or in contact with midwives for postnatal and early childhood interventions. Midwives also increasingly play a role in health promotion outside of the perinatal period globally (WHO, 2016a). Third, as suicide has undergone revised classification as a cause of maternal death by WHO, several LMIC have identified perinatal suicides as a new category of maternal mortality demanding attention (Fuhr et al., 2014). The potential role of midwives in prevention of maternal suicides has been highlighted in HIC, but restricted to discussions of improved mental health assessment and referral (Holland, 2018). WHO (2016a) recently emphasised the need to document midwives' perspectives and experiences providing care on a range of issues, although mental health and SDV were not included in their own global consultation. Mental health's role in maternal suicides, however, is debated in LMIC (WHO, 2014b), preventing the transferability of already insufficient evidence on midwives' attitudes toward managing mental disorders in perinatal women from HIC (McCauley et al., 2011). Limited research has explored midwives' attitudes toward suicide using survey methodologies, however, these studies exclude the fuller range of SDV experiences, originate from high-income contexts, and do not extend to exploring midwives' practices (Brunero et al., 2008; Lau et al., 2015). Finally, recent research suggests those with a history of SDV report a disinclination to disclose past or potential risk within close social networks of family and friends, and, thus, may look for confidantes beyond this (Frey et al., 2018). Midwives may already be providing support for women experiencing SDV, however, no data document the extent to which this may be happening in any setting nor the lived reality of midwives encountering it in their roles. This study, using the case of Sri Lanka and its Public Health Midwives (PHM), is the first to report midwives' understandings of, attitudes toward, and responses to SDV among women.

4.2 Aims of the Research

This study uses Sri Lankan midwives' narratives to answer three questions:

- 1. How do midwives understand risk and vulnerability among women experiencing SDV?
- 2. How do midwives respond to women's SDV, and why?
- 3. How do midwives perceive their capacity and role to respond to women engaging in or at risk of SDV?

4.3 The Sri Lankan Context

Sri Lanka is home to 21.2 million people and has enduringly high suicide rates with roughly 7% of households reporting at least one lifetime suicide attempt (Knipe et al., 2018; WHO Sri Lanka, 2018a). Although total suicides have decreased substantially since their peak in the mid-1990s, reductions in suicides among women have stalled, and hospital admissions data suggest a growing burden of self-harm among young women (under 21 years) (Knipe et al., 2017c). These data represent the tip of an iceberg, where the proportion of SDV events that do not result in contact with health services remains unknown. Police data recorded 662 female suicides in 2018, and maternal suicides are a recognised public health challenge (Agampodi et al., 2014; Sri Lanka Police, 2019; WHO Sri Lanka, 2018b). Despite a national body of suicide research, the broader spectrum of SDV has received less attention in Sri Lanka with the exception of new evidence on household-level suicide attempts from one rural district, which suggests similar risk in females as males (22.3 per 1,000) (Knipe et al., 2018).

Sri Lanka's midwives form the bedrock of its National Health Service and are responsible for family health at the community level free of charge, including family planning, anteand postnatal care, child health for under 5 year olds, and some health promotion (FHB, 2018b). PHM are all women, recruited from age 18 onward who receive approximately 18 months of training, qualifying them as mid-level health providers. Midwives reside in the communities they serve, covering roughly 750 households each (2,000–5,000 residents) (Jayatilleke et al., 2015). Sri Lanka outperforms regional neighbours on a number of health and social indicators, and much of this success has been attributed to the contribution of PHM to improving community health outcomes (Jayatilleke et al., 2015). PHM are viewed as one of Sri Lanka's greatest healthcare assets.

4.4 Method

4.4.1 Study Setting: Gampaha District

Gampaha District, north of Sri Lanka's capital, was purposefully selected for this research for two reasons. First, with 2.4 million people, it has a more urban and industrial population than elsewhere in the country. Second, hosting three Free Trade Zones (FTZ) as well as the country's international airport, Gampaha has high migration levels and large concentrated populations of young and unaccompanied women travelling to and from the district for employment there or abroad (FHB, 2018b). Its FTZs house hundreds of factories, dominated by the garment industry, and operate on 80% female labour. Living conditions for FTZ workers can be challenging, and Gampaha's towns offer lifestyles quite different to those of village life, although parts of the district are classified as rural (Jordal et al., 2015). This local demography has not featured in previous Sri Lankan research on SDV, which has concentrated on rural, farming populations affected by pesticide poisoning (Pearson et al., 2014). In 2016, Gampaha District had 702 PHM delivering services from 184 community clinics, public hospitals, and/or through home visiting (Ministry of Health, 2016a). Recent estimates report that 0.4% of households in Gampaha have experienced at least one suicide attempt in the previous year (DCS and MoH, 2017b), while lifetime household levels are unavailable. Data on prevalence of other dimensions of SDV are limited to one recent study, which found that one in four pregnant women in Gampaha District reported a lifetime experience of suicidal ideation, suicidal behaviour, or both, while 7.4% of women reported these experiences in their current pregnancy (Palfreyman, 2018).

PHM were identified through a three-step process. First, four of the district's 16 Medical Officer of Health (MOH) areas were purposefully selected to ensure (a) representation of Gampaha's urban-rural mix, (b) that at least one FTZ was captured, and (c) that one MOH area hosted a hospital from which to recruit as community- and hospital-based PHM serve different populations. Within each MOH area, one antenatal clinic was randomly selected to approach midwives. Three antenatal clinics operate in the study hospital, but only one clinic was selected. As women were assigned to the hospital clinics randomly, the PHM serving the selected clinic would not have been receiving a biased patient pool. Finally, all PHM assigned to the four chosen clinics were invited to take part; all PHM accepted and, in total, 11 participated between March and October 2016. Midwives were given the option to participate individually or in group discussions, three clinic teams selecting the latter, citing comfort with one another and efficiency as primary reasons. The hospital-based PHM, working solo, took part in a face-to-face, in-depth interview.

Focus group discussions (n = 3) and the interview (n = 1) occurred on-site at times convenient for midwives that engendered privacy and minimal interruption. All PHM operated primarily in Sinhala, and discussions were bilingual, transitioning from English to Sinhala between myself as facilitator, and the midwives. I have extensive experience working in maternal and mental health across a number of LMIC including Sri Lanka, and data collection was guided by key values of feminist research, including equity and awareness of power and relational dynamics throughout the research process. I was present for four months in the field prior to commencing data collection, which fostered rapport preceding discussions. This pre-data collection engagement supported trust and candidness between midwives and the research team, and this likely led to richer discussions than had time not been invested outside of these data collection moments. I was present at all discussions, which were supported by a research assistant acting in the role of interpreter. The research assistant was a nursing graduate with specialist midwifery training from the study district and was, therefore, familiar with the local context and profession. All discussions were audio-recorded, with notes taken by me, and lasted until information redundancy was reached – usually between one and two hours (Carminati, 2018).

4.4.3 Research Instrument

Discussions were guided by a semi-structured topic guide developed by me. Drawing on core issues evidenced in the SDV KAP literature, additional items were selected to address context-specific issues in Sri Lanka as well as those requiring further evidence, such as PHM's perceived capacity to respond to women's SDV. The tool was intentionally flexible, asking a mixture of descriptive, evaluative, and structural questions, and allowed for unanticipated topics to emerge. It was translated from English to Sinhala and back-translated to assess accuracy of intended meaning and allow for linguistic variability. The research team piloted the guide inviting participants' feedback to challenge assumptions about meaning, and made minor amendments to improve conceptual and cultural translation of ideas, supporting validity (Willig, 2013).

4.4.4 Transcription and Translation

As discussions were bilingual, I transcribed English segments verbatim, which contained my spoken words as well as portions of the research assistant's. Following this, two local professional bilingual transcriptionists reviewed the English segments and added all Sinhala portions, which were subsequently translated into English. All transcripts were quality checked by me and swapped between translators to ensure accuracy and completeness.

4.4.5 Data Analysis

This study employed thematic analysis to explore providers' perspectives as it offers a theoretically flexible but rigorous approach to identifying and organising patterns of meaning in qualitative data (Braun and Clarke, 2006). Data analysis was supported by the use of NVivo 11 Plus (QSR International, 2018). Following initial reading of transcripts, coding proceeded inductively; generated directly from recurrent issues and often the participants' own language (in vivo) and continued until no new codes were identified. Codes were applied to units of meaning, rather than line-by-line, and were refined into themes that permitted recognition of relationships between themes. Clusters and themes were constantly interrogated within and across cases to ensure they were grounded in

these data. To support quality and data validation, cultivate reflexivity, and minimise biases on my part, key themes were discussed with the research assistant to verify or modify interpretations and incorporated Braun and Clarke's (2006) quality criteria for good thematic analysis.

4.4.6 Ethics

Ethical approval for this study was granted by the London School of Economics and the Faculty of Medicine, University of Kelaniya (Ref. P/135/08/2015). The research assistant was trained on ethical research behaviour and interviewing best practice, and she and the independent transcriptionists were subject to confidentiality agreements. All midwives were given written informed consent forms in their preferred language (English or Sinhala⁵⁵), and forms were reviewed in detail with the research team (Appendix 17). PHM had time to read the forms privately before consenting. No incentives or compensation were given for participating, and no deception was employed.

4.5 Findings

Midwives largely spoke in stories, offering rich, experiential accounts yielding four main themes: (a) perceived dimensions of women's risk and vulnerability to SDV, (b) midwives as arbiters of risk, (c) representations of women engaging in SDV, and (d) midwives' perceived capacity to respond. Themes and subthemes were often and necessarily interrelated. Findings begin with a brief overview of midwives' characteristics, awareness, and general exposure to SDV in women. Illustrative quotes are presented to accompany my interpretations, and anonymity of midwives and their catchment areas is maintained.

⁵⁵ No midwives in our sample spoke Tamil as a first language, but accommodations would have been made to include them had it been necessary

4.5.1 Background and Exposure to SDV in Women

Midwives ranged in age from 31 to 58 years (mean = 39.7 years) with varying lengths of service (3 to 31 years). Eight of the 11 midwives had more than 15 years of service, and PHM had been in their current posts for the majority or entirety of their careers. All 11 were married, and ten were mothers, while one midwife was pregnant with her first child. All midwives lived in their communities of service, some of them for their whole lives. Their length of service and residency suggested PHM were very familiar with local populations and cultures.

The research team asked whether midwives had previous knowledge and/or exposure to women's SDV in their communities, as no evidence was available to suggest whether this provider role had contact with women experiencing SDV. All 11 midwives were aware of incidents of SDV among women in catchment areas other than their own, and each midwife had direct experience within the past five years. Most midwives recounted stories of affected women throughout their careers, some vividly from as early as 1990, which highlighted that, for them, SDV among women was not a new or emerging issue. However, there was a general consensus among midwives that SDV "has increased" among women and is, therefore, a growing issue for them personally and professionally.

The full spectrum of SDV had been encountered by all midwives, from ideations, to preparatory behaviours such as "carry[ing] with her a bottle of poison wherever she went to kill herself at any time", multiple experiences with suicide attempts, and deaths by suicide. The methods reported by midwives were variable, from self-poisoning ("recently [I] met a mother who drank Lysol"), to more violent means, such as, "jumping to the train", jumping into wells and dams, hanging, and multiple reports of self-immolation. Midwives encountered women at different life stages in the community, including perinatal and nonperinatal women, and often reported long-standing provider-patient relationships with SDV-affected women. The hospital PHM had several stories of maternal suicides, two of which were women under her care earlier in her career and the other in a neighbouring catchment; all three occurred during pregnancy.

Community-based midwives encountered SDV more frequently than the hospital-based PHM, who reported few recent cases and reflected on the more common occurrence in her community-based years: "During my years at the field I had met a lot . . . and a lot of pregnant mothers who had set themselves on fire . . . I have come across many like that". This is perhaps a reflection of the different dynamics of community- versus hospital-based clinics as she only sees perinatal women in the hospital context, which is busy, overcrowded, and frequented by husbands and other family members compared with the relative calm of community settings. It may also be that women accessing hospital disclose or engage with health providers in other departments instead of the midwife.

4.5.2 Perceived Dimensions of Risk and Vulnerability for SDV in Women

Multiple dimensions of risk rendering women more vulnerable to SDV were identified. Strained family dynamics, particularly those revolving around marriage or intimate partners, were recognised as primary sources of women's vulnerability: "Most of the time [midwives are]...dealing with family problems – that's the problem they're having". Estranged relations with parents or in-laws, often ascribed to disapproval of women's intimate relationships, were cited as sources of tension. Parents and in-laws openly disapproved of women's marriages, vocalised discontent, and in one case engaged in repeated dowry harassment: "When I talk to the boy, the boy said that their family tells him to don't bring her home without a dowry [sic]...That's another thing to fight [about]". Other women faced tremendous pressure to marry – including from midwives themselves – primarily in circumstances of nonmarital pregnancy: "The girl was unmarried [and] I had to force the boy to marry her".

Several midwives summarised women's primary risk as being "because of their husbands". Volatile relationships, violence including marital rape, and tension due, in part, to husband's jealousy or insecurity were described:

I knew a family, where the husband was not educated. Wife was well educated. The husband felt that the wife would supersede him one day because of her education...Some days the husband would bring swords [large knives] to cut her [harm her]. (Rural clinic midwife) Volatility and violence were explicitly linked to men's substance abuse and both illegal drug use and alcohol abuse in men were perceived as common by midwives: "Alcoholism of the husband is...one of the key reasons for such behaviour". Drug addiction was viewed as a particular risk for women in Gampaha, which may not be found elsewhere: "In here many women are married to men who are addicted to drugs...Drug addicts are high in this area so mostly their family members are more vulnerable to [these] kinds of things".

Infidelity on the part of husbands, and occasionally women themselves, was seen as a common risk for subsequent SDV, and women's infidelity was attributed to preexisting tensions in the home, the husband's absence or neglect. Lack of social and familial support was the overarching feature in all midwives' experiences with women affected by SDV. Neglectful or absent husbands, loss of parents to death, migration, or disapproval over personal relationships, and abandonment by boyfriends in critical periods such as pregnancy were seen as damaging to women's well-being and contributors to women's choices to self-harm: "When they haven't anyone to help they used to do this kind of thing"; "When they get pregnant, they have no one to speak with and they commit suicide".

Women's sexual and reproductive health and rights took centre stage in midwives' stories. Pressure from family to have or continue pregnancies, women's anxieties about (potential) infertility or impending motherhood, sex and pregnancy outside of marriage, and unplanned and/or unwanted pregnancies were reported by multiple midwives as contributing to women's trajectories into SDV. PHM felt married women had knowledge about avoiding pregnancy ("they have been taught"), but that unmarried or adulterous women were less able to access contraception and information from them due to stigma. Abortion is highly stigmatised and illegal in Sri Lanka save risk to a mother's life (Jordal et al., 2015), yet abortion experiences frequently featured in midwives' accounts of women's SDV as a result of premarital or extramarital pregnancies or, in one case, rape:

The mother got pregnant because of the rape...She said she has nothing more to do, that she wants to take her life because if she has the baby she will not be able to face anyone. (Rural clinic midwife)

PHM reported abortion as prevalent in Gampaha District, in part because of the FTZs ("Now the illegal abortions are high...there are many places which [are] doing these kinds of abortions around this area"). Finally, forced sex in the context of marriage was reported by two midwives' accounts of suicidal women:

He forces her to have sex with [him] unnecessarily...even when the children are at home he forces her to have sex with him. So because of it she is depressed and [it] makes her feel uncomfortable and she had said she wants to commit suicide. (Rural clinic midwife)

Marital rape is just one form of intimate partner violence (IPV) described by midwives, which was perceived as a significant and common precursor to women's SDV. All midwives reported experiences with self-harming women affected by IPV including sexual, physical, emotional, and financial abuses and other controlling behaviours, such as preventing women from working, restricting family contact, withholding money, and blaming women for family difficulties. IPV was viewed as both a direct and indirect risk for women's SDV. Indirectly, they reported it contributed to depression and other mental health problems in women, affected their attendance at antenatal clinics, and incited fear about the safety of pregnancies when partners were violent. Suicidal ideation was associated with these circumstances in midwives' views. Episodes of IPV were also presented as direct triggers for SDV, "so when they got [sic] abused...[women] try to do this kind of thing".

Mental health was raised by several midwives as a potential source of risk that could initiate or exacerbate preexisting difficulties with SDV. This was discussed in relation to women's own mental health, as well as their husbands and other family members as indirect causes of worry. PHM shared several accounts of women with preexisting psychiatric diagnoses, including perinatal women who should have been medicated, but were not consistently adhering due to lack of support and competing traditional treatments. Other examples demonstrated that midwives' perceived as-yet undiagnosed psychiatric disorders including postpartum psychosis as key in some women's SDV trajectories. Overall, however, while mental health disorders were identified in a few cases, midwives felt their role was secondary as, "it's not mainly dependent on psychiatric disorders". Husbands' mental health could encourage women's consideration of SDV: "When I started visiting the home she said she has been facing this [husband's 'mental stress'] for a long time and now she couldn't take it anymore". Two midwives described how women's trauma and anxieties over the impact of violence on their children's mental health compounded their own thoughts of suicide.

The Gampaha context, with FTZs, and high migration within and outside of Sri Lanka, converged to construct what midwives perceived to be a risk environment not seen elsewhere in Sri Lanka: "This is a very different area due to the Free Trade Zone. All those problems arrived because of that. Here we are having [the] most migrant population". That many of the women they encountered with SDV were young and lacking in education and life experience was seen as a consequence of the female migration from rural villages to Gampaha. Youth and its presumed naïveté were presented as vulnerabilities: "When under 18, children come to work [and] they haven't any idea about the society so they are easily trapping to these problems". Separation from family, and, specifically, lack of guardianship from caring adults, rendered women susceptible to risky relationships with men, negative consequences of sex outside of marriage, exploitation, and violence. FTZ workers were perceived to be at particular risk of SDV:

Most of them are in very young age and they live in boarding places. They don't have any guardian in there. So when they got [sic] abused or got pregnant without marrying, they try to do this kind of thing. (Semi-urban and FTZ-serving clinic midwife)

The dimensions of risk noted above were, for midwives, amplified in boarding house settings. According to one clinic's midwives, the transitory nature of boarding house living attracts women from elsewhere in the country and returning from overseas who wish to hide unwanted pregnancies, contributing additional cases at "higher risk" of SDV to their services.

4.5.3 Public Health Midwives as Arbiters of Risk

Midwives emerged as providing a critical social role in local communities, not restricted to health, and in relation to women experiencing SDV. PHM viewed themselves as first points of contact for women in distress and as embodied sites for trusted disclosure: Midwife is a person who is in the field and closest to the people. People share most of the stories with the midwives...Those issues [SDV], they start in a home. And the home is visited by a midwife. (Hospital-based midwife)

Their stories revealed many instances of help-seeking by women directly – either during clinics or home visits; other times, community or family members approached PHM to help women at risk of or experiencing SDV or PHM-initiated probing when concerns arose.

Throughout midwives' accounts, their responses to women's SDV and their circumstances were described. All of the practices were presented by midwives as having been well-intended, and midwives appeared deeply committed to reducing risk and preventing SDV. These practices, however, reveal the significance of PHM in attending to women's SDV, as they could reduce or, conversely, heighten women's vulnerability to harm. Practices that appeared to support positive outcomes for women included facilitating access to community health services – frequently antenatal care in the case of unplanned pregnancy – provision of health information and advice, referrals to a variety of services including psychiatric care, mothers' groups, gender-based violence, and drug rehabilitation services. These efforts were sometimes reinforced by follow-up on women's progress at the household level.

Considerable emphasis was placed on time spent talking, whether through perceived empathising by sharing their own struggles with women, listening to women's difficulties, or facilitating family mediation and couple's counselling, albeit in informal ways as midwives are not formally tasked with this. Several PHM described this as providing "mental support". There were, however, talking practices with potentially harmful unanticipated consequences for women. A woman who had disclosed suicidal ideation due to regular forced sex by her husband was advised by her midwife to stop refusing his sexual advances. The midwife first minimised the woman's concerns by suggesting it would not happen too regularly due to the husband's occupation, and upon learning it was a nearly daily occurrence, the PHM advised cooperation on the part of the woman. This was rationalised that otherwise the husband would seek sex outside the marriage, potentially putting the family unit at risk: She has a problem of connecting with the husband [euphemism for sex]. She also visits me to talk about this and she feels like committing suicide at times...She visits me and says she feels like that...So I explained to her, if she refuses him, he will look for another woman. And that her three children will not have a mother. I explained it to her, and said not to do it. And after that she accepted it. (Rural clinic midwife)

Another midwife recounted the story of a young, unmarried FTZ worker who became pregnant by her violent boyfriend who was demanding an abortion. Upon finding out about the woman's situation through a retired midwife, this PHM phoned the boyfriend, impersonating a police officer, to inform him of the illegality of terminations and that should the abortion go ahead, he would be arrested. This tactic was repeated, and the midwife reported that she "forced him to marry the girl". Once married, IPV escalated, causing distress in the woman for the safety of the unborn baby. The midwife made multiple visits to the boarding house following abusive episodes:

When [I] got the news, [I] thoroughly advised to the husband by telling that if he had done something to her, [I was] going to have the legal actions against him. Also [I] had given the counselling for the boy telling that this pregnant lady should not be [treated] like this. (Semi-urban and FTZ-serving clinic midwife)

Following another fight that turned physically violent, the young woman attempted suicide by jumping into a well. Numerous examples highlighted the ethical and social complexity inherent in midwives' assessments of women's circumstances. At times, midwives appeared laden with the task of executing judgment as to how to respond to them. Keeping significant secrets such as women's infidelity, sexual assault, and unwanted pregnancy from partners and extended family was not uncommon. Their rationale for selecting particular responses seemed to be partly influenced by their perceptions of women's circumstances as blameless or transgressive and their capacities.

4.5.4 Representations of Women Engaging in SDV

Two opposing representations of women emerged from midwives' narratives. Some women were described in terms that suggest victimhood – "tearful", "quiet" women deserving of care, protection, and empathy, especially if their experiences were relatable to midwives'. Included were women with psychiatric diagnoses, those experiencing IPV,

sexual violence, pregnancy and childlessness, and some FTZ workers were women to be pitied. Under these circumstances, PHM expressed a commitment to alleviating their distress: "I feel sorry. A woman when she comes to a position like that, they are helpless...So I want to help at times like that".

At other times, women's circumstances qualified them as female transgressors of social and gender norms. These women were described as shortsighted, impulsive, lacking in coping skills, "secretive", and unable to control themselves sexually, thus, ending up in precarious situations. A lack of tolerance for life's difficulties, especially in marriage, was identified by several midwives:

Most of the time today they go for the quick decisions...[I] wanted to save their marriage, to protect their marriage, but most of the women...just want to leave their husband and meet another one. (Rural clinic midwife)

Transgressions centred on standards of motherhood and female sexuality. A lack of willingness to endure in unhappy marriages was seen to jeopardise outcomes for children, thus, breaching the "sacrificial mother" role (Hemawanna, 2003), even when a husband's behaviour was deeply problematic. Sex workers were a specific subpopulation well-known to one clinic serving an FTZ, and unwanted pregnancies were common; they constituted women that were "not so much good".

Women's representations invited both empathy and disapproval for their situations and the transgressions that facilitated them. This tension was best illustrated by the story of a young, unmarried pregnant woman deemed too problematic for her family who lived in a midwife's own home for five months:

She just wanted to commit suicide because she couldn't cope with it [pregnancy]. Then I was also feeling really bad so I took her home...it was becoming an issue for my children...I feared that they might get influenced...What I did was wrong. I could have lost my job...I tried to take her home and support and realised I couldn't. (Hospital-based midwife)

Midwives expressed general views that SDV was morally wrong under all circumstances and religiously prohibited, and in one focus group discussion, midwives believed suicide was illegal⁵⁶. While accepting solutions may be difficult to identify, all PHM felt that, "every problem has a solution" and that women did not have a right to take their lives.

4.5.5 Midwives' Perceived Capacity and Role in Responding to Women's SDV

Midwives were asked about when they first encountered issues of SDV in women, whether they had expected this as part of their professional roles and been given any professional preparation. PHM with long service recalled attending two-week, on-site psychiatry training in the late 1980s and early 1990s at what is now the National Institute of Mental Health. However, trainings were restricted to identifying signs of psychiatric conditions in mothers – not social and interpersonal difficulties – and none had received refresher training despite perinatal mental health evolving in the past 30 years. Younger midwives did not receive psychiatric training at all as it was reportedly cut from preservice curriculum, and only three midwives recalled having a one-off session on IPV. Overall, PHM felt they had not received sufficient preparation to respond to SDV and the concomitant distress present in women experiencing it. Midwives had no consistent guidelines or treatment pathways to follow, resulting in reactive strategies reliant on individual midwives' judgment: "We are doing just what we think, it's not the professional way".

Additional barriers to providing optimal care and support included patient, provider, and health systems challenges such as unsupportive family members, women's resistance to certain interventions, limitations to making direct referrals extending women's care pathway, and lack of local counselling and gender-based violence services. However, the most significant barrier for most midwives was high patient load and lack of time to build rapport with women:

Our issue is that we don't have the time to spend with such people...And only if we can become friends with them they would open up...No matter what workshop we are offered, if we are limited in time then we have a problem. We like to be [in] the field to talk, to build those relationships, but we don't have that opportunity. (Urban clinic midwife)

⁵⁶ Suicide was decriminalised in Sri Lanka in 1998 (Gunnell et al., 2007)

All PHM vocalised confidence that on a number of occasions they had "saved" women's lives and "stop[ed] them from suicide". They all expressed a willingness and sense of responsibility for attending to women at risk of or experiencing SDV: "Absolutely it's our responsibility; we are directly involved [in] these kinds of matters. We do maximally what we can do". This responsibility extended beyond their duty as a midwife for some and was a source of satisfaction: "This is more than a duty. We are having so much pleasure when someone gets solutions for their problems". For others, it was a reflection of their commitment to being a "good" Buddhist: "We want to do something good. Because if we do good in this life then in our next life it will be good". Most of the midwives believed their role was critical to prevention of SDV in women, and some expressed a womancentered approach to reducing risk:

We must focus on her as much as possible, and get her the help. There are social service institutes even that you could get her the support she needs. We can build an environment to prevent her from self-harm. (Hospital-based midwife)

All 11 PHM felt strongly that their role deserved investment and support, to build their capacity to identify and respond to women at risk of SDV. This reasoning was based on the common perception that women's risk stemmed largely from their living environment, and that as *the* grassroots health provider, they were uniquely positioned to address SDV and its drivers. They shared numerous suggestions for capacity building, including pre- and in-service training that was both theoretical and practical on mental health, and specifically developing skills and confidence to deliver professionalised counselling as this would be more convenient for women and reduce the need for onward referral. They stressed the need for other levels of the health system to listen and engage with them, for referral systems to be improved so they could more easily track women's progress, and for adjustments to be made to allow for the critical resource of time to be more available for these time-intensive cases:

We do share these same things, but not many listen to us. With the knowledge we have, the scale of work we can do is less. It is reducing with time. Make use of us. Give us the knowledge and make use of us. (Urban clinic midwife)

4.6 Discussion

This study is the first to present midwives' experiences of working with women at risk of or engaging in self-directed violence, and considers the reasons midwives in a LMIC context respond to the phenomenon as they do. The Sri Lankan midwives who participated all had multiple encounters with SDV-affected women, who were at various life stages including, but not limited to, the perinatal period. These contacts occurred throughout their careers highlighting that, for them, SDV is not a new phenomenon. Crucially, however, and although this study was not assessing knowledge, midwives' perception that SDV is rising among women is substantiated by global evidence (WHO, 2014b).

Marital and family tension and IPV were core issues perceived to engender vulnerability in women, both of which have been documented as risk factors elsewhere (WHO, 2014b). In Sri Lanka, between 25% and 35% of ever-married women have experienced IPV (Guruge et al., 2015), while only 9.2% of affected women report seeking help from public health providers including midwives in Gampaha District itself (DCS and MoH, 2017a). Women's perspectives on help-seeking for IPV and possible deterrent or enabling factors to approaching midwives in this context such as fear or assurance of nonjudgmental support are needed (Ivany et al., 2018). Evidence on prevalence, forms, and help-seeking for IPV among unmarried women is lacking, however, one recent study of both married and unmarried pregnant women in Gampaha District found nearly 54% experienced at least one form of IPV in their most recent/current partnership (Palfreyman, 2018). Women's sexual and reproductive health and rights appeared central to vulnerability in midwives' narratives, including impacts of (marital) rape, motherhood status, unwanted pregnancy, and abortion. Although these issues are common to the lives of women globally, they have received scant attention in SDV research and prevention efforts. This study reiterates the importance of exploring SDV with a gender perspective to ensure critical dimensions of risk are not overlooked or minimised. While psychiatric disorders were recognised as risks in certain cases, midwives perceived them as rare and secondary to women's social circumstances, challenging the global- and perinatal mental health movements' framing of SDV as a mental health issue (McCauley et al., 2011; WHO, 2014b). According to these midwives, overemphasising the role of mental disorders would risk

missing the most vulnerable of women, and not offer appropriate solutions. While screening for common mental disorders is encouraged for perinatal women by midwives in certain HIC (McCauley et al., 2011), this study suggests more comprehensive assessment of psychosocial issues – including IPV – is warranted (Jayatilleke et al., 2015; Palfreyman, 2018), and should not be confined to perinatal women only.

Community-based PHM are essential social actors in responding to women experiencing SDV. Seemingly trusted as early ports of call by families, community members, and women themselves, responding to SDV is an addition to the already extensive list of issues for which they are formally responsible (Jayatilleke et al., 2015). The nature of their responses demonstrates a position of influence that could mitigate or worsen women's outcomes.

Their responses were, in part, shaped by their capacities in terms of knowledge, skills, relevant training, awareness of, and confidence in utilising referral mechanisms and social and health services. None of the midwives felt sufficiently knowledgeable or prepared to professionally address SDV, nor potentially related issues of mental health, and there are no government-issued guidelines facilitating clear and consistent health system- and provider-level responses to SDV. While their duties include screening postnatal women for depression – a step toward formalising mental health in their role – this is rarely implemented (Agampodi et al., 2014). In practice, this means midwives relied on their own judgment or that of other midwives in seeking appropriate solutions. Recognising the potential of midwives to respond to women's SDV and prevent its escalation to higher levels of the health system, as has recently begun in some HIC (Holland, 2018), LMIC may consider investing in specialised training and development of complementary guidelines suited to their context. Models from HIC such as introducing a dedicated mental health midwife role into each local health area may offer inspiration (Holland, 2018). Existing training packages for PHM on IPV were successfully piloted in Sri Lanka, and, although they have stalled in their scale-up, they may offer a blueprint from which to broaden training to cover women's SDV (Jayatilleke et al., 2015)⁵⁷. As IPV

⁵⁷ WHO Sri Lanka's country profile on gender-based violence (2018) asserts midwives are trained in managing GBV through pre-service curriculum or a 5-day cascade training for already in-service providers. This was not available at the time of this study, and ongoing relationships with participating PHM indicate they have not yet

and SDV are intimately linked in this context, this study underscores the importance of following-through on promising interventions. Midwives stressed, however, that without the resource of time, additional trainings would do little to facilitate their care for women at risk of self-harm.

Perhaps more influential to midwives' responses than structural capacities, however, were their perceptions of the extent to which women experiencing SDV achieved or transgressed "respectable womanhood". Ideals of respectable womanhood in Sri Lanka reflect a hybrid Victorian Buddhism prizing qualities of, "shyness, naivety, docility, helplessness and chastity, virginity" (Jordal et al., 2015, p.2) and ignorance of sexual knowledge until marriage, against which all women are measured (Hemawanna, 2003). The concept of "shame-fear" (*lajja-baya*) is well recognised in Sri Lankan culture as a necessary and beneficial virtue into which all women should be socialised from a young age, encouraging obedience (Jordal et al., 2015). Transgressions such as premarital or extramarital sex, pregnancy outside marriage, disregard for parents' marriage preferences, and sex work are heavily stigmatised, subject to social ridicule, and call into question a woman's morality (Hemawanna, 2003).

This moral burden is amplified for rural women charged with preserving tradition, thus, those migrating to the FTZs who are subsequently socialised into new "urban" lifestyles are seen as particularly shameful in their transgressions, transitioning "from innocent to disrespectable" (Jordal et al., 2015, p.6). For midwives, the FTZs epitomised all that renders women vulnerable to self-directed violence. Midwives' reflected that women in the FTZs were faced with an almost impossible task of performing the role of both urban worker and village girl simultaneously, and that their vulnerability and resultant SDV was a consequence of the "freedom" and lack of supervision of urban life. PHM endorsed the popular social perception that FTZs are sites of "cultural decay", and portrayed women as deserving of pity, disapproval, or both depending on the degree to which PHM appeared to believe women deployed agency in creating their transgressive circumstances (Hemawanna, 2003).

received this in-service training. The status of this new programming therefore requires transparent monitoring and evaluation.

Health providers, including midwives, must constantly navigate and manage the cultural expectations and pressures of their roles, institutions, and that of the external societies from which they and their patients originate. Previous research has observed this challenge among maternal health specialists as well as those providing treatment for SDV in hospital-based settings in LMIC (Senarathna et al., 2013; Mselle et al., 2017). Midwives, being female, have all been socialised into the same cultural and gender norms as the women they described, with a powerful internalised sense of what it is to be a respectable woman in Sri Lanka. Tasked with performing "respectability" themselves, their responses to women's circumstances were shaped. PHM are the ultimate stewards for Sri Lankan women into acceptable sexuality, as their professionally sanctioned duty is to support women transitioning into marriage and the cultural expectation to become a wife and mother (Marecek and Appuhamilage, 2011). When faced with women experiencing SDV, midwives assessed women's circumstances, and arbitrated risk based on the solution that would best support a woman's ability to achieve or maintain respectability. Reinforcing the role of "sacrificial wife/mother" meant midwives sometimes heightened women's vulnerability rather than minimising it (Hemawanna, 2003). This was most vivid in the accounts of instructing women to tolerate forced sex by a husband as this was preferable to his infidelity, and pressuring marriage to a known perpetrator of IPV because unmarried motherhood would have been worse than spousal abuse. At other times, their responses buoyed women's agency to find acceptable solutions that did not appear to compromise safety.

4.7 Conclusion

Although this study does not include the direct insights of women experiencing SDV in this context, it reveals PHM to be critical in the identification of and response to SDV in women. As a qualitative study, it recognises the findings are connected to the study context and does not presuppose the same experiences would be observed among all PHM operating in Sri Lanka (Carminati, 2018). Further research in other parts of the country would, therefore, contribute to an evidence base on midwives' role and potential in addressing the growing phenomenon of SDV among women in Sri Lanka. Their proximity to communities, trustworthiness as sites of disclosure, and respectability as women and guardians of ideal womanhood in Sri Lankan society, PHM occupy a powerful position in the health system through which to alleviate or reinforce women's risk to SDV. The midwives in this study vocalised a deep commitment to supporting women in their distress, and a confidence that with the right training and systemic support, they would be able to provide a health system's response for women that, to date, has not been considered or prioritised. Yet, as actors embedded in their communities and socialised into local cultural norms, any such capacity building must take into account the context within which PHM make decisions and offer context-specific guidance that strives to facilitate the agency and safety of women affected by SDV.

4.8 Summary

This chapter revealed the familiarity and depth of experience Sri Lanka's midwives already have in responding to self-directed violence in women across their life course as a primary interface between SDV-affected women and the health system. While promising as a potential source of positive intervention, they are presently underresourced to systematically reduce risk in women, and reflect the formidable broader challenge of deconstructing damaging gender norms that may be underpinning women's trajectories to SDV. The next chapter extends the reader's insight into a second formal system encountered by some SDV-practicing women – that of suicide inquests – and the implications of the granularities of this system for understanding women's self-directed violence in this context.

Chapter 5. The Commodity Chain of Suicide Data in Sri Lanka: How Suicide Inquest Files are Produced and Why it Matters

5.1 Introduction

She was 42 when she died; a mother and a wife of 27 years who worked as a tile maker. Her inquest file contained statements from her husband, son and a close neighbour who had intervened on the day of her death during what appeared to be her first effort to jump into the river. Family statements reported that she was not ill and that neither self-harming remarks nor behaviours had occurred before. She drank – daily according to her husband – with a preference for arrack⁵⁸ according to the neighbour. Both the son and neighbour reported she was heavily intoxicated at the time, so much so that she fell while walking to the river. The neighbour reported seeing her laughing on the road, while the son shared that his mother told him she could hear a deceased relative speaking to her for several days before her death. She returned to the river later that afternoon and was found drowned shortly after. Despite there being no recorded evidence of prior suicidal thoughts and behaviours and testimony referenced an inebriated and recently delusional state of mind, no documentation exploring possible mental disorder and/or alcoholism was included in her inquest file and, based on its contents, her death was declared a suicide.

Determining how and why someone died involves gathering, analysing and drawing conclusions from multiple data sources including sometimes-equivocal narratives. At the individual level, determinations of both the physiological cause of a person's death and the manner in which it occurred – whether natural, accidental, suicidal, or homicidal (Shneidman, 1981) – are necessary to guide stakeholders in managing a death and its effects. The reliability of conclusions is important because of the legal, economic and sociocultural implications such as: identifying whether the death involved other persons and/or resulted from criminal behaviour; negotiating insurance and inheritance claims; recognising lessons regarding health conditions and healthcare; as well as issues of safety or security, and burial rights and options (Jobes, Berman and Josselson, 1987). Determinations of a death's cause, particularly those formalised by authorities, impact surviving family, friends and communities and the manner in which the deceased is memorialised in official records and in people's memories.

⁵⁸ Arrack is a popular alcoholic spirit in South Asia, most commonly produced in Sri Lanka using fermented parts of coconut palms.

As each death is allocated a label of cause, typically selected from the International Classification of Diseases (ICD), it is integrated into what is commonly referred to as Cause of Death Data (CoDD) (WHO, 2019). At progressively higher levels of aggregation, CoDD shape national, regional, and global understandings of mortality patterns, and are a critical resource for health policy and planning (GBD Collaborators, 2017). As a core aspect of health surveillance, CoDD support identification of emerging population health issues and inform systemic responses – in health and other sectors – to ongoing challenges of particular categories of deaths (Mathers et al., 2005; Byass, 2007). Global health and development agendas have increasingly prioritised investment in more comprehensive and comparable CoDD, encouraging improved definition and collation practices, most recently through the Sustainable Development Goals (GBD Collaborators, 2017). However, confidence in the conclusions drawn from aggregated data must be carefully assessed against the provenance of the various contributing data sources at lower levels.

Given the importance of CoDD at all levels, their quality and validity have received some attention in the literature, particularly those data employed for comparative and temporal analyses (GBD Collaborators, 2017). CoDD are, in practice, often a combination of data on cause, mechanism and manner of death (Jobes, Berman and Josselson, 1987), and methods for determining a death's cause still vary across and within contexts. This results in diverse forms of CoDD such as vital and sample registration systems, registries and issue-specific surveillance data, surveys and censuses, verbal autopsy and police data (GBD Collaborators, 2017). Despite increased investment and methodological advancements (Byass, 2007), measurement weaknesses persist due to: incompleteness of vital registration data; the changing use of death categorisation systems such as the ICD (WHO, 2019); underreporting, misreporting, and overuse of vague categories (i.e. "garbage codes"); reliance on proxy methods for death classification (i.e. verbal autopsy) where vital registration systems are absent; reporting delays; and missing data (GBD Collaborators, 2017).

CoDD are therefore artefacts of the systems that create them, shaped by their procedures and contributing stakeholders (Kapusta et al., 2011), with systemic challenges varying by context. Low- and middle-income countries (LMIC) in particular still experience large numbers of deaths which are not systematically documented (Byass, 2007), in part because of poorly resourced systems, but also because additional challenges (e.g. category of death) may weaken the quality of data for deaths which are captured. The 2017 Global Burden of Disease (GBD) study, which contains the most comprehensive annual statistics on CoDD covering 264 distinctive causes of death across 195 countries from 1980-2016, now reports quality of CoDD by country, with a five-star rating scale for percentage of deaths deemed accurately certified within a setting. While GBD methods, including this rating scale, have received criticism (Yoon, Kim and Kim, 2018), the study asserts that no single LMIC captured 65% or more of their deaths accurately across the period, and none received a data quality rating above three (GBD Collaborators, 2017).

In addition to specific challenges of resource-poor contexts weakening quality of CoDD, certain categories of death are especially problematic to determine, including equivocal deaths, like that described in the opening vignette. As an external, sudden and unnatural cause of someone's death, suicide has historically been viewed as a "hidden" phenomenon with under- and mis-reporting of cases, both deliberate and unintentional (Kapusta et al., 2011). No international standards exist to guide certification of the suicidal death, although suicide by definition necessitates that a death be self-inflicted with the knowledge and intention of ending life (WHO, 2014b). Consequently, the identification and documentation of suicides when faced with equivocal deaths may be influenced by multiple factors including: socially constructed understandings of intent; varying definitions and conditions under which suicide can be assigned; characteristics of the deceased and/or of the investigating parties; the interaction of multiple sectors (health, police, judiciary); the quality of methodological approaches used; and the role of culture, religion and stigma (Jobes, Berman and Josselson, 1987; Andriessen, 2006; Kapusta et al., 2011; Ahmedani, Coffey and Coffey, 2013; Palmer et al., 2014).

The recent increased profile of suicide on the public health agenda is partially driven by better availability of CoDD identifying it as a significant contributor to global mortality, with LMIC accounting for nearly 80% of global suicides (WHO, 2018). Users of CoDD on suicide rely on their completeness, coverage and quality not only to monitor the

magnitude of the issue, but to inform prevention and postvention⁵⁹ initiatives (Gunnell, Hawton and Kapur, 2011). Through the process of data abstraction and aggregation, the nuances of context, varying interests and actions of stakeholders involved in suicide data production, and multiple decisions for measurement and attribution can be obscured. Aggregated CoDD on suicide may become increasingly detached from the actual circumstances of the human deaths they represent (Collins, 2014), lacking a clear understanding of how contributing sources of evidence were developed. As a consequence of this unclear data provenance, few suicide studies using aggregate CoDD are in a position to consider the effects of these uncertainties on their data's integrity and utility.

To begin to address the ambiguity in generating suicide-specific CoDD, this chapter uses the case study of a selected LMIC, Sri Lanka, to consider how a particular form of suicide data is gathered, packaged, and made available for use as a commodity for research. The objective is to add to the literature on quality and utility of suicide data by interrogating the provenance of Sri Lanka's vital statistics on suicides as a product of a complex commodity chain. Through the lens of feminist commodity chains (Collins, 2014), I examine suicide inquest files of reproductive age women in Sri Lanka. I begin with a brief overview of Sri Lanka's history of suicide and the broader trends in female suicide. I then present a model commodity chain for suicide data in Sri Lanka with an emphasis on inquest files, and reflect on issues of access as a consumer of these data. Finally, I explore the capacities and limitations of these data, how they are situated within the context of other sources of suicide data in this setting, and their significance politically, as functional indicators of national information systems and for suicide prevention and research efforts.

5.2 Case Study Setting

Asia accounts for 60% of the world's suicides, with 40% occurring in the Southeast Asia region (SEAR) alone (WHO, 2014b). Suicide in women of reproductive age (WRA) (15-49 years) in SEAR is recognised as a growing social and public health challenge, with 9.1%

⁵⁹ In suicidology, postvention refers to targeted responses following a suicidal death

of deaths in WRA attributed to this cause (WHO, 2014b). Evidence on young SEAR women (15–19) places suicide as their leading cause of death and at a higher rate than their male counterparts (at 28 and 21 per 100,000 population respectively) (Jordans et al., 2013; WHO, 2014b). Female suicide in SEAR countries like Sri Lanka is set against a global background in which suicide is now the second and fourth leading cause of death among women aged 15-19 and 15-49 years respectively (WHO, 2014b; 2017).

Suicide rates and absolute figures are cornerstones of suicide research which inform global rankings and provide two metrics against which prevention efforts are often measured. Yet their interpretation should be informed by knowledge of the context and processes by which they are produced; knowledge which may indicate their fitness as forms of CoDD to guide research and prevention agendas. Sri Lanka's suicide rates have received considerable attention recently due to both perceived improvements in their accuracy, and real reductions in their levels (Pearson et al., 2015). Rates across genders⁶⁰ have historically been reported as consistently high in Sri Lanka, peaking in the mid-1990s at 47 per 100,000 population, and the island nation was declared by WHO as having the world's highest suicide rate as recently as 2017. These estimates, based on modelling, are challenged by analyses of police data asserting models overinflate Sri Lanka's suicidal deaths by a substantial 26% (Knipe et al., 2014a; Knipe, Metcalfe and Gunnell, 2015). Rates for female suicides have also presented wide and conflicting estimates depending on source of data and analytic method. In Sri Lanka, police data have superseded WHO projections and are now the official source of suicide statistics in both rates and absolute figures. Police data suggest significant declines in national incidence, though these are driven by reductions in men and rural areas (Knipe et al., 2017c). These overall declines are attributed in part to Sri Lanka's exceptional policy context among LMIC with a Presidential Committee and National Policy and Action Plan on Prevention of Suicide convened in 1997 (Gunnell et al., 2007; Pearson et al., 2015). This strategy guided effective means restriction interventions focused on pesticide regulation given their primary contribution to suicides in the country (Knipe et al., 2017a). The Government is currently reviewing its suicide prevention strategy – now 22 years old –

⁶⁰ Research to date in Sri Lanka has employed the gender binary of men and women and I refer to available data using this categorisation while recognising not all people may fit these normative labels.

in light of the varied and multidisciplinary body of suicide research amassed since its inception (Pearson et al., 2014; 2015).

Sri Lanka's official suicide data are varied in form and not without flaws. The weaknesses of Sri Lankan suicide statistics are often mentioned in research, but their limitations are minimised with inadequate reflection. For example, recent longitudinal analysis of police and hospital data by Knipe et al. (2014a) used national level police data "where available" (p.840) and despite not having data disaggregated to district level, the researchers "assumed" which districts contributed to missingness. Each year the Sri Lanka Police Crime Statistics Unit publishes the official suicide figures, aggregated at national level, however their production is non-transparent and no publicly available documentation describes the chain of production generating these data. Disaggregated data below national level are not published by the Police. Complementing police data, Sri Lanka does operate a vital registration system deemed complete (above 90%) for adult deaths, which requires the registration of all deaths under law (Mathers et al., 2005; DCS, 2018). Yet quality of the CoDD captured by this system has been considered low in several assessments, with over 40% of deaths attributed to ill-defined causes, adding to an unknown degree of under- and mis-reporting of suicides (Mathers et al., 2005; WHO, 2008; GBD Collaborators, 2017). Female suicides in this context are also thought to be underestimated to a greater extent than those in men (Knipe et al., 2014a). Sri Lanka's Department of Census and Statistics still cites findings from an internal assessment in 1980 for level of completeness of its vital registration data (94%), and the most recent publicly available year of vital statistics reporting deaths by cause is from 2013 (DCS, 2018). How the vital registration data and police data align with each other is also unclear. No studies have assessed the quality or reliability of Sri Lanka's official suicide data (Knipe et al., 2017a).

There are additional forms of suicide data in Sri Lanka. Quantitative data on suicidal behaviours, not deaths, have been reported in sub-national academic studies – predominately from North Central Province's Anuradhapura District – and the 2016 Demographic and Health Survey captured household level data on suicide attempts from 18,302 WRA respondents for the first time (DCS and MoH, 2017b; Knipe et al., 2018). Less effort has been directed at generating or mining complementary suicide data that yield

insight into decedents' trajectories towards this extreme outcome of self-directed violence. This chapter focuses on an under-explored form of suicide data – suicide inquest files resulting from the formalised inquiry into deaths by judicial and medicolegal authorities (Wijebandara, 2014). No previous literature explores these data in Sri Lanka. One prior study reports autopsy practices in medicolegal procedures in Colombo district from 1995 (Fernando, 2003), and two further publications present critiques of medicolegal processes for unnatural deaths in Sri Lanka (Goonerathne, 2011; Wijebandara, 2014). However none consider the particularities of suicides, suicide inquest files as critical products of medicolegal processes, their generation in this setting, contribution to the broader pool of suicide data available in situ or their implications for understanding the phenomenon of suicide in Sri Lanka.

5.3 Background and Study Sample

This chapter uses data from a sample of 31 cases of recorded suicide in WRA and one case of likely suicide but with an officially "open verdict" occurring between January 2015 and November 2016 identified from all jurisdictions in a purposefully selected district in western Sri Lanka. The district was chosen to address a gap in Sri Lanka's evidence base as it reflects a more urbanised, migratory population with fewer residents engaged in agricultural livelihoods. Previous national suicide research concentrates on the experiences of rural communities, including a rich corpus of work from North Central Province documenting suicides due to pesticide poisoning with a greater emphasis on data from male decedents (Knipe et al., 2017c). This study's district is therefore likely to reflect more diverse suicide methods and an emphasis on the female experience. The research team, comprising of myself and two local research assistants, identified the 32 cases between February and November 2016, requiring both retrospective and prospective active case finding. Ethical approval was granted by the London School of Economics and University of Kelaniya's Faculty of Medicine.

5.4 Methods – The Use of Feminist Commodity Chains

To make sense of the processes and data, the principles of feminist commodity chain analysis were employed. The suitability of applying historically economic language to frame knowledge - here, data - as a commodity has been criticised for ignoring the influence of social context and relations underpinning knowledge production (Collins, 2014; Porter, 2016). However, I suggest feminist commodity chain analysis offers a fuller lens to reflect upon our suicide inquest files. Traditional forms of commodity chain analysis would focus on describing the sequence of steps through which suicide data 'products' are created and ultimately consumed – linking activities to actors – but with little emphasis on interrogating why particular agents are involved and act as they do (Bair, 2009). A feminist approach instead acknowledges the processes involved to generate these data are comprised of complex networks of social actors operating under constraints and forces at particular points in time. Feminist commodity chain analysis calls for exploration of the role of culture and agency, challenging assumptions of where agency happens during production, and consideration of actors with less visible influence. Used here as a tool for critical reflection, I not only describe the sequence of activities and their respective agents throughout the Findings section, but also consider how and why stakeholders involved in Sri Lanka's suicide death inquests may (inter)act as they do. Further, I highlight areas of the commodity chain where knowledge is limited so as to discourage assumptions about the 'functionality' of the chain which may be made by more traditional methods focused on mapping the ideal, rather than the real processes. This approach also emphasises the consumption end of the commodity chain and asks how the needs and preferences of different consumers of these data might have shaped their production. Feminist commodity chain analysis presupposes that the process of generating these data created more than the data themselves, and performs additional work of reinforcing hierarchies by privileging particular roles and types of knowledge across the chain (Collins, 2014). Ultimately, this form of analysis prioritises understanding the positionality of actors involved and suggests how this may affect what the suicide data are and what they can then tell us about women's suicides. Reflections on the role of power on suicide data production in this setting are presented in the Discussion.

The principles of ethnography guided collation and analysis of multiple sources of evidence from which I constructed a model commodity chain of suicide data. I first generated comprehensive field notes documenting 'sites of production', i.e. steps along the production pathway, and observational notes regarding stakeholders with whom the research team had direct encounters. I then performed secondary data analysis on suicide inquest files (n = 32). This identified a need to gather additional evidence to aid my interpretation and mapping of the commodity chain. Further evidence included: extant literature; one telephone- and one emailed-based key informant interview with two academic experts in suicide epidemiology in Sri Lanka; email consultation with a leading forensic pathologist in Sri Lanka; and acquisition of previously unreleased police documents including district-level police statistics on female suicides for years 2015-2017.

5.5 Findings: A Model Commodity Chain for Suicide Data

Based on this corpus of information and experience, I first explain the concept and status of death inquests including their legal and historical framing in Sri Lanka. This is followed by a rich description of the model commodity chain for suicide inquests in the study district. Figure 7 provides a representation of this chain of production. While we may desire linear and unidirectional pathways explaining how these data came to exist, any attempt to model their production is an over-simplification of something that is infinitely more complex (Collins, 2014). My analyses evidence observations of deviations from this model, report gaps in my knowledge as recognition of the difficulty in this exercise, and identify limitations of the commodity chain.

5.5.1 What are Death Inquests?

Death inquests are public investigations of the circumstances surrounding a person's death led by judicial authorities. As fact-finding missions, their primary purpose is to determine the identity of the decedent, and how, when, and where the death occurred in order for the death to be formally registered (Wijebandara, 2014). Death inquests, particularly those which involve post-mortem examinations, are costly, and in low resource contexts such as Sri Lanka may be discouraged by stakeholders including

ministries, forensic pathologists, medical officers, and families (Fernando, 2008). Evidence suggests there has been a reduction in autopsy rates as part of death inquests in Sri Lanka and elsewhere, and that this coincides with reductions in suicide rates as suicides are missed (Fernando, 2008; Kapusta et al., 2011). Thus, death inquests hold significance for arriving at more accurate estimates of countries' suicide rates and present opportunities to better understand the full spectrum of suicidal deaths. Autopsy rates – whether clinical or medicolegal – are not publicly available for Sri Lanka and only one previous study from 1995 explored autopsy practices in the capital (the best-resourced district in Sri Lanka) (Fernando, 2003). I was unable to identify how many death inquests are held overall in Sri Lanka or the study district annually, but research suggests between 5-20% of deaths would benefit from formal forensic inquiry as their causes are difficult to determine (Shneidman, 1981).

The process described in Figure 7 is partly a manifestation of Sri Lanka's historical position as a colony, directed by legislation originally architected on the British coronial system in the 1800s, requiring cooperation among the Ministry of Justice and Prison Reform (MoJ), Ministry of Health and Indigenous Medicine (MoH) and Ministry of Law and Order. Although suicide has been decriminalised, with laws changing in 1998 (Knipe et al., 2014a), death investigations into suspected suicides are still governed by the Code of Criminal Procedure Act (1979), which remains largely unchanged from its colonial origins (Fernando, 2003; Wijebandara, 2014). There are also two linguistic versions – one Sinhala and one English – which do not align (Wijebandara, 2014) and may direct proceedings differently dependent upon the version consulted. In 2014, greater clarity on the legal obligations of certain roles including the Sri Lankan equivalent to coroners and magistrates was documented in official guidelines, however this failed to extend to the key role of forensic pathologists (Perera, 2014). While Figure 7 presents what I understand to be required practice by these roles, observed practice that sometimes deviates from the ideal is described in prose.

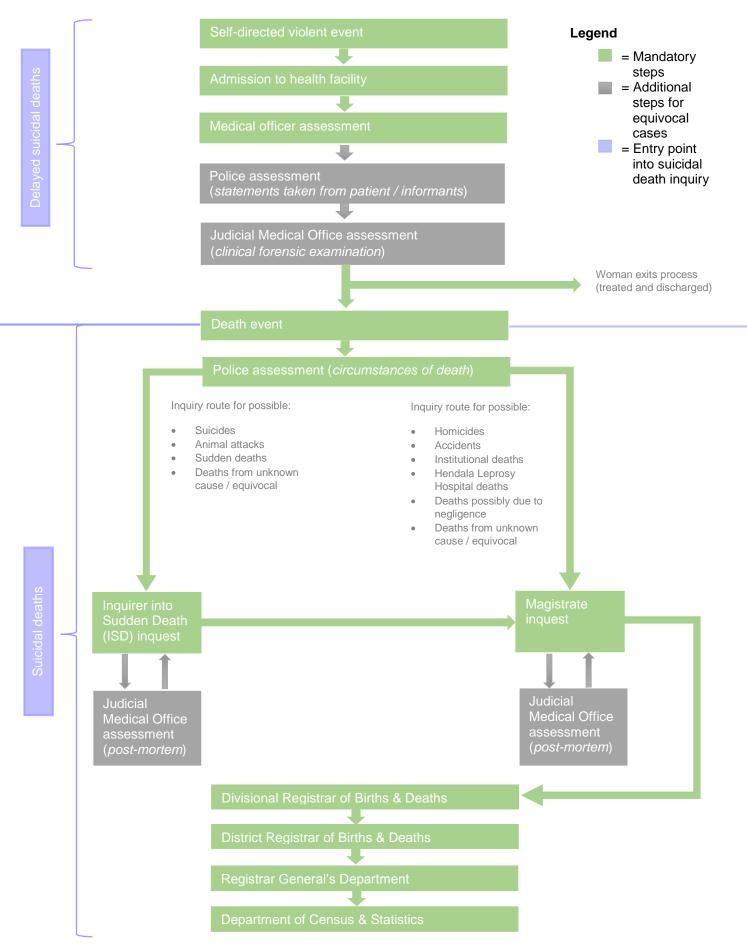


Figure 7. Commodity chain of Sri Lanka's suicide inquest files and vital statistics

5.5.2 Delayed Suicidal Deaths

Women who died by suicide could enter the death inquest pathway at two possible timepoints: prior to their deaths as patients receiving facility-based treatment for an ultimately fatal episode of self-directed violence (i.e. delayed suicidal deaths within a health service) or from the point of death (i.e. a death event) outside of health facilities. For delayed suicidal deaths, women must first have engaged in SDV severe enough to require medical treatment, and been assessed at and admitted to a health facility. In our sample, one known such case occurred. This woman was brought to the health service by her family. Self-presenting, and being brought by neighbours and unrelated witnesses to the event are, in theory, also possible, but unobserved in our sample. Initial assessment of women's physical condition at outpatient departments would escalate their care to requiring admission to an appropriate medical or surgical ward based on the nature of their injuries and methods used to sustain them (see Figure 6). For example, a woman with severe burns would be admitted to a surgical ward, while another who ingested paracetamol in excess would be sent to a medical ward. The circumstances of women's injuries are then assessed by medical officers. Protocol in Sri Lanka requires that for equivocal cases, i.e. those in which medical officers cannot determine whether the injuries were sustained through accidental, self-inflicted, or other-inflicted means, cases where other-inflicted injuries are highly suspected, or cases of serious intoxication, the police must be notified. Alcohol consumption is low among women in Sri Lanka, and intoxication even more so (Sørensen et al., 2017), rendering this condition under which a suicide attempt would be identified rare in women. We did, however, observe one case with this uncommon feature.

Involvement of the police initiates a formal medicolegal inquiry in which the police are expected to attend the ward and gather statements from the patient, when possible, and/or from family or other relevant collaterals with knowledge of the injury-inducing event. This is primarily done to rule out criminal offenses such as attempted homicide. The police then pass proceedings over to forensic pathologists working under the office of Judicial Medical Officer (JMO). Each health facility falls under one JMO's jurisdiction (Balachandra et al., 2011). Our study district hosts three JMO offices each responsible for a particular geographical catchment although we were aware these geographic

boundaries were not always observed and preferences for particular JMOs – sometimes based on expertise or workload – affected who was notified.

Sri Lanka's Judicial Medical Officers merge the fields of medicine and law and apply forensic medicine to both the living and the dead (Goonerathne, 2011). The intention of this role is to minimise the burden of medicolegal work for regularly practicing doctors and to develop specialists who understand the medicolegal significance of unexpected injuries and deaths. Operating under the authority of the Department of Health⁶¹, JMOs are qualified medical doctors who go through additional training to obtain a diploma and later degree in Forensic Medicine. They are then required to do a minimum one-year placement under an existing JMO, followed by a one-year international placement (usually in the UK, Australia or US) in order to qualify as a board certified consultant in Forensic Medicine under Sri Lanka's Post Graduate Institute of Medicine. Only then are they deemed sufficiently qualified to be appointed to major cities around the country, where their offices are attached to large district or teaching hospitals. Continuing professional development is not officially required, yet they are expected to engage in teaching younger cohorts of forensic specialists. The reality of the situation in Sri Lanka, however, is that there is a shortage of consultant-level experts, which means in practice some JMO offices are not all operating with this level of experience. The latest publicly available figure (2018) reported 76 JMOs were active across the country (WHO Sri Lanka, 2018a); roughly one-third at consultant level. The additional posts are believed filled by forensic specialists with lower levels of training and experience (Balachandra et al., 2011). Based on caseload and availability of JMOs, it is possible, therefore, once police notify the JMO's office, that a more junior doctor attends wards for medicolegal inquiries. IMO posts in our district were occupied by two consultants of Forensic Medicine and one more junior clinician.

JMOs perform examinations on both the living and the dead, the former referred to as clinical forensic examination, the latter post-mortem examinations (i.e. autopsies). For clinical forensic examinations, their responsibility is to conduct an exam with the patient's consent, and in instances where women are unable to consent due to severity of

⁶¹ The Department of Health sits within the Ministry of Health

injuries and/or cognitive limitations, next of kin's permission must be sought. We encountered one such case involving a self-immolation patient. During her nine-day treatment in a surgical ward, she was unable to speak and highly sedated on painkillers which would have affected her comprehension, and consent and statements were instead provided by her grandmother. Once clinical forensic examinations are concluded, and determinations of likeliest manner of injury made, forensic specialists are expected to provide a report to the police, and keep medical officers informed of its conclusions although medical officers do not receive a copy themselves. For women whose injuries are concluded to be the result of interpersonal violence, police are meant to remain involved to take forward any relevant legal ramifications. They may also remain involved in undetermined cases if they feel additional clarity may be obtained, though the degree to which this occurs is unclear.

For cases identified as interpersonal, undetermined, and accidental in nature in which women improve in condition and are discharged, women exit the potential sample for suicide death inquests. Critically, this does not mean these women's injuries are not the result of self-directed violence; only that they were not identified to be so. We observed instances where these examinations misidentified interpersonal violence as accidents, potentially meaning that cases of recovered self-directed violence and delayed suicides were also missed. For women whose injuries are concluded to be self-inflicted, police discontinue engagement as suicide and attempted suicide are not illegal (Balanchandra et al., 2011). From this stage onwards, these patients would continue to be treated until such time as they either recover and are discharged, thus also exiting the potential suicide inquest pathway, or succumb to their injuries and a death event occurs. Throughout their time in treatment, and regardless of outcome, medical records in the form of Bed Head Tickets (BHT) are also produced by attending doctors and nurses, in addition to the medicolegal reports generated by police and forensic specialists. BHTs remain property of the health facility in which they are created, while medicolegal reports are property of the Ministry of Justice. Across these sites of production in the commodity chain, BHTs and medicolegal reports emerge as forms of potentially useful - but under-used - data on women's self-directed violence.

For delayed suicidal deaths which occur in a health facility, the procedures of normal certification of death by medical officers are modified. In normal ward settings, medical officers confirm somatic death, and then document these confirmations in the BHT, signing off with their designation, signature and time. The official time of death is the time in which this BHT entry is completed. At this stage, the attending medical officer must make a decision – whether or not the death requires an inquest. In cases deemed natural or non-suspicious the attending doctor is authorised to complete a Death Declaration Form, which allocates a label of cause based on the ICD-10 and allows the claimants of a body (usually family) to register the death with the local Registrar for births and deaths, compulsory under Sri Lankan law (SLMC, 2004). The local Registrar produces a Death Certificate or note permitting the release of the body to those managing burial or bodily disposal and the matter is closed from the perspective of health authorities. In the case of deaths in which a prior clinical forensic examination determined interpersonal, accidental, undetermined or self-inflicted circumstances, a new inquest phase is required regardless of the medical officer's personal clinical opinion. The police and hospital administration are notified in such circumstances, with requests for further inquiry noted in the BHT by medical officers thereby commencing the death inquest. There is a possibility some delayed suicidal deaths are not informed to proceed into the next stage of the pathway. This is likely rare as multiple doctors and nurses will have been aware of a patient's engrossment in a medicolegal inquiry prior to death, reducing the chances of such a death being overlooked by multiple ward staff. Yet evidence from auditing one major hospital revealed 6% of deaths which should have progressed with inquests were instead inappropriately issued Death Declaration Forms by medical officers without further investigation (Fernando, 2003). If this occurs, the BHTs – being property of the health facility – are filed away in the hospital's record room, and medicolegal reports are physically kept by police. Despite both documents being stored by stakeholders for years post-death, difficulties in accessing them mean these data products are effectively eliminated from the commodity chain of evidence on women's suicides.

5.5.3 Initiating a Death Inquest

From the point of a death event onwards, and where inquests are appropriately initiated, they follow the same general pathway regardless of whether the woman dies in hospital

or in the community, with the exception of one subset of women: those who die during pregnancy through one year postpartum. Since 2013, WHO requires these self-inflicted deaths be considered maternal deaths which must legally be reported to the national Maternal and Child Morbidity, Mortality Surveillance Unit under Sri Lanka's Family Health Bureau (FHB) and are investigated through this mechanism (Agampodi et al., 2014). As none of the cases in our sample constituted a confirmed maternal suicide 62 the Maternal Death Investigation Procedure is not expanded here beyond noting that actors and processes differ with the exception of the brief involvement of JMOs for mandatory post-mortems (WHO Sri Lanka, 2014; FHB, 2018a)⁶³. For non-maternal hospital-based deaths, there is potential for continuity of stakeholders to take forward a death inquest in the case of women with delayed suicides as the same police officers and forensic specialists from the medicolegal inquiry may become re-involved. This is different to those cases which begin their pathway from death and draw in formal stakeholders only from the death event. Regardless of where the death occurs, the police should be notified to attend the scene of death and assess the circumstances under which it occurred. Medicolegal experts have raised concerns, however, that, "due to the ignorance of doctors, police and members of the public" (Fernando, 2003, p.239), some proportion of these deaths are not reported appropriately. There is limited research on the extent to which this happens and why, however a recent review of unnatural female deaths in Sri Lanka found approximately 80% of cases (some of which included suicides) were subject to initial police investigation within the first 24 hours post-death (UNFPA, 2018). Clarity on the other 20% of cases – whether they were missed or simply investigated beyond that 24-hour cut-off - is lacking, but suggests delays, if not missed opportunities, in identifying women's suicides.

At this point in the pathway, immediately following a death event in which police have been notified, a decision involving police input is made as to which route a death inquest will follow. In the Sri Lankan system, death inquests are led by an 'Inquirer' and this role can take one of two forms: Inquirer into Sudden Death (ISD) – the local designation for

⁶² One suicide inquest file contained a family statement suggesting the woman was pregnant, but no additional information in the file substantiated this sufficiently for us to count it as a maternal suicide.

⁶³ In 2016, the Surveillance Unit introduced its own specialised death investigation process called psychological autopsies of maternal suicides (PAMS) which aims to enhance its standard Procedure for this particular manner of death. The PAMS process, unlike the standard Procedure, is not publicly available (Jayaratne, 2018).

coroner, or the Magistrate. ISDs are locally appointed, non-clinicians who are allocated to a particular area by the Ministry of Justice (Balachandra et al., 2011). They are unsalaried and officially under the management of the MoJ. They are entitled to expenses and – at the time of this study – 500 Sri Lankan rupees per inquiry⁶⁴. They operate under a code of conduct laid out in an official handbook⁶⁵, and receive periodic updates about their responsibilities via MoJ circulars. ISDs do not hold any official qualification in death investigation and minimal qualification requirements, including achievement of "ordinary passes" at A-levels and demonstration of "excellent moral character". ISDs are not subject to continued professional development in their posts (Goonerathne, 2011; Wijebandara, 2014; Ministry of Justice, 2019). They are political posts, much like in the British coronial system. This study encountered ISDs who performed their duties as parttime and additional roles to paying occupations such as religious leaders or providers of alternative medicine, or in their retirement from previous careers such as serving in the military. In our study, all ISDs were male. Magistrates represent the local level of the courts, and as legal professionals they are non-medical. Magistrates are ultimately responsible for signing off on all deaths in their catchment, and therefore have critical decision-making authority to direct the course of death investigations, including overriding ISDs or taking over their inquests. In our study, we directly encountered only two Magistrates, one of each normative gender.

On paper, allocation of death inquests to an ISD or Magistrate is based on likely circumstances of the death. Magistrates must take the lead in homicides, accidents, deaths occurring in institutions (e.g. prisons), leprosy deaths in the sole remaining leprosy hospital, and deaths that may be due to negligence (Fernando, 2003). ISDs are meant to lead on inquiries into suicides, animal attacks, and other sudden deaths. However, either authority can investigate deaths considered equivocal. This means, in practice, there is a blurring of which role takes responsibility and may be influenced by such things as availability and capacity of each role, possibly profile of the deceased or the case (e.g. in circumstances of heightened media interest), and/or directives of the

⁶⁴ This figure was confirmed by the ISDs participating in this research as well as in the literature and equates to roughly £2.40 per inquest.
⁶⁵ Not publicly available

Magistrate who has higher authority than ISDs. While ISDs *should* always lead on suicides, this varies in situ and thus subsequent steps differ for data collection on deaths.

Regardless of whether the ISD or Magistrate takes the lead, responsibilities of the inquest are similar at this next stage. The inquirer attends the scene of death as soon as possible after being notified. Inquirers are tasked with documenting all injuries visible on the decedent, any evidence of what is likely to have caused the injuries (e.g. a rope in the case of a hanging or an empty pill bottle in the event of suspected self-poisoning), circumstances under which the death appears to have occurred and their opinion as to the likeliest cause of death. Both types of inquirer are empowered to gather statements from witnesses to the event or those they deem relevant to offer insight into the decedent's death; most often this includes family, neighbours and/or friends. A key collateral in cases of female suicide may be the local Public Health Midwife as they provide primary healthcare to women across the reproductive lifespan, have longstanding relationships with women in their catchments and are thus privy to women's life circumstances. At present, however, midwives are not consulted. Those providing statements are expected to declare the information they provide is true and accurate under oath. Inquirers can, under the law, compel family and other collaterals to present additional evidence, for example, by asking to see the diary of a decedent or recent text message exchanges between a deceased woman and her husband, if they believe it to be critical in aiding their inquest (Fernando, 2003). I found no evidence of consistent protocols or pro formas to guide this stage of data collection, but this site of production has potential to generate perhaps the most data of any single step and critical insights into the context of women's SDV.

5.5.4 Initial Verdicts and the Need for Post-Mortems

Inquirers will reach a point in the investigation at which their ability to provide an opinion on cause of death is either satisfied or not. For inquirers confident as to the cause and manner of death, they issue what is colloquially referred to as a verdict, though this is not a legal requirement. At this stage, if the inquest is directed by an ISD, a report including their 'verdict' is submitted to their nearest Magistrate, and the Magistrate holds the ultimate authority to accept the verdict or take over the inquest for further

investigation. If the inquest is led by the Magistrate from the outset, and they are confident to issue a verdict, they may conclude the official inquiry (Fernando, 2003; Wijebandara, 2014).

In the scenarios, however, that 1) an ISD is not sufficiently satisfied as to the cause and manner of death, 2) the Magistrate is not satisfied with the ISD's verdict, or 3) his/her own ability to deploy a verdict, an additional step of death inquests begins. Deaths at this stage are considered "under investigation" and requests for post-mortem examinations through JMOs are made by the ISD or Magistrate. For delayed suicidal deaths from health facilities this is when additional contact with previously involved forensic specialists is most likely, although it may not always be the same individual representing the JMO office re-attending the now deceased patient. This introduces potential for confirmation or contradiction of conclusions drawn from the initial clinical forensic examination, and suggests it is theoretically possible for women's injuries previously opined as something other than self-inflicted to move into the sample of suicides at this later stage. It is also possible that women admitted with ultimately fatal self-directed violence could be reviewed by the same forensic specialist right through medical care, supporting the use of prior knowledge of the patient's state upon admission and treatment received, all of which can help inform cause and manner of death conclusions at this next stage. It is unknown how regularly this happens.

Post-mortems, or autopsies, must be conducted by forensic pathologists and in Sri Lanka this requires either qualified staff from the JMO offices or support of one of the forensic pathologists based at one of the country's seven medical faculties (Balachandra et al., 2011)⁶⁶. In the study district, one such faculty was present with a dedicated Forensics Department that was often called in by JMOs to perform these medicolegal autopsies. In less populated areas of the country, medical officers with only a diploma in Forensic Medicine may perform autopsies, but in our study district this was done by JMOs directly or senior forensic specialists with considerable experience. It is important to note that

⁶⁶ Balachandra and colleagues claimed roughly 50 such specialists were attached to universities as of 2011, while WHO Sri Lanka's country profile on GBV (2018a) mentions a mere 20 board-certified forensic specialists are housed in the university sector. This wide discrepancy could not be rectified by my investigation.

while clinical autopsies require consent of families, medicolegal autopsies as in the case of all unnatural deaths including suicides, do not.

Post-mortems in these circumstances have very explicit objectives: to identify the body; the cause, manner and likely time of death; to identify injuries, deformities, or evidence of illness; and to gather relevant specimens from the body for further investigation such as tissue samples (Fernando, 2008). Further tests of specimens, such as toxicology reports, are potentially critical in suicide cases. For example, they can illuminate instances of accidental overdose or mixing of medicines in which the decedent was unlikely to have known the fatal risks. In Sri Lanka, forensic specialists must send all samples to a central department for final results to be certified despite the Government Analyst Department not being specialised for this purpose⁶⁷. This can lead to significant delays in meeting the final objective of post-mortem examinations which is for forensic specialists (ideally JMOs) to provide an original report of the findings to the Inquirer who initiated the autopsy request (Goonerathne, 2011). Post-mortems are meant to follow a particular pro forma known as the H42 for documentation, however there appears to be no national set of standards for forensic specialists performing this task with institutions instead developing their own. The JMO/forensic pathologist is expected to keep a copy of their report, submitting the original to the Inquirer.

This is a critical point about record keeping at this stage, as JMOs/forensic pathologists are expected to keep reports of the deaths for which they provide post-mortems. This is done to ensure information sustains should the case need to be revisited at a later date and for deaths triggering court cases as there are significant delays in the legal system. Each JMO's office establishes its own system and each sets a standard for documenting death inquests which more junior forensic pathologists then meet in their own record keeping. Two of the three JMOs were in the process of establishing their own electronic systems which differed from one another, but these were not functional at the time of this study, nor would they be applicable to retrospective cases. The third JMO maintained handwritten records. There is no national database as yet, although progressive forensic specialists, largely from the university sector, have been championing the appeal for an

⁶⁷ How samples are internally processed by the Government Analyst Department is also unclear.

electronic system for all country post-mortems for years. This effectively results in a paper trail for records at this site of production, and files are to be kept with the individual JMO, rather than the office itself. This means, in practice, as JMOs and others are relocated and/or retire – or die, as occurred in this study – their files go with them, thus leaving the setting in which they were generated and possibly becoming inaccessible (Edirisinghe and Kitulwatte, 2011). Ultimately, post-mortem reports in these cases are conducted and expected to be taken into consideration *before* Death Certificates can be issued. It is not the task of the JMO or other forensic pathologist to opine a verdict in the report, though they may effectively arrive at one in concluding and submitting their reports.

At this point in the production of evidence, forensic specialists may be operating under various and competing expectations. There have been reports of JMOs and other forensic pathologists under pressure from families to rapidly conclude an autopsy to release the body, often for religious purposes. It has been posited by forensic specialists that suicides in Muslim women in Sri Lanka, for instance, are more likely to be missed due to strong resistance of family to autopsies and preferences for immediate burial. Bodies are not encouraged to be stored for long periods by the health system, in part because of limited resources and space, which encourages post-mortems to proceed quickly, often within 24 hours of a death event. This is also intended to keep costs down (Ruwanpura, 2012). Additionally, JMOs and those others conducting autopsies on suspected suicides are only answerable to the Inquirer, yet we observed they also sometimes engaged in direct feedback with decedents' families. As Perera (2014) suggests, this introduces a grey area of ethical and legal complexity as there appears to be a lack of protocol guiding forensic specialists in this part of the pathway. This choice to discuss matters with family was seemingly a personal one from my observations, and as no records are kept of these interactions, any agreements between parties remain unregulated. I am not able to speculate as to how common or to what extent these various pressures may affect data generation at this step along the chain. I did, however, observe JMOs and other forensic specialists being called in to perform autopsies overnight which may be an indication of these systematic and social pressures, but could also be grounded in a perception that examinations conducted shortly after death generate better scientific evidence.

In many settings, research has suggested that autopsies improve the accuracy of death determinations, including recognition of suicides (Fernando, 2008; Kapusta et al., 2011). However, there is no evidence on the quality of autopsies in Sri Lanka and whether and under what conditions errors have been made in arriving at a cause of death (Fernando, 2008). Furthermore, frequency of requesting post-mortems by Inquirers in Sri Lanka is unknown, an understanding of how many suicides are subject to this stage of the commodity chain is not documented systematically because of a lack of standardised reporting and record keeping of post-mortems. The only previous study from Colombo district in 1995 found just 55% of sudden deaths went on to this stage of the death inquest pathway, and only 45% of suicides (Fernando, 2003). It is thought that Inquirers may be influenced by factors such as characteristics of the deceased, e.g. her/his age, input from family, and confidence in their own skill to determine cause and manner of death (Fernando, 2008). Taking all of this into consideration, it is a complex and vitally important, yet underexplored site of data production along the commodity chain of suicide data in Sri Lanka.

5.5.5 Opining a Verdict

Once a JMO or pathologist has completed his/her report and submitted it to the ISD or Magistrate, it is reviewed by the Inquirer in order to issue a verdict. In cases with insufficient information to conclude what happened beyond a reasonable doubt, Inquirers can report an "open verdict". This is one way a suicide may be unrecognised and may contribute to the over 40% of deaths allocated vague labels of cause in Sri Lanka (Mathers et al., 2005). If an ISD requested the post-mortem, the report informs their verdict which is passed to the Magistrate and is in theory, reviewed and signed off by them; in cases where the Magistrate leads the death inquest, they formulate their verdict directly. The verdict is the key 'commodity' which advances forward from this point of the chain. Notably, verdicts are not required from Inquirers at the end of this process, and reaching a conclusion, this cannot be challenged at a later date by the courts. This is a feature of the system which presents difficulty for re-opening investigations in light of new evidence and bears permanent implications for misclassifying deaths leaving little room for 'corrections' (Wijebandara, 2014) and risking miscarriages of justice. Once the

Magistrate is satisfied that a cause and manner of death have been identified or that an "open verdict" is most appropriate, the next step of the pathway is guided by the Births and Deaths Registration Act (1954) and Code of Criminal Procedure Act (1979). They require that within five days of concluding the death inquest, a Death Certificate be submitted by the Inquirer to the Divisional Registrar of Births and Deaths. Once a Death Certificate is issued by the Inquirer, the body of the deceased can also be released for burial or disposal. Bodies subject to death inquests are by law not allowed to be cremated, however in Buddhist and Hindu cultures – the predominant belief systems in Sri Lanka – cremation is the norm (Widger, 2009), and both types of Inquirer have been known to ignore this legal prohibition to allow families to cremate (Ruwanpura, 2012).

It is at this point in the pathway that a woman's suicide is transformed into statistics, as only the Death Certificate reaches this authority. The certificate must include the time and place of the death inquest and opinion as to the cause and manner of death. Notably, neither type of Inquirer is medically qualified, but death certificates are categorised using the ICD-10 system (SLMC, 2004). The local Registrar proceeds with registering the death based on this information. If the death, for some reason, had already been registered (which should not be the case in a suicide), this is also an opportunity for the Registrar to confirm or 'correct' the original record of entry. Divisional Registrars report this form of CoDD to the next level of the District Registrar for Births and Deaths. The District Registrar in turns passes these data up to the Registrar General's Department. At the national level, Sri Lanka's Registrar General's Department is the responsible authority for all final death registrations. I was unable to surmise how regularly Registrar levels report to one another, but am aware of delays in the system. It is the understanding of this commodity chain analysis, that Sri Lanka's Department of Census and Statistics subsequently utilises Registrar General's Department data on causes of death in their publication of national vital statistics. Under a single category aggregating all opined suicides from any single ICD-10 code of X60-X84, suicides are summarised and made periodically publicly available as national statistics (DCS, 2018).

I now turn my attention to the consumption end of the commodity chain by summarising the various outputs of the data production process, clarifying at which stage of suicide inquests they are generated, who retains each output, and whether – as a foreign researcher – I was able to access them (Table 6). I then proceed with a description of accessing the suicide inquest files specifically.

Table 6. Summary of commodity chain data outputs, owners, and accessibility forthis study

Entry point to inquest	Data outputs (and accessibility)	Data steward
Delayed suicidal deaths in health facilities	 Medical officer assessment → Bed Head Tickets (not available) 	1. Health facility
	 Police assessment → medicolegal report (not available) 	2. Police
	 JMO assessment → Clinical forensic examination / medicolegal report (not available) 	 JMO / attending forensic specialist
Suicide (death outside facility)	 Police assessment of scene of death → Police data (not available) 	1. Police
	 Death inquest → Inquirer's report (partially available) 	2. Inquirer (ISD / Magistrate)
	 Death inquest → JMO / forensic specialists' reports including post-mortems (partially available) 	 JMO / attending forensic specialist
	 Death inquest → Death certificates (not available) 	 Registrars for Births and Deaths (divisional level)

In order to be a consumer of the suicide inquest files, I had to first acquire them. This was a protracted process. Active case finding – retrospective and prospective – isolated likely instances of suicide in WRA in the study district. Reflecting on the demands or preferences I had for the data I wished to acquire, I declare that my interests were twofold: firstly, to utilise suicide inquest files as data in and of themselves, and secondly, as platforms to enable Qualitative Inquiry with those bereaved or otherwise affected by these deaths. Given this, my aim was therefore to obtain the records for each suicide in as much completeness as possible including those with post-mortem examinations. This was, as it turned out, an ambitious effort.

I selected to begin work through the JMO offices, as they hold positions of authority and have strong links to ISDs and Magistrates across the study district. The research team approached the district's three JMOs to introduce the study and initiate the process of active case finding. As all JMOs were based within government sector hospitals, the research team also sought and gained ethical approval from gatekeepers - hospital directors - to conduct data collection (see Appendices 6 and 7). Gatekeepers, whether individuals or organisations, exert social control over research in ways that impact physical and social access in research, and they are principally concerned with how research may benefit their organisations or individual careers. Their motivations to act as conduits for researchers are effectively guided by informal cost-benefit analyses. Although gatekeepers are not intended as subjects of this research, it is the case that social researchers often (unintentionally) discover aspects of gatekeepers' ways of working or uncover practices gatekeepers may not want revealed as they attempt to access data in the field. In circumstances where concerns about reputation or criticism exist or where the benefits being offered by a researcher are not deemed sufficient by gatekeepers, they may resist efforts to negotiate access (Broadhead and Rist, 1976; Clark, 2010). As this study explored the provenance and potential of suicide inquest files gathered partly by JMO offices, it is possible that JMOs had reservations about granting access to their data, locally developed systems for cause of death ascertainment and data management.

Two JMOs agreed to involvement from the outset of the data collection period (February – November 2016), while the third required considerably more contacts before a meeting was achieved. Introductions were facilitated by a senior forensic pathologist well respected in the profession who was supportive of the study, yet went unanswered by the third JMO. Despite holding all necessary approvals and following suggested protocol to begin working with the third office, we encountered silence. This was addressed by the research team visiting the office on consecutive days until the JMO agreed to discuss the study. It was the conclusion of our team that this office resisted engagement for two

reasons, both of which reflect recognised barriers to positive gatekeeper relationships in the literature. Firstly, their lack of interest and value for the benefits of research in general and suicide specifically discouraged them in supporting others to explore the issue more deeply. Secondly, my positionality as a young, non-medical female professional with a foreign background⁶⁸ was viewed as intrusive and raised their suspicions over accessing sensitive information in this setting (Clark, 2010). I attempted to navigate the resistance to my foreignness at this initial encounter as the most modifiable barrier, by suggesting one of the local research assistants take the lead in further requests for access and by reassuring the JMO of the research team's ethical commitment to responsible handling of data. This temporarily allowed us to progress to the next step in acquiring data.

Following introductions and demonstration of the necessary local, national and international research approvals, the research team set about identifying relevant cases. In two of the three JMO offices, this involved consulting official logbooks – handwritten registers of all deaths subject to inquests by their offices for the study period (January 2015 – November 2016). These registers maintained records of deaths in chronological order and contained high level information such as the inquest number, date of death, decedent's name, age, sex, police area, cause and manner of death, and name of the ISD, Magistrate, and/or forensic specialist responsible for the respective inquest. Women's deaths recorded with a manner of death as suicide aged between 15-49 years were isolated and case details noted in order to proceed to the next step of requesting the inquest files. A third JMO office reviewed their own logbooks to identify cases prior to our arrival, and thus the research team did not conduct this early step in active case finding. It is possible cases were missed as we did not review logbooks directly and instead relied upon that JMO office to provide a complete sub-sample from their catchment. However, this JMO office was enthusiastic throughout the research expressing both motivations of moral obligation to contribute and hope the research could support office learning and change (Clark, 2010). Consequently, I felt they likely deployed best effort to identify relevant cases.

⁶⁸ I was made aware of previous episodes of resistance to other research projects by this JMO office, including those led by senior medical and academic professionals from Sri Lanka with considerable authority in the Judicial Medical space. Projects led by females and/or researching topics affecting women reported especially arduous attempts at cooperation, reflecting challenges of sexism in research and this setting (Warren, 1988).

As cases were identified, the research team assessed whether full records could initially be accessed from the JMO's own archives. Our experience revealed some cases progressed along the commodity chain collating the ever-growing body of data generated at each step culminating in some JMO's files including not just their own post-mortem reports and conclusions, but products of previous steps of the death inquest (Table 4). However, it was not always possible to get the comprehensive suicide inquest files from JMOs. As such, we contacted the relevant responsible authority for each particular inquest – whether it was an ISD, Magistrate and/or forensic pathologist. This was aided, in one jurisdiction, by a JMO writing letters to ISDs and Magistrates requesting files on our behalf, though these were not always answered and resulted in loss of access to three cases. On most other occasions, this involved attending in-person appointments.

Authorities worked out of hospitals and associated JMO offices, judicial buildings including courthouses, and in the case of one ISD, a private business. It was not uncommon to attend appointments to discuss cases to find the ISD or forensic pathologist was called away on new and urgent matters, requiring additional visits. At each site hosting an Inquirer, the research team was subject to institutional and interpersonal protocols and expectations of decorum, which sometimes prevented accessing files reemphasising the significance of gatekeeping in this process. For example, on one visit to a Magistrate's Court, we were required to clear security, which involved an assessment of our attire to ensure we adhered to dress code. The research assistant was wearing a sleeveless dress, and although socially acceptable now in public spaces for women, this was considered inappropriate in a court of law. She was denied entry on the grounds that her attire was "offensive" to the courts. In response, I creatively refashioned my own clothes on the street – much to the amusement of security personnel – to offer the research assistant a covering and we were then permitted to enter the Magistrate's Court and continue our search for the inquest files. This particular episode represents a pattern of well-documented and disproportionately female-directed sexism deployed by gatekeepers towards social researchers in the field (Warren, 1988; Lee and Renzetti, 1990). On another occasion, at a different Magistrate's Court, the Magistrate directly met with us, but requested an additional handwritten letter from us stating precise wording about our intentions as he perceived the printed letters of approval from relevant authorities insufficiently 'personable'. Despite submitting the handwritten letter as per

his request, he did not further aid in acquiring his suicide inquest files. Finally, the JMO who had displayed reluctance early on embarked on a protracted series of days of agreeing to allocate a member of staff to assist in finding the hard copy files we had identified from their logbook, only to deny this support upon our attendance. After several months of repeated effort and repudiation, we felt unable to reach a consensual arrangement and I chose not to engage in conflict methodologies to advance (McAreavey and Das, 2013). I chose instead to terminate efforts to acquire this JMO's suicide inquest files, thus losing access to 1/3 of the data we had hoped to explore.

In total, through this approach to active case finding, we identified 32 cases of suspected suicide among women of reproductive age in the district which occurred between January 2015 and November 2016. Twenty-three cases were identified in the district for 2015, of which full suicide inquest files were available for 15, while partial or logbook-only records were available for eight. For 2016, just nine cases were identified, five of which yielded full suicide inquest files, and four partial or logbook-only records. Overall, 20 suicide inquest files were obtained in full for in-depth review across both years.

5.5.7 What can Suicide Inquest Files Tell Us?

I reflect on our sample of suicide inquest files as objects, analytical categories and as a methodological orientation for exploring suicide (Fincham et al., 2011). Firstly, in looking at the inquest files as objects to study, I present an overview of their structure and content, i.e. what artefacts can be identified within these files. Across the sample, the following types of documentation could be found:

- 1. Physical descriptions of the decedent including body mapping
- 2. Physical descriptions of the scene of death
- 3. Handwritten statements of family, collaterals and/or witnesses to the suicide
- 4. Contact details for those giving statements
- 5. Health records including discharge summaries from health facilities and mental health treatment records
- 6. Formal identification document for the decedent (e.g. national identity card)
- 7. Newspaper articles referring to the suicide event
- 8. Photographs of decedents, including at the scene of death

- 9. Post-mortem reports from JMOs or other forensic specialists
- 10. Official statement to modify child custody and support
- 11. (Suicide) notes from decedents⁶⁹
- 12. Verdicts or conclusions of JMOs and/or Inquirers, i.e. conclusions of the inquiry

Of these artefacts, #1-4 were present in some form for all 20 files, although body mapping was rare. Notes from the deceased (#11) were present in seven files, and formalised verdicts (#12) included in the majority of cases (n = 14). Items 5-10 were less consistently found to be part of each file. Nineteen files included statements, most of which contained narratives from two persons, and roughly 1/3 contained three statements. Two files contained statements from only a single witness and one case appeared to include none. Sources of statements most commonly included parents (n = 14), spouses or boyfriends (n = 12), siblings (n = 6) and neighbours (n = 5). Children, friends and 'others' also contributed accounts, albeit uncommonly.

Analysis of substantive content revealed the suicide inquest files had the potential to yield rich information across a range of analytical categories. I was able to extract evidence on:

• Demographics

outcomes.

- Characteristics of the death
- Women's health and wellbeing
- Women's relationships
- The response to SDV by women (in the case of delayed suicidal deaths), authorities and surviving family/collaterals
- Possible triggers or perceived reasons for the self-harming event, and
- The nature of disclosure of suffering or risk of self-directed violence and how disclosure operated prior to and after women's deaths⁷⁰.

⁶⁹ Not all notes from decedents clearly communicated suicidal intent, and could be interpreted as communicating something else, e.g. running away. Recognising this ambiguity in certain cases is important when reflecting on their verdicts. I avoid labelling some women's notes as 'suicide notes' in the absence of clear suicidal intent.
⁷⁰ Notes left by decedents (document type #11) were an especially powerful device through which to explore women's disclosures of suffering and they often operated as signifiers of women's intent for their actions and

¹⁷⁷

Evidence on women's demographics and death characteristics were available from all files, although the specific items captured varied. Limited information on women's health and wellbeing was present in most cases, while the other substantive areas were less consistently captured. In-depth findings on the substantive content of these 20 cases as well as characteristics extracted from the additional 12 partial/incomplete suicide inquest files are presented in Chapter 6.

5.6 Discussion: The Value of Sri Lanka's Suicide Death Inquests for Understanding Suicides

This study's feminist examination of the commodity chain of suicide death inquests and their eventual transformation into vital statistics contributes to the literature in three ways. By first generating evidence on specific investigative practices around female suicide I then secondly raise questions about the quality of these data and the systems and power structures which create them. Third, I reflect on how examination of suicide death inquests advances discussions about other forms of suicide data in Sri Lanka, interrogating the dominant (inter)national discourse privileging police data.

Two unique contributions to the knowledge base on women's suicides in Sri Lanka were made possible by my compilation and analyses of these files. First, for 90% of cases (n = 18), it was possible to deduce how quickly post-mortem examinations were concluded, which provides a proxy indicator of how swiftly individual deaths may proceed through the death inquest pathway and how soon autopsies are undertaken. Twenty-five percent of our full sample (n = 5) were subject to autopsy on the same day of the death event, while a further 60% had autopsies on the following day. This aligns with the figure reported in a recent UNFPA study (2018) on unnatural deaths in Sri Lankan women which reported roughly 80% of deaths are attended by authorities within 24 hours. Our files are able to be more explicit that this attention included post-mortem examination rather than just early stages of death inquiry by, e.g. the police. Only one case was knowingly delayed more than one day post-death, while two cases are missing this information. Reasons for this efficiency in conducting post-mortems, such as the social and systemic pressures JMOs and forensic pathologists may face described above, cannot

be deduced from these data, but it is a starting point to exploring autopsy practices for suicides.

The second contribution of these analyses is their ability to indicate what percentage of suicides among WRA are investigated by the full possible pathway of stakeholders, i.e. the percentage of these deaths submitted for post-mortems. I obtained district-level police data on female suicides for our study district for the years 2015-2017. Police data serve as Sri Lanka's official suicide statistics. As our files only covered 23 months from 2015-2016, Table 7 below compares the female suicides among WRA identified by police and the number identified by our team through the JMO / Inquirer route of active case finding by year. This is an imperfect comparison, but still a useful one. Police data disaggregate age groups slightly differently from our categorisation of WRA as aged 15-49, as their youngest age category includes those aged 8-16 years and another grouping includes women 46-50. For 2015 comparisons, this made no difference, but for 2016 one such death was reported in police statistics for the youngest age group. I have included this case in the police figure for 2016 knowing the decedent may well have been younger than our 15-year minimum, but as suicides in younger age groups are rare in SEAR there is a good chance the decedent would have fallen into our age-defined category for WRA (Naghavi, 2019).

Cases identified by	2015	2016	
District Police	26	31	
Research team	23	9	
Suicides referred for post-			
mortems (%)	88%	29%	

Table 7. Suicide cases in women of reproductive age (15-49) identified throughpolice data versus death inquest data for 2015 – 2016

2015 was the only completed calendar year for which we had data, and in comparing figures, it suggests our method of obtaining suicide inquest files through active case finding identified nearly all suicides in WRA (88%). This indicates that almost all suicides in women of this age range were subject to death inquests inclusive of post-mortems in

our study district in 2015. For 2016, however we observe a different picture as we were only able to identify 29% of cases through this route compared to the official suicide figure for WRA in the district that year. This considerable discrepancy is possibly attributable to three things. Firstly, one JMO office effectively terminated cooperation midway through our data collection period which resulted in obtaining retrospective cases for 2015, but a lack of access to identify prospectively occurring cases in 2016 in this particular jurisdiction. Secondly, we ended data collection in November 2016, leaving the full month of December unassessed. It is possible that a large proportion of our 'missed' cases occurred in December and therefore skews our understanding of how effective this route was at identifying female suicides in this age group. However, seasonality of suicides is not observed in Sri Lankan research, although incidence of nonfatal SDV was found higher in the first half of the calendar year in an agricultural part of the country (Eddleston et al., 2006). This study's district is comprised of fewer agricultural communities, and as 11/12 calendar months were captured, it is unlikely a meaningful proportion of suicides were concentrated in the final month of 2016. The third possibility is that a substantially lower proportion of suicides in WRA were referred for post-mortems in the death inquest process in 2016. For context, Sri Lanka Police (2018) reported 28 suicides in females aged 8-50 in our study district for 2017, most of whom would have represented our age group of interest between 15-49 years. Although we did not gather suicide inquest files to compare for that year, it suggests a relatively stable number of female suicides of reproductive age women over the past three years in the study district. As police data are not disaggregated further, and access is extremely limited, it is not possible for us to deduce which of the above scenarios may have contributed to these divergent findings.

Our two estimated autopsy referral rates for 2015-2016 are in stark contrast to the findings of the single available study on autopsy referral practices for suicides in a nearby district. Fernando (2003) observed roughly 45% of suicides were subject to post-mortem examination, while we observed a polarising picture of very high (88%) or very low (29%) rates of autopsy referral between the two years of study. In 2017, one of the country's leading forensic pathologists presented conclusions of a working committee to address the lack of guidance around post-mortem referral practices at this juncture of death investigations. The Committee is currently taking forward proposals to introduce

new policy and legislation making post-mortems mandatory for all suicides unless they were 'directly witnessed' (Jayasekera, 2017). This effort is commendable given the substantive data about each suicide that could be generated if the full death inquest pathway was followed. I acknowledge this also requires, however, considerable effort on the part of the Committee to attend to issues of quality and standards for performing post-mortems themselves, and to wider systemic weaknesses expanded on below.

5.6.1 Vulnerabilities of the Commodity Chain: Risks for Data Quality

Throughout this chapter's description of the steps and stakeholders involved in the commodity chain, the research team's observations of deviations from ideal practice were highlighted. Additionally, broader systemic shortcomings appeared to undermine the potential for consistently high-quality data from suicide death inquests in this context regardless of how well stakeholders adhered to articulated guidelines as processes across the commodity chain were inherently flawed. Below I present the areas of practice revealed through this feminist commodity chain analysis as deficient, some of which have been previously noted in wider critiques of Sri Lanka's medicolegal system (Wijebandara, 2014).

- There is a lack of standardisation, including sufficient minimum qualifications and training for multiple key roles across the commodity chain such as police, ISDs and forensic specialists and a lack of continued mandatory professional development for each role aside from medical officers whose roles are limited to the delayed suicidal deaths.
- Concerns have been raised over delayed or poor handling of scenes of death, particularly delays to forensic specialists' access and clarity over the police's role in these circumstances is deficient.
- Both the politically appointed nature of the post of ISD and their lack of remuneration in a cultural setting where bribery is commonplace in personal and professional spheres may encourage corruption, disincentivise thorough work and result in biased evidence and verdicts.
- As a consequence of the above, concerns over deployment of "inappropriate" verdicts based on incomplete or non-transparent evidence emerge. Given verdicts cannot be challenged after the fact the impetus to 'get it right' is high. Yet suicides

are sometimes concluded without other manners of death being fully excluded based on the evidence. The opening vignette is one such example, as this woman's history of alcohol use and episodes of apparent psychosis suggest she may well not have understood the consequences of her actions would result in her death, which might better assume a label of "accident" or "undetermined" than suicide.

- No pro formas or standardised documentation requirements exist for Inquirers to guide death investigations and consistent use of the H42 or other standards of documentation are absent for those responsible for post-mortems.
- As an extension of the above, the persisting lack of a national (ideally electronic) database for death inquests and specifically for post-mortems hampers efforts to develop quality assurance mechanisms and a rich corpus of evidence on suicide which could contribute to research and prevention agendas.
- Monitoring and evaluation of stakeholders involved in death inquests is absent. Inquirers – both ISDs and Magistrates – are not subject to evaluations across their careers with regard to managing death inquests, which means ISDs, for example, could conceivably remain in post until age 60 with little to no oversight.

5.6.2 The Influence of Power and 'Consumer' Demands on the Production of Knowledge on Women's Suicides

In continued analysis of how these data were generated, compiled and made available, the multiple pivotal functions of death inquest record keeping surfaced. When comparing types of documentation gathered and the form in which data were captured and presented across Inquirers and JMOs, distinct styles could be identified. Structure and content of our files varied hugely with some level of consistency found only within subsamples belonging to the same investigating stakeholder. Variation included, but was not limited to:

- The nature and extent of missing data
- Limitations of handwriting and handwritten records
- Preservation of documents such as exposure to water damage, loss, disorganisation of papers difficult to reconstruct in their correct order, and storage and security of files against unauthorised access

- Differing levels of detail within and across files (including by the same stakeholder)
- Prevalence and extent to which inconsistencies in evidence were reconciled by the stakeholder, particularly contradictory statements of family and collaterals
- Evidence of missed opportunities to gather additional or better information
- (In)accuracy of contact details for family and collaterals to support follow-up engagement

This highlights the consequences of a lack of standard procedures and guidelines in this context as a recognised systemic weakness. However, it also exposes these data as "containers of hidden social relations... [where] living, breathing, gendered and raced" (Collins, 2014, p.27) actors, especially the intended consumers of these data, exert influence over knowledge production about suicide in this setting. These data were originally gathered for the principal purpose of opining a cause and manner of death. At the grassroots level this is to direct systemic responses to a person's death, for example, can their body be released by the hospital or police or are criminal proceedings required? At the highest level, the ascribing of cause and manner of death ultimately serves to inform the country's vital statistics. At neither of these levels is there an articulated demand for the generation of detailed knowledge to inform suicide research, prevention efforts and/or to provide survivors of a woman's death with information which may affect the course of their bereavement. It is here we may consider how individual actors' (e.g. Inquirers, JMOs, police, etc.) needs and preferences to fulfil their specific responsibilities may have shaped what pieces of information were gathered across each site of production along the commodity chain at which they were present (Collins, 2014). For example, Magistrates are ultimately concerned with receiving sufficient information to issue a Death Certificate, while officers in the Registrar General's Department responsible for compiling the nation's vital statistics require completed Death Certificates containing minimal, pre-categorised information. Formalised expectations for the data therefore encourage relative brevity in fact-finding for and concluding of one's task. In the context of over-burdened, low-resource systems across multiple ministries; pressure from families, police, health services; competing responsibilities and potentially under-skilled and under-supported human resources, it is perhaps

unsurprising that the quality and depth of information on each woman's death (and preceding life) varies so substantially.

Record keeping practices provide insight into the role of individual agency among key stakeholders to determine what data are therefore perceived essential, desirable or unnecessary in opining a suicide, i.e. they yield power to establish what knowledge about women's suicides is of value and what is not. In suicide death inquests, this involves police, Inquirers and forensic specialists deploying agency to determine which stakeholders are worthy of inclusion in developing a comprehensive picture of each woman's suicide and which are not, producing and reproducing norms of whose voices matter most or at all (Ramamurthy, 2004). For example, in the case of one woman from our study, who suicided in her boarding house near her place of recently-terminated employment, no statements were gathered from ex-employers, ex-colleagues or friends, housemates or the boarding house owners. Instead statements were taken from her mother and daughter, who saw her infrequently and lived distant from the site of death. This possibly evidences a preference in the inquiry process to engage with the 'usual suspects' who, in this case, may not always be the most informed of women's circumstances prior to death, or a lack of critical reflection or training in selecting informants. Regardless of the reason, it exemplifies one of the many missed opportunities identified by this analysis to generate more complete knowledge of this particular woman's trajectory into SDV.

By taking a feminist approach to this commodity chain analysis, I examined how hierarchies of power are reinforced through Sri Lanka's death investigation processes (Ramamurthy, 2004). In this study, we observed the potential for complex interactions, but identified likely patterns at each step of the commodity chain suggesting relative power of medical officers over patients and families; police over families, medical officers, and potentially ISDs; magistrates over police, ISDs and forensic specialists; and ISDs over forensic specialists. Forensic specialists, while arguably the most skilled to actually determine the cause and manner of a woman's death (WHO, 2008), were a) not always involved as our autopsy referral rates revealed and b) operated under multiple often competing pressures when they were. Families' and collaterals' positions of influence appeared at first glance comparatively lacking relative to authorities, yet extant literature

and review of our files' content reminds us of their critical role in death investigations, challenging assumptions about where agency occurs in the data production process (Marecek, 1998; Collins, 2014). For example, their provision (or lack thereof) of formal statements to medical officers, police, and Inquirers has the power to shape how women's lives and deaths are represented, managed, and remembered. Women themselves emerged as often marginalised actors in their own stories, with parents' or spouses' narratives for example given more weight by Inquirers even in cases where direct communication from the decedent was available and inconsistent with informants' statements. These power structures reflect broader sociocultural and gender norms in Sri Lanka (Marecek, 1998), marginalising women's experiences of SDV and our potential to better understand them (Jaworski, 2014). Mindful of the vulnerabilities and socially constructed nature of these data, they still hold potential to usefully inform the evidence base in this context.

5.6.3 Implications for Sri Lanka's Cause of Death Data

Exceptional for its LMIC status and compared to many regional neighbours, Sri Lanka is often recognised for its responsiveness to public health challenges including maternal mortality, malaria, and indeed suicide through a combination of improved cross-sectoral policies and services (WHO Sri Lanka, 2014). Yet evidence suggests current efforts to reduce suicide are ineffective among women as rates have plateaued, while men's continue to decrease (Knipe et al., 2017c). Formulating policy and programmatic responses will rely on CoDD that accurately identify female suicides, correctly distinguishing them from other possible unnatural causes, in order to establish reliable statistics of incidence and to monitor trends over time. Sri Lanka's commendable efforts to operate a national vital registration system, into which suicide inquest files feed, that legally mandate registration of all deaths in the country should go some way towards meeting these requirements for meaningful CoDD (WHO Sri Lanka, 2014). However, three primary challenges remain to the production of nationally comprehensive, timely, reliable, transparent and thorough suicide CoDD in Sri Lanka.

Firstly, at present, Sri Lankan authorities officially prioritise CoDD on suicide provided by the Sri Lanka Police's Crime Statistics Unit over that which is produced through the commodity chain presented in this chapter. Knipe and colleagues (2014a; 2015) have written extensively on the value of Sri Lankan police data on suicide compared to previously favoured statistics provided by WHO. Building on their national-level epidemiological work, this feminist commodity chain analysis identified multiple points across the death investigation process at which police are expected to be or may be present, active and influential. To date, the expected procedures and real-life practices of police across these sites of production have not been transparently documented or explored. With increasing regularity since the 1970s, the Crime Statistics Unit has published multiple tables of nationally aggregated data on suicides. From 2005, most years' tables have been available to review or download from the Unit's website (Sri Lanka Police, 2018). These tables include such topics as:

- Mode (i.e. method) of suicide
- Civil status and education level of suicided persons
- Race and religion of suicided persons
- Occupation of suicided persons, and
- Reason for suicide

Raising interesting questions about data quality and completeness, each table tabulates to 100% with no missing data reported. Perhaps more remarkably, only a single "reason" is attributed for each person's suicide with pre-defined categories from which to choose that have remained unchanged since the 1980s (Key informant 1). Interrogation of these potentially ascribable reasons reveals women's experiences are overtly marginalised. For example, "sexual incapacity" only includes the male experience of erectile dysfunction, disqualifying entirely women's sexual and reproductive health from being considered as a factor in their suicides. As part of the additional fact-finding of this study to better understand what data police were utilising to generate these statistical and topical tables, I obtained previously unreleased documents from police and knowledgeable informants. Police initially resisted direct requests by me over anxieties around foreigners accessing sensitive local data, reflecting further challenges of gatekeeping in this context. However once a local research assistant was supported to explain the legitimacy of the study and that the information requested was not of a sensitive or personal nature, access was granted. Key to this analysis, I reviewed the headings on an unpopulated handwritten register from one police station which officers are expected to complete in the event they attend the scene of a sudden death. These "sudden death registers" as referred to by police are part of their role in suicide death inquests. Column headings of the register importantly do not include all topics of the suicide tables produced by the police each year, for example, there is no column to record a decedent's ethnicity, religion nor method of injury. Further, there is no national pro forma for "sudden death registers" for all police stations. Instead, handwritten books varying in content are maintained by each police station suggesting some police stations might collect data on a broader range of topics than others.

Peripheral police stations are expected to submit their sudden death registers to the district police station on a monthly basis, which in turn collate district-level data to be escalated to the national Crime Statistics Unit the following month suggesting rolling reporting cycles. There is no publicly available literature on how this reporting cycle operates in practice. For example, clarity on who is responsible for transforming handwritten records into digital records and at what level this occurs, regularity of reporting, and mechanisms for assuring data quality are all unavailable. Key informant interviews with persons familiar with police data revealed gaps in knowledge and suggested neither mapping nor evaluation of this process has been done. One key informant perceived police data were most comprehensive at divisional level, with completeness dropping as data advanced through the reporting chain, and that the 'mode of suicide' table is the most accurate topically, though the absence of this category on the sample police sudden death register obtained by this study challenges this assertion. This individual suggested plans are being discussed to develop pro formas for sudden death registers, but was uncertain when this system might be introduced. No additional information could be obtained on the specifics of police data collection at the point of medicolegal investigations when women are initially admitted to health facilities with equivocal injuries and subsequently succumb to a delayed suicidal death.

Second, as an extension of discussions on the current status of Sri Lankan police data on suicide, this analysis identified challenges with reconciling data between these two primary CoDD sources. I cross-referenced the most recent two years of vital statistics on female suicide that could be compared with police data of the same years (Table 8). This exercise revealed significant discrepancies between how the two sources are counting

the dead. Between 2009 and 2010, a total of 203 *additional* female suicides were recorded by police compared to the vital statistics commodity chain. For context, and reflecting higher absolute numbers of male suicides in Sri Lanka, 520 more male suicides were accounted for by the police than by vital statistics.

Data source	2009	2010	
Vital statistics	804	864	
Police data	921	950	
Discrepancy*	117	86	

Table 8. Cross-referencing of all female suicides between police data and vital statistics for two most recently available comparable years (2009 – 2010)

*Number of female suicides accounted for differently between the two CoDD sources (n)

In addition to challenges reconciling absolute figures of confirmed female suicides, mapping of police data's 'mode' categories onto the vital statistics system's use of ICD-10 categories for methods of fatal self-harm (X60-X84) reveals a mismatch, as police data allow for a much shorter list of possible methods. Both of these system-based reporting differences highlight a need to review practices involved in both cause of death datasets and how these datasets communicate with one another. Challenges of parallel systems counting suicides differently are not uncommon with discrepancies observed in relatively well-resourced systems such as Australia (De Leo, 2007). Yet in the Sri Lankan context these comparative data are, in theory, borne out of one original process: the death inquest. This specifically raises questions about where in the process of death inquiry do facts and figures start to diverge and why. Police are legally obligated to take part in the death inquest process described above, and as all deaths are legally required to result in Death Certificates submitted to the Registrar General's Department for use in vital statistics, the discrepancies observed above might suggest there is a meaningful proportion of suicidal deaths failing to make it to this final stage of legal death registration. Conversely, it is possible that police data represent deaths recorded as likely suicides earlier in the death investigation process, which are later attributed to other causes by Inquirers, and current feedback mechanisms may not support updating the sudden death registers maintained by the police. Given the lack of research on these systems, these are currently speculations.

A third and final challenge to developing useful CoDD on female suicide in Sri Lanka is that the currently articulated demands on the data by its core consumers (e.g. Registrar General's Department and Magistrates) are insufficient to encourage generation of the high-quality information needed from each case to develop a rich corpus of evidence that informs more in-depth discussions about potential points of intervention and prevention than has occurred up to this point. While CoDD on suicide are not always expected by those who shape their production to provide insight into, for example, risk and protective factors, there is a need for these data to make such inquiry possible. The practice of performing psychological autopsies has endured for more than 60 years as the gold standard in suicidology which can serve multiple concurrent purposes. For example, they can support understanding around individual suicides, which contributes to a broader suicide research base, but this method also explicitly aims to improve cause of death ascertainment, helping to refine and reinforce stronger health information and legal systems (Pouliot and De Leo, 2006). At present, neither police nor suicide inquest file data appear fit-for-purpose as platforms for much-needed in-depth and rigorous research methodologies like psychological autopsy, although this analysis asserts suicide inquest files offer demonstrably richer data on individual cases than police data. The extensive variations in suicide inquest files and underexplored challenges of police data introduced here, however, ultimately limit our ability to draw comprehensive conclusions about women's trajectories into the suicidal life.

5.7 Summary

The implications of this chapter's critical review of Sri Lanka's suicide data reveal a need for both large and small-scale research efforts employing mixed methodologies and perspectives of diverse stakeholders. With that in mind, I present a conceptual framework of women's trajectories through self-directed violence, informed by substantive findings of the suicide inquest files, enriched by the introduction of primary data on living women's experiences of non-fatal self-directed violence.

Chapter 6. Trajectories of Self-directed Violence amongst Women of Reproductive Age in Urban Sri Lanka

6.1 Introduction

Women disproportionately experience self-directed violence (SDV) – a continuum of selfharming thoughts and behaviours that may or may not be suicidal in nature or hold fatal consequences (Crosby, Ortega and Melanson, 2011; Vijayakumar, 2015). However, suicide fatalities are more commonly observed in men, and suicide data fail to account for non-fatal acts and those uncaptured by health or reporting systems due to complex systemic and/or sociocultural reasons (WHO, 2014b). Discourse therefore remains informed by excessively male data, inaccurately framing SDV as a predominately male phenomenon (Jaworski, 2014). SDV research and prevention efforts also emphasise quantitative paradigms applying epidemiological and clinical methods mostly reflecting findings of high-income country populations (Hjelmeland and Knizek, 2017).

Low- and middle-income countries (LMIC) experience a double burden of limited SDV evidence while observing 79% of global suicides and increasing incidence of non-fatal SDV (WHO, 2018). The Southeast Asia region (SEAR) accounts for 40% of the world's suicides with exceptionally high rates in women, and is observing self-harm's growing contribution to disability-adjusted life years (WHO, 2014b; Haagsma et al., 2016). The region recognises a need for SDV research on women of reproductive age (WRA) (15-49 years), where adolescent girls (15-19) suicide at higher rates than adolescent boys (at 28 and 21 per 100,000 population respectively) (Jordans et al., 2013; WHO, 2014; Naghavi, 2019), and perinatal suicide (i.e. in pregnancy through one-year postpartum) accounts for an increasing proportion of the region's pregnancy-related deaths (Fuhr et al., 2014).

Limited research explores SEAR women's experiences to understand how, why and with what consequences they engage in SDV (Vijayakumar, 2015). Although SDV reflects an interplay of biopsychosocial factors, research stems largely from high-income settings and has historically engaged in pathologising individual women (Jaworski, 2014; WHO, 2014b). This psychiatrization drives a narrative around intrapersonal characteristics,

with common portrayals of women's SDV as impulsive, manipulative, attention-seeking and unserious (Marecek, 2006; Payne, Swami and Stanistreet, 2008; Jaworski, 2014). The role of psychopathology is contested in LMIC with calls for Asian research to critically engage with this debate (Connor et al., 2012). In selected SEAR countries, lay perceptions attribute women's vulnerability to SDV to an inherent feminine flaw of delicate, hottempered characters (Marecek, 1998; 2006; Billaud, 2012). Critical suicidology however encourages exploration of the cultures within which SDV occurs incorporating, "the contextual and relational in a life course perspective" (Hjelmeland and Knizek, 2017, p.489), cautioning against adoption of Western and biomedical models (Colucci and Lester, 2013). In response, research on the communicative social function of SDV in SEAR cultures has advanced local knowledge (Marecek 2006; Widger, 2012; Canetto, 2015), a departure from high-income countries' canonical narratives rationalising SDV (Marecek and Senadheera, 2012). However, regional research minimally considers more distal and pervasive structural influences including gender.

Gender is a recognised determinant of physical and mental health, shaping health outcomes directly and indirectly by interacting with personal and social characteristics, influencing health behaviours and health systems (Deton, Prus and Walters, 2004). In suicidology, gender – if acknowledged – is principally treated as a descriptive factor (WHO, 2014b), rather than a social construction affecting personal trajectories (Hawkes, Haseen and Aounallah-Skhiri, 2019). While unique and shared factors exist between the binary genders of men and women, inadequate research considers *how* these factors operate within women's lives and how these interactions influence women's SDV trajectories (Payne, Swami and Stanistreet, 2008). The reductionism of gender in SDV research invisibilises the ways in which gender may inform women's roles, behaviours, responsibilities, expectations, care-seeking and access to resources and support for SDV.

This paper contributes to theory building by developing an emic conceptual framework to understand women's pathways to SDV in a SEAR context. Applying a gender-conscious psychosocial approach, I first compiled rich experiential accounts of living and deceased SDV-practicing women in western Sri Lanka. These primary and secondary data were synthesised to reveal a cumulative and gendered trajectory through SDV.

6.2 The Sri Lankan Context

Sri Lanka gained global attention as a nation in crisis, with historically high suicide rates peaking in the mid-1990s (Knipe et al., 2014a). While substantial reductions in suicides have followed in response to effective multi-sectoral measures modifying access to pesticides in agricultural areas (Knipe et al., 2017a), declines remain less pronounced amongst women and urban districts less likely to select pesticide poisoning as a method (Knipe et al., 2017c). Young women in Sri Lanka suicide at higher rates than male peers (de Alwis, 2012), 20-25% of whom are under 21 years (Marecek and Senadheera, 2012; Sri Lanka Police, 2019), and hospital data indicate a growing burden of non-fatal SDV in young women (Knipe et al., 2014a). Maternal suicides have also gained attention as a leading cause of death in perinatal women (Fuhr et al., 2014; WHO Sri Lanka, 2018b). Accepting an absence of absolute numbers, 13-18 non-fatal episodes are estimated for every suicide, primarily contributed by girls and women (de Alwis, 2012). Despite Sri Lanka's history of SDV as a common feature in women's lives, women have been largely overlooked (de Alwis, 2012), and confined to rural narratives (Marecek, 1998; 2006; Marecek and Senadheera, 2012; Widger, 2012; Sørensen et al., 2017). Calls persist for targeted research on women, especially those of reproductive age, to inform gendersensitive prevention efforts (Rajapakse and Tennakoon, 2016).

6.3 Methods

6.3.1 Study Setting

Gampaha District was purposively selected to generate evidence from an increasingly urban and industrial population. Gampaha hosts three Free Trade Zones (FTZ) chiefly employing young unaccompanied women, and contributes heavily to female emigration, most commonly to the Gulf States. Gampaha is also home to Sri Lanka's second biggest public hospital – Colombo North Teaching Hospital (CNTH) – serving a large urban and referral population, an appropriate setting from which to identify SDV-practicing women from across the district. Mixed methods employing quantitative and qualitative approaches were used in this study. First, to identify living WRA (15-49) including perinatal women, I established a surveillance system in CNTH prospectively capturing all females (12+⁷¹) admitted to adult female medical, surgical, obstetric and psychiatric wards for suspected SDV between April 25 and November 11, 2016, including a one-month pilot period. Women admitted for 'unclear' reasons were investigated and included or excluded accordingly, resulting in a sample of 210 women. Socio-demographic characteristics were recorded for all women, including 40 women (19.0%) not directly engaged, due to going 'missing', being discharged before ward rounds, or leaving against medical advice. Two women died during their admission, one of whose information became part of the sample of suicides.

Second, a subsample of 14 WRA was selected from our surveillance system to participate in in-depth interviews. Given the prospective nature of the surveillance system and a lack of previously documented trends in this setting, women were invited to participate on the basis of interest and ability to relocate for interview, while supporting as wide a range of participant and SDV characteristics as possible until data saturation (i.e. information redundancy); none declined and they were interviewed privately at CNTH. Additional women were recruited from a specialised burn treatment unit to ensure self-immolation patients were included given the dearth of evidence on this method in Sri Lanka (de Alwis, 2012). Three patients confirming self-inflicted burns were invited to participate and all accepted. All 17 interviews began by asking women to describe a typical day which provided, "an entrance to understanding larger issues, such as...how [women] organise their lives" (Sørensen et al., 2017, p.2). In line with my phenomenological approach (Willig, 2013), this was followed by an open-ended question: Can you tell us how you ended up in hospital on [date]? Women naturally covered large portions of the research instrument topics, however the research team introduced and probed issues as needed.

⁷¹ At the time of data collection, adult wards held responsibility for all females aged 12 years and above

Interviews with women were led by me in English and supported by two research assistants, originating from the study district, interpreting in interviews with Sinhalaand Tamil- speaking women. Interviews lasted between 45 minutes and three hours and were audio-recorded. English-only interviews were transcribed verbatim by me. Bilingual interviews' English-language segments were transcribed by me, while Sinhala portions were transcribed and back-translated into English by two independent professional Sinhalese transcriptionists. Each transcript was exchanged between transcriptionists to assess translation accuracy, and discrepancies clarified with RA2. All transcripts were then quality assessed by the research team against audio files.

To identify and obtain suicide inquest files the research team worked through the District's three Judicial Medical Officers (JMO) who are medicolegal authorities in Sri Lanka partially responsible for investigating suicidal deaths. We worked with each office to isolate all suicides among WRA occurring between January 2015 and November 2016; among the three offices, a total of 32 cases were identified in official registers. We assessed whether suicide inquest files matching registered cases could be accessed by JMO's own archives, resulting in 20 cases for which copies of suicide inquest files were obtained. The other 12 cases were held by Magistrates or one JMO's office which declined to share further documentation. Suicide inquest file documentation not already in English was translated by research assistants.

6.3.3 Research Instrument

The research instrument (Appendix 21) captured women's experiences across the life course, unlike typical psychological autopsy methods limited to more proximal time periods preceding SDV. It combined methods of psychological and sociological autopsy to explore individual and social circumstances surrounding women's SDV (Fincham et al., 2011; Connor et al., 2012), complemented by a narrative element to explore gendered issues missed or minimised by standard psychological autopsy tools. While neither psychological nor sociological autopsy has been applied in name to living SDV-practicing persons, they have been used with living controls in case-control studies on suicide (Conner et al., 2012). Drawing on extant literature (Abeyasinghe and Gunnell, 2008; Samaraweera et al., 2008), expertise of the American Association of Suicidology, and

formative fieldwork at CNTH, I developed a comprehensive and hybrid psychosocial autopsy instrument to apply to living and deceased samples.

6.3.4 Data Analysis

I employed Interpretative Phenomenological Analysis (Smith, Flowers, and Larkin, 2009; Willig 2013). Themes were identified, refined and grouped hierarchically to reflect relationships, aided by NVivo 11 Plus (QSR International, 2018). Interpretative Phenomenological Analysis acknowledges an interactive relationship between the data and researchers. Given the cross-cultural nature of this research this encouraged me to interrogate my assumptions about women's SDV and use them to improve my analysis. What is derived is my interpretation of the living and deceased women's pathways through the self-harming experience, grounded in these data.

6.3.5 Ethics

All surviving women displayed decisional capacity to grant written and oral consent, were approached once medically stable, and were provided with take-home materials in their preferred language (Sinhala, Tamil, or English) (Appendix 20). No incentives were given to women for their participation nor to JMOs for access to suicide inquest files. Approval was granted by London School of Economics and University of Kelaniya's Faculty of Medicine Research Ethics Committees (Ref. P/135/08/2015).

6.4 Findings

As this study aimed to explore women's SDV trajectories through rich in-depth accounts, I present an overview of the characteristics of the 17 living women subsampled from the surveillance system and 32 deceased women identified through suicide inquest files. This is followed by a conceptual framework, which synthesises and structures the "key factors, constructs or variables" present across these women's narratives and how they related to one another (Miles and Huberman, 1994, p.18). The conceptual framework will subsequently be applied to the larger sample to test its applicability across a broader range of experiences.

6.4.1 Sample Characteristics

Women participating in psychosocial interviews ranged from 17 to 43 years (mean 29.1), and were most likely to be Sinhalese (82.4%), Buddhist (70.6%) and educated to secondary level (82.4%). The majority were married (70.6%), and lived in extended families (53.0%). Suicided women were on average older than surviving women; nearly 80% of suicides occurred in women aged 26+ (n = 25). Only three suicided women were under 21 years, diverging from national trends in which one in four female suicides are observed in this younger age group (Marecek and Senadheera, 2012). Other characteristics could not be deduced due to missing data in suicide inquest files. Five women (29.4%) were currently pregnant or experienced pregnancy within the preceding 12 months, including cases of miscarriage and induced abortion⁷². One suicide inquest file suggested maternal suicide, but no further evidence was available to corroborate this.

Paracetamol-only poisoning was favoured by interviewees (n = 7); three women (17.6%) self-poisoned using medicines usually prescribed for mental disorders; two swallowed agrochemicals; one combined self-cutting with ingestion of prescription medicines; and three self-immolated. The majority of suicides resulted from complications of hanging (59.4%) and self-immolation (18.8%); both deceased self-poisoning women ingested pesticides. This method mix reflects an urban distinction from rural SDV practices, where self-poisoning with agrochemicals prevails.

6.4.2 Cumulative Dimensions of Women's Trajectories through Self-Directed Violence

I summarise visually the dominant themes in women's interviews and suicide inquest files that shaped their trajectories through SDV (Figure 8). The seven dimensions are interrelated and dynamic, and intentionally suggest a progression over time advancing women towards SDV and its consequences. Each dimension summarises complex

⁷² While perinatal officially refers to women during pregnancy through one year postpartum, women experiencing pregnancy within one year are increasingly included in perinatal mental health research and services given the growing recognition of pregnancy loss as an important and common event in many women's lives. I applied this expanded definition in calculating the number of perinatal women in this sample.

experiential accounts with selected sub-themes briefly described, supported by pseudonymised⁷³ quotes from interviews and suicide inquest files.

⁷³ Women's pseudonyms were purposefully selected by me to capture the essence of their individual stories or character traits, and reflect an intentional recognition of women as active agents in their lives as opposed to selecting popular Sri Lankan names which often reference women's physical attributes or 'idealised' feminine character traits, e.g. sweetness and docility.

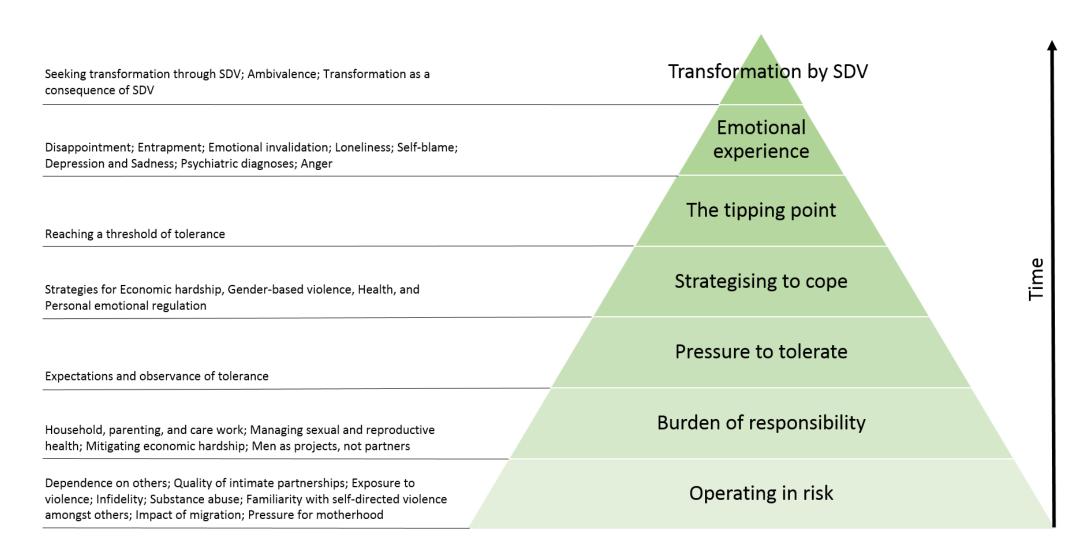


Figure 8. Cumulative dimensions of women's trajectories through self-directed violence

6.4.2.1 <u>Operating in risk</u>

This foundational dimension encapsulates the social networks and institutions, including marriage and family, into which women were born and in which they operate across the life course, underpinning all other experiences and engendering risk of harm to self. Each of these themes were experienced through women's gendered position as subordinate members of families, intimate partnerships, and communities.

Women operated in a state of self-described dependence on others; almost all surviving women relied on parents (n = 5), partners (n = 5), or other family (n = 3) economically. Women were also dependent in managing health and psychiatric disorders, housing during relational dissolution, access to technology (e.g. mobile phones), arranging marriages and employment, and transportation, including the seeking of medical treatment for SDV⁷⁴. Dependence undermined women's potential to function outside traditional structures, encouraging women to stay in relationships even when they wished to leave, and resulted, for some, in a fear of being alone: "I am totally afraid still. I am 36 years old, but really afraid to stay alone" (Nihinsa, 36, paracetamol poisoning).

Nearly all living women (n = 14) described dysfunctional, volatile, deceptive, and/or migration-affected partnerships. Although most indicated some agency in selecting partners, this was not without social and familial influence, including application of very narrow selection criteria assuming non-drinking and non-smoking men would make "good" husbands, or that particular occupations would offer economic stability for "a calm life without much obstacles [sic]" (Sachitch, 30, paracetamol poisoning). One in three women partnered in their teens, including two who illegally married under-age; most reported brief courtships with limited unsupervised time to get to know prospective partners. Women expressed feeling unprepared for marriage: "The truth is, although I got married, I did not know how to live in a marriage. Because of that, after the marriage I was afraid" (Hibah, 39, self-cut and ingestion of antipsychotics). Evidence was presented of forced marriage and migration, coercion to marry or stay married, or outright refusal over women's choice of partner. Bratindri's (21) parents so opposed her

⁷⁴ E.g. One participant and her mother delayed seeking treatment for her self-poisoning because they did not know how to get to a hospital. They chose to wait until the father returned home from work for him to procure a trishaw to take them to CNTH.

boyfriend, they forcefully relocated her to Gampaha District and arranged for work in the Middle East; she hanged herself before the move. Women described what they perceived as unhealthy conflict resolution strategies within partnerships, and deception and secrecy around past and present employment, money, assets, fidelity, family, intentions to marry, and substance (mis)use affected half the living and deceased sample's primary relationships preceding SDV. In all cases, women were operating in an environment of dishonesty, and more than half the sample – both living and deceased – were amidst relational breakdown or the fallout of already-ended partnerships.

Violence was presented as unavoidable in almost all women's narratives, and was most pronounced within intimate relationships where 13/17 living women and three suicide inquest files reported intimate partner violence (IPV). Physical violence ranging from hair pulling to broken bones and hospitalisation for stab wounds; restrictions to women's freedom of movement; financial abuse through withholding or forcefully taking money; isolation from friends and family; and removal of women's means of communication were disclosed. Psychological violence involved regular verbal abuse, jealously and accusations of infidelity, and manipulative language "blaming and blaming" women for problems and in some cases, for why men were violent. One in three women shared accounts of marital rape and sexual violence from husbands, and one woman reported a degrading "inspection" of her virginity after marriage. Several women stated they vocalised non-consent for sex on multiple occasions, but that husbands "didn't listen".

Violence was also perpetrated by parents, in-laws, friends, and employers, targeting women, and less frequently their children and wider families. Women recounted being publicly slandered to neighbours and mistresses; suffering verbal and psychological abuse; witnessing IPV in parents; being denied access to medical care; money, food or access to children being withheld; confinement; forced relocation and emigration; and negotiation of one woman's marriage and subsequent divorce without her consent or knowledge which remains legally sanctioned in Sri Lanka's Muslim community (Marsoof, 2019). Violations of women's sexual and reproductive health and rights were common, including inference of female genital mutilation after one Muslim woman reached menarche; being refused money by family for emergency reproductive health services following incomplete miscarriage; and being trafficked into Singapore's sex trade.

Half of surviving women and four suicided women experienced infidelity. All deceased women were labelled as adulterers by those providing official statements, whilst living women only reported being cheated on. Men purportedly had in-person and cyber-based affairs in Sri Lanka and while working abroad, repeatedly lied about their whereabouts, gave mistresses money, and contracted sexually transmitted infections. Social media was reportedly used by men to enable online liaisons, including the exchange of graphic photographs. This modern form of infidelity was minimised by men and, in one case, a mistress as "playing": "I am very upset about that...He say, 'don't care about that, it's like I'm playing with her'... It's not a relationship. It's like for time passing, like a playing, you know?" (Nimali, 27, paracetamol poisoning). Infidelity affected women's sense of self-worth, ability to trust partners, and concern for their own (sexual) health.

A third of living women cited alcohol abuse and two reported abuse of heroin and ganja by husbands and one father. Only one suicide inquest file addressed substance abuse, suggesting the woman herself had alcohol addiction – rare in Sri Lanka (Sørensen et al., 2017): "My wife is taking alcohol daily...she has been addicted to take alcohol since the young ages" (Husband of Himasha, 42, drowned). Three women reported men's substance abuse led to arrests and one father's death, and all living women associated men's addiction with violence including forced and aggressive sex. Women reported fear of repercussions if they fought back about sex when men were inebriated. Men returning home intoxicated "looking for a fight" and asking women for money to finance their habits was common, and substance abuse was perceived to influence and be influenced by male 'underachievement'.

6.4.2.2 Burden of responsibility

Women's interviews concentrated around the multiple and competing demands to care for and support others, often to their own detriment, and reflected an internalised and gendered burden of responsibility.

Women described managing gruelling schedules, waking hours before husbands and children, describing themselves as "tired", "having a lot of work" and little to no rest, while being held to unreasonably high standards, including during pregnancy and immediately postpartum. Care work for household members was common, with multiple examples of

parents or in-laws falling to women to manage: "My mother-in-law is paralysed and I have to look after her also" (Sathi, 37, ingestion of antidiabetics). Responsibility for children was portrayed as primarily or entirely that of women, with only one husband reported as actively sharing care work in the home. A third of women reported their husbands expressed changeable desire for children, and in several accounts women believed their husbands "did not want", did not help with or care about their existing children: "Normally he doesn't care about the children…even when he is in the home… [and] the small child cries, he doesn't do anything" (Shakthi, 30, paracetamol poisoning).

Women bore responsibility for sexual and reproductive health and potential to bear children within relationships, describing efforts to prevent or manage pregnancies including illegal and unsafe abortion and acquiring emergency hormonal contraception as partners refused to use condoms. Unmarried women could not easily access other forms of contraception from socially approved health providers such as midwives. Other women reported preventing sexually transmitted infections from cheating partners, painful and/or non-consensual sex with partners, and managing consequences of pregnancy-loss. A final subset of women focused on their efforts to become pregnant including paying for fertility treatment, undergoing unnecessary personal treatment when husbands were sub/infertile, and frustration at husband's disregard for costly fertility services. This reproductive work was often experienced in the context of perceived pressure and gossip within families as to why women had not had (more) children, failing to obtain the symbolic capital of motherhood (Marecek and Appuhamilage, 2011). Finally, two women recalled partners "blaming" mistresses for their own infidelity, reinforcing a gendered attitude that women are responsible for men's sexual transgressions: "His excuse was that she was the one who started to send [the explicit photos]... 'she follow me, she disturb me'" (Nimali).

The principal burden foregrounded by women concerned economic stability, which featured in 11 interviews and seven suicides. Women were frequently tasked with managing household budgets yet were financially dependent on men, receiving as little as 200 rupees per day⁷⁵ for expenses or no "allowance" at all. Women were openly critical

⁷⁵ Equivalent to roughly £1.00/day

of perceived lack of men's work ethic, productivity, and contribution to household finances. Though this disparagement largely focused on partners, brothers, fathers and father-in-laws were also derided. Their stories suggested seemingly intentional underand unemployment and men's inadequate effort to rectify financial strain in the household, with accusations of "spending lavishly" and "wastefully". Several other surviving women reported husbands *chose* unemployment, preferring instead to deplete women's dowries and/or accept financial support from parents and in-laws, who were sometimes working overseas and unaware of women's realities. Two women shared accounts of duplicitous marriage with men presented as solvent, only to discover substantial debt and unions motivated by hopes of acquiring women's money:

When [my] family came to visit his house initially the house was full and was wellfurnished. But when [I] came after the marriage, [I] found out that there wasn't anything, and there wasn't even a chair to sit. (Sachith)

Debt and multiple loans created considerable pressure for women who sold jewellery and other possessions – sometimes against their will, went without food, took on new or additional employment, tried to introduce cost-saving behaviours, emigrated or supported spouses to seek overseas employment, established saving practices, gave up their education to work in garment factories, and declined sick leave or healthcare in times of illness. Despite efforts to keep the family financially afloat, women reported tensions over money and employment contributed to confrontations with others. At the extreme, these fights resulted in IPV, divorce, threats of murder by one husband, and directly contributed to women's suicides. Seven suicide inquest files indicated economic hardship, including of women's own making, having recently lost jobs, pawned or taken others' jewellery, and acquired debts they felt unable to pay: "Mum, I am sorry…I do not know how to pay the debts…I have no other option" (Gayani's suicide note, 41, hanged).

Women embodied the expectation to 'rehabilitate' or improve men, ultimately realising men were "unlikely to change". Men reportedly "begged" women for second chances following infidelity, and families encouraged unions saying, "he might change because of [you]". Other families reportedly pushed women to reconcile despite failed interventions for men's substance abuse. In several partnerships, there was a mismatch between women's achievements, particularly educationally, and their partners', including extremes of women qualifying for university while boyfriends had failed to pass high school examinations⁷⁶. These discrepancies had knock-on effects of comparative male underachievement, women's attempts to 'correct course', and may have contributed to coercive tactics by men to retain superiority:

I'm still trying to get him [on the] right path, but it's so difficult...he doesn't listen to me. Even I say to go for a job, he doesn't. Even if he gets an interview, he doesn't go after I have applied for him... He says that the reason why his life is like this is because of me. (Iromi, 20, paracetamol poisoning)

Women felt the burden of responsibility so deeply they endeavoured to direct their family's wellbeing from hospital post-SDV. Several decedents left suicide notes containing instructions on managing matters of estate, child custody, men's undesirable behaviour, and their children's futures in their absence.

6.4.2.3 <u>Expectations and observance of tolerance</u>

All 17 living women's narratives portrayed a valuing of and efforts to observe tolerance through adversity, while five suicide inquest files reflected this theme. Directly, tolerance was invoked through women's language, which emphasised a practice of self-silencing: "...I would always tolerate through everything...even if something happens, I don't usually go to talk. I would keep quiet" (Kiyoma, 30, ingestion of fertiliser in pregnancy). Indirectly, tolerance was evident in women's recollections of patience and forgiveness, facilitated by pressure from others and by social expectations to reconcile and/or accept circumstances. In relation to marriage and normative gender roles, pressures to tolerate violence and infidelity were pronounced.

Two women, both of whom had worked overseas, directly attributed pressures to tolerate maltreatment to women's inferior position in Sri Lankan society: "What [my marital family] wanted is a village girl who would stay as they say and won't question... but I'm not used to living that way, and they don't like it" (Sachith). Women revealed an internal conflict as although they all vocalised discontent with their circumstances and a desire to challenge them in our presence, most narratives suggested women had also

⁷⁶ Roughly 4% of the adult population in Sri Lanka holds a university degree and competition to qualify for a university placement is increasing on an annual basis. Thus obtaining a place at a national university is highly prized.

deeply internalised this commitment to tolerance and feared the consequences of breaking it.

6.4.2.4 <u>Strategising to cope</u>

Living women described numerous strategies to mitigate difficulties, while suicide inquest files yielded limited insight into decedent's strategies preceding suicide. Interviewees combated financial strain by taking loans, selling property and re-entering work or education. Women with poor health adhered to allopathic treatments or sought traditional healers when allopathic medicine failed. Women experiencing violence altered household composition, moved, sent children to live elsewhere, sought divorce, and several women approached the police: "When the situation gets really bad...[I] have gone to Police three times before" (Nipuni, 31, paracetamol poisoning). Women emphasised strategies to regulate their own emotions including crying, confiding in others - most commonly mothers, focusing on their children, taking "time-outs" from confrontations, and less commonly engaging in ruminations of sadness, cutting behaviour, and attending one-off counselling. Three women of differing faiths highlighted their use of prayer to cope with difficult times. Strategies were used concurrently or in succession, usually in response to perceived escalation and where previous strategies were judged ineffective. Whether strategies were interpreted as successful or not, they were employed until women identified limitations to their ability to cope.

6.4.2.5 <u>The tipping point: Reaching a threshold for tolerance</u>

Each woman arrived at a point at which she felt her situation became unendurable: "A couple of days before [I] was fed up and thinking, 'this is enough and I can't suffer anymore'" (Sachith). Most women depicted multiple stressors tolerated over protracted periods of time – sometimes decades – which women recognised and named as contributors to self-harm including IPV, men's substance abuse, economic strain, and burdens of responsibility. A smaller number of surviving women (n = 5) attributed their watershed moments to isolated and short-lived incidents immediately preceding their SDV such as feeling "ignored", a specific argument, or acute illness. For these women, reaching their tipping point felt "sudden" and like a loss of control to something self-described as "minor". Closer interrogation of women's fuller narratives, however found these women underplayed or under-recognised other chronic strain in their lives, and

that despite presenting these as one-off incidents, there was evidence of long-term difficulties such as raising children alone while a spouse worked abroad or suffering debilitating chronic ill-health. This minimisation or lack of associating more pervasive challenges may reflect internalised beliefs about accepting particular life circumstances, or a cultural perception that despair-driven SDV is cowardly (Marecek and Senadheera, 2012).

A final group of women, including many decedents, engaged in forecasting, acting in response to a clearly identified tipping point not yet reached, but perceived as encroaching – conditions which, if they materialised, could not be tolerated. Such looming threats included possible loss of child custody, likely termination of intimate relationships by men, potential consequences of misplacing and/or taking other's property, expected pressure from debt collectors, and – for many surviving women – the near-certainty of (continued) infidelity by partners and/or household violence. All narratives reflected pressure accumulating to an insufferable level: "All the things got together and led to this" (Asheni, 24, ingestion of antimigraine medication).

6.4.2.6 <u>Women's emotional experiences</u>

A small subset of women could not remember what they were feeling or thinking shortly before their SDV, while another described being overcome by a visceral but inexplicable emotional experience: "Yesterday morning when I wake up...something happened to me...I don't know what it is...but I cannot control this...then I want to finish my life" (Nimali). Most living women, however, and those decedents with more complete inquest files including the seven who left notes, communicated a complex array of emotional experiences preceding, during and following their SDV. Eight prominent emotional themes emerged from analyses: disappointment; perceived physical, mental, and cultural entrapment; emotional invalidation; loneliness; self-blame; depression and sadness; psychiatric diagnoses; and anger. Anger, not symptoms of mental disorder, emerged as the single strongest emotional state centred by living women as immediately preceding and directly influencing their choice to self-harm, though co-occurrence with other emotions was common. Women may have emphasised anger given its socially acceptable motivation for suicide in Sri Lanka (Marecek and Senadheera, 2012), or may have genuinely recalled the primacy of this emotion.

6.4.2.7 <u>Transformation as a cause and consequence of SDV</u>

Women communicated an eventual realisation that there was no value in nor solution for their current state, being "better off" under different circumstances: "There's no point living. It would be better to be dead. That's how I felt" (Hibah). Eight surviving women reportedly sought to transform their circumstances through death, while at least half the decedents left evidence of this as the intended outcome of their SDV. Two decedents believed death would result in a metaphysical experience: "If you remember me, look at the sky in the night. I will be a star in the sky" (Abheetha, 23, hanged), which may reflect Hindu and Buddhist beliefs in rebirth. Other women trusted SDV would affect change upon others, usually those perceived responsible for harming them. Threatening and causing fear and/or suffering in others was an openly articulated goal of SDV for four surviving women, while a fifth hoped it would force her father to pay attention to her: "I want to frighten the husband. Threaten the husband. I had no intention to suicide" (Yana, 25, self-immolation). Women believed SDV would compel changes in the target's behaviour and demand improvements in relational dynamics such as increased care and concern or a reduction in IPV. Few women (n = 5) were unsure of what transformation they expected for themselves as a result of their SDV, and reflected an ambivalence or a lack of certainty of SDV's consequences: "[I] didn't have a very clear idea about what would happen" (Bhakthi, 17, paracetamol poisoning).

SDV, however, often unfolded differently to what was expected or desired. Some women who had desired death instead survived, while others found the targets of their desired change did not react as hoped: "I thought that he might come, but he didn't come" (Nihinsa)⁷⁷. Several women stated that SDV turned out to be "useless" and that the only people affected were themselves, leading to feelings of regret and further emotional disappointment: "I feel I did something stupid. I was the one who had to suffer...nobody else got hurt except [me]" (Iromi). For the ten deceased women who clearly communicated suicidal intent, their desired change to die was realised, while I am less certain of other decedents' intentions. For all surviving women however their

⁷⁷ Nihinsa was referring to her estranged husband whom she rang from work following her self-poisoning to ask for help to reach hospital. Her husband never showed up and instead rang her parents to assist her. He had still not come to see her in hospital by the time of our interview, which caused evident distress and disappointment.

transformation would be ongoing beyond physical recovery, with an understanding that – in most cases – SDV was unsuccessful at achieving the relief for which they longed.

6.5 Discussion

A life course approach viewing SDV as the result of dynamic, progressive and gendered trajectories set in motion earlier in women's lives may be better-suited to reflect women's lived realities compared to factor-based studies or gender-free tools of suicidology (Jacob et al., 2017). Informed directly by living and suicided women's stories, their synthesised trajectories culminated in a conceptual framework that contributes to the discourse on SDV amongst women in SEAR by presenting its gendered, cumulative, and transformative nature.

Without centring gender, the forces pushing or pulling some women towards SDV as part of their behavioural repertoire will remain under-represented, and gender-blind SDV research is not "missing the mark, but missing the topic altogether" (Jaworski, 2014, p.30). Recognising that gender is a key organising principle of social life (Denton, Prus and Walters, 2004), this conceptual framework brings together the circumstances within which women operate, paying attention to gendered power relations and the cultural norms and systems re/enforcing them (Marecek and Appuhamilage, 2011).

I identified IPV, male substance abuse, (poor) quality of intimate relationships, and accusations of sexual impropriety as contributors to women's SDV consistent with regional research (Vijayakumar, 2015). These data refute claims that women are less vulnerable to SDV than men at times of marital dissolution due to plentiful social connections and their mothering role (Payne, Swami and Stanistreet, 2008), and that at the household level women hold more power which is protective against female suicide (Widger, 2012). In Sri Lankan society, divorce and singleness expose women to social disrepute, and as women are primarily enjoined by and discouraged to socialise beyond husbands and their families, leaving a marriage is prohibitively socially costly (Marecek and Appuhamilage, 2011). The majority of this study's sample were mothers, and while they expressed love for their children, they vocalised an over-burden of care work, while non-mothers disclosed painful efforts to fulfil gendered fertility expectations,

contributing to SDV (Marecek and Appuhamilage, 2011). Sexual and reproductive health and rights are minimally considered in SDV – an oversight I suggest is costing women's wellbeing and possibly contributing towards Sri Lanka's maternal suicides. Women's reliance on allowances made if and *when* others accommodated them, and their strategic efforts to improve families' economic circumstances challenge assertions that economic factors are less relevant in women's SDV (Payne, Swami and Stanistreet, 2008). Instead, mitigating economic hardship and compensating for perceived "under-performing" men demanded women's mental and emotional labour – and sometimes paid employment – to fulfil cultural expectations that women maintain a unified family (Abeyasekara, 2017). As with men's substance abuse (Sørensen et al., 2017), economic strain also indirectly contributed to SDV by stoking interpersonal tensions with family, debt collectors, and local community members.

Suicidology has overlooked valuable lessons of gender and health which highlight that not only are women exposed to these individual vulnerabilities due to their socially constructed identity as inferior members of patriarchal societies, but they are also limited by their gendered position in managing their impacts and to which resources they have access (Denton, Prus and Walters, 2004). In this study, women had comparatively reduced access to wealth and interventions to support their health and wellbeing, evidenced by their reliance on others leading to delayed or denied care and fleeting or dismissive responses by state institutions like the police. Additionally, and contrary to dominant discourse, aspects of culturally prescribed social integration and social regulation were risks for women's SDV in this context due to reliance, excessive responsibilities and required tolerance towards others (Canetto, 2015; Abeyasekara, 2017). These findings closely reflect a socioecological model of gender-based violence (Heise, 1998), in which larger systems (economic, legal, cultural, political) act on women to engender exposure to structural, symbolic and interpersonal regulation and degradation (Montesanti and Thurston, 2015). Echoing evidence from other highly patriarchal societies, women's selection of SDV in this context appeared to be sub/consciously employed to drive change against "suffocating social regulation" (Canetto, 2015, p.454).

Gender norms are changing in Sri Lanka, yielding opportunities and consequences for women's wellbeing. Spaces such as Gampaha District's FTZs facilitate gender role renegotiation through increased labour force participation and decreased supervision (Marecek, 1998; Jordal et al., 2015). Yet this is co-experienced with continued expectations for traditional motherhood, presumed (sexual) immorality of FTZemployed and migrant women, reduced safety for women living away from natal families and through labour exploitation, and reputation and status management of men and families in light of women's desire for increased negotiating power and independence (Marecek, 1998; 2006; Jordal et al., 2015; Abeyasekara, 2017). Women's ability to perform ideal womanhood was located by women themselves through their narratives and conveyed through the judgment of others in suicide inquest files. As both living and deceased women engaged with internalised struggles to adhere to or subvert gendered expectations, I observed that, "both aspirational femininity and subordinated or marginalised femininities" (Payne, Swami and Stanistreet, 2008, p.26) were associated with women's SDV.

Women's experiences of SDV reveal that the complex and often-protracted interaction of contributing factors is cumulative, acquired through number, duration, and severity of exposures (Jacob et al., 2017). Gender and health research finds that across the life course women experience more distress, as well as more demands and obligations in their social roles than men (Denton, Prus and Walters, 2004). In this study, women described a suite of responsibilities for which they were often exclusively accountable, reflecting a global trend in which "women's contributions...as caregivers are still grossly under-appreciated" (Horton, 2019, p.511). While timelines differed between cases, and women self-selected to identify the beginning of their trajectories, all narratives evidenced accumulation of distress through their lifelong exposure to disadvantage as women in this context and often rapid clustering of exposures in compressed periods preceding their SDV (Jacob et al., 2017).

Prior research in Sri Lanka acknowledges accumulation of daily life stressors and emotional experiences as relevant in SDV, but presents these stressors as "mundane" and attributes emotional experiences of long-standing suffering to primarily middle-class men's SDV (Widger, 2012; Sørensen et al., 2017). Women have conversely been more readily associated with SDV in the wake of sudden anger described as arising with little to no prior warning in response to isolated incidents of interpersonal conflict (Marecek, 1998; Widger, 2012). This discourse of SDV occurring in the context of women's emotional fragility and impulsivity is prevalent across all contexts, but especially so in patriarchal settings where women's self-harm is deemed an over-reaction to 'ordinary family conflicts' (Payne, Swami and Stanistreet, 2008; Canetto, 2015). Anger was isolated by many women in this study as the primary emotional experience preceding their SDV, and – reflecting a global and ultimately internalised opprobrium of anger in women – participants criticised their inability to manage this emotion (Jaramillo-Sierra, Allen, and Kaestle, 2017). Particularly young women in this sample employed self-critical cultural scripts of their anger being irrational and their SDV impulsive following trivial events, minimising or disassociating other damaging experiences over their life course. These findings challenge the feminised discourse of impulsivity and argue that it is instead an accrual of harm from persons and institutions due to women's subjugated position.

Labels of impulsivity imply women's SDV occurs without thought, and although twothirds of participants reported their SDV as "unplanned", I suggest the language of impulsivity inaccurately represents women's experiences. Firstly, participants described pre-SDV experiences of invalidation, entrapment, disappointment, and intensely affective loneliness often over prolonged periods. Moreover, 65% of the living sample reported suicidal ideation for at least the month preceding their SDV, and a quarter of suicided women had histories of SDV. I endorse a counter-narrative that women's SDV is the result of excessive and additive self-control in the face of largely gendered and unsustainable cumulative negative life experiences (Widger, 2012). If immediate triggers preceding SDV remain the focus of research and prevention efforts, sudden situational responses will continue to be conflated as non-thinking, even irrational, acts. I encourage future researchers to dig deeper into women's experiences and reconsider the oft inaccurate and pejorative language of impulsivity in women's SDV.

This study recognises women's desired and – often unforeseen – consequential transformations post-SDV. Evidence from SEAR and other patriarchal contexts points to SDV's instrumentalism communicating discontent with others or escaping perceived entrapment (Marecek, 2006; Billaud, 2012), both of which emerged here. Yet I assert that

women's SDV went beyond communication and, "in the absence of other socially acceptable means of self-determination and influence" (Canetto, 2015, p.451), served to forcefully change women's circumstances. Evidence rarely attends to the experiences of surviving self-harming persons post-SDV. In this study, surviving women, regardless of their intended outcome, faced a realisation that "the problem hasn't been solved". Considerations of divorce or relationship termination, moving home, letting go of hopes for motherhood, finding outlets for and building capacity to vocalise distress in future including unlearning self-silencing - and addressing long-term effects of SDV on self, others and relationships were new challenges women had to confront. These created new identities for women – one of the self-harming woman, with consequences for continuing to navigate unresolved difficulties (Marecek and Senadheera, 2012). Self-immolation patients faced unique challenges of disfigurement which could not be fully disguised or healed, limitations to physical capacities, and their ability to work and speak. These physical consequences enacted changes in relationships both short- and long-term including men's infidelity during women's recovery, fear and hesitation from children at mothers' appearance, and worry that disfigurement would invite ridicule and shame upon their children.

Women's disappointment at SDV's perceived ineffectiveness and fear of shame from surviving it is not misplaced. Research found that while women held aspirations of loving responses, they commonly incurred shame and anger for bringing public attention to household disharmony (Marecek, 2006; Marecek and Senadheera, 2012). The markedly gendered transgression of 'outing' family dysfunction invites shame (*lajja*) and demoted status to a household and the offending woman (Abeyasekara, 2017). While surviving women in this study wanted improved emotional relationships, they also yearned for material, situational, and practical changes. Without attending to this new life stage in surviving women's trajectories, I suggest women's vulnerability to recurrent SDV intensifies.

Hospital-recruited samples underestimate the scale of the issue and can represent only those whose injuries are deemed serious enough to seek medical attention. However, as I encountered women with minor levels of self-poisoning through suicides, this sample covered breadth of method severity. Suicide inquest files were incomplete due to gatekeeping, revealing a wider weakness of national systems to systematically gather and make available data for research and prevention. Narratives were subject to the myriad challenges of qualitative research in suicidology concerning memory, desire to diminish or modify one's role in the event (Widger, 2012; Bantjes and Swartz, 2019), and the intersubjective nature of both the in-depth interviews and the gathering of statements for women's suicide inquest files (Fincham et al., 2011; Abeyasekara, 2017).

6.6 Conclusion

The conceptual framework of women's gendered, cumulative and transformative trajectories through SDV presented in this chapter can be applicable to other contexts. Settings in SEAR and elsewhere in which deeply-entrenched gender norms, values and resources operate within patriarchal structures may find particular relevance with this model that accounts for temporally additive exposure to risk factors inhered by women's subordinate positionality. I encourage application of this framework in future research to assess its relevance and utility (Canetto, 2015; Vijayakumar, 2015). Women's SDV is both an individual and symbolic act of gender role renegotiation. Women's experiences, demanding a life course and gendered lens, offer insight into opportunities to prevent SDV and/or intervene at key life stages, with implications for improved policy, research, and institutional responses. At the individual level, women and those affected by their acts require quality health services that do not perpetuate negative consequences of surviving SDV. Women need tailored emotional support and access to relevant complementary services such as gender-based violence, family and legal mediation, which endorse a message of collective responsibility to heal from SDV, in a context in which it is an interpersonal act. Policies and interventions, however, must attend to deeprooted inequities and the limitations faced by some women in selecting courses of action going forward, and facilitate step-wise change where safer and more acceptable for women (Horton, 2019). Finally, viewing women's SDV as one consequence of structural and interpersonal gender-based violence, enacted at all levels and over women's life courses, I propose adopting a human rights-based approach that addresses women's continued oppression through legal, social and other official institutions (Marecek, 2006; Montesanti and Thurston, 2015). Only with collective social change can the roots of women's SDV be challenged and transformed.

6.7 Summary

This chapter synthesised living and suicided women's stories to present interrelated, dynamic and cumulative vulnerabilities putting women at risk of SDV as a consequence of their socially constructed position as inferior members of patriarchal societies. The ways in which women's gendered position limited their ability to manage impacts and access support, and the unsuitability of the language of impulsivity to describe women's SDV emerged. Women's selection of SDV in this context ultimately offered both transformative potential and unforeseen consequences. This framing of women's SDV reveals clear synergies with other components of this thesis, particularly findings from Chapters 3 and 4. The overarching themes emerging across empirical chapters and their implications for policy, prevention, and research agendas are discussed next in the concluding chapter of this thesis.

Chapter 7. Conclusion

This thesis aimed to contribute to a better understanding of the scale, dimensions, and contributing factors of poor antenatal mental health in Sri Lanka including depression and self-directed violence (SDV). It further aimed to improve our understanding of the magnitude of fatal and non-fatal dimensions of SDV utilised by reproductive age women in Sri Lanka, and the pathways advancing women towards these experiences as understood by affected women, health service providers, and families/collaterals of suicide. This chapter first summarises key findings of the four substantive chapters (Chapters 3-6). It then presents the cross-cutting thematic contributions and conclusions of this research, reviews this study's strengths and limitations and explores possible policy, programmatic and research agendas which build on the research findings.

7.1 Summary of Key Findings

Chapter 3 presents the first evidence on SDV amongst perinatal women from Sri Lanka and the most comprehensive data on antenatal mental health generated in country to date. These data address the persistent lack of evidence on common perinatal mental disorders, suicidal ideation and/or behaviours (SIB), most acute in low- and middleincome countries (LMIC) and from the antenatal period. This is despite a growing recognition of their contribution to maternal morbidity and mortality across contexts (Fisher et al., 2012; Fuhr et al., 2014). In my effort to identify the prevalence of antenatal depressive symptomology, lifetime- and current-pregnancy SIB, and their correlates, analyses reveal concerning trends. Nearly one in three pregnant women disclosed experiences of depression during pregnancy and a lifetime history of SIB – the single strongest predictor of subsequent suicide across populations (Fleischmann et al., 2005; WHO, 2014b). One in eight women had a history of self-harming behaviour of any intent, while 7.4% considered or engaged in acts of SDV during pregnancy. Women's experiences of depression or SIB during pregnancy were associated with unique and shared factors, where exposure to intimate partner violence (IPV) and lifetime SIB emerged as the strongest correlates. This chapter advocates for improved comprehensive assessment of perinatal women's wellbeing, in light of the exceptionally high prevalence of multiple psychosocial vulnerabilities.

Complementing findings from antenatal women, Chapter 4 presents the first global evidence on attitudes towards and experiences of responding to SDV-practicing women from women's primary healthcare provider in the Sri Lankan context. Public Health Midwives (PHM) revealed regular and increasing encounters with women affected by SDV, alongside other psychosocial vulnerabilities, coupled with decreasing resources of time, relevant training, and higher-level institutional support, all of which impairs their ability to respond to women's distress. Perhaps most importantly, PHM framed women's vulnerability in light of gendered conventions and their own gendered experience as women operating in a cultural climate in which women's ability to attain and maintain respectability affects risk trajectories, access to and perceived worthiness of support. Their narratives foreground the influence of gender on health service providers' interpretation of who is and is not at risk of particular experiences including SDV and why. Consequently, midwives appear to hold considerable social power to support or undermine women's health and wellbeing, including shielding or exposing women to matters of safety and trauma.

Extending discussions on which experiences of SDV are recognised, legitimised and responded to by key state actors, Chapter 5 shifts our attention from health providers' engagement with SDV-practicing women, to the medicolegal system's engagement with suicided women. This is the first research to document in detail how suicide inquest files are generated in Sri Lanka contributing to the country's national vital statistics on suicide. My deliberate selection of feminist commodity chain analysis first models and then explores aspects of quality throughout the production of suicide data, identifying potential vulnerabilities in actors and processes shaping this critical health information. Findings suggest a lack of standardised procedures may be weakening suicide death investigation in this context, and while forensic pathologists are arguably the most qualified to investigate these cases, they are the *least* likely of all stakeholders to be involved. Comparative analyses to police suicide data, considered Sri Lanka's most accurate suicide statistics (Knipe, Metcalfe and Gunnell, 2015), raise questions about their infallibility. I draw attention to issues of divergent suicide statistics between police and vital statistics, despite their origination from a single death investigation process, querying where along this commodity chain women's lives begin being counted and recorded differently. Just as sociocultural pressures appear to affect health provider

responses to SDV, this commodity chain analysis identifies power differentials amongst stakeholders involved in suicide death inquests, and the ways in which their – sometimes conflicting – priorities may shape what knowledge about suicide is permitted, sought, and advanced in this setting.

Finally, first-person narratives of surviving self-harming women, brief communications left by suicided women, and accounts of those affected by women's suicides in Gampaha, compiled through Chapter 5's efforts, facilitate an emic perspective on women's trajectories through SDV. Chapter 6 presents a conceptual framework elucidating the additive nature of women's (di)stress, commonly experienced over their life course and lived through their gendered bodies. I describe not only the multiple vulnerabilities present in women's lives, often due to their subordinate position in a rigidly patriarchal culture, but also the strategies and resources available to and trialled by them to mitigate accrual of harm before reaching perceived intolerable levels. The ways in which surviving women and suicide-affected informants' (re)produce beliefs about ideal and transgressive womanhood in Sri Lankan culture emerge. Women expressed disappointment with SDV's desired or experienced transformative consequences. Specifically many surviving women transitioned into a new phase of vulnerability post-SDV in which their distress remained unresolved and new issues of shame were acquired. The need for a human-rights and gendered lens for understanding and responding to women's SDV is justified.

7.2 Thematic Contributions

7.2.1 Centring the Female Experience

As self-directed violence is a significant factor in mortality and morbidity amongst reproductive age women in LMIC, including the perinatal population, this thesis endeavours to place value on the lives of women in the Sri Lankan context experiencing or at risk of SDV's multiple dimensions. This study intentionally responds to the recognised need for rigorous focus on the female experience (Canetto and Lester, 1995; Armstrong and Vijayakumar, 2018), to which scholars, policymakers and prevention agendas have been remiss. Though not necessarily at odds with more localised or focused

research on women *in principle*, in practice Sri Lanka's concentration on rural suicides by pesticide poisoning – driven by both government and academia – has long assumed knowledge on SDV was more complete than it actually was. Prevention efforts, while hugely commendable (Pearson et al., 2015), have missed a key step in the design process through limited accumulation of evidence on women and other sub-populations of interest. They have, to a degree, either treated Sri Lankans as a monolith in their risk and response to SDV or ignored entire population sub-groups altogether. In response, this study prioritises inclusive participation of women across the reproductive life course including minority groups and those with low literacy.

The deliberately comprehensive research scope, examining the full spectrum of SDV rather than perpetuating the limited focus on suicide, automatically moves women's experiences from the margins to the centre, given the disproportionate burden of non-fatal SDV borne by this group (Vijayakumar, 2015). It secondly serves to allow for the fluidity, overlap or even ambivalence of women's experiences of the varied dimensions to emerge through findings. For example, Antenatal Screening reveals that women co-experienced non-suicidal and suicidal self-harming behaviours during pregnancy and could experience self-harming behaviours without preceding periods of ideation, while women sometimes directly expressed ambivalence, e.g. "the pills could do what they want", indicating lack of clear intent for the physical outcome at the time of SDV. This complexity to women's experiences would not have been observed had I endorsed the compartmentalisation of SDV so commonly found in suicidology and its dominant approaches to research (Kapur et al., 2013).

Concerns are growing for maternal mental health and perinatal SDV globally and in Sri Lanka as a subpopulation of women with particular risks and needs (Fuhr et al., 2014; WHO Sri Lanka, 2018b). Further, development agendas encourage a commitment to gender equity in health and social work and among those tasked with responding to these challenges (Horton, 2015; 2019). Given the experiences of pregnancy and new motherhood are both unique to women and a part of most women's life courses, purposeful inclusion of this subpopulation's experiences is necessary to inform the evidence base on women as a whole. This study contributes to the still nascent global, regional and national data on maternal mental health and SDV in the perinatal period, by presenting comparative data on SDV practices before and during pregnancy, and exploring issues of reproduction and motherhood within women's accounts of selecting and surviving self-harm. By concentrating on the female experience for its own sake rather than as a comparative exercise to what is known about men in this or any other context, this study also reveals the centrality of the role of gender in women's SDV.

7.2.2 The Role of Gender in Women's SDV

Gender remains one of the organizing principles of social life. We come to know ourselves and our world through the prism of gender. Only we act as if we didn't know it. (Kimmel and Messner, 2004, p.ix)

Suicidology, like health research broadly, has trivialised gender by employing it as a primarily descriptive variable in all persons' experiences of SDV through its preferential treatment of quantitative, positivist research (WHO, 2014b; Hjelmeland and Knizek, 2017; Hawkes, Haseen and Aounallah-Skhiri, 2019). The findings of this thesis instead suggest that gender is an embodied reality through which SDV is lived and enacted. The primacy of gender as a framework within which women operate and are operated on by individuals, families, communities, and the state; that framework's impact upon women's selection of SDV; and its impact on others' perceptions of women's risk and use of SDV materialise across research components. In the Sri Lankan context, this framework has been termed the "cult of feminine respectability" (Marecek and Appuhamilage, 2011, p.14), understood as a rigid normative ideology enforcing standards of ideal female comportment, its core rooted in fears over and regulation of female sexuality. This framework, having consequences for how participants recognised, judged and responded to women's SDV, may also partly contribute to two additional gendered challenges raised by this research, including the seriousness with which women's SDV is taken, and the language applied to describe it.

The cult of feminine respectability is reflected in all participants' narratives, including those left by decedents, presenting expectations for, frustrations with, and judgment over women's lives and their choices. Further, it can be seen through participants' explanations – and frequently justifications – of the multiple gendered obligations women held towards husbands, families, and communities. These obligations

engendered risk of SDV, as they not only commonly accumulated in number and severity over women's life courses, but were compounded by expectations of all parties to accept them and, if one could not, to only seek certain outlets for relief. These constraints on women's freedom and personal development and fear of transgressing standards of good womanhood meant SDV-practicing women engaged in painful efforts to hide difficulties. These accounts emulate those observed in women seeking support through Sri Lanka's leading gender-based violence (GBV) charities, to which the concept of the cult of respectability has also been suited (Marecek and Appuhamilage, 2011).

Importantly, there is evidence through all forms of qualitative data that many women at risk of SDV, including many who died by suicide, did disclose thoughts of self-harm and/or plans to act, whether by telling husbands, children, neighbours, mothers, police, or health providers. This disclosure, delayed in many instances because of norms for female tolerance, was often ignored, minimised, or actively repudiated. It appears that many of those being approached for help subscribed strongly to the cult of feminine respectability and judged women's worthiness of support based on these ideals. Women who sought help from state actors like the police and from family were frequently encouraged to forgive men's violence, substance abuse, recklessness with money, and/or infidelity and told to "go home". Women who disclosed most frequently confided in their mothers, whose reported responses reflect their own restrictions to support their daughters given their shared gender. Preoccupation with women's respectability, signified by the ultimate obligation to maintain at least the façade of a harmonious household at all costs (Marecek and Appuhamilage, 2011), is no more marked than in the responses of midwives from whom women at risk of SDV reportedly sought care. PHM enforced women embody the "sacrificial wife/mother" role and, despite intentions of safeguarding women from damaged reputations, certain selected forms of perceived 'helpful' social integration and regulation by midwives instead amplified women's distress (Hemawanna, 2003). Participants' adherence to the cult of respectability, and the consequences of breaking it, are visible indicators of what Heise (1998) presents as a socioecological model of GBV and discrimination in which all Sri Lankans live. Reductive notions of good or bad womanhood aided by these patriarchal norms, structures and institutions, may also influence broader discourse and action over perceived seriousness

and language describing women's SDV, affecting which women and under what circumstances their SDV may be met with acknowledgement and empathy.

Both literature and lay perceptions of risk to self-harm preserve an image of women's SDV as unserious in both scale and intent (Marecek, 2006; Payne, Swami and Stanistreet, 2008; Jaworski, 2014). Yet through this study's first application of the Columbia-Suicide Severity Rating Scale (C-SSRS) in antenatal women, a significant one in four reported a lifetime history of suicidal ideation, behaviour or both. Active Case Finding identified 210 self-harming women in Colombo North Teaching Hospital (CNTH) across a seven-month surveillance period, and 32 known suicides between 2015-2016 district-wide, with an unknown number of women self-harming in the community. Accepting the challenges of accurately enumerating SDV in hospital settings in Sri Lanka described in Chapter 2, Gampaha's Regional Director of Health Services reported 1260 admissions for SDV in eight other district and base hospitals across Gampaha in 2015, the majority of which would have been contributed by women (RDHS, 2015; Rajapakse et al., 2014; Vijayakumar, 2015). Acute treatment of self-poisoning cases has incurred district-level costs of nearly \$900,000 per year in Sri Lanka (Wickramasinghe et al., 2009). Although other-method economic analyses are absent, methods largely selected by women like self-immolation are likely to be significantly costlier in light of often multi-year recovery processes requiring complementary services such as counselling, occupational and physical therapies as observed in this study. With evidence non-fatal SDV is rising in (particularly young) women (Knipe et al., 2014a), this is not an unserious challenge for a health system currently allocated insufficient investment to meet treatment demand nor for families who bear growing out-of-pocket expenditure for health services (Sørensen, Konradsen and Agampodi, 2017), and where other support services are largely absent (De Silva et al., 2016).

Beyond discussions on the seriousness of the scale of women's SDV, lie assumptions around the seriousness of women's intent in using it. Discourse suggests death is rarely the nature of women's ideations or the goal of their self-harming actions (Jaworski, 2014). These assumptions were evident in the daily remarks of hospital-based health providers and lay conversations I had throughout the course of fieldwork. Brief interviews during Active Case Finding in CNTH, in-depth interviews with surviving selfharming women, and deceased women's own communications revealed a wide range of intentions for the outcome of their SDV. However, of all women identified during Active Case Finding, a sizeable 41.5% communicated suicidal intent, while fatal intent was communicated by at least half the suicided women. PHM also mainly gave examples of women who had expressed a desire to die during their exchanges as opposed to some less serious physical outcome. Together, issues of scale and intended lethality of behaviour presented in this research suggest there is a need to question gendered assumptions about women's likelihood to consider or use SDV and their intentions in doing so.

Further, derogatory gendered language was commonly deployed in descriptions of women's SDV, reinforcing unhelpful depictions of women's agency and motives in selecting SDV and reflecting global semantic trends (Canetto and Lester, 1995; Jaworski, 2014). In this study, midwives described certain types of SDV-practicing women as shortsighted, impulsive, and lacking in self-control, while some surviving self-harming women selected to frame their acts as unplanned over-reactions to their immediate circumstances. Likely reflecting both procedural demands and informants' tendencies (Fincham et al., 2011), family and collateral narratives generated through suicide death inquests most commonly provided proximate, singular explanations for women's suicides, while police data only allow for attribution of one 'reason', immediately preceding suicide. Both forms of suicide data reinforce perceptions of impulsivity, mirroring language of some participants. This framing may be partly explained by an internalised comfort with cultural narratives about what conditions constitute 'acceptable' self-harm, with anger-driven SDV preferable to 'long-suffering' motives in Sri Lanka, especially in narratives of women's self-harm (Marecek, 1998; Marecek and Senadheera, 2012; Widger, 2012).

However, this research encourages reconsideration of previous scholars', health providers', suicide-affected persons' and women's own use of the language of impulsivity for several reasons. First, deeper interrogation of women's experiences was made possible by the use of innovative psychosocial autopsy methods to examine more extended periods of women's life course. In doing so, analyses reveal that surviving women's, midwives' and some family/collateral's descriptions of women's SDV *rarely*

reflect truly isolated/one-off situational responses, and more strongly align with 'longsuffering' narratives in which SDV occurs against a backdrop of accumulated harm - itself largely gendered in nature. Second, this language reduces the complexity afforded to women's lived experience and eliminates the possibility of identifying points in women's trajectories where women could – and perhaps should – have been supported to avert SDV. Without allowing for depth and breadth in accounts that expose (missed) opportunities to intervene, prevention efforts are hindered and responsibility to attend to women's SDV abdicated, undermining commitments to achieve gender justice in health (Horton, 2019). As oversimplification and omission of context may be a coping strategy employed by suicide-affected persons to alleviate guilt (Widger, 2012; Bantjes and Swartz, 2019), this study's inclusion of first-person narratives from living SDV-practicing women helps counteract suicide narratives' dilution of women's experiences (Hjelmeland and Knizek, 2017). Third, this use of minimising and mismatched language to describe motivations for self-harm reinforces the commitment to upholding notions of 'respectable womanhood' in Sri Lankan society. According to my reading of women's experiences the continued ascription of impulsivity to women's SDV is not only inaccurate in most instances, but limits our ability to identify inroads for prevention, and perpetuates a sexist discourse, judgmental of women's self-harming behaviours, which in turn perpetuates wider cultural practices judging women's performance of their gender.

Contributions in four additional substantive areas of perceived and real vulnerability contributing towards Sri Lankan women's consideration or use of SDV are made through this study's use of a gender lens. Responding directly to knowledge gaps presented in the Introduction of this thesis, plus an additional issue, they include: violence, sexual and reproductive health and rights, economic hardship, and mental health.

7.2.2.1 (Intimate partner) violence

This study is the first to report estimates of the prevalence and relationship of multiple forms of IPV with antenatal mental health in Sri Lanka, and is amongst the most comprehensive exploration of IPV's relationship to SDV in reproductive age and perinatal women from a LMIC setting (Halim et al., 2017). Multiple forms of IPV were associated with depressive outcomes in antenatal women, and women exposed to any form of IPV – whether physical, emotional, sexual, or financial – were four times more likely to disclose

SIB in pregnancy, all of which resonates with LMIC research (Gausia et al., 2009; Fisher et al., 2012; Gelaye et al., 2016; Surpraja et al., 2016; Onah et al., 2017). All women reporting antenatal suicidal behaviour disclosed violence in their current partnerships, while 13/17 surviving self-harming women reported IPV; all 17 were affected by violence when non-intimate relationships were taken into account. Midwives, as women's primary healthcare provider, expressed a lack of capacity to respond to IPV, despite its frequent presentation in their work. Women, midwives and suicide inquest files presented IPV as both an indirect and direct contributor to women's SDV by affecting their mental wellbeing, and activating women's self-harm as part of a situational reaction (Gentile, 2011), supporting hypotheses about violence's function in women's suicides from neighbouring LMIC (Pradhan et al., 2010).

Importantly, the findings of this thesis highlight two key issues often overlooked in the IPV and GBV literature. Firstly, disclosure of IPV whether through screening or in-depth engagement as in this study, must be interpreted with an understanding of (women's) attitudes towards violence in a given context. Through surviving self-harming women's accounts we heard how families, health providers, and state actors (e.g. police) pushed women to forgive violence and reconcile with abusers; midwives' own narratives confirmed this happened with regularity. The actions of others encouraging women to swiftly move on from episodes of violence are fittingly reflected in the common Sinhala saying, denna demahalange ada dabara batha idenakung vitharai (quarrels between married couples last only until the pot of rice is cooked), inferring altercations are transient and thus bearable. This minimisation goes further in the context of operating legal frameworks in Sri Lanka which, for example, do not recognise forced sex in marriage as rape (i.e. a criminal offense) unless women are physically living separately from already legally-estranged husbands⁷⁸, and not under any circumstances in the case of Muslim women, including girl children who are married before or as a consequence of the rape (Marecek and Appuhamilage, 2011; Marsoof, 2019). Some husbands' handwritten statements found in suicide inquest files almost matter-of-factly disclosed violence on their part, though the tone of this disclosure is impossible to truly deduce. All of this reflects permissive cultural norms around violence against women and girls,

⁷⁸ I.e. Couples must already be in the midst of legal separation

naturalising male superiority (Marecek and Appuhamilage, 2011), and almost certainly affects women's own attitudes towards, and thus recognition of and willingness to disclose experiences of violence. This study captured women's attitudes towards as well as their own personal experiences of a range of violent acts. Nearly 40% of antenatal women justified physical abuse by a husband under certain conditions⁷⁹, while numerous surviving self-harming women defended, rationalised, and made excuses for abusive men and family. Ultimately, the levels of disclosure around violence in studies such as this are not objectively 'true' estimates and propose when estimates appear lower than expected – as was the case for physical violence in pregnancy in this research – extra caution should be applied to consider the extent to which violence is likely being masked by local norms and attitudes.

Secondly, and possibly related to attitudes towards physical violence, this study finds that controlling behaviours including limiting contact with family and friends; confinement; removal of communication mechanisms and transportation access; and regulation of access to food, children and money were more strongly associated with antenatal depression and SDV during pregnancy, and negatively affected women's overall wellbeing to a greater extent than physical forms of violence. By using comprehensive definitions of IPV and inquiring into women's experiences on that basis, this study contributes to a richer understanding of the role of *all* forms of IPV on women's mental health and self-harming repertoires. Of surviving self-harming women, 53% reported multiple concurrent forms of violence operating in their households. I therefore encourage scholars and service providers to abandon the common practice of inquiring into solely physical abuse as an indicator of exposure to violence and to expand definitions understanding that without this, the women most vulnerable to violence, including of a self-inflicted nature, may be missed.

7.2.2.2 Sexual and reproductive health and rights

Sexual and reproductive health and rights (SRHR) have been neglected in suicidology and other disciplines exploring SDV. The findings of this research strongly suggest this

⁷⁹ It logically follows that the condition under which women felt wife beating was *most* acceptable was if the husband *perceived* wives to be neglecting children, aligning with ideals of the cult of respectable womanhood and of the sacrificial mother.

oversight is undermining women's welfare and contributing to women's SDV as dimensions of SRHR go unacknowledged and unaddressed by academia, government, and third sector actors. Participants raised issues of pregnancy and motherhood, (in)fertility, miscarriage, induced abortion, (marital) rape, pornography, online sexual exploitation, infidelity, sexually transmitted infections, sex work, sex trafficking, partner choice, dowry (harassment), coerced or forced and girl-child marriage, non-consensual divorce, and female genital mutilation. Non-consensual sex (i.e. rape) was common and 30% of selfharming women reported at least one event. Child marriage was reported by 5.5% of pregnant women, most commonly by Muslim women. Nearly 20% of Muslim antenatal women confirmed marriage before the age of 18, far above the 6% estimates for this population (Marsoof, 2019). Accurate data are, however, absent as the current Muslim Marriage and Divorce Act discourages child marriages from being registered with the Registrar General's Department as legally required by Sinhala and Tamil communities, and families are frequently thought to lie about a girl's age when they do register (Marsoof, 2019). Thus this study may contribute a more accurate picture of women's age at partnership, especially in light of clandestine practices within some Muslim communities. Married women bore responsibility to maintain the image of "a devoted and sexually pure wife" (*pathiwatha*) (Marecek and Appuhamilage, 2011, p.14), even in the presence of publicly adulterous husbands, and to bear children early in new marriages. All women held responsibility for sexual and reproductive health and the avoidance of pregnancy in relationships, were blamed for sexual transgressions including men's, and faced difficulty accessing services and products to protect against infections and manage unwanted pregnancies. This was especially true for unmarried women who are currently structurally marginalised by SRHR services which have been developed on the basis of upholding the cult of feminine respectability. Each of the dimensions of SRHR were tied by participants to women's selection of SDV, albeit sometimes indirectly, and were part of the additive harm observed across women's life courses.

Abortion is illegal in Sri Lanka with exceptions made to protect a mother's life (Suranga, Silva and Senanayake, 2016). Within this legal definition, women at risk of self-harm or suicide *should* qualify for a legal termination, but as evidenced by midwives, women were not made aware or supported to access abortion services under these conditions even when explicitly asking for them. Given its legal status, the number of abortions disclosed

through Antenatal Screening was low; 16 multigravida women reported this as the outcome of their previous pregnancy⁸⁰. However, midwives perceived abortion to be common in Gampaha District, driven strongly by its migration patterns and Free Trade Zones, which is supported by limited evidence⁸¹ (UNFPA, 2012). I was aware through personal networks of schemes through which doctors were providing illegal terminations in Gampaha, under obviously dangerous conditions, and a couple of surviving women openly disclosed histories of illegal terminations. SDV was not viewed as an 'act of desperation' following abortion as suggested by some scholars (Gentile, 2011), however these women did associate their SDV with repercussions of an abortion experience, namely through its provocation of IPV in subsequent and/or disapproving partners⁸². Instead, women featuring in midwives' stories displayed an association between suicidal ideation and *denied* access to abortion, questioning the thin evidence on the abortion-SDV interplay and suggesting it is the unplanned and *unwanted* pregnancy coupled with a lack of access to terminations elevating women's risk of SDV in this context (da Silva et al., 2012; Miranda-Mendizabal et al., 2019). A now outdated study estimates approximately 658 illegal abortions occur daily in Sri Lanka (Rajapaksa, 2002), and they contribute heavily towards the country's preventable maternal deaths (Suranga, Silva and Senanayake, 2016). Efforts to reform legislation, even in the case of rape, incest or foetal non-viability, continue to be met with resistance, driven by an almost entirely male religious leadership (Kumar, 2013). Despite its prohibition, it appears consistently in this study's findings as a feature of self-harming women's lives and one that will continue to do so in the absence of reform.

Finally, this study suggests women may be better protected against SDV during pregnancy itself compared to previous time points in their life course. However, this finding stops short of endorsing what others have previously termed a "motherhood protective effect" against SDV (Romero and Pearlman, 2012), as long term trajectories of women's engagement in SDV were not assessed, and the mechanism supporting the observed pregnancy protective effect in this study is not yet clear. Importantly, perinatal

⁸⁰ This does not mean women had never had an induced abortion, only that the pregnancy preceding the current one did not end in induced abortion.

⁸¹ UNFPA's research is based on modelling and discounts unmarried women – the most likely group to seek induced abortion in my research, and the primary group at risk of unwanted pregnancy in Gampaha District given its occupancy by female-driven industries.

⁸² Partners reportedly disapproved of women's refusals to obtain an induced abortion, while others disapproved of them seeking one.

women exhibiting current or recent SDV in this study did not differ substantially in their life circumstances to non-perinatal SDV-practicing women, with the most influential factors common to both groups. Perinatal women with a recent self-harming event did report extreme exhaustion and sleep deprivation, which may be an additional factor in this subpopulation, but this study overall suggests both perinatal and non-perinatal women are rendered vulnerable to SDV under largely the same conditions. This thesis powerfully indicates SRHR in all its dimensions is a core feature in women's self-harming trajectories, creating vulnerabilities by exposing women to negative experiences, frequently unrecognised or created by institutions, shaping women's access to resources and support and the nature of support offered.

7.2.2.3 Economic hardship

A somewhat unexpected contribution of this research is its recognition of economic hardship as a dominant contributing factor to women's self-harm and especially suicide. The overwhelming majority of suicide research, including in LMIC and Sri Lanka, frames unemployment, debt, and poverty as direct correlates of men's self-directed violence (Iemmi et al., 2016; Knipe et al., 2017b; Bantjes et al., 2018). Regarded as a gender-specific risk factor for men (Bantjes et al., 2018), this association is related to globally shared norms that expect men to embody the role of breadwinner within family structures as part of their performance of masculinity (Payne, Swami and Stanistreet, 2008). Associations of economic hardship in women's SDV are infrequently discussed in the literature, however I suggest based on findings of this research, this may be partly due to gendered assumptions operating within lay discourse and within research disallowing for consideration and exploration of this issue within women's experiences.

Midwives were asked to reflect upon their perceptions of risk and protective factors for women's SDV, and none raised issues of economic hardship. While it may be that it was never disclosed by women seeking support for SDV, it seems likelier it was not selected by midwives because mitigating economic hardship is presumed to be the responsibility of men in Sri Lankan culture under clearly delineated gender roles. Many women under their care and with whom I engaged, however, were living in endemic poverty and part of families and/or marriages in which men were poorly or moderately educated – often below women's education levels – and performing ad-hoc, unreliable day-labouring jobs.

By asking women with experience of SDV directly about this aspect of their lives, women foregrounded economic hardship as *the* most significant burden of responsibility befalling them within their households, while pressures of debt and asset (mis)management were directly linked by deceased women to their own suicides. Half the self-harming women reported recent financial changes, while half were also living paycheck to paycheck, with debt or some other condition constituting subjective financial instability.

This is the first research in Sri Lanka to consider the role of deprivation and economic (in)stability in perinatal women's mental health. Women reporting stress over household debt (1.6x), husband's unemployment (4.5x) and problematic drinking in husbands (2x) were all significantly more likely to exhibit signs of antenatal depression. Importantly, self-harming women linked husband's unemployment and 'underachievement' as providers to their substance abuse, suggesting this relationship was cyclical. Women described extraordinary efforts to manage household budgets and economic hardship, often involving considerable sacrifice on their part. This research therefore asserts that while economic hardship does not operate the same way in women's SDV as it may for men's, it is seemingly no less important. Recognising that 'money matters' for women as a potential protective or injurious factor for women's self-harm is necessary for advancing research and prevention efforts.

7.2.2.4 Mental health vs. mental disorder

This research set out to explore dimensions of mental health in antenatal women as well as multiple perspectives, including women's own, on the role of mental health and mental disorder in SDV. The overwhelming majority of suicide research operates from a position of presuming relevance of mental disorders, and suicidology has long practiced a custom of pathologising women who engage in SDV (Colucci and Lester, 2013; Jaworski, 2014). Antenatal Screening identified high levels of antenatal depression with one in three women exhibiting a suite of symptoms. However, critically, findings indicate that while co-morbidity of depression and SIB during pregnancy was certainly possible and even common, it was not inevitable. SIB was experienced in the *absence* of antenatal depression for 1 in 5 women. This evidence challenges the dominant and linear view that maternal SIB is necessarily a consequence of ante-/postnatal depression, and the broader discourse in mainstream suicidology which maintains an increasingly criticised position that depression is a prerequisite for experiencing dimensions of SDV (Hjelmeland and Knizek, 2017). While there was definite overlap, those exhibiting depression or SIB in the perinatal period could be separate subsets of women, requiring new thinking to ensure both are recognised.

Traditional psychological autopsy tools are used to retrospectively diagnose mental disorders in the deceased (Connor et al., 2011). In this study, the modified psychosocial autopsy instrument was not applied for such a purpose, but women, midwives, and suicide inquest files did provide insight into the role of mental disorders. A small, but important subpopulation recognised mental disorders as present and related to women's SDV. For example, 10% of women admitted to CNTH following SDV reported past treatment for a mental disorder, while four suicide narratives from informants directly or indirectly suggested presence of mental disorder and that it affected women's decision-making prior to suicide. PHM recalled examples of women disclosing thoughts of self-harm with known psychiatric diagnoses, but importantly also provided examples of women who were indirectly affected by managing *others*' mental disorders, rather than their own. Midwives felt strongly that mental disorder was secondary to many other life challenges facing women, principally those relating to unhealthy intimate partnerships, violence, and SRHR.

Importantly, previous experiences of SDV were common among participants. A lifetime history of SIB was a shared and strongly correlated factor of antenatal women exhibiting both depression and antenatal SIB, increasing their odds of experiencing these outcomes by ten times. One in seven women admitted to CNTH and three suicided women had a history of self-harm. These findings support global evidence that a history of SDV, especially in behaviour, is a suitable gauge of future risk (WHO, 2014b).

Beyond mental disorder and prior self-harming episodes, women experienced a huge range of distressing psychological experiences before selecting to self-harm. These included intense feelings of isolation, loneliness, anger, disappointment and self-blame, among others. Experiences such as violence and infidelity inflicted evidently painful intrapersonal communication in women. While these may not be diagnosable disorders, this full range of mental states was nevertheless deeply affective for women's wellbeing including their sense of safety and worth. This research suggests a more holistic understanding of the role of emotions and affective states, rather than the emphasis on disorders, may better support (identification of) women at risk of SDV. This study by no means suggests psychiatry and mental disorders are irrelevant in women's SDV in this context, nor that these issues only pertain to the female experience. This thesis does, however, assert that psychiatry and mental disorder are not synonymous with mental health, and should be positioned as one component part of a much-needed broader (re)conceptualisation of mental health in Sri Lanka and beyond.

7.3 Strengths and Limitations of this Research

Many of the strengths and limitations of this research have been presented throughout the thesis. In review, this study's strengths firstly lie in its comprehensive approach. Inclusive sampling, incorporating experiences of minority and low literacy populations, women at all stages of pregnancy, health facility- and community-based women, persons representing the full spectrum of self-harming experiences, and the perspectives of a huge breadth of health service providers, and, to a more limited extent, those affected by suicide, have not been analysed in one study before. The addition of self-immolation patients contributes to a current shortage of evidence on this method in Sri Lanka (de Alwis, 2012), and most importantly supports inclusion of women's experiences months and years post-SDV. This long-term view complemented immediately post-SDV narratives raising critical issues over the need to support women through extended and holistic - not just physical - recovery. My intentional adaptation of tools such as the C-SSRS maximised timeframes explored in women's lives, and enabled independent assessment of SDV without presuming a relationship with mental disorder, i.e. depression. Finally, my development of study-specific and gender-conscious research instruments allowed for exploration of varied life circumstances and previously neglected issues of IPV and SRHR pertinent to the female experience.

The key limitations of the study are fourfold. Firstly, no component of this study was longitudinal in nature, limiting our ability to understand women's trajectories postnatally and beyond, or past physical recovery in hospital, with the exception of self-immolation patients who added great value in exploring this subsequent phase of women's lives. The research questions were not longitudinal in nature and such research is difficult on this topic. Secondly, and as discussed as a challenge in the Methodology chapter, I was unable to recruit any families or collaterals to contribute their direct and fresh first-person accounts of the context and circumstances in which women selected to suicide. In light of the many pressures and systemic processes through which original statements were generated (Fincham et al., 2011), as described in Chapter 5, it is assumed informants' narratives would have yielded considerably richer evidence had recruitment been possible, albeit affected by factors of time, recall, and positionality (Bantjes and Swartz, 2019). While imperfect and criticised by some scholars (Hjelmeland et al., 2012), I maintain this form of data would have enhanced the study. Thirdly, the sample of women experiencing only self-harming ideation was separate from those who engaged in medically serious SDV, with data generated using quantitative and qualitative methods respectively. Consequently comparing ideating-only and recently self-harming women to identify which precise personal and/or social factors deter some women from acting on thoughts of self-harm, i.e. from escalating to their tipping point, was not appropriate. Further exploration of Antenatal Screening data may help address this. The final limitation resulted from challenges of gatekeeping during fieldwork, prohibiting me from acquiring one-third of the desired suicide inquest files. Discussed in full in Chapter 5, this set-back hindered engagement with potential families and collaterals and more thorough comparison of this study's data against presiding police statistics.

7.4 Policy, Programmatic and Legal Implications

The findings of this thesis hold implications for prevention, intervention, and postvention for self-directed violence amongst women in this context. However, in order to realise further gains in reducing suicides in Sri Lanka and to address other self-harming experiences, all actors must recognise that a continuation of the current 'one-size-fits-all' approach is not only unsupported by the evidence, but potentially detrimental to the project of reducing risk for women and girls. It is commonly claimed in every day conversation, as well as by government, academic, and third sector actors responsible for issues of health and welfare, that the changing social structures and gender norms now being observed in Sri Lanka, and most intensely in settings like Gampaha District, enact "erosion of traditional support structures such as the extended family" (Fernando, Suveendran and de Silva, 2017, p.18). These shifts have far-reaching implications, and this thesis does not and cannot attend to all of them, but I propose this almost exclusively negative interpretation of change is at least partially rooted in patriarchal conventions that presume these systems and structures previously worked for everyone.

This research consistently presents that many of the structures (re)producing "traditional" forms of social integration in Sri Lanka, including marriage, motherhood and family, simultaneously bind women to others, while leaving them feeling intensely lonely and unsupported. In short, traditional social structures have long been the source of the problem for women's self-harm and still do not work for many women in this context. The transitions underway in Sri Lankan society may be difficult for particular groups to reconcile, yet they hold potential for new and more socially just institutions and interpersonal norms and structures to emerge. Breaking barriers to realise women's right to live in safety and with dignity is no easy task and resistance to change is expected and visible. However, with a human-rights and gender-conscious lens, stakeholders can facilitate the process, reducing women's likelihood of resorting to SDV on most occasions as they are revealed, by this research, to so commonly be currently-solitary acts of real and symbolic pleas for change by Sri Lankan women. To that end, women's SDV may be practically addressed through a series of efforts including improving suicide data, updating formal SDV prevention strategies, attending to associated issues, supporting new and improved service provision, revisiting of selected legal frameworks, and facilitating wide-spread attitudinal and behaviour change.

First, I present proposed policy responses to the gaps and systemic weaknesses identified in the current commodity chain of suicide data in Sri Lanka. Clarity over the role and responsibilities of forensic pathologists and police could be integrated into official guidelines given their roles' current absence in legal frameworks on death investigations (Perera, 2014). Novel approaches to both the appointment of Inquirers and the finance mechanisms under which they operate could improve transparency in their management of death inquests and encourage adherence to occupational standards. Next, reviewing current restrictions against re-visiting Inquirers' verdicts, particularly in cases where new evidence becomes available, is advisable. Development of national reporting requirements and mechanisms to encourage adoption of nationally standardised tools is prudent. Finally, introducing performance evaluations and requirements for professional development across all roles involved in death inquests could be mutually reinforcing for improved practice. These challenges can be seen as opportunities to improve national cause of death data systems with the potential to generate high-quality evidence for health policy and planning and beyond, and may be relevant to consider for other causes of death in Sri Lanka.

Second, in 2017 the Government of Sri Lanka convened a workshop on suicide prevention, with the intention of revisiting and revising their official suicide prevention strategy (Directorate of Mental Health, 2019). Not all relevant players were informed or invited to participate in this forum, reducing the likelihood the best evidence has contributed to reshaping national plans. As a first step, fresh stakeholder mapping is required followed by an updated situation analysis including the contributions of this broader pool of knowledgeable actors (WHO, 2012). This thesis emphasises the importance of viewing SDV as more than a health issue. Multi-sectoriality, recognising the contribution that each stakeholder can and does already make, may stimulate action over currently untapped opportunities and share the resource strain. In particular, actors such as traditional healers, non-governmental agencies and other third sector bodies, religious leaders, academics, and advocacy groups are insufficiently consulted and involved. Third, and particularly to yield benefits for women, updated strategies must expand beyond the narrow focus on suicide and the singular response of pesticide regulation, as means restriction is demonstrating a levelling-out in its influence, and non-fatal SDV rises as method substitution occurs and preferences change (Knipe et al., 2014a).

Fourth, this high level political work needs also to take account of and take a position on the role of the mental health sector in addressing SDV. Sri Lanka has invested in remarkable and admirable change in its approach to mental health since the early 2000s, selecting to decentralise provision of mental health care across the country (Fernando, Suveendran and de Silva, 2017). Driven largely by the now out of date, and yet to be replaced, 2005-2015 mental health policy (Mental Health Directorate, 2005), the system is increasingly aiming for community-based provision of care more accessible to the population and delivered by differing levels of health providers and volunteers. The Ministry of Health's Directorate of Mental Health positions suicide within its remit as part of its chief role in health system strengthening. Current mental health provision under this decentralised system continues however to prioritise medical interventions and mental disorder (Fernando, Suveendran and de Silva, 2017).

In addition, Sri Lanka's College of Psychiatrists recently staked its claim as the most relevant professional body to spearhead suicide prevention efforts exhibiting an understanding of the issue largely imported from Western contexts⁸³. Psychiatrists currently operate almost exclusively at tertiary level also focusing on issues of mental disorder from a biomedical perspective. Furthermore, they have long-resisted the introduction and development of a complementary profession of psychologists and counsellors in Sri Lanka (Marecek and Appuhamilage, 2011). Neither of these current approaches are sufficient in light of evidence that the overwhelming majority of women at risk of or affected by SDV do not have psychiatric disorders and would likely not benefit substantially from medical interventions. Further, psychiatry and the broader mental health system continue to be challenged by stigma, discouraging help-seeking (Fernando, Suveendran and de Silva, 2017). The wider project of improving mental health in Sri Lanka will require an active rebranding, expanding, and educational movement to improve mental health literacy of not just the population, but of mental health service providers themselves who, I suggest, currently conceptualise their roles in far too limited a scope, and with unnecessary and detrimental territorialism discouraging development of elsewhere relevant specialties such as psychology (Marecek and Appuhamilage, 2011).

Fifth, and beyond clarifying a role for the mental health sector, other relevant sectors addressing critical issues affecting women's consideration and use of SDV must be engaged in a coordinated and intentional manner, and supported to respond to this issue. Violence – and specifically intimate partner violence – emerged as one of the most affective issues in women's lives throughout this study, and Sri Lanka's state actors are making headway in raising the issue's profile and developing response mechanisms. *Mithuru Piyasa* services like the one in CNTH, are now available in 56 sites across the country under the auspices of the national and provincial Ministry of Health, though they

⁸³ For example, at the opening day of the College of Psychiatrists' conference in 2018, I observed multiple presentations propagating the 90% statistic on depression in suicides.

remain heavily concentrated in Western and Central Provinces, and four districts lack services altogether (WHO Sri Lanka, 2018a). There is no publicly available assessment of their current functionality and quality of care, though limited referral data were published last year (Guruge, Jayasuriya-Illesinghe and Gunawardena, 2015; WHO Sri Lanka, 2018a). However, my experience in CNTH found this hospital's joint GBV-Youth Friendly service essential, but hugely over-stretched, managing to support just 20% of eligible SDV patients in typically one-off interactions⁸⁴. Given this is one of the best resourced hospitals in Sri Lanka, I infer that other *Mithuru Piyasa* or Youth Friendly Services may face even more difficulty meeting demand. Needs assessments across services, or even at the individual level, could help inform service development.

Further, Mithuru Piyasa's have not benefited from nation-wide campaigns, and instead currently promote through the use of billboards immediately outside the hospital property, and occasionally near police stations. Consequently, many in the community will not be aware of their existence, evidenced perhaps in-part by the low proportion of women referred to *Mithuru Piyasa* centres by community public health providers (6%), police (12%), and women themselves through self-referral (19%) (WHO Sri Lanka, 2018a). Awareness raising campaigns for these services, including through social media, could be beneficial especially for young women, but should be undertaken concurrent with efforts to improve their capacity to absorb demand and to formalise collaborative mechanisms with other relevant stakeholders (e.g. Legal Aid Commission and police). Sri Lankan Police have also introduced Women's and Children's Desks across the country⁸⁵, but as with *Mithuru Piyasa*, awareness raising campaigns have not accompanied their rollout and quality of support is unassessed⁸⁶. This study indicates capacity strengthening and sensitisation to issues of GBV and sexual violence within police services are necessary to safely and more effectively respond to families and individuals in need of their support. At the time of fieldwork, new curriculum addressing these issues was being piloted in police training academies, while refresher or continued professional development of current officers could be of great value. Nation-wide campaigns on

⁸⁴ This was calculated by assessing their detailed logbooks against my patient list across the surveillance period ⁸⁵ As of 2018, WHO Sri Lanka reported 43 Women's and Children's Desks to be in operation at main police stations across the country

⁸⁶ Anecdotally female police officers assigned to these Desks are undermined and overloaded with administrative responsibilities as senior (and chiefly male) offers question the value of this service

violence against women are lacking, though multi-agency community-based violence prevention programmes like *Manohari*, are being trialled (WHO Sri Lanka, 2018b), and if effective, will be scaled. Third sector organisations already operating in this space are likely to continue, however government bodies do not currently offer financial or material support despite heavily relying on these agencies (Guruge, Jayasuriya-Illesinghe and Gunawardena, 2015). Given the third sector's considerable expertise in tackling violence, they should be included in shaping future large-scale and government-led initiatives, albeit with the requisite resourcing.

As a related issue, substance abuse receives inadequate attention by state and local actors. Alcohol-related injuries – frequently observed with violence and/or SDV – cost the economy more than any other single disease condition (WHO Sri Lanka, 2018b), but rehabilitation services are extremely limited, concentrated mostly in Colombo and the surrounding areas. The National Policy on Alcohol Control, developed by the Ministry of Health (2016b), provides much-needed structure in addressing this form of substance abuse, but, as with the original suicide prevention strategy, takes a paternalistic and means-restriction approach by introducing mechanisms to make alcohol inaccessible to certain segments of the population, rather than educating communities about responsible consumption. Women remain legally prohibited from buying alcohol under a 1979 statute. This legislation was set to be overturned in 2018 in an effort to address overtly sexist policies and laws, but as with abortion, was kept in place largely through patriarchal pressure of male religious leadership. It is possible measures such as increasing taxation and outright banning of-age women from purchasing alcohol may increase use of illicit forms of alcohol, particularly among young urban women who may increasingly see alcohol use as acceptable and of interest in light of exposure to social media and tourism. Illicit forms are already thought to account for 50-90% of national consumption of alcohol (Sørensen et al., 2014), and are exceedingly difficult to regulate for safety. Men's use of Illegal drugs was raised as a growing and relevant concern in women's SDV throughout fieldwork and by multiple types of participants. Current policies and services do not operate with contemporary understanding of the epidemiology of drug (mis)use in Sri Lanka nor of potentially effective responses and continue to treat it as a principally legal (i.e. criminal) matter. This study indicates that drug (mis)use may be especially relevant in urbanising areas with growing

industrialisation, and suggests coordinated action with alcohol initiatives may be appropriate.

Sixth, all of the associated issues of mental health, violence, substance abuse, gender, sexual and reproductive health and rights, economic hardship and SDV itself, could be incorporated into curriculum of Sri Lanka's School Health and Nutrition programming, led by the Ministry of Education and supported by complementary activities delivered by the Ministry of Health. School health and nutrition programming globally is recognised as an effective means to develop healthy behaviours in children and young people, contributing to a prevention agenda, while also giving children knowledge to support others in their social networks - including elders - and connecting them with sources of support. Sri Lanka's school health programme has historically been successful in delivering a range of interventions, and is ostensibly responsible for skills-based health education (Drake et al., 2014). Ministries of Education and Heath could consider expanding the currently offered portfolio to address pressing issues of sex and relationship education, violence, responsible consumption of substances in addition to self-harm and suicide under the umbrella of developing Life Skills. Models from other LMIC may offer inspiration. For example, UNICEF Kazakhstan successfully piloted the first LMIC programme on promotion of adolescent mental health and prevention of suicide through the school-based platform between 2015-2017, with promising results (Itad, 2018). This model is now under consideration by Ministries of Health and Education throughout the Central Asia region. As part of this programmatic approach, and in line with recent recommendations developed from Sri Lanka's suicide first aid guidelines (De Silva et al., 2016), school-based 'gatekeepers' could be trained to recognise and respond to SDV risk in students.

Next, evidence from this thesis indicates midwives are already addressing SDV in women, are motivated and interested to do so, and are trusted persons with whom to disclose. As the pregnancy care programme includes screening for postnatal depression, with a view to expand to the antenatal period, there is a precedent for formalising assessment of non-physical issues in women during the perinatal period as part of midwives' responsibilities. This study supports consideration of models from high income settings which have introduced a cadre of midwives dedicated to mental wellbeing (Holland,

2018) and revisiting of successfully piloted local interventions for assessing IPV through Maternal and Child Health services (Jayatilleke et al., 2015). Acknowledging challenges of resourcing, referral mechanisms, training, and hierarchical territorialism within the health sector, I argue that with political will, adequate investment and enhanced training, specialised 'wellbeing midwives' could be allocated in local teams to operationalise screening and support for multiple psychosocial vulnerabilities raised by this research. The findings of this study's Antenatal Screening have already contributed to the country's first National Women's Policy currently in development under the Prime Minister's Office, advocating for earlier assessment of maternal mental health in the antenatal period⁸⁷. It is hoped this is the beginning of an ongoing contribution to development of policy positions and programmes touching on issues raised throughout this thesis.

Eighth, prevention of women's SDV may be better supported through the revisiting of current legal statutes. Marital rape is still not adequately defined and therefore recognised and punishable under Sri Lankan law. Persisting parallel legal frameworks allowing girl-child marriage and (sexual) violence against girls and women in Sri Lanka's Muslim community violate international conventions on human rights and the rights of the child (UNICEF, 1989; Marsoof, 2019), and undermine all development agendas on ethnic and gender equity as this fast-growing subpopulation of girls and women is left behind Sinhalese and Tamil counterparts. This study advocates strongly for political actors to rectify this in-built violence against women present within current legislation. Additionally, as illegal abortion continues to contribute a sizeable proportion of Sri Lanka's maternal deaths, is associated with women's SDV and features regularly throughout this research, decriminalising abortion warrants renewed consideration (Kumar, 2013).

Finally, in developing programmatic, legal, and "gender-sensitive policies to address deep-rooted inequities" (Horton, 2019, p.511), stakeholders must encourage and facilitate the involvement of men and others currently participating in and perpetuating

⁸⁷ Sri Lanka's government has issued relevant policy pieces in previous years including, for example, the Sri Lanka Women's Charter (1993), National Action Plan for Women (1996), Prevention of Domestic Violence Act (2005), National Policy on Maternal and Child Health (2012), and most recently a National Plan of Action to Address Sexual and Gender-based Violence (2016-2020), however these have been disjointed and under the auspices of separate policy-making bodies (WHO Sri Lanka, 2018a). The forthcoming *Women's Policy* aims to consolidate many of the themes previously separated in each of these earlier documents.

the cult of feminine respectability. Specifically, "men must do more to amplify the importance of gender...to listen, to engage, to advocate, and to create the conditions for women to flourish" (Horton, 2019, p.511). For women to no longer operate in risk, particular patriarchal behaviours and attitudes of families, partners, and the community at large must also be addressed through comprehensive action.

7.5 Future Research

In reflecting on the contributions, limitations and implications of this research, the need for additional research arises. Overall, further studies replicating these analyses in similar contexts are needed to validate conceptual generalisation of the conclusions of this thesis (Carminati, 2018). The following are specific areas identified as a result of this study warranting new or enhanced investigation, some of which may be taken forward by continued mining of this study's data. First, a new research agenda would address current gaps identified by analyses of Sri Lanka's suicide cause of death data. Research into the provenance of data for other causes of death could help distinguish which weaknesses are systematic and which are cause- or even gender-specific. Exploratory research on police practices in death investigations from attending scenes of death across the reporting chain remains a critical gap in the evidence base and may illuminate where police and vital statistics on suicide diverge. Additionally, qualitative inquiry of police, Inquirers and forensic specialists' experiences of suicide death inquests would be of value given evidence from other LMIC settings indicating this responsibility can be vicariously traumatising (Brysiewicz, 2007). Further research is needed on the integrity of Sri Lanka's vital registration data. (Health) information systems research to improve the interoperability of multiple, complementary sources of cause of death data in Sri Lanka is also increasingly pertinent.

Next, in order to inform continued service development within the mental health sector and beyond, contemporary evidence on stigma, perceived barriers and facilitators to help-seeking, and preferences for sources of support for self-harm is needed across Sri Lankan populations. Preferred models of care may vary by geographic location, ethnicity, gender, age, knowledge and literacy and acceptability of technology, etc. Current understanding of how young people perceive issues of mental health is poor, as is knowledge on the acceptability and suitability of mental health services currently leading on SDV interventions.

Third, research on a suite of SRHR issues, including female genital mutilation, girl-child marriage, sexual exploitation, dowry and partner selection, and abortion, is urgently needed. The dowry system has a long tradition in Sri Lanka, yet operates differently to neighbouring countries and its importance appears to be declining or at least becoming less visible. WHO Sri Lanka's recent country profile on gender-based violence makes no mention of this practice except to say dowry deaths do not occur (2018a). While only raised by a small number of participants, their experiences challenge assumptions of dowry's unimportance and instead suggest it remains a salient practice affecting some family dynamics, including contributing to violence against women and their consideration of SDV. Dowry practices require fresh investigation to understand how the system has evolved and its current implications for women's safety and value in Sri Lankan society overall and by subgroup. Estimates on girl-child marriage are unreliable and outdated, and knowledge on abortion attitudes, practices, providers, and statistics all inadequate. Research on women's self-management of medical abortion through the use of misoprostol would be beneficial, given evidence this method is increasingly readily accessible by unregulated and untrained providers (Kumar, 2012).

Some of these issues appear to be more prevalent within Sri Lanka's Muslim communities in light of legal statutes and customs. Muslim women constituted a small proportion of this study's participants across components, and there is a need to advance dedicated research on this subpopulation to better understand their particular experiences of SDV, associated and contributory factors, and available and trusted sources for help-seeking. Evidence on the scale and nature of female genital mutilation practiced in this community is negligible, while anecdotally known to occur with regularity, especially amongst the Bohra sect.

This study identified interest and motivation on the part of Public Health Midwives to build their capacity and formalise assessment and support of psychosocial wellbeing within their roles. However, given the small sample further research is needed to explore attitudes and interest in expanding responsibilities for these issues amongst midwives island-wide. Baseline research on current implementation of postnatal depression screening is necessary, to assess barriers and opportunities to improve and build on this role requirement. Finally, this thesis emphasises the centrality of gender in shaping women's trajectories through self-directed violence and the ways in which all actors respond to it. It is possible, even likely, gender uniquely shapes the male experience, but as previous research has operated with a gender-free lens, this is poorly understood. Men's risk may be mediated by some of the same issues, but through differently operating mechanisms in their embodied experience, and unique or emerging issues may expose men to different risk environments. To inform gender-sensitive responses for all people, new evidence applying a gender lens is required. This research generated data on 153 men's experiences of SDV, currently unexplored. Additional outputs of this research will maximise these data to explore trends and trajectories of the male experience.

7.6 Summary

The data generated for this thesis provide valuable new insights into the complexity of women's self-directed violence in a LMIC context. The findings highlight high levels of mental distress, interpersonal and intimate partner violence and lifetime prevalence of self-directed violence amongst Sri Lanka's reproductive age women. The particularities of women's gendered position in Sri Lankan society observed throughout this thesis including their sexual and reproductive health and rights, exposure to violence and expectations to embody respectable womanhood, emphasise the value of employing a gendered perspective to assess women's risk of self-directed violence and inform future policy and prevention efforts.

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Appendix 1: Center for Disease Control Uniform Definitions for Self-directed Violence

This study utilises the CDC's categorisations of self-directed violence. Official definitions are provided for each term, followed by a shortlist of selected terminology for this thesis, and a flowchart illustrating relationships between surveillance categories (Figure 9).

Definitions

Self-directed violence (analogous to self-injurious behavior)

Behavior that is self-directed and deliberately results in injury or the potential for injury to oneself.

This does not include behaviors such as parachuting, gambling, substance abuse, tobacco use or other risk taking activity, such as excessive speeding in motor vehicles. These are complex behaviors some of which are risk factors for SDV but are defined as behavior that while likely to be life-threatening is not recognized by the individual as behavior intended to destroy or injure the self. (Farberow, N.D. (Ed.) (1980). *The Many Faces of Suicide*. New York: McGraw-Hill Book Company). These behaviors may have a high probability of injury or death as an outcome but the injury or death is usually considered unintentional. Hanzlick, R., Hunsaker, J.C., Davis, G.J. Guide for Manner of Death Classification. National Association of Medical Examiners. Available at: http://www.charlydmiller.com/LIB03/2002NAMEmannerofdeath.pdf. Accessed 1 Sept 2009.

Self-directed violence is categorized into the following: **Non-suicidal** (as defined below) **Suicidal** (as defined below).

Non-suicidal self-directed violence

Behavior that is self-directed and deliberately results in injury or the potential for injury to oneself.

There is no evidence, whether implicit or explicit, of suicidal intent. Please see appendix for definition of implicit and explicit.

Suicidal self-directed violence

Behavior that is self-directed and deliberately results in injury or the potential for injury to oneself.

There is evidence, whether implicit or explicit, of suicidal intent.

Suicide attempt

A non-fatal self-directed potentially injurious behavior with any intent to die as a result of the behavior.

A suicide attempt may or may not result in injury.

Interrupted self-directed violence - by self or by other

By other – A person takes steps to inure self but is stopped by another person prior to fatal injury. The interruption can occur at any point during the act such as after the initial thought or after onset of behavior.

By self (in other documents may be terms "aborted" suicidal behavior) – A person takes steps to injure self but is stopped by self prior to fatal injury.

Source: Posner, K., Oquendo, M.A., Gould, M., Stanley, B., Davies, M. Columbia Classification Algorithm of Suicide Assessment (C-CASA): Classification of Suicidal Events in the FDA's Pediatric Suicidal Risk Analysis of Antidepressants. Am J Psychiatry. 2007; 164: 1035-1043.

This research avoids particular terminology deemed inappropriate as they carry valuejudgments on the behaviours they describe. Alternatives, aligned with the selected Center for Disease Control nomenclature, were used as below:

- 1. Completed or successful suicide is referred to as suicide.
- 2. Failed attempt is reported as suicide attempt or suicidal SDV.
- 3. Parasuicide does not account for intent and is thus distinguished as suicidal or non-suicidal SDV.
- 4. Suicidal gesture, manipulative act, or suicide threat are avoided terms.
- Suicidality often refers to both thoughts and behaviours and has been used sparingly in this thesis. Terminology distinguishing between these dimensions, e.g. suicidal ideation or suicidal behaviour, is applied wherever possible.
- 6. Language which verbs suicide, e.g. suiciding, suicided, to suicide, acknowledges agency of those utilising SDV as part of their behavioural repertoire and is supported terminology of the American Association of Suicidology (2015)

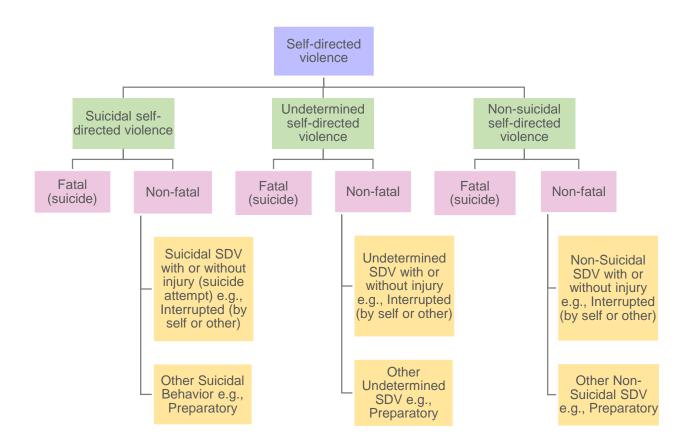


Figure 9. Flowchart for surveillance definitions of self-directed violence

Appendix 2: London School of Economics Research Ethics Committee Approval



THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

Houghton Street London WC2A 2AE United Kingdom

tel: +44 (0)20 7106 1202 email: rescon@lse.ac.uk

www.lse.ac.uk

Research Division

Alexis Palfreyman Department of Social Policy a.d.palfreyman@lse.ac.uk

8th June 2015

Dear Alexis

Re: Self-directed violence amongst women of reproductive age in Sri Lanka

I am writing with reference to the above research proposal. The Research Ethics Committee, having considered the documentation sent, is satisfied that the significant ethical issues raised by the proposed research have been properly taken into account and that adequate safeguards have been put in place. The Committee was impressed by the level of care and attention to detail in the application. I am accordingly able on behalf of the Committee to confirm our approval of the application.

I would like to take this opportunity to wish you well with your research project. If you have any further queries, please feel free to contact Lyn Grove, Research Division.

Yours sincerely,

Professor Hartley Dean Chair of the Research Ethics Committee

cc. Lyn Grove, Research Division

The London School of Economics is a School of the University of London. It is a charity and is incorporated in England as a company limited by guarantee under the Companies Acts (Reg. No 70527)

Appendix 3: Faculty of Medicine (University of Kelaniya) Research Ethics Committee Approval



Ethics Review Committee Faculty of Medicine, University of Kelaniya, Sri Lanka

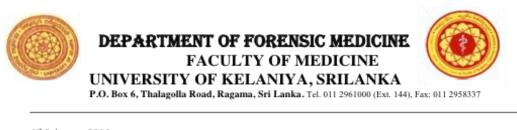


FWA00013225

Chairperson	12.08.2015
Prof A Pathmeswaran	12.06.2015
	Ref. No. P/135/08/2015
Secretary	Ms. Alexis D. Palfreyman
Dr Nirmala Perera	8 Dover Way Croxley Hertfordshire
Committee members	WD3 3SL UK.
Dr Madawa Chandrathilake	Dear Ms Palfreyman
Mr Jayatilleke de Silva	Subject: Self-directed violence amongst women of reproductive age in Sri Lanka
Dr Shamila de Silva	Applicant: Ms. Alexis D. Palfreyman
Prof Kithsiri Gunawardena	Thank you for submitting the above research proposal. I am pleased to inform you that the
Dr Aruni Hapangama	Ethics Review Committee which met on 11.08.2015 has granted conditional approval to the
Dr Indira Kitulwatte	above study.
Dr Durga Moratuwagama	However, considering the vulnerability of the study population and your informal contact with
Dr Channa Ranasinha	the staff of the faculty of medicine we suggest that you have a local supervisor or equivalent who can be held responsible for the welfare of the study participants.
Dr Lanka Ranaweera	Amend the Participant Information Sheet and include the contact details of local person
	sanena ne rancipan information sieet and include the contact details of local person (supervisor).
Dr Wasanthi Subasinghe	In addition please ensure that permission is obtained from the institutional head - Director
Prof Shirley Wijesinghe	North Colombo Teaching Hospital, Ragama & from relevant consultants providing clinical
Dr Shehan Williams	care to the participants before starting data collection.
Rev. Dr. Nihal Abeysinghe	We'll be issuing a formal letter of approval once the above issues are sorted out
Dr. Thilina Palihawadana	
Dr. K.C.D. Mettananda	
Dr. Ranmali Rodrigo	With best wishes, Yours sincerely,
	APathenean
	Prof. A. Pathmeswaran Chairperson/ERC

PO Box 6, Thalagolla Road, Ragama, Sri Lanka Telephone: +94 -112961000, Fax : +94-112958337 /+94-112955280

Appendix 4: Request for Permission to Conduct Research to Regional Director of Health Services – Gampaha



1st February 2016

The Regional Director Health Services Gampaha District

Through: Prof Nilanthi de Silva

Dean / Faculty of Medicine

University of Kelaniya

Dear Sir,

Study on 'Self-directed violence amongst women of reproductive age in Sri Lanka'

Ms Alexis Palfreyman is currently attached to the Faculty of Medicine, University of Kelaniya, as a postgraduate research student under my supervision. She is registered for a PhD at the London School of Economics, on the above topic. The study has received ethical clearance from both the LSE and the Ethics Review Committee of the Faculty of Medicine, University of Kelaniya, for the study (see enclosed documents).

The objectives of Ms Palfreyman's study are to advance the understanding of suicide and self-directed violence (SDV) among women of reproductive age (WRA) (15-49) in Sri Lanka, by answering three primary research questions:

- What dimensions of mental health and suicidality are present in the antenatal population in Gampaha District?
- For WRA who have engaged in SDV, what is the incidence of fatal and non-fatal events in Gampaha District?
- What are the pathways to SDV amongst Sri Lankan WRA, as understood through bereaved families, women themselves, and health service providers?

Ms Palfreyman has been in contact with Health Ministry officials in order to obtain data in relation to questions 1 & 2 above, but has been informed by Dr Risintha Premaratne Head of MoH Research Unit, that she should seek approval of the RDHS Gampaha, as her study will be confined to the Gampaha District.

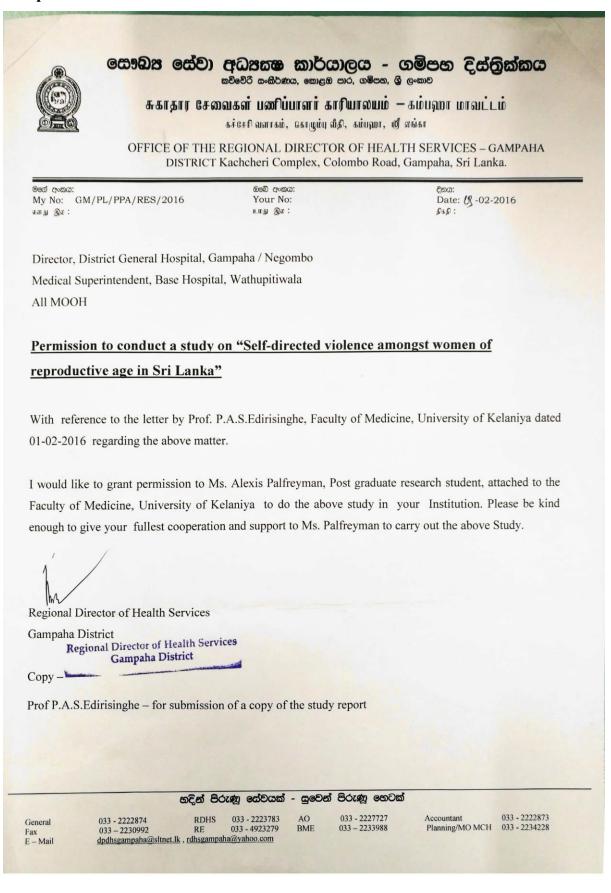
I shall be grateful if you would grant Ms Palfreyman access to work with antenatal services, medical and surgical wards in Ragama Teaching Hospital and 2-3 selected community antenatal sites where screening of women's mental wellbeing would take place. In addition, access to work with Gampaha District's Judicial Medical Officers to identify incidents of fatal self-harm in women in recent years would be greatly appreciated.

Thanking you

Yours faithfully

Prof P A S Edirisinghe MD(For Med), MBBS,DLM,DMJ(Lond), MFFLM(UK)

Appendix 5: Letter of Approval from Regional Director of Health Services – Gampaha



Appendix 6: Letter of Approval from Colombo North Teaching Hospital Director's Office

Ms. Alexis D. Palfreyman, MSc Email: <u>a.d.palfreyman@lse.ac.uk</u> +94 (0)769827912

4 April 2016

Director and Deputy Director Colombo North Teaching Hospital Annasihena Road Ragama Sri Lanka

RE: APPROVAL FOR PHD RESEARCH ON SELF-HARM AND SUICIDE IN WOMEN IN GAMPAHA DISTRICT WITH UNIVERSITY OF KELANIYA AND THE LONDON SCHOOL OF ECONOMICS

Dear Sirs,

I hope this finds you well. I am pleased to follow up after meeting with Deputy Director and Professor Shaluka Jayamanne regarding the above research to request your written approval for the research.

At our meeting we discussed my proposed PhD research. This project aims to advance our understanding of suicide and self-directed violence (SDV) among women of reproductive age (WRA) (15-49) in Gampaha District, by answering three primary research questions:

- 1. What dimensions of mental health and suicidality are present in the antenatal population in Gampaha District?
- 2. For WRA who have engaged in SDV, what is the incidence of fatal and non-fatal events in Gampaha District?
- 3. What are the pathways to SDV amongst Sri Lankan WRA, as understood through bereaved families, women themselves, and health service providers?

The key aspects of the research for the hospital relate to questions 2 and 3 above in which we aim to establish a system within in the hospital to prospectively identify

all WRA attending for self-harm, to gather some preliminary information from each patient, and later to select a small sub-sample for qualitative engagement.

As agreed, I have provided a copy of the full project proposal, which has received ethical approval from both the London School of Economics and the University of Kelaniya, for your records and review.

Additionally, I am under the local supervision of Dr. Anuruddhi Edirisinghe, Professor of Forensics at the University of Kelaniya, and she is providing both oversight and guidance for the pragmatics and ethics of the research throughout the lifetime of the fieldwork (lasting through 2016).

With your approval, I will be working in collaboration with Professor Shaluka Jayamanne at the University's Faculty of Medicine and medical staff in Colombo North Teaching Hospital to conduct this needed research. It will involve engagement with health service providers and patients to achieve its aims.

It is a top priority of the research to share findings with you, the Faculty of Medicine and the involved health services to ensure it is as beneficial to your services, women and their families in Gampaha District as possible.

I very much appreciate your support for the research to commence and to sharing how the research develops over the coming months.

Yours sincerely,

Alexis D. Palfreyman, MS

Approved

Director / Deputy Director, for Direct Colombo North Teaching Hospital Deputy Director Colombo Morth Teaching Hospital Ragama

Jun Resurch.

Appendix 7: Letter of Approval from Gampaha Hospital Director's Office

Ms. Alexis D. Palfreyman, MSc Email: <u>a.d.palfreyman@lse.ac.uk</u> +94 (0)769827912

1 September 2016

Director and Deputy Director District General Hospital - Gampaha Gampaha Sri Lanka

RE: APPROVAL FOR PHD RESEARCH ON SELF-HARM AND SUICIDE IN WOMEN IN GAMPAHA DISTRICT WITH UNIVERSITY OF KELANIYA AND THE LONDON SCHOOL OF ECONOMICS

Dear Sirs,

I hope this finds you well. I am pleased to follow up after meeting with the Director regarding the above research to request your written approval to proceed with the JMO office, Gampaha.

At our meeting we discussed my proposed PhD research. This project aims to advance our understanding of suicide and self-directed violence (SDV) among women of reproductive age (WRA) (15-49) in Gampaha District, by answering three primary research questions:

- 1. What dimensions of mental health and suicidality are present in the antenatal population in Gampaha District?
- 2. For WRA who have engaged in SDV, what is the incidence of fatal and non-fatal events in Gampaha District?
- 3. What are the pathways to SDV amongst Sri Lankan WRA, as understood through bereaved families, women themselves, and health service providers?

The key aspects of the research for you and the Gampaha JMO office relate to questions 2 and 3 above in which we are gathering the case information on all known female suicides under Gampaha JMO jurisdiction for 2015 and 2016. The purpose is to gather preliminary information from the JMO register and related records from each suicide case, and later to select a small sub-sample for psychological autopsy engagement.

We are currently successfully doing this with Dr. Ruhul Haq (Negombo JMO) and Dr. Handun Wijewardena (Ragama JMO) to ensure that across the three Gampaha District JMO offices, we cover all female suicides for 2015-2016. If you would like further information on

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this process, both Dr. Ruhul and Dr. Handun will be happy to advise as they have both been active supporters of the work.

As agreed, I have provided a copy of the ethics approval from both the London School of Economics and the University of Kelaniya, for your records and review, as well as approval and a request for cooperation from the Regional Director of Health Services – Gampaha, clearance for the same from Director Colombo North Teaching Hospital and a summary project proposal.

Furthermore, I am under the local supervision of Dr. Anuruddhi Edirisinghe, Professor of Forensics at the University of Kelaniya, and she is providing both oversight and guidance for the pragmatics and ethics of the research throughout the lifetime of the fieldwork (lasting through 2016).

With your approval, I will be working in collaboration with Dr. Gunathilaka and the JMO team in Gampaha to conduct this needed research.

It is a top priority of the research to share findings with you, the Faculty of Medicine and the involved health services to ensure it is as beneficial to your services, women and their families in Gampaha District as possible.

I very much appreciate your support for the research.

Yours sincerely,

AlusDParper

Alexis D. Palfreyman, MSc

Professor P. A. S. Edirisinghe

Director / Deputy Director, Colombo North Teaching Hospital

Appendix 8: Terms of Reference for Research Assistant 1

Terms of Reference

Post: Research Assistant – Wellbeing and mental health in antenatal women in Gampaha District

Project: Exploring pathways of self-directed violence amongst Women of Reproductive Age (15-49) in Gampaha District, Sri Lanka

Background to the Project:

Every year over 900 women die by suicide in Sri Lanka and many more experience nonfatal incidents of self-directed violence. Although treatment of self-harming patients has improved in recent years and deaths appear to be declining, non-fatal self-harm is believed to be increasing in Sri Lanka, particularly among women. Additionally, recent evidence suggests that death by suicide is now a leading contributor to women's deaths during pregnancy and postpartum. Despite this, little is known about women's mental health during pregnancy including their experience of suicidality (i.e. ideation and behaviours), and there is limited evidence on the contexts and circumstances in which women are choosing to engage in fatal or non-fatal self-harm. In order to inform future interventions and to identify possible risk factors, in-depth research is needed, particularly in more urbanised settings in Sri Lanka where less is known about this phenomenon.

The current study comprises PhD fieldwork for a doctoral candidate from the London School of Economics, working in collaboration with the University of Kelaniya's Faculty of Medicine, and is funded by the UK Economic and Social Research Council and the doctoral candidate.

Purpose of this Role:

The below described post is one of two research assistant roles in the research project working with pregnant women attending antenatal services in Gampaha District, with the primary purpose to screen antenatal women for mental ill-health.

Duties & Responsibilities:

The RA will be given training on research methodologies and the study's data collection tools prior to engaging in the field activities.

- Ensure that data are gathered and recorded in a timely, reliable and cost-efficient manner
- Ensure that data collection and reporting are aligned to contractual targets and performance parameters
- Independent and team travel around Gampaha District
- Scope of work
 - Piloting of 3 data collection tools in antenatal services in Gampaha District including:
 - Edinburgh Postnatal Depression Scale

- Columbia-Suicide Severity Rating Scale
- Sociodemographic / lifestyle questionnaire
- Screening of 1000 pregnant women attending antenatal services in Gampaha District using the above mentioned tools for mental ill-health, thoughts and behaviours of self-harm, and sociodemographic characteristics. This process also involves:
 - Introducing the research and gaining informed consent from participating women prior to them filling out the three paper-based tools
 - Providing women with further written information on women's support services if they are interested / in need
- Entering of participating women's responses into data management software including Microsoft Access and SPSS
- Reviewing and ensuring the accuracy and completeness of data entry, reviewing and updating existing database
- Liaising with antenatal health service providers, Public Health Midwives, Departments of Obstetrics & Gynaecology and Public Health at University of Kelaniya, and the Medical Officer of Maternal Child Health, Gampaha Regional Health Services office and any other relevant stakeholders to achieve the data collection targets.

Reporting:

The RA will report to the lead researcher, a PhD candidate from the London School of Economics. They will be part of a team and therefore also be working with other research assistants at times, members of the University of Kelaniya's Faculty of Medicine and health service providers. Often work will be done jointly with the lead researcher, but there will also be considerable independent work expected of the research assistants with regular reporting to the lead researcher.

Working hours:	Monday – Thursday weekly, 8am – 5pm
Duration:	On a rolling contract basis, 5 April 2016 through completion of data collection (exp. Aug. 2016)

Appendix 9: Terms of Reference for Research Assistant 2

Terms of Reference

Post: Research Assistant – Engagement with women experiencing non-fatal selfdirected violence in hospital

Project: Exploring pathways of self-directed violence amongst Women of Reproductive Age (15-49) in Gampaha District, Sri Lanka

Background to the Project:

Every year over 900 women die by suicide in Sri Lanka and many more experience nonfatal incidents of self-directed violence. Although treatment of self-harming patients has improved in recent years and deaths appear to be declining, non-fatal self-harm is believed to be increasing in Sri Lanka, particularly among women. Additionally, recent evidence suggests that death by suicide is now a leading contributor to women's deaths during pregnancy and postpartum. Despite this, little is known about women's mental health during pregnancy including their experience of suicidality (i.e. ideation and behaviours), and there is limited evidence on the contexts and circumstances in which women are choosing to engage in fatal or non-fatal self-harm. In order to inform future interventions and to identify possible risk factors, in-depth research is needed, particularly in more urbanised settings in Sri Lanka where less is known about this phenomenon.

The current study comprises PhD fieldwork for a doctoral candidate from the London School of Economics, working in collaboration with the University of Kelaniya's Faculty of Medicine, and is funded by the UK Economic and Social Research Council (ESRC) and the doctoral candidate.

Purpose of this Role:

The below described post is one of two research assistant roles in the research project working with women attending Colombo North Teaching Hospital for self-harm related injuries, with the primary purpose to establish a surveillance system to identify these women and gather background information on them.

Duties & Responsibilities:

The RA will be given training on research methodologies and the study's data collection tools prior to engaging in the field activities.

- Ensure that data are gathered and recorded in a timely, reliable and cost-efficient manner
- Ensure that data collection and reporting is aligned to contractual targets and performance parameters
- Scope of work:
 - Hospital surveillance system role:
 - Participate in the establishment of a patient notification system to prospectively identify all women attending Colombo North Teaching Hospital for reasons of self-harm

- Routinely visit relevant hospital wards to identify women meeting inclusion criteria
- Gather preliminary details on each woman's case (during her admission)
- Entering and management of data gathered on each woman into Microsoft Access / SPSS database
- Liaise with CNTH staff on a daily basis and Department of Medicine at the University of Kelaniya (Prof. Jayamanne) as needed
- Qualitative research role:
 - Participate in the finalisation and translation of data collection tools and informed consent materials
 - Support the lead researcher in conducting qualitative in-depth interviews with female SDV patients
 - Support the lead researcher in conducting qualitative in-depth interviews with families of suicided women
 - Support the lead researcher in conducting qualitative in-depth interviews or focus group discussions with health service providers
 - Transcription and translation of qualitative data into English
- \circ $\;$ Support to RA 1 in selected ANC clinics as needed
- \circ Forensic file translation role:
 - As an additional task, basic translation of the contents of forensic files on women who have already died by suicide in Gampaha District (2015 and 2016 deaths) from Sinhala into English is requested

Reporting:

The RA will report to the lead researcher, a PhD candidate from the London School of Economics. They will be part of a team and therefore also be working with other research assistants at times, members of the University of Kelaniya's Faculty of Medicine and health service providers. Often work will be done jointly with the lead researcher, but there will also be considerable independent work expected of the research assistants with regular reporting to the lead researcher.

Working hours: Monday – Saturday weekly, 8am – 4pm

Duration: On a contract basis, initially 23 May 2016 – 20 June 2016

Appendix 10: Example Research Assistant Confidentiality Agreement

RESEARCH ASSISTANT CONFIDENTIALITY AGREEMENT PHD RESEARCH

[Self-directed violence amongst women of reproductive age in Sri Lanka]

I, [name of research assistant], agree to assist the principal investigator [Alexis D. Palfreyman] with this study by:

- attending selected antenatal clinics in Gampaha District,
- supporting patients to complete a survey on their mental wellbeing,
- providing information to patients on support services,
- entering and maintaining survey data, and
- creating electronic copies of survey data.

I agree to maintain full confidentiality when performing these tasks.

Specifically, I agree to:

- 1. keep all research information shared with me confidential by not discussing or sharing the information in any form or format (e.g., USBs, disks, hard copy papers, transcripts) with anyone other than the principal investigator or approved members of the research team;
- 2. hold in strictest confidence the identification of any individual that may be revealed during the course of performing the research tasks;
- 3. not make copies of any raw data in any form or format (e.g., USBs, disks, hard copy papers, transcripts), unless specifically requested to do so by the primary investigator;
- 4. keep all raw data that contains identifying information in any form or format (e.g., USBs, disks, hard copy papers, transcripts) secure while it is in my possession. This includes:
 - keeping all digitised raw data in computer password-protected files and other raw data in a locked file;
 - closing any computer programmes and documents of the raw data when temporarily away from the computer;
 - permanently deleting any e-mail communication containing the data; and
 - using closed headphones if transcribing recordings;
- 5. give, all raw data in any form or format (e.g., USBs, disks, hard copy papers, transcripts) to the principal investigator when I have completed the research tasks;
- 6. destroy all research information in any form or format that is not returnable to the principal investigator (e.g., information stored on my computer hard drive) upon completion of the research tasks.

Provide the following contact information for research assistant:

Printed name of research assistant:	
Address:	
Telephone number:	
Signature of research assistant:	Date:
Printed name of principal investigator:	
Signature of principal investigator:	Date:

Appendix 11: Example Translator / Transcriptionist Confidentiality Agreement

TRANSLATOR CONFIDENTIALITY AGREEMENT PHD RESEARCH [Self-directed violence amongst women of reproductive age in Sri Lanka]

I, [name of translator], do hereby agree to maintain full confidentiality when serving as a

translator for this research project.

I will be performing the following translation services (check all that apply)

- _ Transcribing recordings or other raw data (e.g. survey responses) into English from Sinhala
- ____ Verbally translating information from English into Sinhala or vice versa
- ____ I verify that I possess the qualifications to accurately perform the translations

Specifically, I agree to:

- 1. keep all research information shared with me confidential by not discussing or sharing the information in any form or format (e.g., USBs, disks, hard copy papers, transcripts) with anyone other than the principal investigator or other approved members of the research team;
- 2. hold in strictest confidence the identification of any individual revealed during the transcription of recordings, during a live oral interview, or in any other raw data (e.g. collection of survey data);
- 3. not make copies of any raw data in any form or format (e.g., USBs, disks, hard copy papers, transcripts), unless specifically requested to do so by the principal investigator;
- 4. keep all raw data that contains identifying information in any form or format (e.g., USBs, disks, hard copy papers, transcripts) secure while it is in my possession. This includes:
 - keeping all digitised raw data in computer password-protected files and other raw data in a locked file;
 - closing any computer programmes and documents of the raw data when temporarily away from the computer;
 - permanently deleting any e-mail communication containing the data; and
 - using closed headphones if transcribing recordings
- 5. give, all raw data in any form or format (e.g., disks, tapes, transcripts) to the principal investigator when I have completed the translation tasks.
- 6. destroy all research information in any form or format that is not returnable to the principal investigator (e.g., information stored on my computer hard drive or any backup device) upon completion of the translation tasks.

Provide the following contact information for research assistant:

Printed name of research assistant:	
Address:	
Telephone number:	
Signature of research assistant:	Date:
Printed name of principal investigator:	
Signature of principal investigator:	Date:

Appendix 12: Informed Consent for Antenatal Screening

Informed Consent - Wellbeing and Mental Health during Pregnancy

PhD Research Department of Social Policy London School of Economics and the University of Kelaniya 2016

For women participating in a study exploring wellbeing and mental health amongst pregnant women in Gampaha District, Sri Lanka.

Introduction

As you have been informed by the midwife or research assistant, we are currently undertaking research as part of a project between the University of Kelaniya and the London School of Economics. As part of this process we are interested in exploring pregnant women's wellbeing, particularly their mental and emotional health. You were selected for this study because you are a pregnant woman attending the antenatal services in Gampaha District and we are interested in better understanding how women like you are feeling during pregnancy and whether the services may be able to better support women in Gampaha during their pregnancies. We will be asking 1000 women in Gampaha for their responses.

What am I asking of you?

The questionnaire is concerned with:

- Feelings of sadness
- Negative emotions
- Thoughts or experiences of harming oneself
- Some basic questions about your life circumstances

All the information that you provide will remain anonymous, which means that no one will be able to know who you are. You can answer the questionnaire privately unless you would like clarification from the research assistant about a particular question, and will take about 20 minutes of your time. Capturing your perspective is important.

What are the potential benefits of participating?

Women experience many different feelings during pregnancy and in other times during their lives. Some women may feel low in their pregnancy while others experience it as a very happy period, and we are interested in understanding how we may be able to identify women who would benefit from extra support if they are not feeling their best. By answering this questionnaire, you will be providing information that will be useful in helping us to know which women need enhanced care and support.

What happens if you do not wish to participate?

Participation is voluntary and there are no consequences for refusing to participate. Before making a decision about participation, please feel free to ask any questions about what I have just explained.

If you agree to participate, this form will be shared with you to show that the study has been explained to you and that you agree to be part of it. The research assistant will keep a record of your participation, and leave this information sheet with you if you should wish to get in touch with the research team or seek any advice or support following participation.

It is important to answer all of the questions as honestly as possible and to answer all the questions. Remember only the research team will see your responses and no one will know your name. You may decide to end your participation at any time if you don't feel comfortable about continuing.

The research team has the best intentions in mind for all participating women and in the event that a woman seems distressed or in need of help, we would like to connect her with a source of support. This is the only occasion when a participating woman's name may be shared with a health professional in confidence and would only be in circumstances in which the research team is concerned for her wellbeing.

What happens if I want to know more?

If you wish to have further information or if you have questions you wish to ask after the interview, please contact the research assistant you met today or the lead researcher directly:

Research assistant's name: Ms. Chamilya Perera Email: <u>gampaha.womens.study@gmail.com</u>

Lead researcher's name: Ms. Alexis D. Palfreyman, MSc Email: <u>gampaha.womens.study@gmail.com</u> Phone: [redacted]

Supervisor (University of Kelaniya): Prof. P. Anuruddhi S. Edirisinghe MD(For Med), MBBS, DLM, DMJ (Lond), MFFLM(UK) Professor of Forensic Medicine Department of Forensic Medicine Email: <u>anuruddhi@kln.ac.lk</u> Phone: [redacted]

If you or someone you know would benefit from support about how you are feeling or if any issues arise from participating in this study that you would like to discuss, there are several options:

1. Sumithrayo

Sumithrayo provides emotional support in a friendly and confidential manner and has been working with thousands of people around Sri Lanka for over forty years. They are always happy to help, 365 days a year. If you would like to speak to someone in confidence at Sumithrayo, you may contact them by phone, email, letter, or face-to-face:

Phone: 011 2692909

011 2696666

011 2683555

Email: sumithra@sumithrayo.org Address: No. 60B, Horton Place Colombo 07

2. Mental Health Services, Gampaha District

Dr. P. A. D. Premarathna
033 2234228
033 2230992
033 2222116
011 2489785
011 2404769
011 2914782
011 2958035

3. Perinatal Psychiatric Unit, National Institute of Mental Health, Angoda

This is an in-patient unit for pregnant and postpartum women experiencing mental ill-health with expert care for women in this stage of life.

Phone number: 011 257 8234 / 8235 / 8236 / 8237

(Instructions to research assistant, ask the respondent:

1. Are you willing to participate by filling out a questionnaire about the issues that I've just mentioned? Please remember that you do not have to participate if you do not want to.

2. Do I have your permission to include your responses, without your name, in the research findings, which will be shared and published?)

Informed Consent

Researcher's Declaration	ı
1,	Date
	e explained clearly to the participant the aims and objectives of this e participant's consent to participate according to the

I understand the terms of participation that have been explained to me both orally from the research assistant and through this form and hereby agree to voluntarily participate in this research.

Respondent's signature

Date: -----

Appendix 13: Antenatal Screening Instrument

Screening for Wellbeing and Mental Health in Pregnancy

Survey Cover Sheet

Participant ID:	

Clinic ID:	
Chine ID.	

Date survey	
completed	
(D/M/Y):	

Participant	
ID:	

Edinburgh Postnatal Depression Scale

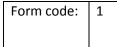
As you are pregnant, we would like to know how you are feeling. Please choose the answer that comes closest to how you have felt **IN THE PAST 7 DAYS**. Choose just one answer for each question.

In the past 7 days:

- 1. I have been able to laugh and the see the funny side of things
 - As much as I always could
 - \Box Not quite so much now
 - Definitely not so much now
 - Not at all
- 2. I have looked forward with enjoyment to things
 - □ As much as I ever did
 - □ Rather less than I used to
 - Definitely less than I used to
 - Hardly at all
- 3. I have blamed myself unnecessarily when things went wrong
 - □ Yes, most of the time
 - □ Yes, some of the time
 - Not very often
 - No, never
- 4. I have been anxious or worried for no good reason
 - No, not at all
 - Hardly ever
 - □ Yes, sometimes
 - □ Yes, very often
- 5. I have felt scared or panicky for no very good reason
 - □ Yes, quite a lot
 - Yes, sometimes
 - No, not much
 - No, not at all
- 6. Things have been getting on top of me
 - □ Yes, most of the time I haven't been able to cope at all
 - Yes, sometimes I haven't been coping as well as usual
 - □ No, most of the time I have coped quite well
 - □ No, I have been coping as well as ever
- 7. I have been so unhappy that I have had difficulty sleeping
 - Yes, most of the time
 - Yes, sometimes
 - □ Not very often
 - No, not at all
- 8. I have felt sad or miserable
 - □ Yes, most of the time
 - □ Yes, quite often
 - □ Not very often
 - No, not at all
- 9. I have been so unhappy that I have been crying
 - □ Yes, most of the time

Participant	
ID:	





- □ Yes, quite often
- Only occasionally
- □ No, never

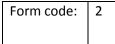
10. The thought of harming myself has occurred to me

- Yes, quite often
- Sometimes
- \Box Hardly ever
- Never

Participant	
ID:	







Columbia-Suicide Severity Rating Scale (C-SSRS)⁸⁸

The next part of the survey asks women specific questions about whether they have ever experienced thoughts or behaviours of self-harm and suicide. We are interested in whether women have experienced these things ever in their whole lives **AND** also specifically during their current pregnancy.

Please read the questions carefully and answer as honestly as possible.

IDEATION Check off "Yes" or "No" in the right-hand column for each question. Please answer BOTH columns	Life	Lifetime		During this Pregnancy	
	Yes	No	Yes	No	
1. Have you ever thought you would be better off dead?					
	Yes	No	Yes	No	
2. Have you ever wished you could go to sleep and not wake up?					
3. Have you ever had any thoughts of killing yourself?	Yes	No	Yes	No	
4. Have you ever thought about how you might kill yourself (for	Yes	No	Yes	No	
example, taking pills)?					
5. Have you ever had these thoughts about killing yourself and had	Yes	No	Yes	No	
some intention of acting on them? Did you think you could actually go through with your plan to kill yourself?					
6. Have you ever started to work out or worked out the details of	Yes	No	Yes	No	
how to kill yourself (for example, exactly how, where, and when) with the intent of carrying out this plan?					
7. Have you ever heard noises or voices that other people cannot		No	Yes	No	
hear (or when no one else is around), or have you ever seen things that other people do not see?					

⁸⁸ Self-Report. Lifetime and During this Pregnancy. Version 3/3/16. Adapted from: *Posner, K.; Brent, D.; Lucas, C.; Gould, M.; Stanley, B.; Brown, G.; Fisher, P.; Zelazny, J.; Burke, A.; Oquendo, M.; Mann, J.* C-SSRS Self Report Lifetime / Last month 6/30/10 version.

Participant	Ī
ID:	

Clinic
ID:



If you have answered "Yes" to any of Questions 1-7, even just once, please answer Questions 8 – 12.

If you have answered "No" to all of Questions 1-7, please skip ahead to Question 13.

INTENSITY OF IDEATION Please answer BOTH columns		Time in your life when you felt the worst	During this pregnancy
8. How many days a week did you	Very rarely		
have these thoughts?	Less than one day a week		
	One day a week		
	2-3 days a week		
	4-5 days a week		
	6-7 days a week		
	Never / not applicable		
9. How often did these thoughts usually last on the days you had	Just a few seconds or minutes		
them?	Less than 1 hour		
	1-4 hours		
	5-8 hours		
	More than 8 hours		
	Never / not applicable		
10. How easy was it for you to control these thoughts or push them out of	Easy		
your mind when you wanted to?	A little difficult		
	Somewhat difficult		
	Very difficult		
	Impossible; unable to control the thoughts		
	Didn't attempt to control thoughts		
	Not applicable		
11. Are there things - anyone or anything (e.g., family, religion, pain	Deterrents definitely stopped me from attempting suicide		
of death) - that stopped you from wanting to die or acting on thoughts of suicide?	Deterrents probably stopped		

Participant Clinic ID:	Date (M/D/Y):	Form co	ode: 2
	Uncertain that deterrents stopped me		
	Deterrents most likely did not stop me		
	Deterrents definitely did not stop me		
	Does not apply		
12. What sort of reasons did you have for thinking about wanting to die or killing yourself?	Completely to get attention, revenge or a reaction from others		
	Mostly to get attention, revenge or a reaction from others Equally to get attention,		
	revenge or a reaction from others and to end/stop the pain		
	Mostly to end or stop the pain (you couldn't go on living how you were feeling)		
	Completely to end or stop the pain (you couldn't go on living with how you were feeling)		
	Does not apply		

Participant	
ID:	

Clinic
ID:

Date (M/D/Y):

BEHAVIOR : Answer the questions below. Check "Yes" or "No" in the right-hand column for each question. Please answer BOTH columns	Life	time	During this pregnancy	
13. Have you made a suicide attempt or done anything to harm				
yourself because you wanted to die (even if you were not	Yes	No	Yes	No
totally sure you wanted to die or just wanted to die a little bit)?				
How many times has this happened?	Total #	of times	Total #	of times
14. Have you done anything to harm yourself purely for other				
reasons, <u>without any intent to die (</u> like to relieve stress,	Yes	No	Yes	No
feel better, get sympathy, or get something else to happen)?				
How many times has this happened?	Total #	of times	Total #	of times
15. Has there been a time when you started to do something to				
end your life but someone or something stopped you	Yes	No	Yes	No
before you actually did anything (e.g., you had the pills in your hand but a friend stopped you from taking them)?				
How many times has this happened?	Total #	of times	Total #	of times
16. Has there been a time when you started to do something to				
try to end your life but you stopped yourself before you	Yes	No	Yes	No
actually did anything (e.g., you took out pills but then				
changed your mind before you could swallow any of them)?				
How many times has this happened?	Total # 	t of times	Total #	of times
17. Have you taken any steps towards making a suicide				
attempt or preparing to kill yourself (e.g., collecting pills, or	Yes	No	Yes	No
writing a suicide note)?				
How many times has this happened?	Total #	of times	Total #	of times

Participant		Clinic		Date		Form code
ID:		ID:		(M/D/Y):		

le: 3

Sociodemographic questions for women in antenatal care

Please take a few minutes to tell us a little bit more about yourself by answering the following questions. If there is a small box like this \Box , please check the box like this \checkmark that is the best response for your situation. For answers requesting numbers, please write the number as clearly as possible.

What age did	you turn at yo	ur last birthday				
Religion:						
Buddhist	Muslim	Hindu		Roman	Other	Other
				Catholic 💭	Christian 🔲	
Ethnicity:						
Sinhala	Sri Lankan	Indian	Moor	Burgher	Malay	Other
\bigcirc	Tamil 🔲	Tamil 🔲				

Marital status	5:							
Single		Married 🔲		Divoro	ed	Widowed		
If living with a man, how old were you when you first started living with him?								
If you are mai	rried, who c	hose your husba	and?					
Your family		His family / he	chose	You cł	nose him	Joint dec	ision	
		you		\bigcirc				
Who do you live with? (please tick all that apply):								
Alone	Husband	Partner	Own pa	irents	Spouse's	Children	Other	
					parents 🔲			

What is your highest level of education attainment?									
Primary	Secondary	College	/ Diploma	University / Degree	Post graduate				
Your employment status: (Full-time = 40 or more hours each week; Part-time = less than 40 hours each week)									
Full-time	Part-time	Student	Housewif	e Unemploye	ed Other				

Participant	
ID:	

Your spouse's employment status: (Full-time = 40 or more hours each week; Part-time = less than 40 hours each week)									
Full-time	Part-time	Student	Unemployed	Other					
-	Other than your mortgage, is your household in debt to anyone or any entity (e.g. bank, company, credit card agency)?								
If yes, is this de	Yes	No 💭							
Is money or the stress for you?	Yes	No 💭							

Pregnancy history:				
Are you currently pregnant?	Yes	No	Gestation of current pregnancy (how many weeks along are you?):	
Is this your first pregnancy?	Yes 🔲	No		
Outcome of last pregnancy?			Number of living children:	
Delivered a Miscarriage live baby	Stillborn	Abortion		
Just before I became pregnant (please tick th	he answer that	most applies to you):	
I intended to get pregnant My intentions kept changing I did not intend to get pregna				
Just before I became pregnant (please tick tl	he answer that	most applies to you):	
I wanted to have a baby	I had mix having a l	ed feelings ab baby 问	out I did not want to have a baby	

Do you have a chronic illness? E.g. diabetes, heart condition, chronic pain, etc.	Yes	No
To your knowledge, does anyone in your family have a history of mental disorder?	Yes	No

Participant	Clinic	Date	Form code: 3
ID:	ID:	(M/D/Y):	

If you had a problem and wanted to talk to someone for advice, whom would you speak to (please tick all that apply)?						
Husband /	Parent	Siblings	Spouse's parents	Other family		
partner						
Friend	Health provider	Other	Unsure	I don't have		
				anyone to speak		
				to		
l address						
problems on						
my own 💭						

Does your husband/partner drink alcohol?					
Never	Sometimes 🔲	Often 💭			
Do you feel his drinking is a proble	m? Yes	No 💭	Unsure		

Sometimes a husband is annoyed or angered by things that his wife does. In your opinion, is a						
husband justified in hitting or beating his wit	fe in the follow	ing situations:				
If she goes out without telling him?	Yes 🔲	No	Unsure 🔲			
If she neglects the children?	Yes	No 🔲	Unsure 🔲			
If she argues with him?	Yes 🔲	No 💭	Unsure 🔲			
If she refuses to have sex with him?	Yes	No 💭	Unsure 🔲			
If she burns the food?	Yes	No 💭	Unsure			
Now I am going to ask you about some situa	tions which ha	ppen to some wome	n. Please tell me if			
these apply to your relationship with your (la	ast) husband/p	artner?				
He (is/was) jealous or angry if you (talk/talked) to other men?	Yes 🔲	No	Unsure 问			
He frequently (accuses/accused) you of being unfaithful?	Yes 💭	No 🔲	Unsure 🔲			
He (does/did) not permit you to meet your girl friends?	Yes	No 💭	Unsure 🔲			
He (tries/tried) to limit your contact with your family?	Yes	No	Unsure			
He (insists/insisted) on knowing where you (are/were) at all times?	Yes	No 💭	Unsure 🔲			

Participant	Cl	linic	Date		Form code:	3
ID:	ID	1 •	(M/D/Y):			

He (does/did) not trust you with any money?	Yes	No	Unsure 🔲
Have you been humiliated / intimidated / made to feel worthless or emotionally harmed in any other way?	Yes	No	Unsure 🔲
Have you been Hit / Slapped / Burned / Kicked / Bitten / Pushed / Strangled / Shown a weapon and threatened to be physically harmed / Actually been harmed by a weapon / Threatened to be killed / Attempted to be killed or physically harmed in any other way?	Yes	No	Unsure
Have you been forced to have sex or forced to do something sexual that you didn't want to do?	Yes	No	Unsure
Have you ever experienced your money being taken away against your will or not been given money when you needed it?	Yes	No	Unsure
Has anyone physically hurt you during pregnancy?	Yes	No	Unsure 🔲

Who did you go to for help (please tick all that apply)?						
Husband /	Parent	Siblings	Spouse's parents	Other family		
partner		Ο				
Friend	Health provider	Other	Unsure	I didn't speak to		
			\Box	anyone 🔲		

* If you would like more information on support for any of these issues for yourself or a friend, please ask the research assistant as we can provide information on services that may help women facing these issues.

Thank you for participating in our research

Appendix 14: Gender-based Violence Support Materials

GBV Service Providers

Mithuru Piyasa Family Health Bureau No: 231, De Saram Place, Colombo - 10. 2011 3 040 541

BH Thambuththegama ☎ : 025 2 276 262 BH Marawila ☎: 032 2 254 261

 Police Bureau for the Abuse of Women and Children

 No 16, Pagoda Rd, Nugegoda.

 2011 2 826 444 / 011 2 768 076

 Chilaw (2012) 222 222

Anuradhapura 12:025 - 2 222 223

National Child Protection Authority No: 330, Thalawathugoda Rd, Madiwela, Sri Jayawardenepura. Hot Line 1929

Women In Need (WIN) No 25, Tickle Rd, Colombo - 08. 2011 4 718 585

Puttalam 🕾: 032 - 5 672 161 Anuradhapura 🕾: 025 - 2 225 708

Happy Life Contact Center The Family Planning Association of Sri Lanka 37/27, Bullers Lane, Colombo - 07. 🕾: 011 2 588 488

™: 011 5 335 329 / 011 5 335 281
 Marawila
 Marawila
 1032 - 2 254 443

Anuradhapura 🕾: 025 - 2 224 465

Ministry of Women's Affairs 3rd & 5th Floor, Sethsiripaya Stage II, Battaramulla. 2 101 2 186 057

Sri Lanka Sumithrayo, P.O.Box 60B,Horton Place, Colombo - 07. : 011 2 692 909





DO YO

or

Your Sister / Brother

Mother / Father Friend Neighbour

Experience physical, sexual, or emotional violence?

Break the silence. Seek help. We are here to assist you



Do you know?

- Violence involving women and men based on their gender is called 'Gender Based Violence' (GBV)
- GBV can take place in many forms, including Physical Violence, Sexual Violence, Psychological Violence or Economical Violence.
- Survivors of GBV are largely women. In Sri Lanka, at least one in every three women are known to experience GBV during their lifetime.
- GBV could take place at homes, work places, in the community, and even in public transportation. But the most common form of GBV is violence performed by a husband or a male partner.
- Women who experience GBV can be wealthy or poor, educated or illiterate, married or single, and of any nationality.
- Many do not disclose GBV because of shame, fear for the perpetrators, thinking of their children, and financial insecurities .But women who disclose GBV can gain support from relatives, neighbours, health workers, social workers, religious leaders and most importantly from the police and the courts.

Using violence within a relationship is not acceptable.

- Different forms of physical violence include, but are not limited to punching, hitting, choking, biting, kicking, pushing, using a weapon and throwing objects at a partner.
- Sexual Violence includes forceful demands for sex, demanding to perform certain sexual acts that a person dislikes, forcing a person to have sex with other individuals, treating a person in a sexually derogatory manner or insisting on unsafe sex, ect.
- Psychological Violence includes mistreatment and undermining of a partners self-worth and self-esteem.
 Besides this, criticism, threats, insults, belittling comments and isolating a partner from family and friends, ect.

 Economic violence is identified as withholding money or preventing the access to money according to a partner's requirement.

What's more,

GBV can also cause several health effects. These might have a range of minor bruises to severe depression which could eventually lead to suicides or homicides.

Effects of GBV can persist even after violence ends and in some situations cause lifelong effects.

Children who witness GBV can develop psychological disorders, aggressive behaviours, poor school performance and later in life might have problems in their future relationships.

Myths on GBV

- Violence is considered as a private family matter. No. It is not. Such thinking is one of the main reason for GBV. Acts of GBV is not normal within a family and it is not acceptable in any relationship.
- Only few women experience GBV
 No. In Sri Lanka, more than 33% of the women
 experience GBV. Many do not disclose
 their experience of violence to anyone.
- GBV is experienced only by poor women. No. Women of any social class can experience GBV.
- Women who experience GBV are helpless in Sri Lanka. No. There are both governmental as well as nongovernmental organizations that provide services to the survivors of GBV. Also, in Sri Lanka, there are laws against domestic violence and police desks to receive complaints.

Appendix 15: Bivariate distributions for exclusive and co-morbid antenatal depressive symptomology and SIB in pregnancy

		Antenatal depression† (exclusive) (n = 236)	Antenatal SIB (exclusive) (n = 14)	Co-morbid antenatal depression and SIB (n = 58)
	Variable	N (%)	N (%)	N (%)
Demographics	Religion			
	Buddhist	172 (72.9)	9 (64.3)	39 (67.2)
	Minority religion ¹	64 (27.1)	5 (35.7)	19 (32.8)
	Ethnicity			
	Sinhalese	208 (88.1)	11 (78.6)	47 (81.0)
	Minority group ²	28 (11.9)	3 (21.4)	11 (19.0)
Marriage and family	Marital status			
	Married	229 (97.0)	10 (71.4)***	54 (93.1)
	Not currently			
	married	7 (3.0)	4 (28.6)***	4 (6.9)
	Social support			
	No support	13 (5.5)	1 (7.1)	8 (13.8)***
	At least one source	000 (04 5)	40 (00 0)	
	of support	223 (94.5)	13 (92.9)	50 (86.2)***
	Living situation	4 (0.4)	A (7 A)++	0 (0 4)**
	Alone	1 (0.4)	1 (7.1)**	2 (3.4)**
	Nuclear family	125 (53.0)	8 (57.1)	30 (51.7)
	Extended family	109 (46.2)	5 (35.7)	26 (44.8)
Socioeconomic	Missing	1 (0.4)	0	0
factors	Stressed by debt			
1001013	No	194 (82.2)**	12 (85.7)	40 (69.0)***
	Yes	42 (17.8)**	2 (14.3)	18 (31.0)***
	Household finances	(2 (11.0)	10 (0110)
	cause worry			
	No	192 (81.4)**	11 (78.6)	36 (62.1)***
	Yes	44 (18.6)**	3 (21.4)	22 (37.9)***
Pregnancy and				
motherhood	Trimester			
	1st trimester	60 (25.4)	1 (7.2)	8 (13.8)
	2nd trimester	101 (42.8)	8 (57.0)	29 (50.0)
	3rd trimester	72 (30.5)	4 (28.6)	21 (36.2)
	Missing	3 (1.3)	1 (7.2)	0
	Pregnancy			
	intendedness			
	Intended to get pregnant	194 (82.2)	11 (78.6)	30 (51.7)***
	Intentions kept	134 (02.2)	11 (70.0)	30 (31.7)
	changing	12 (5.1)	0 (0.0)	5 (8.6)
	I did not intent to get	- ()	0 (0.0)	
	pregnant	27 (11.4)	3 (21.4)	23 (39.7)***
	Missing	3 (1.3)	0	0
Personal and family	Family history of			
health	mental disorder			
	No	229 (97.1)	10 (71.4)***	55 (94.8)
	Yes	6 (2.5)	4 (28.6)***	3 (5.2)
	Missing	1 (0.4)	0	0

Table 9. Bivariate distributions for exclusive and co-morbid antenatal depressivesymptomology and SIB in pregnancy

	Spousal use of alcohol			
	Never	87 (36.9)	7 (50.0)	16 (27.6)
	Sometimes	139 (58.9)	6 (42.9)	31 (53.4)
	Often	10 (4.2)	1 (7.1)	10 (17.2)***
	Missing	0	0	1 (1.8)
IPV	Justifies at least one			, ,
	scenario of IPV			
	No	131 (55.5)	7 (50.0)	21 (36.2)**
	Yes	103 (43.7)	7 (50.0)	37 (63.8)**
	Missing	2 (0.8)	0	0
	Experienced at least			
	one form of IPV			
	No	82 (34.8)***	2 (14.3)*	4 (6.9)***
	Yes	153 (64.8)***	12 (85.7)*	54 (93.1)***
	Missing	1 (0.4)	0	0
	Physical IPV in			
	pregnancy			
	No	220 (93.2)	12 (85.7)	46 (79.3)***
	Yes	8 (3.4)	2 (14.3)	11 (18.9)***
	Unsure	8 (3.4)***	0 (0.0)	0 (.0.0)
	Missing	0	0	1 (1.8)

¹ Includes Hindu, Catholic, Other (e.g. Muslim)

² Includes Sri Lankan and Indian Tamil, Burgher, Malay, Moor, Other

[†] Scores of 9 or more on the EPDS qualified women as depressive, i.e. indicating likely presence of antenatal depression

Bolded items are significant where $*p \le 0.05$, $**p \le 0.01$, $***p \le 0.001$

Patient		Ward	
ID			

Appendix 16: Patient Information Form for Active Case Finding in Colombo North Teaching Hospital

FOR SELF-HARMING FEMALE PATIENTS (12+ YEARS) IN CNTH

BASIC INFORMATION				
Today's date (dd/mm/yy):		Resident of Gampaha District		
Patient's name:		Age:	DOB (dd/mm/yy):	
Address (where patient will go once discharged or home):		Phone:		
Incident date (dd/mm/yy): Admissic		on date (dd/mm/yy):		
Transferred from another health service	Method	of self-harm:		
Which health service?				
Severity of self-harm (e.g. number of pills, degree of burns):				
Has she had any self-harming incidents in the past?	Yes 💭	No 💭	Unsure 🔲	
If yes, number of times she has self-harmed in the past?	If yes, number of times she has been hospitalised for self-harm in the past?			
Did she plan in advance to harm herself or was her decision sudden? (e.g. buying pills days before)	Planned	Sudden	Unsure 🗌	
What did she think would be the outcome of her self-harm? (e.g. death, relieve stress, fix family problem)				
Has she known anyone else who has self-harmed?	Yes	N	0	
Has she known anyone who has (attempted) suicide(d)?	Yes 💭	N	0	
Discharge date (dd/mm/yy):				
Outcome of treatment/discharge:	Home	Transfer	Died D	

PREGNANCY HISTORY					
Is the patient curre	ntly	Yes	No	Don't	Gestation of pregnancy
pregnant?				know 💭	(weeks):
Has the patient bee	n pregnant	in the past:	12 months (1	L year)? 🔲	24 months (2 years)?
Outcome of last pro	egnancy?				Number of living
Delivered a Mis	scarriage	Abortion	Stillbirth		children:
live baby 🔲 🗌)				

Patient		Ward	
ID			

LIFE CIRCUMSTANCES					
Religion:					
Buddhist	Muslim	Hindu	Roman	Other	Other
			Catholic 🔲	Christian	
Ethnicity:					
Sinhalese	Sri Lankan Tamil	Indian Tamil	Moor/Muslim	Burgher	Malay Other
Her marita	l status:				
Single	Marrie	d 🔲	Divorced 🔲	W	/idowed 🔲
Who does	she live with (tick a	l that apply):			
Alone	Husband /	Her parents	Spouse's	Children	Other
	Partner 🗌		parents 🔲		
Her employment status:					
Full-time	Part-time	Student 🔲	Housewife 🔲	Unemploy	ved Other
What is her highest level of education attainment?					
Primary	Secondary	College	e / Diploma Un	iversity /	Post graduate
			De	gree 🗌	

Does she have a chronic illness? E.g. diabetes, heart condition, chronic pain, etc.	Yes	No
To her knowledge, does anyone in her family have a history of mental disorder?	Yes	No
Has she ever been treated for mental disorder?	Yes	No

NOTES

**Please write down anything additional she shares and as much of her story as possible of how she ended up choosing to self-harm / how she feels now, etc.

Researcher's initials: _____

Appendix 17: Informed Consent for Health Service Providers

Informed Consent – Health Service Providers

PhD Research Department of Social Policy London School of Economics and the University of Kelaniya 2016

For health service providers participating in a study exploring self-directed violence in women in Gampaha District, Sri Lanka.

Introduction

As you have been informed, we are currently undertaking research as part of a project between the University of Kelaniya and the London School of Economics. The purpose of this research is to better understand the reasons why women may harm themselves or end their own lives, at the time they do, and in the manner they do, in order to provide support in future and to prevent other women from experiencing this event. Additionally, examining the critical role of health services and identified 'gatekeepers' for the screening, identification, and support of at-risk women and their families, is essential.

As part of this research, we are interviewing a range of health service providers who have worked with women who self-harm or have ended their own lives.

We would greatly appreciate if one of our trained research team could speak with you regarding your experience.

What am I asking of you?

The interview will be a one-time face-to-face discussion that typically takes about an hour of your time. Our research team may have follow-up questions later and may contact you if there is a need to confirm a fact or for clarification.

The interview is concerned with:

- How different health service providers understand the reasons women may choose to self-harm
- What it is like working with women who have self-harmed or ended their own lives
- What role, if any, do health service providers see themselves as playing in attending to self-harming patients?
- Asking for any other information you may wish to share

In order to make sure that we capture all that you have to say and can pay attention closely to the discussion, we would ideally like to audio-record the interviews. Please be reassured that our small research team are the only individuals who would ever have access to this.

What are the risks of participating?

There is a risk that answering questions may make you feel sad or uncomfortable. If you feel the need to seek professional support, you will be given contact information for support in your area.

What are the potential benefits of participating?

Your participation in this research project may not be of direct benefit to you personally. However, many people who do participate in similar processes find it a good opportunity to talk openly about their experience and to understand how other health service providers experience these events. Furthermore, the knowledge gained from this study will help researchers and health services develop more effective prevention strategies for women and support strategies for health service providers in the future.

What happens if you do not wish to participate?

Participation is voluntary and there are no consequences for refusing to participate. Before making a decision about participation, please feel free to ask any questions about what I have just explained.

If you agree to participate, this form will be shared with you to show that the study has been explained to you and that you agree to be part of it. The research assistant will keep a record of your participation, and leave this information sheet with you if you should wish to get in touch with the research team or seek any advice or support following participation.

You may decide to end your participation at any time if you don't feel comfortable about continuing or to skip any questions you feel are not appropriate or relevant.

What will happen with the information shared during the interview?

In all writing or presenting resulting from this research, information about you or your participation in this project will be kept in the strictest confidence and will not be released in any form identifiable to you personally.

What happens if you want to know more?

If you wish to have further information or if you have questions you wish to ask after the interview, please contact the research assistant you met today or the lead researcher directly:

Research assistant's email: gampaha.womens.study@gmail.com

Lead researcher's name: Ms. Alexis D. Palfreyman, MSc Email: <u>gampaha.womens.study@gmail.com</u> Phone: [redacted]

Supervisor (University of Kelaniya): Prof. P. Anuruddhi S. Edirisinghe MD(For Med), MBBS, DLM, DMJ (Lond), MFFLM(UK) Professor of Forensic Medicine Department of Forensic Medicine Email: <u>anuruddhi@kln.ac.lk</u> Phone: [redacted] If you or someone you know would benefit from support about how you are feeling or if any issues arise from participating in this study that you would like to discuss, there are several options:

1. Sumithrayo

Sumithrayo provides emotional support in a friendly and confidential manner and has been working with thousands of people around Sri Lanka for over forty years. They are always happy to help, 365 days a year. If you would like to speak to someone in confidence at Sumithrayo, you may contact them by phone, email, letter or face to face:

Phone: 011 2692909 011 2696666 011 2683555 Email: sumithra@sumithrayo.org Address: No. 60B, Horton Place Colombo 07

2. Mental Health Services, Gampaha District

Gampaha District MO Mental Health:	Dr. P. A. D. Premarathna
Direct number:	033 2234228
Fax number:	033 2230992
Home number:	033 2222116

Instructions to research assistant, ask the respondent the following:

1. Are you willing to participate in a recorded interview to discuss the issues that I've just mentioned? Please remember that you do not have to participate if you do not want to.

2. Do I have your permission to include your information, without your name, in my research findings, which will be shared and published?

3. Do I have your permission to use verbatim quotes in the research findings, which will be shared and published?

Appendix 18: Example Topic Guide for Health Service Providers

TOPIC GUIDE:

Health Service Providers' Attitudes and Experiences of Pathways of Self-Directed Violence in Women of Reproductive Age in Sri Lanka

Following informed consent process:

START RECORDING

Introduction / Warm-up:

- 1. To begin with, I would like to get some basic information about your professional background:
 - Age
 - Gender
 - Years of professional experience
 - Area of medicine
 - Worked with SDV patients (Yes / No)?
 - Received training on SDV (Yes / No)?
- 2. Can you tell me what your main responsibilities are in your role?
- 3. What are the areas of focus in the team with which you work?

Experiences of self-harming patients:

- 4. How do you define SDV / self-harm? What does it mean to you?
- 5. Have you encountered the issue of self-harm / suicide in women of reproductive age (and specifically perinatal women) in Gampaha? If so, could you please explain when and in what capacity you first became aware of this issue?
 - Were you familiar with self-harm / suicide as a general health issue before?
 - Had you received any training before starting your role as [insert] on SDV?
 - Were you expecting to engage with self-harming/suiciding women in your job?
 - Prompt: narratives of experiences with self-harming patients
- 6. What kinds of self-harm have you come across?

- 7. How often are you encountering this in your work? Do you feel this is increasing/decreasing/staying stable?
- 8. Have you ever observed or felt that SDV patients are treated differently from other patients? How so? Have you participated in this? Why/why not?
- 9. What is it like working with self-harming women?
- 10. How has working with these patients affected you? How do you manage your responses / experiences with these patients?
 - *Prompt: For those who have experienced loss of a patient, how did that affect them?*
- 11. Has your response or opinion of SDV patients changed over time with experience? How so?
- 12. Do you notice that you are affected by different types of SDV patients differently?
 - Prompt: gender, age, intention, severity, method
 - Do you feel differently about patients who survive versus those who have suicided?

Attitudes and beliefs about self-harming patients:

- 13. How do you feel about women who self-harm/suicide?
- 14. How does their presence affect other patients here?
- 15. To what extent do you feel that women have a right to take their own life or to harm themselves in these ways?
- 16. To what extent do you believe SDV patients are in control of their actions / choices to self-harm?
- 17. Is self-harm or suicide an impulsive act in your opinion? Why or why not?
- 18. If a woman self-harms or attempts suicide, is she likely to do it again? *I.e. once a person is suicidal, she is suicidal forever*?
- 19. Is self-harm or suicide a morally bad act?
- 20. In your experience, what do you think the intention of the behaviour is for women who self-harm?
 - Prompt: 'cry for help', 'attention seeking', communicate with someone else/act of aggression, death, etc.
- 21. Do you feel SDV patients deserve the same right to care as other types of patients?

Perceptions of risk and women who choose to engage in SDV:

- 22. How do you or your team assess risk in an SDV patient?
- 23. Do you feel that anyone is capable of suicide or self-harming behaviour or just certain types of people?
- 24. In your opinion, who are the women engaging in self-harming behaviours? In suicide?

- Are there particular groups of women or types of women you see in your services?
- Do you have a sense of what risk or underlying factors may be involved?
 - *i.* Mental disorder how do they feel self-harm and suicide is related to mental disorder?
 - ii. Violence
 - iii. Gender roles
 - iv. SRHR
 - v. Religion What role, if any, do you think religion plays in women choosing to self-harm / suicide?
 - vi. Migration, etc.
- Are there any specific groups or types of women you have particular concerns about?
 - i. Prompt: free trade zone workers, adolescents, etc.
- Why do you think some women choose to harm themselves?
 - i. Prompt: What stories have you heard/been told by patients or colleagues?
- 25. Prevention and protective factors
 - Do you have a sense of what might be protective or prevent women from choosing to self-harm/suicide?
 - Are there any indications from your work as to what areas of prevention may be appropriate?

Perceptions of their role in caring for self-harming women:

- 26. What role, if any, do you think you have in working with self-harming women?
- 27. What factors influence how you or other staff interact with SDV patients?
- 28. How confident or comfortable do you feel working with SDV patients (e.g. to assess and refer them or to work with their families)?
- 29. What do you think would help you in your role to better manage these clients?
 - Prompt:
 - i. Do you feel you would benefit from more information or training on self-harm and suicide?
 - *ii.* If you need more information/training, which areas would you prioritise?
 - *iii.* Are there related issues you feel warrant further exploration alongside this, e.g. postnatal depression?
- 30. Who else should be involved and how?
- 31. What else do you think researchers in this area need to know about your experiences with women who self-harm/suicide?

Wrap-up:

- 32. Summing up the interview, if you could make one change that would make a difference in terms of your work with women who self-harm, what would that be?
- 33. Do you have any suggestions of other key individuals (including retirees) I should speak to?
- 34. Is there anything else you would like to add or anything you feel we have not covered?
- 35. May I contact you for follow-up information?

CLOSE OF INTERVIEW

Appendix 19: Example Introduction Letter for Psychosocial Autopsy Interviews with Families and/or Collaterals

Ms. Alexis D. Palfreyman Email: <u>a.d.palfreyman@lse.ac.uk</u> Phone: [redacted]

[Date]

[Address of next of kin]

Dear [Next of Kin],

I offer my sincere condolences to you on the recent death of [Decedent]. I am writing to tell you about a study we are doing and to ask you for your time for us to speak with you.

There are over 900 deaths annually to women of this nature in Sri Lanka. We are particularly concerned about Gampaha District and we are working with the Judicial Medical Officers to study a sample of these deaths in Gampaha District. We are interviewing families and friends of women who have recently died, so that we can better understand what was going on in the lives of these women. We hope that this understanding will help us design the best programmes to prevent such deaths in the future. We would greatly appreciate if our trained research team can speak with you for approximately 1-2 hours regarding her death.

We would like to assure you that all information we collect would be treated with utmost confidentiality. Neither your identity nor that of your loved one will be shared with anyone. Data collected in this study will be coded to remove all identifying information and would be sensitively handled.

We will follow up with you by visiting or by phone to answer any questions you may have and possibly set up a time to meet with you. If you do not hear from us within two weeks, it may mean that we are having difficulty getting hold of you, but we hope that you will feel free to contact us with any questions or concerns that you might have. We can be reached at [redacted number] or <u>gampaha.womens.study@gmail.com</u>.

I look forward to your support to prevent future tragedies.

Sincerely,

Alexis D. Palfreyman Lead researcher, London School of Economics [Redacted] Judicial Medical Office, Ragama



Prof. P. Anuruddhi S. Edirisinghe Supervisor / Professor of Forensic Medicine, Department of Forensic Medicine, University of Kelaniya

Appendix 20: Informed Consent for Psychosocial Interviews with Surviving Self-Harming Women

Informed Consent - Women's Narratives on Pathways of Self-Directed Violence

PhD Research Department of Social Policy London School of Economics and the University of Kelaniya 2016

For women participating in a study exploring self-directed violence in women in Gampaha District, Sri Lanka.

Introduction

As you have been informed by the research assistant, we are currently undertaking research as part of a project between the University of Kelaniya and the London School of Economics. The purpose of this research is to better understand the reasons why women harm themselves, at the time they do, and in the manner they do, in order to prevent future cases.

As part of this research, we are interviewing women who have recently self-harmed, so that we can better understand what was going on in their lives.

We would greatly appreciate if one of our trained research team could speak with you regarding your experience.

What am I asking of you?

The interview will be a one-time face-to-face discussion that typically takes one hour, but could take longer. Our research team may have follow-up questions later and may contact you if there is a need to confirm a fact or request your permission to release an official document.

The interview is concerned with:

- Your perspective of how the events of your self-harm unfolded
- Better understanding your life circumstances
- Asking for any other information you may wish to share

The kinds of questions we ask could be as follows:

- What do you like to do in your spare time?
- Do you know anyone who died by suicide?
- Do you have a chronic medical condition?

In addition to those sample questions, you might also be asked questions about relationships in your life and other topics that could make you uncomfortable. You do not have to answer any question you don't want to, and can end the interview at any time.

In order to make sure that we capture all that you have to say and can pay attention closely to the discussion, we would ideally like to audio-record the interviews. Please be reassured that our small research team are the only individuals who would ever have access to this.

What are the risks of participating?

There is a risk that answering questions about your recent self-harm may make you feel sad or uncomfortable. If you feel the need to seek professional support, you will be given contact information for support in your area.

If your interviewer thinks you are in danger of hurting yourself or someone else, she may refer you immediately to a health professional.

What are the potential benefits of participating?

Your participation in this research project may not be of direct benefit to you personally. However, many people who do participate in similar processes following self-harm find it a good opportunity to talk openly about their experience. Furthermore, the knowledge gained from this study will help researchers and health services develop more effective support for women like you in the future.

What happens if you do not wish to participate?

Participation is voluntary and there are no consequences for refusing to participate. Before making a decision about participation, please feel free to ask any questions about what I have just explained.

If you agree to participate, this form will be shared with you to show that the study has been explained to you and that you agree to be part of it. The research assistant will keep a record of your participation, and leave this information sheet with you if you should wish to get in touch with the research team or seek any advice or support following participation.

You may decide to end your participation at any time if you don't feel comfortable about continuing or to skip any questions you feel are not appropriate or relevant.

What will happen with the information shared during the interview?

In all writing or presenting resulting from this research, information about you or your participation in this project will be kept in the strictest confidence and will not be released in any form identifiable to you personally.

What happens if you want to know more?

If you wish to have further information or if you have questions you wish to ask after the interview, please contact the research assistant you met today or the lead researcher directly:

Research assistants' names: Piumi Managoda and Chamilya Perera Email: <u>gampaha.womens.study@gmail.com</u>

Lead researcher's name: Ms. Alexis D. Palfreyman, MSc Email: <u>gampaha.womens.study@gmail.com</u> Phone: [redacted] Supervisor (University of Kelaniya): Prof. P. Anuruddhi S. Edirisinghe MD(For Med), MBBS, DLM, DMJ (Lond), MFFLM(UK) Professor of Forensic Medicine Department of Forensic Medicine Email: <u>anuruddhi@kln.ac.lk</u> Phone: [redacted]

If you or someone you know would benefit from support about how you are feeling or if any issues arise from participating in this study that you would like to discuss, there are several options:

1. Sumithrayo

Sumithrayo provides emotional support in a friendly and confidential manner and has been working with thousands of people around Sri Lanka for over forty years. They are always happy to help, 365 days a year. If you would like to speak to someone in confidence at Sumithrayo, you may contact them by phone, email, letter or face to face:

Phone: 011 2692909 011 2696666 011 2683555 Email: sumithra@sumithrayo.org Address: No. 60B, Horton Place Colombo 07

2. Mental Health Services, Gampaha District

Gampaha District MO Mental Health:	Dr. P. A. D. Premarathna
Direct number:	033 2234228
Fax number:	033 2230992
Home number:	033 2222116

Instructions to research assistant, ask the respondent the following:

1. Are you willing to participate in a recorded interview to discuss the issues that I've just mentioned? Please remember that you do not have to participate if you do not want to.

2. Do I have your permission to include your responses, without your name, in my research findings, which will be shared and published?

3. Do I have your permission to use verbatim quotes in the research findings, which will be shared and published?

Appendix 21: Psychosocial Autopsy Instrument for In-depth Interviews with Surviving Self-harming Women and Families and/or Collaterals Affected by Suicide

Patient
ID:

Form	1
code:	

Psychosocial Autopsy / Narrative Semi-structured Interview Guide¹ - Cover Sheet²

Patient ID:	Interview Date://
Date of Birth:/	Interviewer:
Date of SDV://	Interview location:
Age at Time of SDV:	
Method Used for SDV:	
Any comments on respondent's cooperation/questions regarding valid	ity of responses, etc.:
Other Comments:	Time Interview Started:
	Time Interview Ended:

¹ Adapted with permission from American Association of Suicidology (Cornette, 2015)

² In most cases, the interviewer will NOT be asking these questions verbatim.

Patient	Ward:	Date	Form	2
ID:		(D/M/Y):	code:	

Icebreakers / opening of interview

What I would like to do first is to start by asking some quite open questions, which you can answer how you like. I am very interested in your stories and if you're happy to talk at length about things that would be great. Don't worry if you think you might be getting away from the question, as I am interested in what you want to share.

- 1. Firstly, can you tell me briefly about why you decided to do the interview?
- 2. Can you tell me what a typical day is like for you? (for living patients)
- 3. Would you mind telling me about the incident that brought you in to hospital? (for living patients)

Based on participants' stories, you may not need to probe for answers to some of the structured questions in the tables below, or you may refer to their stories later for clarification.

What I would like to do now is to work our way through a series of more focused questions, but I am happy for you to elaborate or share stories or examples on any of these if you would like so that we get as much understanding of your experience as possible.

Patient
ID:

Form	3
code:	

Demographic Information

1. Place of birth (city, district, country)		
 a. If not Sri Lankan born, year when she moved to Sri Lanka? 	Year:	
b. If not from Gampaha District, when did she move here?	Year:	
c. Did she move to Gampaha with/without her family?	With familyWithout family	
d. What was the reason for migrating to Gampaha from elsewhere?	Reason:	
e. How did she feel about the move, if old enough to remember it?	Attitude to move:	
2. Primary language	📮 Sinhala	English
	🖵 Tamil	Other
3a. Ethnicity	Sinhalese	Other – Specify:
	📮 Sri Lankan Tamil	Don't know
	📮 Indian Tamil	
	Moor / Muslim	
	Burgher	
	📮 Malay	—
3b. If she was a member of a minority group, did she have a strong/weak attachment to her	Strong (please explain)	Weak (please explain)
racial/ethnic/cultural identity?		
4. Marital status	Single, never married	Divorced (# years:)
	Married (# years:)	Separated/Separating (# months:)
		Widowed
5. Children	🖵 Yes	🖵 No

Patient	
ID:	

Date (D/M/Y):

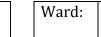
Form 3 code:

r			
		Foster/Adopted – How many?	Don't know
		Biological – How many?	
6.	Education status	Never attended	University / degree
		Primary school	Postgraduate
		Secondary school	Other – Specify:
		College / diploma	Don't know
			Grade Level:
7.	Raised by	Biological parents	Other – Specify:
		Adoptive/Foster parents	Don't know
		Other family	
8.	Living situation (all that apply)	Alone	Partner's parents
		Husband / partner	Children
		Her parents	Other – Specify:

Religion & Religiosity

9.	Did she identify or affiliate with a specific religion? Did she consider herself to be a spiritual person?	De	scribe:	
10.	Was she active in this religion?		Very active Somewhat active	Not active Don't know
11.	Family expectations for religious practice		Expected Optional	Other – Specify: Don't know
12.	Attended religious services		Daily Once/week Monthly	Rarely Don't know
13.	Change in participation in religious activities over past year		Increase Decrease	Remained the same Don't know

Patient
ID:



Date (D/M/Y):

Form 3 code:

Financial Situation

14. Main source of income for family	Husband / partner	Other family members
	Parents	Friends
	🖵 Job	Other – Specify:
	Savings	Don't know
15. Main household earner	🖵 Husband	Occupation:
	🖵 Father	Occupation:
	🖵 Mother	Occupation:
	Other – Specify:	Occupation:
16. Any recent change or threat to financial	Yes, explain:	🖬 No
stability of family?		
17. Financial situation of family	No financial pressure	Significant debt
	Living paycheck to paycheck	Don't know
	Other – Specify:	

Occupation & Employment

18. Employment status at time of SDV	 Full time Part time Student 	 Housewife Unemployed Other – Specify:
19. Occupation	Describe:	
20. Tenure at last job	 Less than one year 1 - 5 years 6 - 9 years 10 - 20 years 	 21 – 30 years 30 years or more Don't know
21. Job satisfaction	HappyUnhappy	No strong feelingsDon't know

Patient Ward: ID:	Date (D/M/Y):	Form 3 code:	
22. Any major negative job change in past 6 months	 Fired or Laid off Demoted Pay cut Seasonal 	 Health issues Other – Specify: None Don't know 	

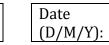
School Experience

23. General School Satisfaction	HappyUnhappy	No strong feelingsDon't know
24. Any major negative school changes in past 6 months?Please explain further if any are checked	 Discipline (reprimanding, suspension) Academic stress/distress (big tests or projects, applying to university, etc.) Failing classes or recent drop in grades Failing or struggling with exams Peer issues at school (falling out with a friend, bullying, teasing, humiliation) 	 Health issues Issues with team sports or clubs Other – Specify: None Don't know
25. Did she have any special abilities or talents?	Specify:	Did these create any special problems or opportunities for her?
26. (Career) Aspirations	Describe:	

Family History & Dynamics

27. Family birth order	Only child	Generation Fourth born
	First born	Other – Specify:
	Second born	Multiple birth – Specify:
	Third born	Don't know

Patie	ent
ID:	



Form 3 code:

28. Number of	biological sibling	S							Ĺ	Don'	t know
a. Num	mber of siblings dead				Don't know						
b. Manner of sibling death											
Sibling	Natural	Unintentio	nal	Suicide		Homic	ide	Undetermined	Other		Don't Know
#1											
#2											
#3											
#4											
29. Has her mo	ther, father, or c	aregiver died	?	-		Yes			Don't kr	IOW	
						No					
a. Man	ner of parents'/ c	aregivers' de	ath								
Parent	Natural	Unintentio	nal	Suicide		Homic	ide	Undetermined	Other		Don't Know
Mother											
Father											
Caregiver 1											
Caregiver 2											
30. Family histo	ory of suicide		ΠY	es – Specify ho	w ma	any, who	o, method		No		
									Don't Kn	ow	
31. Family histo	ory of mental illn	ess	D Y	Yes – Specify who, diagnosis				No			
									Don't Kno	ow	
32. Key family	relationships		Descr	ibe (who, posit	ive/n	egative	impact):				
33. Family diffi	culties			eparation			Substance		scribe:		
				ligration			Domestic	violence			
				reakdown			Housing				
				ealth			Other – Sp	pecity:			
			🖵 Fi	nancial probler	ns						

Patient ID:	Ward:	Date (D/M/Y):	Form code:	3	
	nt changes in family bast 6 months?	YesNoDon't know			Describe:

Marriage or Significant Romantic Relationships

35.	Was she (recently) in a significant romantic relationship at the time of the incident?	YesNo	If, yes, duration of this relationship:
	a. Nature of the relationship	 Love marriage Arranged marriage Live-in partner (boyfriend) Live-out partner (boyfriend) Other – Specify: 	If married, her age at marriage?
	b. Was this relationship known to the family?	 Yes No Don't know 	Family's view of the relationship:
36.	Quality of the relationship	Describe:	
	a. Marital / relationship difficulties (all that apply)	 Behaviour problems Infidelity (Dis)trust Domestic violence Substance abuse / addiction Financial problems Separation or dissolution 	 SRHR issues Children Other family Health Child marriage Other – Specify:
	 b. If relationship was on the verge of breaking up or had very recently 	How recently?	Any known triggering event?

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	broken up:	
37.	If single, was there pressure (from self or others) to marry?	 Yes Describe: No Don't know
38.	Any additional information on romantic relationships	Describe:

Domestic Violence

39. V	Vas she experiencing abuse in the		Yes	Ту	pe of abuse:
h	ousehold and/or within her romantic		No		Emotional
re	elationship?		Don't know		Financial
					Physical
					Sexual
40. P	Perpetrators (all that apply)		Woman herself (towards others)		Mother
			Husband		Other family
			Boyfriend		Other – Specify:
			Father		
41. V	/ictims (all that apply)		Woman herself		Father
			Children		Mother
			Husband		Other family
			Boyfriend		Other – Specify:
42. D	Dimensions of abuse	Fre	equency: Severity:		Influencing factors:
43. Ir	mpact of abuse on the woman	De	scribe:		

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44. Has she ever sought help for this issue?	Yes	Source of help sought:
	No No	Family
	Don't know	Friends
		Neighbour
	If no, why not?	Police
		School
		Religious institution
		Social / charitable service
		Other – Specify:
a. Outcome of help seeking	Describe:	
b. Family's role	Describe:	

Substance Abuse

45. Is there substance abuse in the	🖵 Yes	By whom:	If yes:
household/significant romantic	🖵 No	Husband / boyfriend	🖵 Daily
relationship?	Don't know	Father	Weekly
		Father-in-law	Monthly
		Other family	Special occasions
		Woman herself	Other – Specify:
		Other – Specify:	
a. Has alcohol use contributed to	🖵 Yes	Describe:	
difficulties for her or significant	🖵 No		
males?	Don't know		
b. Trigger for domestic violence?	🖵 Yes		
	🖵 No		
	Don't know		

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46.	History of drug use (non-medication) in self or significant others?	Yes – Specify which drugs: No Don't know	Describe:
47.	History of arrests due to drinking or drug abuse?	Yes No Don't know	Describe:

Sexual & Reproductive Health & Rights

48. Was she sexually active?	Yes	From what age?
	🖵 No	
	Don't know	
a. General attitude towards sex	Positive	Describe:
	Negative	
	No strong feelings	
	🖵 Don't know	
	Other	
b. History of sexual abuse	🖵 Yes	Explain:
	🖵 No	
	Don't know	
c. If married/in significant roman	tic 🖵 Yes	Explain:
relationship, is sex always	🖵 No	
consensual?	Don't know	
d. Indication of sexual risk taking?	Yes	Explain:
	🖵 No	
	Don't know	
49. Pregnancy & fertility history		
a. Has she ever been pregnant?	🖵 Yes	Number of pregnancies:
	🖵 No	
	Don't know	

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		Pregnant in the past 12 months? Pregnant in the past 24 months?		Age at first pregnancy:
	b. Outcome of pregnancy	 Pregnancy 1 Delivered live baby Miscarriage Abortion Stillbirth 	Pregnancy 2 Delivered li Miscarriage Abortion Stillbirth	 Miscarriage Abortion Stillbirth
	c. If she experienced pregnancy or recent pregnancy, elicit:	How did she feel about the preg	nancy?	How did her partner/family feel about the pregnancy?
50.	Had she experienced any fertility issues?	 Yes No Don't know 		Describe / impact on woman / relationships:
51.	Feelings about motherhood	Describe:		
52.	Feelings about childlessness	Describe:		

Physical Health or Disability

53.	Any major health problems or disabilities	□ Yes – Specify:	Describe:
	during her life?	🖵 No	
		Don't know	
			If yes, was this condition chronic?

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54.	Seeing a doctor for any health problem in 6 months prior to death?	0 0	Yes – Specify: No	Describe:
			Don't know	
55.	Did health problem or disability impact		Yes – Specify:	Describe:
	lifestyle?		No Don't know	

Psychological Wellbeing & Suicidal Capability

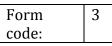
Suicidal Desire: Symptoms

56. Symptoms or behaviours <i>in last 30 days</i>	Appeared sad, despondent, irritable, tearful, or moody
preceding SDV (check all that apply, check	Displayed symptoms of depression.
for ISPATHWARM signs)	(SIGECAPS) Suicidal Ideation, Increase or decrease in appetite, Guilt, Decrease in Energy
	(fatigue), Decrease in Concentration, Anhedonia, Psychomotor agitation or retardation,
I: Ideation	Sleep (increased or decreased))
S: Substance Abuse	Appeared to have made a change for the better
P: Purposelessness	Appeared anxious, or complained of anxiety or panic attacks
A: Anxiety	Showed loss of interest or pleasure in usual activities
T: Trapped	Appeared agitated/restless/unable to relax/fidgety/pacing
H: Hopelessness	Had blurred vision, ringing in the ears, hot and cold flushes
W: Withdrawal	Complained of:
A: Anger	Rapid heartbeat/chest pains/trouble breathing
R: Recklessness	Nausea/vomiting, diarrhoea
M: Mood changes	Change in appetite/weight loss or gain
	Had difficulty getting started on everyday activities
	Expressed feelings of inferiority/pessimism

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			1	
				Behaved impulsively
				Displayed uncontrolled rage or aggressive behaviour
				Demonstrated constricted thinking or "tunnel vision"
				Disclosed feelings of guilt, shame, humiliation, or extreme embarrassment
				Appeared confused, disoriented, or psychotic
				Expressed feelings of hopelessness
				Expressed feelings of helplessness
				Expressed feelings of worthlessness
				Showed an inflated sense of self or signs of magical thinking
				Engaged in excessive risk-taking behaviours
				Appeared to prepare for own death (e.g. giving things away, making references to
				being gone in near future)
				Expressed wish to reunite with a deceased loved on or to be reborn
				Had insomnia, other sleep disturbance, or nightmares (Specify:)
				Expressed feelings of being a burden to others
57. Were any of these symptoms or complaints		If s	o, please specify:	
	more	chronic, i.e. present for more than 30		
	days)		
58.	Ment	al Status: Did she exhibit any of these		Impaired memory
in the last 30 days prior to SDV?			Poor comprehension	
			Poor judgment	
				Hallucinations or delusions
				Difficulty recognising friends or family members
59.	Preci	pitants to SDV		Significant loss(es) – relationships, job, finances, prestige, self-concept, family member,
				moving, anything else important to deceased individual
	a.	Had she been exposed to any		Disruption of a primary relationship (real or perceived)
		situation and/or materials that may		Legal troubles
		have contributed to her thinking		Difficulties with police
		about SDV/death?		Recent traumatic event
				Significant life changes (negative as well as positive): Relationships/break-ups/issues at
	b.	Were there any issues at home that		home?
		may have caused her emotional		Suicide or suicide attempt by family member, loved one, friend

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distress?	nniversary of a significant loss	
	xposure to suicide of another (e.g. celebrity) through media or p	ersonal acquaintance
c. Was she under any other particular	xposure to any materials or situations that contributed to her th	inking about death?
stress around the time of the suicide?	ny other stressors?	

Psychiatric and Traumatic History

60. Prior suicidal attempts?	 Yes - Describe in next section each prior attempt below: (Method, approximate date, any medical attention or hospitalisation, stressors at time) No Don't know
61. Diagnosed with psychiatric condition?	 Yes – Describe where, when, diagnosis (and request release for records) No Don't know Was she ever hospitalised? If yes, where, when, diagnosis
62. History of self-harming behaviour?	 Yes – Describe (Type: cutting, burning, etc.; Frequency) No Don't know
63. History of Physical or Sexual Abuse?	If yes, specify:
64. History of other Victimisation?	If yes, specify:

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Psychiatric Treatment (incl. access to prescribed medications)

65.	Any prescription medications used?		Yes – Specify which medications, dosage?		
			No		
			Don't know		
66.	Medications taken regularly?		Took as prescribed		Frequently missed doses
			Occasionally missed doses		Did not take – stopped (how long ago?)
					Don't know
67.	Trouble paying for medications?		Yes		
			No		
			Don't know		
68.	Ease of obtaining medications		Easy		Other – Specify:
			Difficult		Don't know
69.	Other treatment offered	Spe	ecify where, when, what type, outcome, etc.	.:	

Suicide Ideation

70.	In the last 30 days, did she express	Yes	If yes, describe (specific thoughts, etc.; frequency)
	thoughts about death, dying, suicide?	No	
		Don't know	
71.	In the last year?	Yes	If yes, describe (specific thoughts, etc.; frequency)
		No	
		Don't know	
72.	Ever?	Yes	If yes, describe (specific thoughts, etc.; frequency)
		No	
		Don't know	

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73. Did she ever have any discussions with others on more of an intellectual level about suicide and/or express her attitudes toward suicide?	 Yes If yes, specify: No Don't know

Suicide Attempt / SDV History

74. Date of suicide attempt	Details (medical attention required, stressors at that time, method, aftermath (tx))

Suicidal Intent – Method of SDV

75.	What was the method used in this SDV?	
76.	Would she have had knowledge and/or capability of assessing the	🖵 Yes
	degree of lethality of such an act?	🖵 No
		Don't know
77.	Did the incident occur in her home or elsewhere?	Specify:
78.	Was SDV rehearsed or planned?	Yes
		🖵 No
		Don't know

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79.	Did she give any opportunity to be rescued or interrupted by communicating intent to self-harm/suicide or plan? For example,	Yes – Specify and define the time message(s) were sent relative to the time of incident
	messages on Facebook, e-mail, text, etc.?	No
		Don't know
80.	Did she have any personal relationship to the site of SDV?	Yes – Specify:
		No
		Don't know
81.	Did she leave a suicide note? Includes on Facebook, via e-mail,	Yes – Specify:
	text, etc. (If note(s) were left, transcribe content)	No
		Don't know

Emotional Reactivity & Character

82.	Over the	e course of her life, how often did she:	Ne	ver	Once	Few times	Many times	Too many times	Don't know
	a. Th	nrow a temper tantrum – screaming, slamming doors, etc.							
	b. Ge	et into a physical fight with people							
	c. Ge	et into verbal arguments with people							
	d. Ha	ave fights with parents, partner, or other adults (bosses, teachers)							
	th	nat led to reprimands, disciplinary action at school, or firing from job							
	e. Ha	ave difficulties with police							
83.	Would s	he describe herself as a perfectionist?		Yes No Don't	know				
84.	ls she pr or body	eoccupied with and distressed by an imagined defect in appearance part?	De	scribe:					
85.	Would she describe herself as rigid or very strict?			Yes No Don't	know				

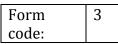
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86.	Would she describe herself as impulsive?		Yes
	·		Describe:
			No
			Don't know
87.	Would she describe herself as easily angered or hot tempered?		Yes
			Describe:
			No
			Don't know
88.	When she has a problem, how does she usually approach it?	De	scribe (actions, who is involved, who, perceived success
		of	this approach for her, etc.)

Description of SDV Incident & Response

89.	Describe the incident	Where, when, why that place, etc.?
90.	Response to the incident	How does she feel now? Reaction of family, etc.

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Buffers & Connectedness

Access to Care

91. Received counselling in last year?	Yes	
	🖵 No	
	Don't know	
a. If yes, from whom?	GP / community physician	Social worker
	Psychiatrist / Psychologist	School counsellor
	Medical Officer of Mental Health	Other – Specify:
	Charmer / traditional healer	Don't know
b. Receiving treatment at time of SDV	🖵 Yes	
incident?	No – Stopped when?	
	Don't know	
92. Receiving needed mental health care	🖵 Yes	If no, why?
	🖵 No	Concerned about others' opinions
	Don't know	Didn't believe in counselling or seeking help
		Difficulty finding or getting into a facility
		Difficulty finding or getting treatment
		Problems getting help at home
		Problems paying bills
		Problems with transportation
		Did not want help
		Other – Specify:
		Don't know
93. Receiving other forms of health care?	🖵 Yes	Describe:
	🖵 No	
	Don't know	
94. Who sought help for her?	🖵 Self	Friend
	🖵 Family	Other – Specify:
	Husband/partner	

Patient	
ID:	

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Social Supports & Attachments

95. How connected did she the feel to family/parents/partner?	 Very Connected Moderately Connected Somewhat Connected Not Connected
 a. If she did NOT feel connected to family/parents, why not? 	Specify:
96. Approximate number of close friends or relatives she could talk freely with	
97. Who could she count on to help her feel better when under pressure?	No one Relationship:
98. Did she have a confidante?	 Yes – Specify: No Don't know
99. Who accepted her totally? (i.e. was there someone who accepted her unconditionally? (best and worst aspects))	No one Relationship:
100. Who would help with daily chores or getting things done if she was sick?	No one Relationship
101. How satisfied was she with support received?	 Very satisfied Satisfied Dissatisfied Very dissatisfied

Patient	
ID:	

Date	
(D/M/Y):	

Form	3
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Recent Timeline

List significant events that went on in her life in the following timeframes:

Day	Events
Day of SDV	
Previous day	
2 days before	
3 days before	
4 days before	
5 days before	
6 days before	
7 days before	
Up to 2 weeks before	

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Summary

In this section, please summarise the key aspects of the case. Please include basic demographic details about the woman, anything significant in her past, what was going on around the time of the incident, and why she may have chosen to self-harm at the time that she did using the method that she did. Please answer the following questions:

(1) Why self-harm/suicide?

(2) Why at this time?

(3) Why by this method?

(4) How do you think the self-harm could have been prevented?

Did she exhibit any of the following in the last 30 days?

Isolation	W ithdrawal	
Sleep disturbance	Anger	
Purposelessness	R ecklessness	
A gitation	Mood	
	changes	
Trapped		
Hopelessness		

Patient	t
ID:	

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Wrap-up / Closing of Interview

Complete the interview by asking the following questions of the participant:

- (1) How was the experience for them?
 - a. Positives
 - b. Negatives
- (2) Is there anything that would have made the process better for them or they think should be done differently?
- (3) Anything else they would like to share with us?