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"When They See Someone Who Is Poor, They Step on Them": The Social Determinants of Health Among Survivors of Sex Trafficking in Cambodia

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Abstract

Social determinants of health (SDH) are defined as the non-medical yet health-affecting conditions of a person's life. They include such considerations as working conditions, discrimination, and access to health services. The aim of this study was to explore the SDH impacting those who have survived sex trafficking in Cambodia. This study employed a mixed methods, secondary analysis, focusing on 52 survivors of sex trafficking in the Butterfly Longitudinal Research Project from 2010 through 2019. Participants described myriad social determinants of health, including: gender, age, relationship status (marriage), ethnicity, national identification documentation (statelessness), social class, formal education, vocational training, occupation, and monthly income. The negative impacts of these social determinants of health included: poor access to basic needs of food and clean water, unstable housing, low education rates, worsening physical health, depression, and suicidal ideation, along with long unresolved STI-like symptoms. As these are multidisciplinary issues, the study concludes with recommendations for remedial actions to be taken by multidisciplinary stakeholders, namely government agencies, healthcare professionals, and survivor aftercare service providers.

Keywords

Cambodia, social determinants of health, sex trafficking, aftercare, reintegration, longitudinal research, social work

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"WHEN THEY SEE SOMEONE WHO IS POOR, THEY STEP ON THEM": THE SOCIAL DETERMINANTS OF HEALTH AMONG SURVIVORS OF SEX TRAFFICKING IN CAMBODIA

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ABSTRACT

Social determinants of health (SDH) are defined as the non-medical yet health-affecting conditions of a person's life. They include such considerations as working conditions, discrimination, and access to health services. The aim of this study was to explore the SDH impacting those who have survived sex trafficking in Cambodia. This study employed a mixed methods, secondary analysis, focusing on 52 survivors of sex trafficking in the Butterfly Longitudinal Research Project from 2010 through 2019. Participants described myriad social determinants of health, including: gender, age, relationship status (marriage), ethnicity, national identification documentation (statelessness), social class, formal education, vocational training, occupation, and monthly income. The negative impacts of these social determinants of health included: poor access to basic needs of food and clean water, unstable housing, low education rates, worsening physical health, depression, and suicidal ideation, along with long unresolved STI-like symptoms. As these are multidisciplinary issues, the study concludes with recommendations for remedial actions to be taken by multidisciplinary stakeholders, namely government agencies, healthcare professionals, and survivor aftercare service providers.

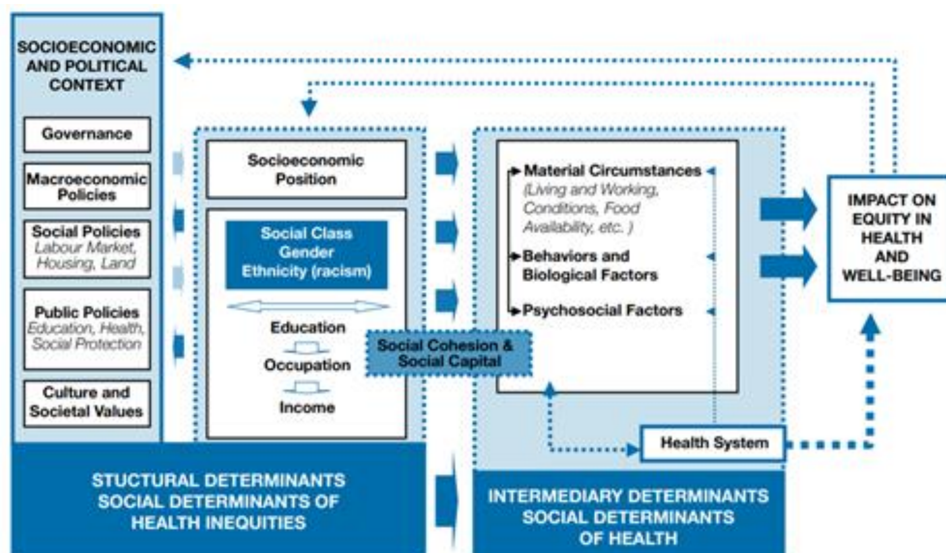
KEYWORDS

Cambodia, social determinants of health, sex trafficking, aftercare, reintegration, longitudinal research

SOCIAL DETERMINANTS OF HEALTH are defined as the non-medical yet health-affecting conditions of a person's life (World Health Organization (WHO), 2021). They include such considerations as working conditions, discrimination, and access to health services (WHO, 2021). SDH are heavily influenced by a person's socioeconomic position within the greater context of the surrounding culture, with higher position being related to better health, which is true across the broad range of socioeconomic positions due to such factors as ethnicity, education, and income (Solar & Irwin, 2010). The WHO Conceptual Framework on the Social Determinants of Health (CSDH) (Figure 1) offers a thorough understanding of SDH and their inter-relationship on a sociopolitical, economic, and individual level, and, thus, was adopted to guide this study's analysis (Solar & Irwin, 2010). Reading from left to right in the WHO CSDH model, structural determinants of health inequities, including an individual's socioeconomic position and the larger socioeconomic and political context in which they reside, are modulated by intermediary determinants of health including access to health systems and material circumstances. All of these factors ultimately impact a person's health and well-being. Illustrating the complicated interplay of how all elements impact a survivor's equity in health and wellbeing, the framework also establishes that these outcomes result in the further impact of structural determinants and socioeconomic position; creating a system that is cyclical and elements that are inextricable from one another.

Figure 1

Conceptual Framework of Social Determinants of Health **(Solar & Irwin, 2010)**



Source: Reprinted from [*A Conceptual Framework on the Social Determinants of Health: Social Determinants of Health Discussion Paper 2]* [Geneva, Switzerland]: WHO; [2010]. License: CC By-NC-SA 3.0 IGO. Used with permission.

Below are definitions of select elements from the WHO CSDH, as defined by the framework's authors.

Social Class

With respect to the current study, social class is understood to be, "The extent of an individual's legal right and power to control productive assets determines an individual's strategies and practices devoted to acquiring income and, as a result, determines the individual's standard of living. Most importantly, class is an inherently relational concept. It is not defined according to an order or hierarchy, but according to relations of power and control" (Solar & Irwin, 2010, p. 33).

Material Circumstances

According to Solar and Irwin (2010), material circumstances are the physical aspects of the environment which impact a person's vulnerability to health discrepancies. These include living circumstances, including both the structural and social environments of people's housing situations, as well as their access to amenities and ability to access healthy food.

Psychosocial Factors

This set of circumstances relates to the amount of stress and anxiety that an individual faces, their mental and emotional health, and a person's access to social and emotional resources (e.g. coping skills and external support), which impact health outcomes. Such stress is interlinked with socioeconomic status (SES), with lower SES being a risk factor for psychosocial strain and the stress of financial insecurity (Solar & Irwin, 2010).

Behaviors

These factors include behaviors (e.g. smoking, alcohol consumption, and diet) that either positively or negatively impact a person's health. While these behaviors have some causal impact on health, the pathway is likely complicated by intermediaries such as stress and physical circumstances (Solar & Irwin, 2010).

Health System

As Solar and Irwin (2010) propose, the interplay between health systems and socioeconomic position cannot be understated. Not only is health impacted by a person's access to the health system in place, but the health system can also play a role in the ongoing socio-economic wellbeing of patients after treatment. Thus, the health system refers to all aspects of a person's experience with healthcare, including susceptibility to disease, access to care, equality in policies, rehabilitation after care, and any financial consequences of treatment (Solar & Irwin, 2010).

SOCIAL DETERMINANTS OF HEALTH AND VULNERABILITY TO TRAFFICKING IN CAMBODIA

Research into social determinants of health becomes particularly important in less affluent regions of the world, where the majority of people are limited in their socioeconomic position. Cambodia, for example, is classified as a lower-middle-income country. Despite its economy's growth and the fact that some individual incomes are rising above poverty level, there is still a high level of resource deprivation (OECD Development Pathways, 2017; World Bank Group, 2021). For example, at the most basic level, lack of clean water and quality sanitary measures contribute to a

high rate of maternal and neonatal death, infectious disease and poor nutrition (OECD Development Pathways, 2017), as is the poor quality of Cambodia's educational resources (Open Development Cambodia, 2015). Also, whilst the Ministry of Health is comparatively well-resourced, the Ministry of Social Welfare is less so.

Research has linked these negative SDH in Cambodia, especially poverty and the lack of quality education, to an increased risk for exploitation through human trafficking (Perry & McEwing, 2013). According to the US Department of State (2020) trafficking in Cambodia occurs across demographics—across genders, sexual orientations, races, and ethnicities.

Understanding SDH can lead to provide better holistic care to survivors of sex trafficking and foster deeper collaboration with social agencies. To date, there have been no longitudinal studies examining SDH among those who have survived trafficking. The aim of this study was to explore SDH impacting the health and well-being of those who have survived sex trafficking.

THE BUTTERFLY LONGITUDINAL RESEARCH PROJECT

The Butterfly Longitudinal Research Project, aka *the Butterfly Project*, is a mixed-methods prospective panel longitudinal research, originally of 128 survivors of sex trafficking from 2010 through 2019 (Babbie, 2007; Bryman, 2008; Menard, 2002). This is the only 10-year longitudinal research project on sex trafficking, to date. Chab Dai Coalition, a group of anti-human trafficking NGOs in Cambodia, developed the project following the Reimer et al. (2007) study. The study's goal was to understand the factors related to the rehabilitation, reintegration, and other outcomes of the survivors of sex trafficking in order to provide data from the participants that could help future policy and program planning.

The original 128 participants of the Butterfly Project were recruited in 2010 and 2011 through 15 anti-human trafficking NGOs. Thirteen of these NGOs were residential aftercare shelters for survivors of human trafficking, and the remaining two were non-residential community-based aftercare and vocational training centers. These NGOs referred their clients as potential research participants who were then vetted by the Butterfly Project research team. The inclusion criteria for participation was that the individual was, in fact, a survivor of sex trafficking as defined by Article 3 of the United Nations' "Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children", aka "The Palermo Protocol" (OHCHR, 2000).

The Butterfly Longitudinal Research Project was implemented to understand the factors supporting or hindering the sustained rehabilitation and reintegration of survivors of human trafficking in Cambodia. As the research was conducted it became clear that understanding the social determinants of health considerations would offer distinct factors promoting healthy wellbeing or offering challenges the cohort continued to face well after services from their NGOs had ceased. The challenges displayed through investigating the elements of SDH provide opportunities for multi-sector stakeholders to shape their programming, policy, and action in order to thoroughly address the needs of their constituents, patients, and/or clients.

DESCRIPTION OF NGO ASSISTANCE FOR TRAFFICKING SURVIVORS IN THE PRIMARY STUDY

The majority of survivors in the Butterfly research project had received services from NGOs that attempted to support their health and wellbeing for years. At the

onset of the Butterfly project in 2010, these NGOs were either residential- or community-based. Free services offered to survivors of human trafficking within residential aftercare shelters included: regular meals, secure housing, clean water, hygienic supplies, access to public education and vocational training, physical and mental health care, and legal services. In community-based aftercare programs, participants lived independently, most residing with their immediate families, but continued to receive similar services offered to residents of shelters. These programs also offered skills training apprenticeships, paying their clients a wage as they trained in restaurant and retail.

For about six months upward to two years following the survivors' return to the communities from the residential shelter, they were in a reintegration program provided by the NGO. During this time, participants were given monthly stipends for their food and continued public education. Also, shelter staff would attempt to visit the participants in their homes bi-annually and respondents were encouraged to contact staff from the shelters should they require any assistance. At the end of the reintegration program, shelter staff would close the case files of the survivors and discontinue the services when they felt the needs of the survivors had been met and stability was restored.

METHODOLOGY

The researchers employed a mixed-methods secondary analysis to explore the longitudinal impact of social determinants of health on trafficking survivors from the primary Butterfly Project (Ruggiano & Perry, 2017; Ziebland & Hunt, 2014). The researchers analyzed the data from two points in time, 2012 and 2018. This offered a comparison of the SDH factors impacting the participants at different stages of their aftercare from sex trafficking, and reintegration back into their communities. The study focused on 52 of the original 128 survivors of sex trafficking in the Butterfly Project because they had completed every interview from 2011-2018.

Quantitative data was obtained from multiple, yearly surveys that covered a range of content. Health questions were asked on how the participants felt about their emotional and physical health over the years, measuring if the survivors felt "better", "same", or "worse" since the previous interview with the Butterfly research team. The qualitative data was procured through open-ended questions in 2012 and in-depth interviews in 2018.

ETHICAL FRAMEWORK OF THE BUTTERFLY PROJECT

The overarching theme of the Butterfly Project's ethical framework was 'do no harm' to either the research participants, the participating NGOs, and the researchers themselves (Havey et al., 2021; Miles et al., 2021; Ennew & Plateau, 2004; Rende Taylor & Latonero, 2018; Zimmerman & Watts, 2003). The primary study adhered to strict protocols including: keeping the identities of the research participants confidential, clarifying that participation remained strictly voluntary, managing the data securely, and ensuring that researchers were never alone with a participant. These ethical protocols echo the guidelines and frameworks set forth by institutions experienced in working with survivors of human trafficking notably the United Nations Inter-Agency Project on Human Trafficking (UNIAP) and the Issara Institute (Rende Taylor & Latonero, 2018). Additionally, approval for the implementation of this project was granted annually by the National Ethics Committee (NEC) of the Royal

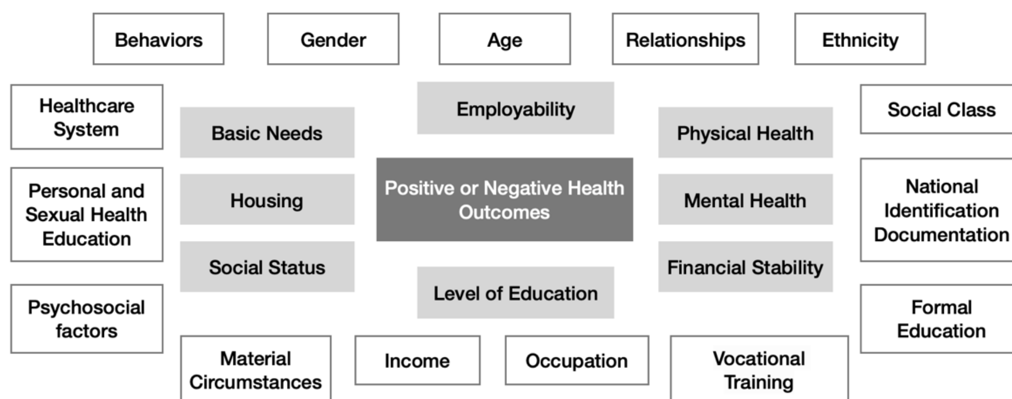
Government of Cambodia, Ministry of Health. Further details on the Butterfly Project's Ethical Framework can be found in Miles et al. (2021).

QUALITATIVE ANALYSIS

The qualitative component of the study took a directed content analysis approach, based on the modified WHO CSDH framework displayed in Figure 2 (Liamputtong, 2010). Through iterative analysis of the transcripts in relation to the modified framework in the context of the quantitative data, the emerging themes were generated.

Figure 2

Modified Social Determinants of Health Framework



MODIFIED SOCIAL DETERMINANTS OF HEALTH FRAMEWORK

Figure 2 displays layers of factors influencing positive and negative health outcomes. Informed by the Solar & Irwin (2010) WHO CSDH framework, this figure was customized to fit the reality of experiences being described by the Butterfly research participants. On its outer ring in white boxes are various socioeconomic and structural factors, along with intermediary determinants of SDH defined by the WHO SDH, all of which impact the determinants of health displayed in the grey boxes of the middle layer. Core to this figure are health outcomes displayed in the center. The boxes remain unlinked intentionally as all of these variables play with one another to varying degrees. However simplistic, this modified framework is to be seen as an *overview* of the many interplaying variables survivors face throughout their lives leading to positive or negative health outcomes so that professionals may begin to understand how to identify and mitigate the vulnerabilities and risks associated with each one.

FINDINGS

Characteristics of the cohort are summarized in Table 1, with further description in the narrative that follows. Categories described were shaped by relevant information found in the WHO CSDH framework's socio-economic category.

A fundamental difference among the cohort between 2012 and 2018 was the extent of NGO intervention in their daily lives. In 2012, 50 of the 52 survivors received some form of support from an NGO, with 36 participants residing in an NGO-sponsored residential program. In 2018, 36 of the participants were living in communities without regular assistance from an NGO; 32 of whom had completed a reintegration program.

Table 1 - Characteristics of the Cohort

Variables	2012*	2018
NGO Assistance* n=52	Residential Shelter: 33 Church-based Residence: 0 Family Group Home: 3 Community-based Aftercare: 12 Reintegration program: 2 Reintegration completed: 1 Declined NGO assistance: 1	Residential Shelter: 2 Church-based Residence: 2 Family Group Home: 0 Community-based Aftercare: 8 Reintegration program: 4 Reintegration completed: 32 Declined NGO assistance: 4
Relationship status n=52	Single: 41 Separated:1 Married (non-registered): 0 Married (registered): 5 Domestic Partner: 5 Widow: 0	Single: 25 Separated: 2 Married (non-registered): 15 Married (registered): 7 Domestic Partner: 2 Widow: 1**
Ethnicity n=52	Khmer: 40 Kampuchea Krom: 2 Vietnamese: 4 Khmer-Vietnamese: 3 Khmer-Chinese: 1 Khmer-Cham: 2	Khmer: 45 Vietnamese: 5 Khmer-Chinese: 1 Thai: 1
National Identification Documentation (Statelessness) n=52	Data was not collected on this topic in 2012	Possessed *all* forms of national identification: 12 Possessed at least *one* form of national identification: 30 Possessed *no* form of national identification: 5 Participant *unsure* if they or family members possessed any national identification: 5

Social Class	Refer to the narrative for a qualitative analysis of interplaying factors determining a survivor's standard of living (Solar & Irwin, 2010).	Refer to the narrative for a qualitative analysis of interplaying factors determining a survivor's standard of living (Solar & Irwin, 2010).
Formal education n=52	No Education: 5 Grades 1-5 (primary): 29 Grades 6-9 (lower secondary): 15 Grades 10-12 (upper secondary): 3 Still attending school: 36	No Education: 2 Grades 1-5 (primary): 13 Grades 6-9 (lower secondary): 22 Grades 10-12 (upper secondary): 11 University: 2 Still attending school: 6
Vocational training n=30***	Received a certificate upon training completion: 2	Received a certificate upon training completion: 10
Occupation 2012 n=16 2018 n=44	NGO Apprenticeship: 12 Entertainment industry: 3 Day Laborer: 1 Feels their labour is exploited: 2 Sells sexual services to clients: 0	NGO Apprenticeship: 9 Entertainment Industry: 8 Small Enterprise: 5 Self-employed: 5 Day Laborer: 4 NGO Staff: 4 Private Sector: 3 Hospitality: 1 Domestic Servant: 1 Garment Factory: 1 Beggar: 1 Feels their labour is exploited: 7 Sells sexual services to clients: 2
Monthly Income 2012 n=16 2018 n=44	Highest: USD120.00 Lowest: USD15.00 Average: USD83.03	Highest: USD375.00 Lowest: USD17.50 Average: USD204.51

*The quantitative data was collected in the first quarter of 2012, meaning that the location of a survivor's residence and the type of services they received from an NGO may have changed throughout the subsequent interviews. In 2018, quantitative data regarding where participants resided and the NGO services they received were collected in quarter 3 of the year and are more representative of their overall living situations.
**Participant self-reported she was a widow instead of divorced to escape the stigma surrounding divorce in Cambodia.
*** Thirty of the 52 survivors in this cohort attended some form of vocational training from 2012-2018.

FACTORS RELATED TO SOCIOECONOMIC POSITION OF COHORT

Overall, the participants' socio-economic position was modulated by a combination of factors, including: gender, age, relationship status (marriage), ethnicity, national identification documentation (statelessness), social class, formal education, vocational training, occupation, and monthly income.

Gender

Forty-one female and 11 male participants self-reported their gender identity within this cohort of 52. No participant identified as transgender or third sex.

Female survivors were more likely to be influenced culturally by the concept of filial piety where the expectation of children to provide financially for their parents in exchange for them being born and raised. This cultural concept has led to some parents and in-laws putting pressure on their children to earn money in whatever way is necessary including working in exploitative conditions and the sex trade. This cultural philosophy of providing for the family was deeply ingrained in the survivors as well. Please refer to Lim et al. (2021) for more information on how filial piety has affected the survivors of the Butterfly research.

Women in this cohort were expected to provide financially for the family, while also caring for their children and the home. When it was difficult to do so, they were blamed and shamed by their partners for failing in their gender-role.

While there were strict expectations for the women to remain attentive to their family, men had more social freedoms. The survivor below described how angry she was because her husband skirted his duties to their home, treated her with disdain and, unusual among the cohort, challenged him because of it. This challenge resulted in her being thrown out of the home, even though she was a new mother:

> Since I got married, I am not happy. He left me alone most nights because he has other girls, he goes out to KTV, and dances in clubs. He lost so much money. During that time, I got very angry with him and said, "if I knew your attitude is like a dog, I wouldn't have accepted you to destroy my future. If I only earned some money to help my mother, it would be better than this. I regret accepting you." After that, he went to tell his mother that I looked down on him. How can I not get angry? He had a second wife! When I had only just delivered our baby, he took his second wife to sleep in our home and pushed me out of my home! He treated me very badly, he hit me when I had just delivered the baby a week before. It's lucky that I wasn't badly hurt (female, 20, 2018).

Age

The male respondents in this study were a narrower age range and, on average, younger than the female participants. The male participants in 2018 were from 17 to 22 years old, and females were from 13 to 43.

Relationship Status (Marriage)

All the male cohort remained unmarried throughout the study. The total number of women married (with or without legal documentation) rose between 2012 and 2018, from five women in 2012 to seven women legally married and 15 married but without legal registration or documentation. Undocumented marriages were popular

among this cohort as it was cheaper than legally registering one, though these left women particularly vulnerable during a divorce or separation as property is typically registered in the husband's name.

In 2018, two female participants were in a domestic partnership that is outside the social norms of Cambodia. A further two female survivors were separated from their partners and one claimed she was a widow but indicated this to escape the stigma surrounding divorce in Cambodian society.

Ethnicity

In 2012, 40 of the participants self-described their ethnicity to be Khmer, the predominant ethnicity in Cambodia. The remaining survivors identified themselves as: Kampuchea Krom, Vietnamese, Khmer and Vietnamese mixed, Khmer and Chinese, and Khmer and Cham. By 2018, some of the participants changed their self-identified ethnicity to ones of greater social power such as Khmer, and Khmer-Chinese mixed. Participants who claimed to be Khmer rose to 45 counts, five participants reported to be Vietnamese, and one participant identified as Thai.

Many participants described the influence of ethnicity in their ability to succeed. One woman's change of ethnicity illustrates the social class difference it can bestow. She began the Butterfly Project study identifying herself as Khmer-Vietnamese, then as the years progressed, she changed her self-identified ethnicity to Khmer, and finally Khmer-Chinese. She did this in order to reflect her rise in economic status over the years as Khmer is the hegemon in Cambodian society, and further, ethnically Chinese-Khmer are seen as being the wealthiest ethnic group. In 2018, this participant was running a successful BBQ business and her husband was also promoted to manager at a construction site with more authority and higher income:

> My livelihood is better than last year. It was really hard last year but it has become better now, so I think my life has changed a lot (female, 35, 2018).

Statelessness

The UNHCR defines a stateless person as one "who is not considered as a national by any State under the operation of its law" (UNHCR, 2003, pg. 12). Five of the 52 participants remained stateless in 2018 as they held no national identification documents. The legal status was unclear among five further survivors. Statelessness barred participants from many social services and constitutional rights, including: employment and education opportunities; subsidized healthcare; and ownership of property.

The following man had to pay USD50 for a certificate of residence (ក្រដាស់បញ្ជាក់ទីលំនៅ *kradach banhcheak tilomnow*) because he is of Vietnamese ethnicity, whereas Khmer individuals may only need to pay approximately USD1.25-5.00 for the same document. Even though he was born in Cambodia and resided there all his life, he did not have a birth certificate and so was required to have documentation that he was an immigrant. He explains how this paperwork took nearly a decade to process and barred him from many employment opportunities:

> I needed a paper to clarify my residence as I am Vietnamese. I didn't have any documents, not even my birth certificate. If I got that paper a long time ago, I could have registered to be a Cambodian already. If I have proper documents, I can work at many different places. I didn't have many options because I

> didn't have a complete document and they were afraid to accept me to work for them (male, 22, 2018).

Social Class

Study participants reported that both their history of sex trafficking and receiving the assistance of an NGO placed them in a lower social class. Participants consistently described a low economic position and experiences of societal stigma and discrimination as they were labelled as "promiscuous" and had "bad karma." One participant encapsulated this discrimination as follows:

> When they see someone who is poorer, they step on them (female, 23, 2018).

Over the years, the survivors sought various routes to raise their social class; both formally and informally; but few succeeded. They did this through: acquiring national identity documents, achieving higher levels of education and skills training, pursuing employment opportunities, attaining higher income, getting married, and also changing their self-reported ethnicity from marginalized ethnic groups to Khmer ethnicity which has more social power.

Formal Education

In Cambodia, completing grade 9 and passing the exam is seen as a threshold for many vocational training centers and employers; offering the individuals who successfully achieve this level of education a much wider range of opportunities than those who do not. In this cohort, 32 out of the 52 participants stopped studying before passing grade 9, with 15 of these participants not obtaining formal education higher than grade 5 (primary school). Eighteen successfully completed grade 9 and passed their exams with 15 of these matriculating into upper secondary school. Three participants successfully completed grade 12 and passed their exams and two (one male and one female) went on to study at university.

The average grade in which participants stopped studying was grade 6 for females, and grade 7 for males. If a survivor missed years of formal education due to exploitation, rarely would they be interested in continuing their formal education once again, stating that they were "too old" to go to school. Furthermore, three participants reported in 2018 that there was no government school available in their communities.

In addition, the socioeconomic need to work prevented most participants from reaching a level of education that would open additional employment opportunities. A number wished to continue studying formally through grade 12 and onto university, however they were required by their families to begin working instead in order to contribute to the income of their household. One survivor described:

> He [uncle] talks with my mother to tell my brother to stop studying. He said nowadays even if we have higher education it doesn't mean we can have a good job (male, 22, 2018).

Notably, one individual could not sit for the grade 12 exam because she did not have a national identification card. Instead of pursuing actions to obtain her National ID in order to overcome this barrier, she told researchers that not being able to take

the grade 12 exam was "God's plan" because she was rude to others; amalgamating her Christian beliefs in God, with the Buddhist principle of karma.

Vocational Training

Thirty respondents participated in some form of vocational training program over the years with only 10 of these participants receiving a diploma recognizing their successful completion of training and the skill set they acquired. Participants studied a range of skills, including: hair, makeup, nail art, screen printing, fashion design, sewing, finance, healthcare, beadwork, baking, electrician, child care, and Khmer traditional music. Of the at least 14 different vocations in which this cohort were trained over the years, few were able to find gainful employment or continue work that utilized the skills they had acquired.

However, despite vocational training, very few were able to continue working in the fields in which they were trained:

> I had skills training. I was assisted [by an NGO] with USD400 for opening a hair shop. [Three] other women who studied the same skill stopped running [their own NGO-assisted hair salons]. Only I still run the business (female, 30, 2018).

Occupation

Quantitative data describing a participant's occupation in this study focused on their primary source of income. Only 16 women were in the workforce in 2012, as most of the cohort were either in formal education or vocational training. Twelve women were apprenticing with their community-based aftercare program; two of whom disclosed that they had felt exploited by this work because of the low wages. Three women worked in the entertainment industry as waitresses in nightclubs, karaoke bars (KTV), and beer gardens. The remaining participant worked as a daily wage laborer.

Forty-four of the 52 participants earned income by the end of data collection in 2018. Of the remaining eight not earning money, six were still in school, one was a homemaker, and the last was a monk. The largest group of survivors (9) remained as apprentices within their community-based assistance program, not having graduated or found gainful employment outside of the organization. Implications of this meant that these survivors received no significant increase in job responsibility, skills development or salary between 2012 and 2018.

The second largest employment sector for this cohort in 2018 was the entertainment industry, in which eight participants worked. These jobs included positions at casinos, nightclubs, KTVs, and beer gardens. Two of the eight individuals who worked in the entertainment industry sold sexual services to their customers. Seven participants felt exploited by their main source of income in 2018. The industries they worked in were the private sector, entertainment, NGO apprenticeship, restaurant, garment factory, daily wage laborer, and being a beggar.

Monthly Income

The average self-reported monthly income in 2012 was USD83, with the highest earnings of USD120. The lowest income was reported by a participant who was given a petty cash allowance by their NGO of USD15 per month.

In 2018, this monthly average income rose to USD204 per month with the highest earner making USD375. The highest echelon of earners in the cohort, all who made USD300-375 per month, were self-employed. The lowest income was USD17.50, reported by a participant who said her primary source of income was begging. For comparison, garment factory workers in 2018 made a minimum wage of USD182 per month (Prak, 2018). Sixteen of the Butterfly cohort made under this amount.

A common challenge was survivors only having low-wage work available to them, which barely covered expenses and did not allow for saving. One worker for a casino (entertainment) reflected, when asked what are his biggest challenges in life:

> My family issues and my work, because I didn't find work I like yet; where I can save a small amount, and they can promote me and increase my salary. I cannot save anything from this work, it's just enough to survive. But sometimes I feel I can't even survive because I need to spend on my family, on gasoline, food, and other expenses. I could work two shifts but the law doesn't allow me to work for more than 16 hours [a day]. The longest shift a person can work in Phnom Penh is for 12 hours [a day] (male, 22, 2018).

The following woman described her fatalism about low-wage work:

> I have no hope these days. I am totally dependent on my husband. If I stop working and live with my husband I could reach a successful life. But now, I cannot achieve or envision it because I am making a living just for each day, and I cannot think about a success plan (female, 22, 2018).

FACTORS RELATED TO WHO CSDH INTERMEDIARY DETERMINANTS OF SOCIAL DETERMINANTS OF HEALTH

Descriptive quantitative information on the intermediary determinants of SDH is presented in Table 2.

Table 2: *Descriptive Data of WHO CSDH Intermediary Determinants of Health*

Variable		2012	2018
Material Circumstances n=52	**Housing**	NGO Residential Shelter: 33 Church-based Residence: 0 Family Group Home: 3 Community-based Aftercare: 12 Reintegration program: 2 Reintegration completed: 1 Declined NGO assistance: 1	NGO Residential Shelter: 2 Church-based Residence: 2 Family Group Home: 0 Community-based Aftercare: 8 Reintegration program: 4 Reintegration completed: 32 Declined NGO assistance: 4
	Food	No problem accessing food self-reported	Difficulty accessing food: 4

	Water	No problem accessing clean water self-reported	Difficulty accessing clean water: 10
Behavioral Factors n=52	**Drugs**	None stated they used prohibited drugs in 2012	Researchers made anecdotal notation of one male participant struggling with drug addiction
	Cigarettes	1 male and 1 female smoked cigarettes in 2012	1 (male) spent money on cigarettes
	Alcohol	6 participants (5 Female, 1 male) self-reported that they had "drunk alcohol excessively to the point of drunkenness"	8 (3 male, 5 female) spent money on alcohol
	Gambling	Data not available	4 (3 female, 1 male) spent money gambling
	Diet	Outside scope of primary study	Outside scope of primary study 9 participants (1 male, 8 female) indicated they often have a poor appetite
Psychosocial Factors n=52	**Original case of trafficking**	Sex trafficked: 27 Labor trafficked: 1 Rape: 6 High-risk to sexual trafficking: 18	
	Occupational exploitation	Feels their labor is exploited: 2 Sells sexual services to clients: 0	Feels their labor is exploited: 7 Sells sexual services to clients: 2
	Debt	Survivors with debt: 14 Average amount of debt: USD128.66	Survivors with debt: 22 Average amount of debt: USD2,633.18
	Emotional health Likert scale	"Better" Female: 18 Male: 6 "Same" Female: 8	"Better" Female: 19 Male: 5 "Same" Female: 5

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		Male: 2 "Worse" Female: 15 Male: 3	Male: 2 "Worse" Female: 17 Male: 4
	Suicidal ideation	No suicidal ideations were disclosed to the researchers	Disclosures of suicidal thoughts: 5
Physical Health and Health System Factors n=52	**Physical health Likert scale**	"Better" Female: 10 Male: 8 "Same" Female: 10 Male: 1 "Worse" Female: 20 Male: 2 "I don't know" Female: 1	"Better" Female: 7 Male: 6 "Same" Female: 14 Male: 2 "Worse" Female: 20 Male: 3
	Sexual health	2 of 13 shelter programs offered STI testing to clients upon intake: Females tested: 8 (0 positive) Males tested: 7 (0 positive) # of survivors who had at least one abortion in their lifetime: 9	Difficulty or Painful Urination Rarely: 6 Sometimes: 2 Usually: 2 Always: 1 Vaginal discharge Rarely: 3 Sometimes: 2 Usually: 2 Always: 1 # of survivors who had at least one abortion in their lifetime: 16

MATERIAL CIRCUMSTANCES

Housing

At the beginning of 2012, 33 of the 52 participants were living in a residential shelter for survivors of sex trafficking. Three further survivors resided in family-group homes sponsored by an NGO that provided many of the same services to their clients as residents within the shelters. In 2018, the number of survivors still residing in the shelter was reduced to two. While there were no participants in Family Group Homes, two survivors resided in churches. Furthermore, four participants remained in a re-integration program while 32 survivors had completed their reintegration program sometime between 2012-2018 and were no longer receiving NGO services.

The housing circumstances among the cohort was complex and varied over time based on their experiences with the types of housing and shelter related NGO services available. Several described the experience residing in the shelter positively as its support services were comprehensive and met their basic needs:

> I just want to say thanks to those NGOs that help the children and to give them support… when I was there everything was good and there was nothing bad; so I only have the word thank you [អរគុណ, arkoun] (male, 19, 2018).

In 2018, three participants who resided in the community without any further support from an NGO disclosed how they have no access to safe housing. One 21 years-old woman lives alone, and another said she was afraid for her health because her house was next to a large electrical power grid. The remaining survivor was told she had to move into a shared housing structure that was built by the government. It appears that she was evicted from the land on which she had previously resided in order to make room for development.

Food Security and Insecurity

Overall, unless the NGO was directly providing access to food, or a daily stipend, the respondents experienced food insecurity. While living in shelters, they had regular access to meals. The participants continually expressed gratitude for this well after they had left the NGO and returned to the community.

After leaving the shelter and participating in the NGO reintegration follow-up program, which offers a monthly food stipend to its clients, clients non-the-less reported greater food insecurity:

> I would like the shelter to increase my basic salary [reintegration program's monthly stipend]. I need more than USD20 per month and the food money [is not enough] as well (female, 19, 2012).

In 2018, four survivors did not have reliable access to food. One stated that this was due to the remote location of his home and his family did not have land for growing their own crops. Another male survivor did not have stable access to food because of his low economic position and drug addiction.

Access to Clean Water

In 2018, ten women of the 52 survivors had difficulty regularly accessing clean water. Nine of these women lived in urban areas. Several lived in unhygienic and

make-shift housing, while the majority either rented or owned homes. Even when a home had running water, there were often concerns about the safety of drinking it. Some boiled their water daily. Others purchased potable water at great expense. One woman commented that, in addition to all her expenses caring for her growing family, water alone was costing her 20-25 USD per week.

SOCIO-ENVIRONMENTAL OR PSYCHOSOCIAL CIRCUMSTANCES

From 1975 to 1979, Cambodia experienced an auto-genocide in which up to a fifth of the population were annihilated by Pol Pot's notorious Khmer Rouge. Although it is now more than 40 years ago the legacy continues. This cohort of sex trafficking survivors were also second or third generation from those who experienced that era and have been affected psychologically with patterns of violence continuing intergenerationally (Miles & Thomas 2007).

Self-reported Emotional Health

In 2012, six of the 11 male participants reported feeling emotionally better than in previous interviews. The reason for this was mixed, as some boys were able to live an "*easier*" life while living in the shelter as opposed to the community, not having to worry about accessing food, having friendships, and the shelter sometimes took them on holiday to the beach. However, other boys were happier because they had moved *away* from the shelter and the bullying perpetrated by some older boys residing there:

> Living here [church-based residence] makes me happy. The shelter was very difficult for me. The older youth hit me when I didn't have money to give them. But when I had enough money to give them, they wouldn't hit or scold me (male, 14, 2012).

In 2012, three boys mentioned that they were emotionally "worse" than in the previous interview. These boys expressed problems with their friendships with the other boys in the shelter as the reason for their unhappiness, one saying that he feels discriminated against because his family were so poor compared to the others. This boy also identified his upcoming reintegration back into his family's home as a cause for his sadness; that he worried about his family's health.

In 2012, 18 women felt "better" emotionally than in the previous interview. The reasons included: employment with living wages, healthy lifestyles with enough food, ability to study, and supportive relationships among friends, family, and shelter staff, led to their better emotional health. Conversely, 15 female survivors felt "worse" in response to this question. Personal and familial health, debts and financial struggles, unemployment, and toxic relationships were among the most common worries that had led to their worsening emotional health.

In 2018, most of the cohort had completed their reintegration programs, five males and 19 female survivors reported feeling emotionally "better", while four males and seventeen females felt emotionally "worse". Among the male participants, emotional stress surrounding financial and job instability, debt, and relationships were the main factors leading to their emotional deterioration. It was found that there were many compounded emotional stressors in the male survivors' lives and they did not seem to have proper supportive nor trusting relationships to be able to speak authentically about their emotional health.

Similar to the male participants, themes of financial anxiety, debt, and toxic relationships were common amongst the women who said their emotional health was "worse." Relationships with family, partners, and particularly in-laws played a heavy role in these women's lives, consistently being spoken upon as the biggest source of their stress and anxiety.

Financial Anxiety

Debt was reported by 22 of the 52 participants in 2018, and one of the most common sources of anxiety for participants over the years. While debts remained under USD 300 for the 14 participants who had them in 2012, the average amount jumped to USD 2,633 USD in 2018. The highest amount of debt was self-reported by two participants who each owed USD 12,000. By the end of data collection, 45% of the indebted cohort owed money lenders more than USD1,500, this was more than seven times the average monthly salary of the participants. While describing aspects about his life that he was happy about, one participant particularly mentioned how his family was debt-free, showing how pervasive and burdensome this is for families and survivors throughout Cambodia:

> I don't have debt with any bank, like others. In short, I love that my family does not have debt with anyone. If my family had debt with the bank, I would be worried so much, I would not know where to go (male, 21, 2018).

In 2018, nine women had an undesired pregnancy during the year. The pregnancies were problematic because the women already had children to provide for and additional pregnancies would result in further financial burden. Note: the primary data does not link this number of undesired pregnancies with the abortion rate of the cohort.

Depression and Self-harm

Depression was commonly discussed throughout the cohort, and six survivors disclosed having suicidal thoughts over the years. A female survivor in this cohort discussed with the researchers her struggles with mental health in 2018, at one point beginning to cry. During this interview she also disclosed the reason why she could not go through with suicide as she had recently planned:

> I don't do it now [attempt suicide] because I know my life is priceless and I don't want to do it anymore. I think although I commit suicide, I will not reincarnate. We cannot predict anything but if I did that, they [friends and family] would ask, "Why would I do that?" (female, 24, 2018)

Self-harm was reported throughout the cohort over the course of the Butterfly project during the qualitative in-depth interviews. To understand more about self-harm practices, including suicide, among the larger cohort of survivors in the primary study please refer to Morrison et al. (2021).

Lacking Supportive Relationships for Emotional Resilience

Having trouble finding relationships that offered a supportive and safe environment for the survivors to discuss their emotions was common among both the male and female survivors in this study. In 2012, one male and 14 females said that they did not trust anyone in their life despite many of whom were actively receiving NGO

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services at the time. A further six females stated that only a "few" community members accepted them and their past history of sexual exploitation.

Moreover, participants were unable to access continued mental health services after their reintegration back into the community as this was not a common practice throughout Cambodia. One participant described how her husband took her to a Khmer traditional healer when she was, as she described, being "*attacked*" by evil spirits who wanted her to die.

Another woman described her difficult transition after shelter services ended that resulted in thoughts of shame if she requested further support from them:

> It's 100% that we are apart and I dare not contact them [shelter] anymore. I worry that if I have any problem and contact them, I would feel ashamed (female, 18, 2018).

While residing in the shelters, the assisting NGOs offered the survivors mental health services in hopes of building their emotional resilience from the traumas they faced from their past exploitation. One woman discussed what her circumstances might be had she not received mental health services from the shelter:

> I would not have been able to get treatment for my mental health. I would have put pressure on myself and thought of it as my fault. I would have thought I was the one who broke the family. I would still have those ideas. I probably wouldn't have married or found a job yet as well (female, 26, 2018).

The survivor's relationships with the NGO staff and service-providers were significant to their mental and emotional well-being throughout the study. As previously mentioned, many appreciated the services from NGOs, however, some did not. While one participant declined NGO services from 2012 through 2018, a further three survivors had declined NGO services because they were not satisfied with the programming and services provided. More details about the significance of the NGO staff's relationship with these survivors in the Butterfly study while they were rehabilitating from trauma can be found in Cordisco Tsai et al. (2020b).

Three survivors felt exploited by NGOs, one of whom described their reasons for transitioning away from the NGO:

> My new work is better than [NGO Apprenticeship] because the salary is much more than there. [Apprenticing for the NGO] I felt like I was a failure and lived in hardship. I also played Tong Tin [តុងទីន - 'tontine' in English (Ham, 2001)] which people who work there could take advantage of me a lot. My life went down at that time and it almost reached zero (female, 35, 2018).

Lacking relationships for emotional support also diminished the survivors' resilience when facing behavioral challenges and abuse of substances.

BEHAVIORAL FACTORS

Substance Use

Substance use was common among the survivors of the primary Butterfly Research Project cohort, but less so in this subset of 52 participants who completed all

interviews from 2012-2018. One of the most common reasons that a participant in the study missed an interview with the Butterfly researchers was related to substance abuse, i.e. incapacitated or intoxicated, or jailed because of drug-related crimes. Please refer to the Limitations section of this study for further information.

In 2012, none in the cohort disclosed using illicit drugs, however six (5 females and 1 male) responded affirmatively when asked if they had “drunk alcohol excessively to the point of drunkenness” and one male and one female smoked cigarettes.

The survey questions pertaining to substances had changed by 2018. In response to the question “what have you spent your money on this year?” eight (three males and five females) said they spent their money on alcohol, one male said he had spent money on cigarettes, and four survivors (three females, one male) spent money gambling. In 2018, none of the survivors disclosed using illicit drugs, though it was known to the researchers that one man who spent money gambling also had a drug addiction.

PHYSICAL HEALTH AND THE CAMBODIAN HEALTH SYSTEM

Physical Health

In 2012, eight males and 10 females reported improved physical health; one male and 10 females stated that they felt the “same”; and two males and 20 females considered that their physical health was “worse” than the previous interview.

A number of the males and females who felt “better” were residing within NGOs that provided them with regular meals, a safe sleeping environment, and the ability to access medical services. However, it needs to be noted that those who required medical attention while in the residential shelter disclosed that these services were often delayed and were only proffered when the un-medically trained shelter staff deemed it necessary. This phenomenon is described in further detail in Cordisco Tsai et al. (2020a).

There was a notable change in the male participants when they were asked about their physical health in 2018; eight stated that their physical health was “worse” than when they had met with the Butterfly researchers previously. They reported that they were having increasing difficulty accessing food, stable housing, sustained employment, livable wages, and mental health support, all contributing to their worsening health. Compared to 2012, when the majority of the boys were living in a shelter with regular access to meals and healthcare, these survivors were finding it harder living in the community. Two males answered “better” and one said their physical health was the “same” in 2018.

In 2018, one individual told the researchers of his continual cold-like symptoms of coughing and fever. In their field reflection after this interview, the researchers noted that this man was skinny, unhealthy looking, and seemed overworked at his job in a casino along the Cambodia-Vietnam border:

> I always have the problem but it is not a serious sickness; I just have a cold, coughing, and fever as normal (male, 22, 2018).

Twenty women described their physical health as “worse” in 2018, the same number as in 2012. The women identified similar themes as the male participants in 2018, fatigue being the most common ailment. Twenty-eight (four males and 24 females) described feeling fatigued “sometimes”, “usually”, or “always.” They linked most of this

fatigue to stress from their jobs, families, and/or dependents, with varying levels of severity. In their field notes, the researchers often noted that the participants' fatigue was associated with weight loss, weight gain, and overall poor health.

Abdominal Pain

Abdominal pain was commonly disclosed as a recurring ailment among the participants with three males and nine females stating this occurs "rarely", three females said it occurred "sometimes" or "usually" for each, and four females reported to "always" have abdominal pain. While the data cannot draw a causal relationship between abdominal pain and any specific causes, some respondents self-reported reasons for their pains, consuming unhygienic foods being a common factor.

One survivor spent a week in hospital because of her abdominal pain. This stay costed her USD75, a significant amount of this woman's monthly income:

> I went to stay in the hospital right away... I can feel the pain even when I'm just drinking water. I have a stomach ache and they told me that I have severe stomach inflammation. It hurt me even if I drank water. I went to stay at the public hospital at Kampong Cham province. I stayed overnight there (female, 23, 2018).

Stress and social anxiety commonly manifested itself as abdominal pain among participants, with one woman stating that this was due to all the secrets she withheld from her spouse and family about her past sexual exploitation. Lastly, one participant who reported that she "always" had abdominal pain, noted in the same interview that she "always" experienced vaginal discharge.

Sexual Health

Of the 13 shelters participants resided in, only two provided their clients with tests for sexually transmitted infections (STIs) upon intake into the facility. Of the eight females and seven males who were tested in 2012 through their shelter program, none tested positive for the presence of an STI.

In 2018 respondents were asked if they experienced painful urination, and penile or vaginal discharge. None of the men responded affirmatively to either question. However, five women responded "sometimes", "usually", or "always" to experiencing painful urination; and five women responded "sometimes," "usually," or "always" to experiencing vaginal discharge. One woman who answered "always" to both questions was described by the researchers in 2018 to be, "thinner than the previous meeting and she looks a bit pale because she doesn't have enough sleep and is sick. She looks weak and is unhealthy. She gets sick often." Though the data does not explicitly correlate painful urination and vaginal discharge to the presence of a sexually transmitted infection (STI), these are common symptoms and potentially traumatic to a woman's sexual reproductive health (SRH) if left untreated.

Described as *thleak saw* ធ្លាក់ស in Khmer (literal translation being 'white fall'), vaginal discharge could have pertained to a number of ailments including a urinary tract infection (UTI), yeast infection, bacterial vaginosis, or STIs such as gonorrhea or chlamydia. The following participant did not know the pathology causing her ailment, but did know that she had this discharge every time she had sex with her husband:

> Sometimes it is hot and painful and when I sleep with my husband, I feel itchy inside. It is really itchy so I want to scratch it but sometimes I scratch it until

> it peels. It is really itchy and white discharge comes out so much (female, 23, 2018).

When asked if she had been to a clinic to help her diagnose and remedy this issue, this woman responded "No, never!" Not receiving sexual health care was common among the participants due to the lack of sexual health education and the culturally taboo subject of sex. One woman was able to go to a sexual health clinic when she was experiencing vaginal discharge in order to have a blood test for a STI. She was particularly worried about this because she was pregnant and did not want an infection to hurt her unborn child. The results of this test fortunately were negative. Most other women in this cohort performed self-remedies to clean the vaginal discharge they were experiencing, wiping it away with a washcloth wetted with a mixture of warm water and lime juice. Another woman tried to clear her vaginal discharge by taking medicine she had purchased from a pharmacy, but was frustrated that the pills were not working.

Common among the cohort was a lack of medically accurate sexual reproductive health education, knowledge, and proper use of contraceptives. To illustrate this low literacy on SRH, the following excerpt from a 2012 interview with a 19-year-old female participant shows the complicated interplay between medical, religious, and erroneous beliefs towards contraception and abortion:

> *Survivor:* When we have sexual intercourse, I don't use any contraceptive pill. I use the "natural way" to prevent birth. I got pregnant once, but the baby could not stay with me, so I aborted that baby at the hospital... The natural way is important for everybody to know. No one told me. I have never read a book or watched television. I know it by myself. I don't know why I know how to prevent birth naturally. I didn't use any materials for prevention or birth control. When I use a condom, it will affect the uterus. If I take the contraceptive pill, it can affect my baby in the future. When you use Nuvaring [a hormonal contraceptive product] it also affects the uterus.
>
> *Researcher:* What will you do if you get pregnant next month or something like that? Would you keep the baby, or not?
>
> *Survivor:* I will keep this baby. I don't want to commit sin again. Sometimes I find it very difficult to go into labor. So, I decided to take that baby out... I will measure my ability to have a baby. I think if I abort a lot, it is surely affecting my health. To abort is not easy, like giving birth. I could die by abortion. Even though I am poor, I can still raise my child. I want to keep that baby (female, 19, 2012).

In 2012, nine women disclosed that they had had at least one abortion at some point in their lifetime. Over the years of data collection until 2018, the number of women who disclosed that they had abortions at one point in their life rose to 16.

AVAILABILITY OF HEALTHCARE FACILITIES IN THE COMMUNITY

The researchers asked the respondents of the availability of various health services within their communities in order to garner an understanding of the continued access to care after the close of the Butterfly Project. Many participants lived without access to a hospital (15), medical clinic (17), and/or pharmacy (7) within their

community. Additionally, some survivors said they didn't know where there was a clinic (2), hospital (1) or pharmacy (1) were, indicating a level of unawareness of their surroundings or apathy towards their healthcare.

Accessing Healthcare Facilities

Eighteen participants saw a medical doctor in 2018, with an average of two visits. This information was garnered in order to understand if the survivors commonly had ailments or medical needs beyond what could be addressed from a visit to a pharmacy or a nurse at a community health clinic. The majority of the participants who visited a doctor 1-2 times in 2018 did so without any acute symptoms. One survivor who visited a doctor three times had a successful surgery on her gastrointestinal tract. Another woman who visited the doctor the most in 2018 (seven times), reported to the researchers that she was pregnant and had a pulmonary edema (ទឹកដក់ក្នុងសួត, *tukadk knong suot*). The researchers recorded in their interview notes that this woman looked unhealthy.

The average number of visits to the community health clinic or pharmacy in 2018 was five. As with the doctor visits, these appeared to be more routine rather than emergent. Indicative of this was one woman who said she went to the pharmacy or clinic 20 times over a six-month period, yet described herself to be happy and healthy. The most visits made to the pharmacy or clinic (30 times) was by a 22-year-old man described by the researchers as being skinny, unhealthy, and overworked. Notably, one of the men who said he visited these establishments three times in the past year said his biggest (physical and emotional) health concern was his poor dental hygiene.

Furthermore, two women had visited a traditional Khmer healer (គ្រូខ្មែរ, *kru khmer*) in 2018. These visits were done in association with visiting western medical care facilities and were seen as supplemental avenues to improved health if the western medicine could not fully resolve the issue.

Distrust in the Cambodian Medical System

Self-remedy and distrust in the Cambodian medical system was common throughout the cohort. One woman described how she had an operation on her uterus specifically because of a medical doctor's recommendation, however when she went to a second doctor because of the same issue continued after the operation, the other doctor said that she did not need an operation in the first place and that she was lied to in order to pay the first doctor for unnecessary medical procedures. Issues with her pelvic area and reproductive organs continued as she was being interviewed in 2018:

> I feel pain inside my uterus and I don't know the reason. Maybe because of the operation? I just feel the pain in this area [pelvis] and it is still bleeding at my uterus where I got the operation. Maybe because I had sex with my husband early [too soon after the operation]... Every time we sleep together the blood comes out, that is why I am afraid to sleep with him because it can cause me a lot of pain in my uterus (female, 22, 2018).

After being lied to in order to pay for an unnecessary operation, this survivor said that the second doctor blamed and scolded her for getting the operation because she was "impatient."

DISCUSSION

Overall, this study illustrates the enormous strength of this cohort of trafficking survivors in Cambodia in the face of adversities after their trafficking situation, including interactions with NGO shelters, reintegration programs, as well as society and family. However resilient, poverty, sexual violence, and exploitation have had long-term impacts on and exacerbated the survivor's physical, emotional, and spiritual vulnerabilities as seen in this research and other studies, such as Miles et al. (2020), Cordisco Tsai et al. (2020a), and Reimer et al. (2007). The interplay of social determinants of health survivors experienced during this transition period of six years reveals how critical it is to view trafficking as the public health issue that it is (Greenbaum 2020). It also reveals how addressing underlying vulnerabilities to trafficking is the only way to end the cycle of trafficking and exploitation, as the longer this cohort was away from the social capital structures offered by the NGO, the more challenges they were presented with.

The longitudinal nature of this research displays the changing socioeconomic position of sex trafficking survivors over the long term, something that cannot be determined through most studies which are taken as a snapshot. For some, their socioeconomic position improved, but for most it remained the same or deteriorated. Principally, sex trafficking added to the lower social position of this cohort of survivors. Understanding that social class is determined by the interplay of many factors including, gender, age, ethnicity, occupation and income (Solar & Irwin, 2010), this cohort, like others (Ditmore, 2014), struggled to retain stability in their lives, constantly having to overcome social and financial obstacles (Lim et al., 2021). Some found challenges to access even basic human needs. Survivors in rural communities were hard pressed to access food regularly, and others in more urban settings lived in makeshift housing in dangerous contexts without access to clean water.

Gender and age were fundamental factors affecting the survivor's socioeconomic position and health outcomes as the older the participants aged, the more gendered responsibilities they were expected to take on. This study displayed an unbalanced reality between the male and female participants. The male cohort remained relatively young compared to the females, so by the end of the study they were largely only expected to be making an income for their family rather than obtaining continued education (Davis et al., 2021). Among the female participants, they were expected to not only be making an income to support the household but also marry, emotionally and sexually support their husbands, bear children, and care for the home in general. This pressure led to distinct experiences of stress among the female survivors in this study, deteriorating their mental and physical health (Morrison et al., 2021; Reimer et al., 2007).

Challenges to the survivors' mental and physical health were present long after they were within the care of an NGO. While there are many layers to improving the health of trafficking survivors in Cambodia, one fundamental challenge the cohort faced was an inadequate healthcare system; Cambodia's healthcare system currently does not have the appropriate response caliber to handle a survivor's complex health challenges. These inadequacies displayed by this study reflected findings in other publications, including: sexual health challenges among both males (Yi et.al. 2015; Hilton, 2008) and females (Couture et al. 2011), emotionally abusive healthcare professionals (Brody et al., 2021), exorbitant healthcare costs (Ir et al., 2019), and inaccessibility in remote locations (Kolesar et al., 2019; Matsuokaa et al., 2010).

Financial pressure was experienced throughout this cohort, especially high levels of debt that left survivors feeling lost, depressed, and suicidal. These financial pressures among the Butterfly project participants are discussed in detail in Lim et al. (2021). Much of this debt could be attributed to the high out-of-pocket costs for healthcare in Cambodia. A recent study on access to healthcare among Cambodia's poorest population showed that though the national Health Equity Fund (HEF) aims to provide free healthcare to the rural poor in the country, "About 36% of people under the national poverty line do not hold an Equity card to access HEF benefits" (Kolesar et al., 2019) This 2019 study concluded that the HEF has yet to achieve its intended impact of removing the barrier of needing to pay out-of-pocket for healthcare.

Survivors routinely found themselves paying for the services of healthcare professionals and buying medicines from pharmacies, with one individual who was described to be healthy reporting to have visited a doctor over 20 times in a six-month period. Basic self-care of health needs was often lacking among the cohort, particularly understanding sexually healthy practices and modes of contraception. Many relied on erroneous information and/or cultural practices that were not medically accurate. These practices and beliefs were self-taught or shared with them by untrained community members or NGO staff (Matsuokaa, 2010).

Perry and McEwing (2013), Jegannathan et al. (2015), and Ditmore et.al. (2014), all describe the mental health sequelae experienced within Cambodia's post-conflict society, especially among survivors of sex trafficking. In addition to this sequelae phenomenon, this cohort was also subject to continued stigma, discrimination, and violence (Monto, 2014; Morrison et al., 2021). Cambodian cultural norms and gender stereotypes combined in ways that harmed and hindered those who experienced trafficking as survivors are seen to be unlucky and have bad karma (Morrison, 2021; Bearup & Seng, 2020; Monto, 2014). This discrimination permeated every relationship the Butterfly survivors had; peers, family, spouses, in-laws, teachers, police, and even NGO service providers (Morrissey et al., 2021; Morrison et al., 2021; Cordisco Tsai et al., 2020b). This left large gaps within the survivor's access to legal support, greater social capital, trusting partnerships, and further development of their education and professional abilities.

There were many intersectional factors that led to more than half of this cohort not reaching grade 9 in school, particularly: gender, age, and ethnicity. The fact that aftercare programs had few relationships with local schools in the communities in which the survivors were reintegrating also attributed to the low education rate. Without properly brokering these relationships, it was easy for survivors to fall behind coursework, feel marginalized and discriminated against, and for families to force their children to work for an income rather than continue education (Cordisco Tsai, 2020b; Davis et al., 2021; Lim et al., 2021; Morrison et al., 2021).

Employability, technical, and soft skills development are recognized as priority areas within Cambodia's workforce (Yok et al., 2019). While technical, vocational, education and training (TVET) has been a major focus of NGO skills training programmes, these programs run the gamut from providing quality assured market-driven training, on through trainings that were incomprehensive and did not provide suitable acquisition of skills for gainful employment. Only a small number of survivors in this cohort sustained employment utilizing a skill they had learned from a TVET course. Furthermore, the Butterfly survivors recognized underdeveloped skills training programs and sometimes disengaged from all NGO services because of it.

Some survivors lacked essential national identification documents even though they were all born in Cambodia. Not having national identification left survivors without the ability to access essential services and rights entitled to Cambodia's citizens (Sperfelt, 2020; UNICEF, 2013). Stateless or undocumented individuals are common throughout Cambodia, as the national documentation system is relatively new, constitutional constraints tie nationality to the Khmer ethnicity, and to register for documentation can cost time and money beyond the means of many indigent families. According to UNICEF's latest Demographic and Health Survey (DHS) on Cambodia in 2014, only 73% of children under 5 years had birth certificates (UNICEF DHS, 2014). As seen in this study, a survivor obtaining these on their own was a long and complicated process that resulted in survivors missing out on many opportunities for education and income. Encouragingly, more and more NGOs and agencies have begun offering pro bono legal services to survivors and migrants over the years (Morrissey et al., 2021).

RECOMMENDATIONS

The socioeconomic and structural circumstances among survivors of human trafficking leading to poor health outcomes are comprised of multidisciplinary problems and so, requires multidisciplinary responses to remedy. The authors have used the findings of this secondary study to provide recommendations for multi sector stakeholders to analyze, problem solve, and adopt. In doing so, it is hoped that these program and policy changes may lead to improved health among survivors of human trafficking in Cambodia.

RECOMMENDATIONS TO THE ROYAL GOVERNMENT OF CAMBODIA

Ministry of Interior

It is recommended that the Royal Cambodian Government (RGC) Ministry of Interior ensure that all those born within Cambodia have equal access to healthcare, particularly ethnic Vietnamese in Cambodia (Sperfelt, 2020). Any undocumented or "stateless" (UNHCR, 2003, pg. 12) persons residing within Cambodia need to be registered with proper national identification documents; especially vulnerable children residing in residential care shelters. This identification process should be done in collaboration with the Ministry of Social Affairs, Veterans, and Youth (MoSAVY).

Further, the Ministry of Interior needs to create a fair and equitable naturalization process for all persons, one that minimizes the time and monetary costs to become a Cambodian citizen (Morrissey et al., 2021). This is recommended to the Ministry of Interior so that all persons in Cambodia have equal access to subsidized healthcare schemes, public resources, education and employment opportunities, along with the ability to purchase property and have legal protections over it.

Ministry of Health

It is recommended that the Ministry of Health continue to invest in the improved healthcare infrastructure in Cambodia to mitigate the costly financial, emotional, and physical risks the survivors faced while engaging with the Cambodian healthcare system. Many of the survivors in this cohort described distrust in the Cambodian healthcare system along with adverse experiences with healthcare professionals. It is pertinent that healthcare education in Cambodia is free from corruption and relies on

international accreditation structures in order to promote the development of high quality healthcare professionals (Amaro, 2016). Furthermore, the authors recommend to the Ministry of Health to invest its resources to foster international collaboration among healthcare infrastructure development and quality assurance programs (Diagnostic Microbiology Development Program, 2021; Phanouvong, S. et al., 2010; Care Quality Commission, n.d.). These programs are building a culture of best practice among diverse fields of medicine throughout the country and thus need to be prioritized in the Ministry of Health's infrastructure development agenda.

This study demonstrates numerous adverse experiences of survivors being shamed, judged, and/or discriminated against by healthcare professionals, seemingly a common occurrence for survivors when accessing healthcare within Cambodia (Brody et al., 2021). This behaviour should be condemned by the Ministry of Health. Along with other regulatory measures outlined in the United Kingdom's *the Health and Social Care Act 2008 (Regulated Activities) Regulations 2014*, regulations particularly upholding the dignity of a patient within a medical professional's care need to be adopted and enforced (Care Quality Commission, 2015; Health and Social Care Act 2008 [Regulated Activities] Regulations, 2014).

Trauma and mental health challenges are also found in the cohort; with occurrences of anxiety, depression, and suicidal ideation. The authors, therefore, recommend that the Ministry of Health continue to develop the professional body of mental healthcare services throughout the country. The capacity-building of Cambodia's mental healthcare system has been a consistent priority among international development agencies for decades (IOM, n.d.), meanwhile new research such as Parry et al. (2020) continually displays gaps within the mental healthcare system throughout the country while also offering remedial recommendations that need to be heeded.

A total of 39 responses from the Butterfly participants stated that they did not have access to a hospital, health clinic, and/or pharmacy in their community, indicating continued geographic gaps in the country's coverage of healthcare services. The Ministry of Health needs to ensure everyone within the country has access to a certified healthcare professional by investing in the proliferation of professionals throughout all areas of the country. While the recruitment and retention of healthcare professionals in rural areas is a global issue, countries have addressed this problem by committing medical students to years of rural medicine practice upon their certification by subsidizing their medical school education costs (Mareck, 2011).

Ministry of Education

The average grade survivors stopped studying was grade 6 for females, and grade 7 for males. Furthermore, three participants reported in 2018 that there was no government school available in their communities. The authors recommend that the RGC Ministry of Education provide up to grade 9 education to all children in Cambodia, and be thoroughly supported to pass their exams, as is guaranteed within the (1993) *Constitution of Cambodia, Article 68* (OpenDevelopment Cambodia, 2018). Passing the Grade 9 exam has been seen as a threshold for continued education, vocational training, and many employment opportunities offering better wages. Where survivors of trafficking have missed education and/or grade levels because of exploitation, remedial education and vocational training opportunities need to be made available through publicly-funded: accredited training centers, scholarship awards, and/or voucher schemes.

Interdepartmental Collaboration

There is a need to improve networking and collaboration between the RCG's Ministry of Health, MoSAVY, Ministry of Education, and the Ministry of Interior for the development of programs and initiatives that cross the functions of the RGCs various departments, in order to enhance the care for survivors of human trafficking. For example, the police involved in investigation of sexual abuse and exploitation need to be trained by medical professionals in identification and appropriate response protocols for protecting the mental and physical health and safety of victims of sexual violence (Morrison g et al., 2021). Further, medically-accurate education programs need to be implemented by the Ministry of Health and Ministry of Education that address the knowledge gaps among the general public pertaining to sexual health, first aid, and combat erroneous misconceptions that lead individuals to harmful healthcare practices and decisions. Finally, in collaboration with the NGOs responsible for aftercare, MoSAVY and the Ministry of Health should develop systems to ensure that this particularly vulnerable group is adequately identified and cared for.

RECOMMENDATIONS TO HEALTHCARE PROFESSIONALS

All professionals in Cambodia's healthcare system need to be trained to identify victims of human trafficking and provide appropriate services at all stages of care, from patient intake through examination and recovery. Protocol toolkits have been developed for healthcare professionals in other contexts that would benefit professionals and medical staff in Cambodia to adapt their contents. For one such toolkit, please refer to the HEAL Trafficking and Hope for Justice's "Protocol Toolkit for Developing a Response to Victims of Human Trafficking in Health Care Settings" (HEAL Trafficking, 2021).

As was previously recommended to the Ministry of Health, healthcare professionals and offices need to uphold the dignity, confidentiality, and respect of each patient that they treat. Guidelines for service providers and medical facility managers as to how these regulations can be implemented within medical practices can be found on the Care Quality Commission's website (Care Quality Commission, 2015). Until formal legislation is in place promulgated and regulated by the RCG, it is recommended that hospitals, medical clinics, private practices, and pharmacies in Cambodia adopt and enforce these patient safeguarding measures within their own professional working culture. Upon adoption, these distinguished practices should be communicated to present and future patients to build trust and retention.

As the main sources of medical knowledge within Cambodia, it is the duty of the country's medical professionals to offer education and training on first aid, hygiene, sexual and reproductive health, and also combat erroneous conspiracies and ideologies held by society. The proliferation of this knowledge could lead to a safer and healthier society, who is better informed on how to respond to medical emergencies.

RECOMMENDATIONS TO AFTERCARE NGO STAFF AND SOCIAL WORKERS

Poverty, sexual violence, and exploitation have long-term impacts on and can exacerbate a survivor's physical, emotional, and spiritual vulnerabilities. Some survivors found challenges to access even basic human needs the longer they were away from the care of NGO support structures.

Programming needs to anticipate survivors' needs over the years after NGO intervention is completed to ensure their sustained health. Using the CSDH and this study's

modified frameworks as guides, social workers and reintegration program field officers should develop strategies to identify and mitigate the risks that the structural and intermediary determinants of SDH poses to a trafficking survivor returning to the community (Solar & Irwin, 2010). Follow-up surveys performed by an NGO's community-based client care social workers can be shaped around the elements of the CSDH framework so that understanding of these factors during a survivor's reintegration is continually discussed upon. Furthermore, it is essential for reintegration programs to advocate for and support local community initiatives that address fundamental human needs among both rural and urban communities e.g. shelter, water, and food security.

As more than half of this cohort did not reach grade 9, aftercare programs in Cambodia need to make every effort to ensure all clients in their care complete grade 9 education through standard schooling or remedial tutoring; either approach leading to successfully passing the grade 9 (equivalency) exam. Beyond this baseline education requirement, aftercare programs should consider the long-term requirements of a client achieving higher levels of formal education through upper secondary school and university, where possible.

Only a small number of survivors found gainful, sustained work upon completing an NGO-sponsored skills training program. Survivors need to be offered comprehensive, accredited skills training that results in certification that they may present to future potential employers. Ideally, TVET, employability development, and apprenticeships all should lead to employment outside of the NGO community and into the formal sector. Moreover, skills training should focus on industries offering gainful employment in Cambodia but with lower risk to further exploitation. For example, skill development meant for employment in the garment industry should be scrutinized as many garment factories in Cambodia offer unhealthy working environments for their laborers. Entities like Fitch Solutions offer regular updates on emerging industries in Cambodia that may inform an NGO's career counselling advice and vocational training offerings (Fitch Solutions, 2021).

Furthermore, aftercare and reintegration programs should provide continual career advice to clients on: soft skills development, resume building, internships, and interview practice. These, along with other technical and soft skills such as critical analysis and problem solving have been expressed to be lacking within the Cambodian workforce by employers (Yok et al., 2019). Toolkits are widely available for the development of skills seen as essential by employers for NGO programs to develop their programmatic capacity, such as *The Skills Builder Universal Framework* (Kashefpakdel et al., 2021; Skills Builder Partnership, 2020). These career resources should remain open to former clients for years after formal intervention services are completed as this study indicates that financial and employment vulnerabilities are long-term issues.

Many of the survivors remained living in poverty and could not escape debt. Financial insecurity and debt appeared to be linked to survivors experiencing deteriorating mental health over the years. Financial literacy should be foundational in a client's life-skills education within aftercare programming. For example, household budgeting, numeracy, and debt management skills are all essential for the continued stability of a survivor's wellbeing (Lim, 2021).

Some survivors lacked IDs and essential documentation even though they were all born in Cambodia. Aftercare organisations need to facilitate the acquisition of legal identification documents of the survivors they are assisting from the Ministry of

Interior. These are lengthy, convoluted, and costly processes that have proven to be severely difficult for a survivor to facilitate and successfully accomplish on their own without the support of an NGO (Morrissey et al., 2021; Sperfelt, 2020). Aftercare organizations are able to intervene to speed up this process by providing social liaison support between the survivors and the Ministry of Interior, legal support of lawyers, and general funding necessary to procure these documents.

Trustworthy relationships to support survivors' mental health while residing in the community were difficult to find. While residing in the shelters, survivors were able to access counselling and confide in peers and shelter staff that they trusted, but once reintegrated, these relationships became distant and survivors did not always feel welcomed to continue contact with the NGOs. Upon reintegration, it is important for NGO staff to facilitate the identification, and broker the establishment, of trustworthy relationships with community members and mentors for their clients in order to support their emotional resilience while residing away from the aftercare center.

Basic self-care of health needs, including understanding of sexual health and contraception was often lacking among the survivors. A client's physical health needs to be an NGOs utmost priority. One way of building emotional resilience among survivors of human trafficking and trauma is through raising their capacity to remain in control of various challenges in life, particularly medical situations (Herdiana et al., 2019). Described in more detail throughout the rest of this section, NGO programming must provide for their clients medically-accurate first aid, hygiene, sex, and reproductive health education so that a survivor may better care for themselves, others, and support informed decision-making when facing medical challenges in the future.

The Butterfly survivors experienced medical care provision that was at times delayed while they resided in aftercare shelters. They reported that NGO staff did not believe their calls for medical attention, and that the decision to be seen by a medical professional was up to the discretion of NGO staff who were not medically trained. This issue could be minimized in the future by providing all NGO staff with thorough first aid training given by a medically certified professional, so that the staff may make better informed medical decisions for their clients. For survivors residing in the community, NGO staff should be equipped to offer their clients contact information about various medical practitioners and to broker communication between their clients and medical professionals.

Age-appropriate and medically accurate sexual health education (Chalemphon, 2021) should be a vital part of aftercare programming equally for both males and females. Clients should be knowledgeable of the symptoms of STIs and if they should occur, clients need to understand the importance of seeking medical help for early treatment so that the risk of complications are minimized. NGO staff need to make their clients feel comfortable enough to approach staff if and when sexual health questions or issues arise.

Contraception education should be a vital part of aftercare programming (Chham, 2021). The researchers believe that Christian faith-based organizations have not put enough emphasis on contraception and sexual health education because of the culture taboo against sexual health, concerns of abortion, and their hope that survivors will remain abstinent until marriage. It is strongly recommended that survivors in aftercare programs, particularly women, should receive biologically accurate sexual health and contraception education. Beyond the fundamental need for this knowledge and the safeguarding from undesired pregnancies it offers, it is also understood that

women cannot control the sexual activity of their partners, and so need to be aware of how to use condoms to protect themselves from STIs where possible.

Furthermore, women should be informed about programs that offer care and services specifically to expectant mothers e.g., the Cambodian NGO *Mother's Heart*. Finally, women should be informed that abortions can legally be performed in Cambodia up to 12 weeks (and after 12 weeks in cases of rape and/or when the woman's life is at risk), meaning that they have access to safe procedures performed by licensed professionals during this time (Hancart, 2018). This information needs to be provided and understood in attempts to mitigate the use of unregulated and clandestine abortions that could result in infertility or death.

STUDY LIMITATIONS

Several important limitations should be noted. First, this is a secondary data analysis, so the original data was not collected with an analysis of social determinants of health in mind. Furthermore, the quantitative data collection questions varied between 2012 and 2018, preventing these authors from making direct comparisons in many instances. As noted throughout, the cohort of 52 individuals is a biased sample, as participants had to complete all data interactions from 2012 to 2018 to be included in the current analysis. Therefore, it is unknown whether those not included experienced greater difficulty in social determinants of health. As well, the presentation of SDH factors is based on self-report and interviewer notes, which has a degree of inherent subjectivity. Finally, although the researchers did not have financial capacity to do participant checking with the individual interviewees about the results of this study, our findings were shared with local partner NGOs and relevant stakeholders. Future studies may be designed to prospectively and specifically explore the impact of SDH on survivor's well-being, including the use of validated tools.

CONCLUSION

This analysis of the social determinants of health helps those working with survivors of sex trafficking, particularly healthcare and social welfare professionals better understand how health is impacted by societal issues. Participants described myriad social determinants of health, including: gender; age; relationship status (marriage); ethnicity; national identification documentation (statelessness); social class; formal education; vocational training; occupation; and monthly income. Negative impacts of these social determinants of health included: poor access to basic needs of food and clean water, unstable housing, low education rates, worsening physical health, depression and suicidal ideation, along with long unresolved STI-like symptoms. As these are multidisciplinary issues, this study concluded with recommendations for remedial actions to be taken by multidisciplinary stakeholders, namely government agencies, healthcare professionals, and survivor aftercare service providers.

This study gives examples of situations survivors face that services already offer remedy for in Cambodia: A overworked young man trying to get national identification in order to enroll in Cambodia's Health Equity Fund so he could obtain free healthcare. An expectant mother who is worried about her unborn child because she cannot access the proper health facilities to fully remedy her recurring vaginal discharge. These services need to be identified, networked, and promoted throughout all care providers working with survivors in the country.

Complicating any remedial action planning are the multitude of interplaying factors determining various health outcomes, making it impossible for service providers to anticipate all future needs when designing the reintegration program with their clients. Although this is being understood, it is hoped that this study displayed that social determinants of health need to be considered by those working with survivors, and how the outcomes can be dire if not continually analyzed.

The Butterfly survivors volunteered their time and stories for this research over the past decade with the intention that their experiences will inform policy and programs so that future care for survivors is ameliorated. Understanding how risk factors outlined by social determinants of health can be identified and mitigated is avenue professionals could offer more sustainable positive outcomes for the rehabilitation and reintegration of trafficking survivors.

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Available at http://digitalcommons.uri.edu/dignity/vol6/iss4/6.

REFERENCES

Amaro, Y. (October, 2016). *Building a medical system without foundation?* Phnom Penh Post. https://www.phnompenhpost.com/post-weekend/building-medical-system-without-foundation

Babbie, E. (2007). *The practice of social science research (12th ed.).* USA: Wadsworth, Cengage Learning.

Bearup, L. S., & Seng, S. (2020). Gendered struggles and competing discourses: Pathways to shelter in Cambodia. *Journal of Human Trafficking*, 1-14. https://doi:10.1080/23322705.2020.1855899

Brody, C., Berkowitz, R. L., Chhoun, P., Kaplan, K. C., Tout, S., & Yi, S. (2021). *"Feeling clean": Stigma and intravaginal practices among female entertainment workers in Cambodia*. BMC Women's Health, 21, Article 127. https://doi.org/10.1186/s12905-021-01271-y

Bryman, A. (2008). *Social research methods (3rd Edition)*. Oxford University Press.,

Care Quality Commission (n.d.). *Care Quality Commission: About us, what we do, and how we do it*. https://www.cqc.org.uk/sites/default/files/20170504_CQC_About-us.pdf

Care Quality Commission (2015) *Health and Social Care Act 2008 (Regulated Activities) Regulations 2014: Regulation 10*. https://www.cqc.org.uk/guidance-providers/regulations-enforcement/regulation-10-dignity-respect

Chham, S., Sok, N., Hay, V., & Ir, P. (2021). Factors determining the use of modern contraceptive among married women in Cambodia: Does their decision-making matter? *Cambodia Journal of Public Health, 2*(04).

Chalernphon, A. (2021). A narrative review of adolescents' knowledge, attitudes and utilisation of contraception in Cambodia, Lao PDR, Myanmar, Thailand and Vietnam [Master of Health Science dissertation, University of Canterbury]. UC Research Repository. https://doi.org/10.26021/10912

Cordisco Tsai, L., Lim, V., & Nhanh, C. (2020a). "I feel like we are people who have never known each other before": The experiences of survivors of human trafficking and sexual exploitation transitioning from shelters to life in the community. *Forum: Qualitative Social Research, 21*(1), Art. 16. https://doi.org/10.17169/fqs-21.1.3259

Cordisco Tsai, L., Lim, V., & Nhanh, C. (2020b). Perspectives of survivors of human trafficking and sexual exploitation on their relationships with shelter staff: Findings from a longitudinal study in Cambodia. *The British Journal of Social Work,* 50(1), 176-194. https://doi.org/10.1093/bjsw/bcz128

Couture, M. C., Sansothy, N., Sapphon, V., Phal, S., Sichan, K., Stein, E., Evans, J., Maher, L., Kaldor, J., Vun, M. C., & Page, K. (2011). Young women engaged in sex work in Phnom Penh, Cambodia, have high incidence of HIV and sexually transmitted infections, and amphetamine-type stimulant use: new challenges to HIV prevention and risk. *Sexually Transmitted Diseases*, *38*(1), 33–39. https://doi.org/10.1097/OLQ.0b013e3182000e47

Davis, J., Miles, G. M., Havey, J., Lim, V., Nhanh, C., & Sreang, P. (2021). "Going it alone": Following the male cohort of survivors of sex trafficking of the Chab Dai Butterfly Longitudinal Research Project. *Dignity: A Journal of Analysis of Exploitation and Violence [Special Edition], 6*(4), Article 3.

Davis, J., Miles, G. M. (2014). *"I want to be brave": A baseline study on the vulnerabilities of street-working boys in Sihanoukville, Cambodia*. Six Annual Interdisciplinary Conference on Human Trafficking, University of Nebraska. https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1005&context=humtrafcon6

Diagnostic Microbiology Development Program (2021). *What we do* [website]. https://dmdp.org/?page_id=608

Ditmore, M. H. (2014). "Caught between the tiger and the crocodile": Cambodian sex workers' experiences of structural and physical violence. *Studies in Gender and Sexuality, 15*(1), 22-31. https://doi.org/10.1080/15240657.2014.877726

Ennew, J., & Plateau, D. (2004). *How to research the physical and emotional punishment of children*. International Save the Children Alliance, Bangkok. https://rb.gy/77hl84

Greenbaum J (2020). A public health approach to global child sex trafficking. *Annual Review of Public* Health,41. 481-497. https://doi.org/10.1146/annurev-publhealth-040119-094335

Hancart Petitet P. (2018) Abortion politics in Cambodia social history, local forms and transnational issues. *Global Public Health, 6*, 692-701. https://doi.org/10.1080/17441692.2017.1354228 .

Ham, S. (August 3, 2001). *When they lose faith in banks, some invest in the tong tin*. The Cambodia Daily. https://english.cambodiadaily.com/news/when-they-lose-faith-in-banks-some-invest-in-the-tong-tin-24823/

Havey, J., Miles, G., Lim, V., Nhanh, C., Ou, S., Sreang, P., & Piano, E. (1 April 2021). "I shared my experience and what it was like": An introduction to the Butterfly Longitudinal Research Project – a collaborative NGO Project. *The Therapeutic Care* Journal, 1(2). https://rb.gy/ls29uf

Health and Social Care Act 2008 (Regulated Activities) Regulations (2014). UK. https://www.legislation.gov.uk/uksi/2014/2936/contents/made

HEAL Trafficking (2021). *HEAL trafficking and hope for justice's protocol toolkit*. https://healtrafficking.org/2017/06/protocol-toolkit/

Herdiana, I., Suryanto, Mashud, M., & Hendriani, W. (2019). Survivors of sex trafficking: How could they revive? *Journal of Educational, Health and Community Psychology*, *8*(3), 2019 E-ISSN 2460-8467. https://smartlib.umri.ac.id/assets/uploads/files/465bb-13353-36888-1-pb.pdf

Hilton, A. (2008). *I thought it could never happen to boys*. First Step Cambodia. https://www.academia.edu/17147312/I_thought_it_could_never_happen_to_boys

International Organization for Migration (IOM) (n.d.). *Cambodia National Program for Mental Health.* https://www.iom.int/sites/default/files/jahia/webdav/site/myjahiasite/shared/shared/mainsite/projects/showcase_pdf/Cambodia.pdf

Ir, P., Jacobs, B., Asante, A. D., Liverani, M., Jan, S., Chhim, S., & Wiseman, V. (2019). Exploring the determinants of distress health financing in Cambodia. *Health Policy and Planning, 34, Issue Supplement_1, i26–i37, https://doi.org/10.1093/heapol/czz006*

Jegannathan B, Kullgren, G, & Deva, P (2015). Mental health services in Cambodia: Challenges and opportunities in a post-conflict setting, *Asian Journal of Psychiatry,* 13, 75-80, https://doi.org/10.1016/j.ajp.2014.12.006.

Kashefpakdel, E., Ravenscroft, T., & Percy, C. (2021). *Better prepared: Essential skills and employment outcomes for young people*. Skills Builder Partnership. https://www.skillsbuilder.org/better-prepared

Kolesar, R. J., Pheakdey, S., Jacobs, B., & Ross, R. (2019). Healthcare access among Cambodia's poor: An econometric examination of rural care-seeking and out-of-pocket expenditure. *International Journal of Health Economics and Policy*, 4(4), 122-13. https://doi.org/10.11648/j.hep.20190404.12

Liamputtong, P. (2010) *Performing qualitative cross-cultural research*. Cambridge University Press.

Lim, V., Smith-Brake, J., & Nhanh, C. (2021). "Why am I the only one responsible for the whole family?" Expressions of filial piety and financial anxiety among survivors of sex trafficking. *Dignity: A Journal of Analysis of Exploitation and Violence [Special Edition], 6*(4), Article 5.

Mareck, D. G. (2011). Federal and state initiatives to recruit physicians to rural areas. *AMA Journal of Ethics: Virtual Mentor, 13*(5). 304-309. https://doi.org/10.1001/virtualmentor.2011.13.5.pfor1-1105

Matsuokaa, S., Aig, H., Lon Rasmeye, C., Rathavy, T., & Okitsu, A. (2010). Perceived barriers to utilization of maternal health services in rural Cambodia. *Health Policy, 95* (2–3), 255-263. https://www.sciencedirect.com/science/article/abs/pii/S0168851009003352#!

Menard, S. (2002). *Longitudinal research (2nd ed.).* California, USA: Sage. https://dx.doi.org/10.4135/9781412984867 .

Miles, G., Lim, V., & Nhanh, C. (2020). *Children of the wood, children of the stone: The journey of faith for the survivors of trafficking.* Chab Dai Coalition, Phnom Penh. Retrieved from: https://static1.squarespace.com/static/55a81f9be4b01a30079bb9d3/t/5ddc0fc6567fe44ced942dac/1574703097323/Spirituality+Thematic+Paper.pdf

Miles, G. M., & Thomas, N. P. (2007). 'Don't grind an egg against a stone:' Children's rights and violence in Cambodian history and culture. *Child Abuse Review,*16(6), 383-400. https://doi.org/10.1002/car.1010

Miles, G.; Havey, J., Miles, S., Piano, E., Vanntheary, L., Channtha, N., Phaly, S., & Sopheara, O. (2021). "I don't want the next generation of children to be in pain like me": The methodology and key findings of the Chab Dai ten year longitudinal study on sex trafficking survivors in Cambodia. *Dignity: A Journal of Analysis of Exploitation and Violence*, 6(4), Article 2.

Monto, M. A. (2014). Prostitution, sex work, and violence: Lessons from the Cambodian context. *Studies in Gender and Sexuality, 15*(1), 73-84. https://doi.org/10.1080/15240657.2014.877733

Morrissey, J., Havey, J., Miles, G., Lim, V., & Nhanh, C. (2021). "I want justice from people who did bad things towards children": Experiences and perceptions of justice for sex trafficking survivors from the Butterfly Longitudinal Research Project. *Dignity: A Journal of Analysis of Exploitation and Violence, 6*(4), Article 7.

Morrison, T., Lim, V., Nhanh, C., Havey, J., & Miles, G.M. (2021). "You have to be strong and struggle": Stigmas as a fundamental determinant of inequality for survivors of human sexual trafficking in Cambodia. *Dignity: A Journal of Analysis of Exploitation and Violence, 6*(4), Article 4.

OECD Development Pathways. (2017). *Social protection system review of Cambodia*. OECD Publishing, Paris. https://rb.gy/z6f8fi

Office of the United Nations High Commissioner for Human Rights (OHCHR) . (2000). Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime. https://www.ohchr.org/EN/ProfessionalInterest/Pages/ProtocolTraffickingInPersons.aspx.

OpenDevelopment Cambodia. (2018). *Education and training*. https://opendevelopmentcambodia.net/topics/education-and-training/

OpenDevelopment Cambodia. (2015). *Labor*. https://opendevelopmentcambodia.net/topics/labor/

Parry, S. J., Ean, N., Sinclair, S. P., & Wilkinson, E. (2020). Development of mental healthcare in Cambodia: Barriers and opportunities. *International Journal of Mental Health Systems,14*, Article 53. https://doi.org/10.1186/s13033-020-00385-4

Phanouvong, S., Krech, L., & Raymond, C. (2010). Strengthening national capacity in medicines quality: Five-year summary (2005-2009) Promoting the Quality of Medicines Program in Southeast Asia and the Philippines. The United States Pharmacopeial Convention: Promoting the Quality of Medicines Program. Rockville, MD, USA. https://www.usp-pqm.org/sites/default/files/pqms/article/rdmareport.pdf

Perry, K. M., & McEwing, L. (2013). How do social determinants affect human trafficking in Southeast Asia, and what can we do about it? A systematic review. *Health & Human Rights, 15*(2), 138-159. https://www.jstor.org/stable/healhumarigh.15.2.138

Prak, C. T. (October 5, 2018). *Cambodia hikes textile workers' minimum wage, falls short of union demands*. Thomson Reuters. https://www.reuters.com/article/us-cambodia-garment/cambodia-hikes-textile-workers-minimum-wage-falls-short-of-union-demands-idUSKCN1MF18B

Reimer, J. K., Langeler, E., Sophea, S. & Montha, S. (2007). The road home: Toward a model of "reintegration" and considerations for alternative care for children trafficked for sexual exploitation in Cambodia. Hagar & World Vision, Phnom Penh, Cambodia. https://childhub.org/en/child-protection-online-library/hagarworld-vision-cambodia-2007the-road-home-toward-model

Rende Taylor, L., & Latonero, M. (2018). Updated guide to ethics and human rights in anti-trafficking: Ethical standards for working with migrant workers and trafficked persons in the digital age. Bangkok: Issara Institute. Respect International https://respect.international/updated-guide-to-ethics-and-human-rights-in-anti-trafficking-ethical-standards-for-working-with-migrant-workers-and-trafficked-persons-in-the-digital-age/

Ruggiano, N., & Perry, T. E. (2017). Conducting secondary analysis of qualitative data: Should we, can we, and how? *Qualitative Social Work*, *18*(1), 81-97. https://doi.org/10.1177/1473325017700701

Skills Builder Partnership. (2020). *Skills Builder Universal Framework*. https://www.skillsbuilder.org/universal-framework/listening

Solar, O. & Irwin, A. (2010). A conceptual framework for action on the social determinants of health: Social determinants of health discussion paper 2. World Health Organization. https://rb.gy/hopadq

Sperfelt, C. (2020). Minorities and statelessness: Social exclusion and citizenship in Cambodia. *International Journal on Minority and Group* Rights*, 27*(1). https://doi.org/10.1163/15718115-02701002

United Nations Children's Fund (UNICEF). (2014). *UNICEF Data Warehouse*. UNICEF Demographic and Health Survey 2014, Cambodia. https://data.unicef.org/resources/data_explorer/unicef_f/?ag=UNICEF&df=GLOBAL_DATAFLOW&ver=1.0&dq=KHM.PT_CHLD_Y0T4_REG.&startPeriod=1970&endPeriod=2021

United Nations Children's Fund (UNICEF). (2013). *Every child's birth right: Inequities and trends in birth registration*. Author. https://www.unicef.org/media/73661/file/Every-Childs-Birth-Right-2013.pdf.pdf

UN High Commissioner for Refugees (UNHCR) (2004). The 1954 Convention relating to the Status of Stateless Persons: Implementation within the European Union Member States and Recommendations for Harmonisation. *Refuge, 22*(2). https://www.refworld.org/docid/415c3cfb4.html

UN High Commissioner for Refugees (UNHCR). (2003). The 1954 Convention relating to the Status of Stateless Persons: Implementation within the European Union Member States and Recommendations for Harmonisation, October 2003. https://www.refworld.org/docid/415c3cfb4.html

US Department of State (June, 2020). *Trafficking in Persons Report*. https://www.state.gov/wp-content/uploads/2020/06/2020-TIP-Report-Complete-062420-FINAL.pdf

US Department of State (January, 2021). *Report to Congress on 2021 Trafficking in Persons Interim Assessment Pursuant to the Trafficking Victims Protection Act*. https://www.state.gov/report-to-congress-on-2021-trafficking-in-persons-interim-assessment-pursuant-to-the-trafficking-victims-protection-act/

World Health Organization (WHO) (2021). *Social determinants of health*. https://rb.gy/bsr1qk

World Bank Group (2021). *The World Bank in Cambodia: Overview. https://www.worldbank.org/en/country/cambodia/overview#1*

Yi, S., Tuot, S., Chhoun, P., Pal, K., Tith, K., & Brody, C. (2015). Factors associated with inconsistent condom use among men who have sex with men in Cambodia. *PLOS ONE, 10*(8), e0136114. https://doi.org/10.1371/journal.pone.0136114

Yok S., Chrea, S., & Pak, R. (2019). Technical and vocational education and training in Cambodia: Current status and future development. In B. Bai, & Paryono (Eds.) *Vocational Education and Training in ASEAN Member States. Perspectives on Rethinking and Reforming Education* (pp. 25-43). Springer, Singapore. https://doi.org/10.1007/978-981-13-6617-8_2

Ziebland, S., & Hunt, K. (2014). Using secondary analysis of qualitative data of patient experiences of health care to inform health services research and policy. *Journal of Health Services Research & Policy* 19(3). https://doi.org/10.1177/1355819614524187