Development of a Quality Index Tool to assess the completion of J88 forms for rape survivors in South Africa

Moushumi Ann Mathews
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SUPERVISORS

Dr. Nicola Christofides

Prof. Rachel Jewkes

DECLARATION

I, Moushumi Ann Mathews, declare that this research report is my own work. It is being submitted for the Master of Medicine in the branch of Public Health Medicine in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination.

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Moushumi Ann Mathews

18 November 2016

DEDICATION

I dedicate this work to my parents, Mathai & Mary Mathews; to my siblings, Manjush & Jenu Mathews and Madhush & Faye Mathews; and to my niece and nephews, Tanzen, Nathan & Joel. Thank you for your love, patience and understanding through this journey. I thank the Lord for His sovereignty and guidance and for providing me with such a blessed support system.

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PRESENTATIONS AND PUBLICATIONS

The findings of this report were presented at the PHASA 2015 conference held in Durban, South Africa:

Development of a Quality Index Tool to assess the completion of J88 forms for rape survivors in South Africa *Mathews, MA; Christofides, N; Jewkes, R; Jina*

There have been no publications to date from this research.

ABSTRACT

Background

The J88 form is important as a legal document that presents the recorded findings of the healthcare worker during the medical examination after rape has been reported through either the medical or justice system. The quality of how these forms are completed therefore becomes pertinent. There are many anecdotal references to poorly completed J88 forms in South Africa; although assumptions are made by the healthcare sector on what comprises a well completed J88 form, the measure of quality is not completely clear.

Aim

This study aims to develop and assess a Quality Index Tool for completed J88 forms.

Methodology

In the first part of the study, a Delphi process used semi-structured telephonic interviews explore the views of eight medical and eight legal experts on what factors they thought contributed to the quality of the completed J88 form. Sixty-three criteria were identified. These were ranked and refined through three rounds where the experts engaged with these issues to come to a level of agreement about what key issues affected the quality of completed J88 forms. These issues were then to be compiled into a tool to assess the quality of J88 forms.

In the second part of the study a simple random sample of 160 J88 forms gathered in a larger study from cases reported to the police in 2012 were used. The forms were scored using the Quality Index Tool created in the first part of the study and inter-rater agreement was assessed. These scores were then entered into STATA 13 with province, provider and patient information like sex of the patient, nurse/doctor to determine what the general quality of the J88 forms. T-tests and ANOVAs, were performed to compare the mean score which had been standardised between different groups e.g. child vs. adult patients. A multiple regression model was built to identify patient and provider factors associated with poorer and higher quality of completion of the J88 forms and a logistic regression model was used to assess whether higher quality was associated with writing better conclusions.

Results

During the first round of the Delphi process, sixty three Quality Statements were identified from the in-depth interviews conducted with the experts. Experts agreed that there was substantial variation in how well the J88 was completed. They identified some factors that were relevant to the completion of the form overall like how legibly the form was completed, and identified specific criteria for different parts of the form like whether an explanation was given if a diagram was not completed. In the subsequent two rounds, consensus on these Quality Statements was sought between the experts. Only two statements achieved perfect consensus (100% agreement). Another twenty two statements achieved a level of agreement above 80%, which was the level of agreement sought in the final round. These twenty four Quality Statements were compiled to form the Quality Index Tool.

In the second part of the study, the mean Quality Index Score percentage achieved for the 160 J88 forms scored was 72.1% (range from 65 to 79.2%). Of the 160 J88 forms scored, 6 (3.8%) were completed for male patients and 66 (41.25%) were completed for children (<18 years of age); 36 (22.5%) were completed by nurses. Factors associated with a better score were the patient being an adult, the healthcare worker being a nurse and performing an anal examination. It was also found that a higher score was predictive of a better conclusion in the logistic regression analysis.

Conclusion

Care of a rape survivor comprises counselling, clinical management and collecting evidence which can be used in the investigation and prosecution of the case. The J88 plays an important role in the latter. Overall, the quality of completion of J88s was variable. Since the Quality Index Tool predicted higher quality in the completion of conclusions it is important to ensure that provider training is intensified. The Quality Index Tool can be used by auditors and researchers who are interested in quality of medico-legal services.

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GLOSSARY OF TERMS

Quality of a completed J88 form

This is defined by the completion of the J88 form (see Appendix B) by healthcare providers, as opposed to how the form is constructed.

The Delphi Method

The Delphi method is qualitative predictive technique and a means of gaining agreement on a difficult topic, from a panel of experts (1). It is an attempt to gather the combined knowledge and proficiency of different area specialists to answer a difficult problem (1).

Rape

“Any person ('A') who unlawfully and intentionally commits an act of sexual penetration with a complainant ('B'), without the consent of B, is guilty of the offence of rape.” (2)

Sexual assault

(1) “A person ('A') who unlawfully and intentionally sexually violates a complainant ('B'), without the consent of B, is guilty of the offence of sexual assault.”(2)

(2) “A person ('A') who unlawfully and intentionally inspires the belief in a complainant ('B') that B will be sexually violated, is guilty of the offence of sexual assault.”(2)

Trauma (Emotional/ Psychological)

“Trauma is an emotional response to a terrible event like an accident, rape or natural disaster. Immediately after the event, shock and denial are typical. Longer term reactions include unpredictable emotions, flashbacks, strained relationships and even physical symptoms like headaches or nausea.”(3).

Abbreviations

DNA	DeoxyriboNucleic Acid
EC	Emergency Contraception
HCT	HIV Counselling and Testing
HIV	Human Immunodeficiency Virus
LA	Level of Agreement
LE	Legal Experts
ME	Medical Experts
NDoH	National Department of Health
NPA	National Prosecuting Authority
PEP	Post-exposure Prophylaxis
QIS	Quality Index Score
QIT	Quality Index Tool
QS	Quality Statements
SAECK	Sexual Assault Evidence Collection Kits
SOCA	Sexual Offences and Community Affairs
TCCs	Thuthuzela Care Centers

CHAPTER 1: INTRODUCTION

1.1. BACKGROUND

The South African Police Service (SAPS) Crime Report has shown a drop in reported sexual offences by 9.4% between 2004/2005 (69117 cases reported) and 2013/2014 (62649 cases reported) (4), yet rape remains a significant public health problem in South Africa with much of the violence directed towards women and children (5, 6). For those survivors who do report to the police, the case should be investigated, the suspect apprehended, and the case should go to trial and conclude with a verdict. Healthcare providers play a key role in the steps followed to investigate the case, by examining the survivor, completing a medico-legal (J88) form, collecting biological evidence and presenting that evidence in court. If rape survivors are managed appropriately by healthcare providers when treating the patient and collecting evidence, this could improve the overall criminal-justice outcomes of the cases (7, 8).

Studies on the association between the documentation of injuries and criminal-justice outcomes have yielded mixed results, some studies conducted in the United States of America and Canada have shown that the documentation of ano-genital injuries (7, 8) as well as other bodily injuries (9-11) have been positively associated with criminal-justice outcomes. A South African study has also demonstrated that the documented presence of ano-genital injuries increases the likelihood of child rape cases going to trial and in the case of adults, a conviction was more likely if injuries were present and documented (12).

Many studies of services offered to rape survivors have been conducted in high income countries and more recently researchers have investigated the services in low and middle income country settings (12-17). While services may have improved over the last 10 years, they remain an area where quality of care can be improved (12, 13). In South Africa, researchers have assessed the delivery of post-rape services but there has been a limited focus on the medico-legal documentation (18-21). In 2008, the Tracking Justice study was conducted collaboratively by the Tshwaranang Legal Advocacy Centre, the Medical Research Council and the Centre for the Study of Violence and Reconciliation (12, 22). It found that although DNA results were of little value in securing convictions (since they were

only available in 2% of cases), injuries documented on the J88 form, accompanied by evidence given in court, significantly increased the chances of a conviction (22, 23).

The J88 form is important as a legal document that presents the recorded findings of the healthcare worker during the first medical examination after rape has been reported. The quality of how these forms are completed therefore becomes pertinent. There are many anecdotal references to poorly completed J88 forms in South Africa (13, 23, 24); although assumptions are made by the healthcare sector on what comprises a well completed J88 form, the measure of quality is not completely clear. Furthermore, not much is known about the quality of how J88 forms are being completed.

It is therefore valuable to understand what experts in the medical, and more so, the legal fields consider to be important in the completion of the J88 form, particularly in its role in trials and convictions. This would help to assess the current quality of completed forms and also direct training for healthcare providers in future on how to better complete the form.

The aim of this study is to develop a Quality Index Tool and to assess the quality of completion of J88 forms for rape survivors in South Africa using the tool.

1.2. STATEMENT OF THE PROBLEM AND JUSTIFICATION

The Tracking Justice Study, published in 2008, identified areas that needed further research, including the J88 form. The J88 form as it currently exists for use by healthcare providers is not a perfect tool for recording all the desired information. An understanding on the part of the healthcare provider, about how the J88 form should be completed to provide the most conclusive representation of the first medical examination, can therefore, significantly improve the quality of the information provided in terms of the use of this document in prosecution (25). An insightful completion of the J88 form is significant in securing a conviction (22). If this form is filled out poorly, it could affect the outcome of the case. Although assumptions are made on how the J88 form should be completed in the best manner, there is no consensus that has been achieved through a formal process.

We can hypothesize that the manner in which a J88 form is completed by healthcare providers, could affect the rate of prosecution and conviction, in the South African context.

For the purposes of this study, the quality of a J88 form will be defined by how well the J88 form (see Appendix B) is completed by healthcare providers, as opposed to how the form is constructed. I will interrogate the relevance and appropriateness of the information filled in by the healthcare provider.

This study aims to develop a Quality Index Tool (QIT) that can be used to assess the completion of J88 forms. The findings from the QIT will provide valuable information to improve the quality of documentation in future rape incidents. It will also identify factors within the J88 form itself that could be altered to improve the J88 form itself.

1.3. LITERATURE REVIEW

1.3.1. An overview of the Health Consequences of Rape

Rape or sexual assault is an intensely personal and intimate violation of a person's autonomy. This has significant implications, not only for the individual's physical well-being, but also for their emotional, mental and social health (13). The consequences of rape are both acute and chronic, having far-reaching implications for victims. Not only do rape victims have to deal with the physical trauma of being raped, but they also have to cope with the mental and social trauma associated with rape (26-29). From the initial trauma and shock to shame, fear and long-lasting anxiety and depressive disorders, victims often have to live with the cost of these traumas for the rest of their lives (26). Particularly for those who are assaulted in childhood, fear, posttraumatic stress disorder (PTSD), behavioural issues, pre-pubertal over-sexualisation, and poor self-esteem are frequently seen (30). Victims of sexual abuse are found to report higher levels of general psychological distress as well as higher rates of major psychological disorders and personality disorders when compared to non-abused counterparts (31). Those abused earlier in life report higher rates of substance abuse, binge eating, somatization, and suicidal behaviours, poorer social and interpersonal relationship functioning, greater sexual dissatisfaction, dysfunction and maladjustment including high-risk sexual behaviour, and a greater tendency toward re-victimization through adult sexual assault and physical partner violence (31).

If a victim chooses to report the case and follow the legal channels afforded to him or her, they additionally have to deal with the implications of reporting the case and the medical examination that ensues, which involve an intimate physical examination, the collection of evidence and accepting treatment for sexually transmitted diseases and the prevention of pregnancy from the rape (26, 28). Often, the only objective information that is captured in the medico-legal reporting of these cases is the physical injuries that may or may not be present.

In this report, I will focus on the physical injuries that are captured in the medical reporting. Physical injuries, both ano-genital and general body injuries may or may not occur depending on the context of the assault.

Often, threats illicit compliance from the victim and this may mean that the patient has few if any physical injuries (13). A study conducted on rape survivors in Johannesburg in 1999, showed that of 432 cases examined, 37% of patients showed evidence of non-genital injuries and 38% showed evidence of genital injuries (32). Other studies conducted in South Africa also document that injuries do not occur in all cases of rape (33-35). These findings can be compared to those from the United States of America and Canada (7-9, 11, 14, 36-39).

Just as with physical trauma, many patients are found to be very distressed after sexual assault, while others demonstrate blunted affects in an attempt to cope with the situation (13).

It is therefore critically important that these features are not interpreted as signs that the patient has not been traumatized or that the alleged offence has not occurred. The medical practitioners who examine women and men after such an event must adequately communicate their findings from the patient's examination and explain them with correct interpretation. The medico-legal documentation completed by healthcare practitioners in these events, is presented during the trial (22).

Women are more often the victims of sexual abuse, particularly in patriarchal societies where sexual abuse may be viewed as acceptable (40, 41). Men are the primary perpetrators and often do not see themselves as abusers or their victims as abused, due to social norms (41, 42). It will therefore be interesting to see what the trend is relative to the sex of the victim.

The high prevalence of childhood sexual abuse in Southern Africa is well-established (43). In 1998, the rate of rape and attempted rape of girls between the ages of 0 and 17 years reported to the SAPS was 47·1 per 100 000 people (44). The decreasing age trend in the South African context suggests that child rape is becoming more common, although reporting bias cannot be ruled out (44). It will thus be interesting to note the percentage of the sample in this study that represents victims under the age of 18 years. TRACKING JUSTICE

1.3.2. Defining Quality in the Health Care Setting and in this Study

Health care quality can be defined as providing the correct care to the correct patient at the correct time (45). The three dimensions to this are structure, process and outcome (45). Structure speaks to the features of the human resources and facilities involved in delivering

care; process speaks to what activities were involved in the delivery of care and whether they were appropriate or not; and outcome speaks to the end result of the care delivered, and whether morbidity, and mortality were reduced or prevented as much as they could have been (45).

Together, these components form the foundation of provision of healthcare that is consistently safe, timely, effective, efficient, equitable, and patient-centred (45). These six dimensions of quality in healthcare delivery are used to assess whether or not the healthcare being delivered to users of the healthcare system are of sufficient quality. The question is asked to define whether the healthcare being delivered is:

- **Safe**: Preventing harm to patients from the care they receive that is meant to help them (45).
- **Effective**: Delivering services based on scientific knowledge to those who should benefit and avoiding providing services to those not likely to benefit (underuse and misuse) (45).
- **Patient-centred**: Delivering care that is respectful of and responsive to the individual patient's preferences, needs, and values (45).
- **Timely**: Cutting waiting times and potentially harmful delays for both those who receive the care and those who give it (45).
- **Efficient**: Avoiding the wastage of equipment, supplies and energy (45).
- **Equitable**: Delivering care that does not vary in quality as a result of personal characteristics like gender, ethnicity, geographic location, and socioeconomic status (45).

In this study, I will be focusing on the J88 form, which acts as the tool for recording medico-legal evidence in criminal cases. This is therefore not an evaluation of the quality of the entire service provided to victims of rape but just a small portion. This study will focus on whether the J88 form is being used efficiently by healthcare providers in documenting medico-legal findings in rape cases for use by prosecutors, when working the case through the justice system and in court. The quality of the completed J88 form is not easy to assess or clearly defined and could be perceived differently depending on which angle one looks at it from: medical opinions of a high quality completed J88 form could very well vary from those of a legal background.

1.3.3. Quality of Post-rape Services in South Africa

Internationally, health services provided to rape survivors have been found to be particularly lacking(12). In South Africa too, rape services provided to victims of rape have also been found to be of poor quality (13, 18, 20, 46, 47).

Much of the research conducted in South Africa on the quality of medical services for victims of rape was conducted more than five years ago and there have been efforts to improve services, yet it is unclear how effective these interventions have been. Studies on medical services offered to victims of rape, like emergency contraception (EC), HIV counselling and testing (HCT), and post-exposure prophylaxis (PEP), showed numerous problems obstructing the delivery of services (48). These included issues with pharmacists being unwilling to stock PEP in outpatient settings, problems with the transport involved in procuring pharmaceuticals and a belief that women lied about rape (48). Effectively, rape survivors do not get the treatment and quality of care they need even though they meet all of the criteria for receiving it (13, 18, 20).

Interventions have been put in place in certain settings to improve the quality of post-rape care services, and have been proven to be effective (47). Yet these interventions have not all been implemented nationally. In one study, more than a third of healthcare workers interviewed, did not see rape as a serious medical condition (18). Part of the reason why survivors receive such poor quality of care is the lack of training of healthcare providers to manage victims of sexual assaults (20, 21). South African studies conducted at different times show that only between one third and two thirds of healthcare providers are actually trained to manage rape survivors (18, 19). This perspective could inevitably affect how they handle patients and complete the documentation associated with a case of rape as well as their willingness to testify when summoned to court, which may then be used for the prosecution of the legal case. In another study providers who have a more appropriate attitude towards rape were more likely to have higher levels of knowledge in providing post-rape care (20).

Another study conducted ten years ago in South Africa, looking at the completion of Sexual Assault Evidence Collection Kits (SAECK's) by healthcare providers in Gauteng, Mpumalanga, North West, Limpopo, KwaZulu-Natal and the Free State, found that not one

SAECK reviewed in the study had all specimens collected, less than a quarter of them had all three genital specimens collected and no aspect of administrative quality had a 100% compliance (19). This indicates that healthcare providers have had a poor understanding of the significance of complete evidence collection. The lack of administrative evidence could break the chain of evidence, negatively affecting the legal outcome (19). This demonstrates that healthcare providers may not fully understand the legal significance of the chain of evidence. Collectively this suggests that healthcare providers have a limited understanding of their role in the medico-legal process that leads to the prosecution of a case. These factors suggest several areas of poor post-rape care and poor medico-legal evidence collection.

Sexual Assault Nurse Examiners who are trained specifically to care for victims of sexual assault have been found to be better equipped to administer effective post-rape care when compared to their untrained counterparts (49). In the South African context however, this skill often goes unrecognized and is therefore devalued.

Even though there is a separate Sexual Assault Evidence Collection Kit for children and dedicated "one-stop" Thuthuzela Centres for victims of rape, the National Sexual Assault Policy of South Africa does not define how services can and should be tailored to accommodate victims who are children or adolescents (50).

This information on the quality of documentation of evidence collection in rape cases in the South African context suggests a need for further investigation and research. It is clear that the delivery of rape services to victims of rape is lacking in the South African context. It is clear that we know we have had problems and that certain interventions have worked but we have not reviewed these services in the last five years or more so we do not know to what degree the problems persist.

1.3.4. The Medico-legal Processes of Post-rape Care

The process that a rape survivor goes through when reporting a case includes various stakeholders - the police, the healthcare system and the justice system - and each has been found wanting in the services they provide to these victims (21, 51).

When a survivor of rape chooses to open a case, they usually go to a police station. At the police station, the rape survivor is interviewed by an Investigating Officer (IO) who then takes down the victim's statement and opens a case (52). It is then incumbent on the police officer to take the victim to a healthcare facility where she or he is then examined by a healthcare provider (52). The survivor may present directly at a health facility and may choose to report the matter to the police at a later stage, or not at all (50).

It is the role of the healthcare provider to take a comprehensive medical history, examine the patient and record all findings on the J88 form (see Appendix B) (23, 52). In the past, the district surgeon, a contracted doctor who collected evidence, was the designated healthcare provider. There were many problems with this system, including accessibility. In the mid-nineties, several policy changes and the training of nurses to attend to victims of sexual violence changed how the healthcare sector interacted with survivors of rape. Currently, a healthcare provider (doctor or nurse) at any facility can examine a rape survivor, provide them with the necessary medical care and collect the relevant medico-legal evidence needed for prosecution (23, 24). The experience of healthcare providers does however vary between provinces and settings (53). This can be problematic as there is little standardization in the provision of services, as well as the collection of evidence and the completion of medico-legal documentation necessary for the prosecution of the case.

The J88 form is a legal document that records the details of any unlawfully perpetrated injuries on a patient (24). It is a legal document that is provided by the Department of Justice and Constitutional Development to record the relevant medical findings for use in court (54). It is completed by healthcare workers and used by prosecutors in the prosecution of these cases within the judicial system.

1.3.5. Impact of the J88 form and other medico-legal documentation on the Legal outcomes of Rape Cases

Any clinical records can be used as evidence in a court of law. However, most countries develop specific medico-legal forms to facilitate the recording of medico-legal findings in obvious criminal cases. The World Health Organization prepared guidelines on the medico-

legal care of victims of sexual violence (55). These guidelines include recommendations on what should be captured on medico-legal documentation as these include the demographic information of the victim, consent obtained from the victim, the general medical history of the victims, including medications; an account of the assault, results of the physical examination; laboratory tests and their results, the treatment plan, medications prescribed, patient education given and any referrals made (55). In South Africa, the J88 form is the medico-legal document used to capture these details when a victim of rape is examined by a healthcare worker.

Internationally, there have been mixed findings about the role that medico-legal findings have in the legal outcomes of rape cases (14). Some studies have found that the presence and documentation of injuries are positively associated with legal resolution (9-11, 14, 56).

Du Mont did a global review of the published literature of studies conducted to specifically measure the association between medico-legal evidence and legal outcomes in rape cases, in 2007. Thirteen studies had been undertaken to measure the impact of medico-legal evidence in the form of documentation and biological samples, on legal outcomes (14). These studies and their details are listed in Table 1. Twelve of these studies had sufficient power to detect statistical significance and showed that in 50% (6/12 studies) victim injury was associated with a positive legal outcome; in 25% (3/12) more severe injury was associated with conviction; in 17% (2/12) ano-genital trauma was associated with case progression in the legal system, but not case outcome (14).

Table 1: Relationship to legal outcome of medico-legal evidence by type as reported in Du Mont's review (2007) (14)

Study	Medico-legal findings (14)			Relationship of medico-legal evidence to legal outcomes
	General injury	**Ano-genital injury**	**Biological samples**	
Helweg-Larsen 1985 (57) **Denmark**	Injury (50/74, 68%): minor (32/74, 43%) and severe (18/74, 24%)	Not Reported	Semen (39/74, 53%)	"A correlation between the judicial outcome and the results of the medico-legal examination was not found in all cases. … No given correlation …found between severity of penalty and the grade of violence concluded by the medico-legal examination" (p.145, 151)
Tintinalli & Hoelzer 1985 (39) **United States**	Injury (119/372, 32%), Total number of injuries (148): mild (121/148, 82%), moderate (26/148, 18%),	Vaginal or perineal injury (28/148, 19%)	Sperm (115/372, 31%)	"No correlation between the presence of sperm or trauma on ED examination, results of the police laboratory examination [for positive acid phosphatase activity], and issuance of warrants or guilty verdicts" (p.453)

	and severe (1/148, 1%)			
Penttilä & Karhumen 1990 (58) **Finland**	Injury, (224/249, 90%): minor (180/249, 72%), severe (44/249, 18%).	Sexual organ injury (45/249, 18%), including fresh tear of hymen (10/249, 4%)	Sperm/semen (115/249, 46%)	"There was little correlation between judicial outcome and severity of injuries and/or the presence of spermatozoa in vaginal samples… [I]n cases leading to imprisonment there were significantly more victims with severe injuries than in the other categories. However, in various categories the distribution of cases with a positive or negative result for spermatozoa was similar" (p.725, 729)
Rambow, Adkinson, Frost, & Peterson 1992 (9) **United States**	Injury (91/182, 50%): minor ("vast majority"), severe (4/182, 2%)	Vaginal or perineal injury (17/182, 9%)	Male secretions (127/182, 70%): sperm (108/182, 59%)	"[E]vidence of trauma was significantly associated with successful prosecution [*P* <. 0.01]. …presence of sperm or acid phosphatase was not significantly associated with successful prosecution" (p.729)
Schei, Muus, & Moen 1995 (59) **Norway**	Body injury (42/109, 39%)	Genital injury (15/109, 14%)	Sperm, live or dead (19/109, 17%)	Adjusted for lapse of time between the event and the examination and the victim's age, the only factor that … showed a statistically significant association with conviction was the report of severe violence" (p.30)
Lindsay 1998 (8) **United States**	Body injury, non-genital (342/697, 49%), multiple sites body injury: none (300/697, 43%), 1 site (135/697, 19%), 2 sites (94/697, 13%), 3 sites (62/697, 9%), 4 sites (36/697, 5%), 5 or more sites (15/697, 2%), injuries on head/neck/face (182/697, 26%), unknown (55/697, 8%)	Ano-genital injury (466/697, 67%), multiple ano-genital injuries (250/697, 36%), genital injury (444/697, 64%) (anoscopy, colposcopy, gross, direct visualization, and/or toluidine blue dye), unknown (55/697, 8%)	Sperm (66/697, 9%)	Among 195 adult cases with examinations reviewed by the District Attorney's office, "evidence of injury to the head, neck, or face region [odds ratio (OR): 2.6, 95% confidence intervals (CI): 1.3, 5.3] or more than one site of ano-genital injury [OR: 2.6, 95% CI: 1.1, 6.4]… are significantly associated with suspect charging" (p.189)
McGregor, Le, Marion,	Injury (85/95, 89%), extent of	Genital injury (including anal	Sperm, motile (6/95,	"Genital injury (excluding tenderness) … and … sperm …were not significantly

& Wiebe 1999 (60) **Canada**	injury: mild (26/95, 27%), moderate (56/95, 59%), severe (3/95, 3%)	and rectal areas), excluding tenderness (23/95, 24%), including tenderness (31/95, 33%), tenderness only (8/95, 8%) (gross, direct visualization)	6%), non-motile (7/95, 7%)	associated with the laying of charges. …The presence of moderate or severe injury was significantly associated with the laying of charges [OR: 3.33, 95% CI: 1.06, 10.42]" (p.1567)
Du Mont & Parnis *2*000 (37) **Canada**	Injury, excluding tenderness and pain (120/187, 64%): bruises, bites, and/or burns (108/187, 58%), lacerations, abrasions, and/or bumps (68/187, 36%), fractures (3/187, 2%), internal injuries (1/187, 5%), requiring hospitalization (3/187, 2%)	Ano-genital injury (51/187, 27%)	Non-motile sperm (13/187, 7%)	"[T]he collection of sperm, semen and/or saliva and the documentation of clinically observed injuries did not predict an arrest and charge" (p.784)
Du Mont, McGregor, Myhr, & Miller *2*000 (36) **Canada**	Injury (187/236, 79%), extent of injury, including injuries on perineum and anus: none (49/236, 21%), one or two sites (102/236, 43%), three or more sites (85/236, 36%)	Genital injury (70/236, 30%) (gross, direct visualization)	Sperm, motile or non-motile (24/236, 10%)	"Neither the documentation of physical injury nor the collection of sperm and semen and/or saliva was related to the laying of charges or securing of convictions" (p.220)
Gray-Eurom, Seaberg & Wears 2002 (10) **United States**	Trauma (202/355, 57%)	Genital trauma (123/355, 35%)	Sperm (110/355, 31%)	"[T]he presence of trauma … [was] significantly associated with successful prosecution [OR: 1.93, 95% CI: 1.08, 3.43]" (p.39)

McGregor, Du Mont, & Myhr 2002 (11) **Canada**	Injury (406/462, 88%), extra-genital injury: bruising (301/462, 65%), lacerations (86/462, 19%), fractures (7/462, 2%), clinical injury extent score: mild (110/462, 24%), moderate (265/462, 57%), severe (31/462, 7%), none (56/462, 12%)	Genital injury (193/462, 42%) (gross, direct visualization, colposcopy in 8% of cases)	Sperm/semen (100/462, 22%) (determined by forensic tests), biological samples (262/462, 57%) (analysed in forensic laboratory), biological samples (327/462, 71%) (collected by sexual assault examiner), biological samples not analysed (65/462, 14%)	"The medical-legal variables significantly associated with an increased odds of charge filing were documentation on the police file of receipt of forensic samples collected by SAS examiner (OR 3.45, 95% CI 1.82 to 6.56) and a clinical injury extent score of mild, moderate, and severe (OR 2.85, 95% CI 1.09 to 7.45, OR 4.00, 95% CI 1.63 to 9.84, and OR 12.29, 95% CI 3.04 to 49.65, respectively)… [T]he only variable found to be associated with conviction was a clinical injury extent score of severe (OR: 6.51, 95% CI 1.31 to 32.32) … [F]ail[ed] to demonstrate a significant association between sperm-semen positivity and conviction. … [L]ack of association of genital injury alone with either charge filing or conviction" (pp.644–645)
Wiley, Sugar, Fine, & Eckert 2003 (7) **United States**	General trauma (192/396, 48%)	Ano-genital trauma (64/396, 16%)[j] (gross, direct visualization)	Not Reported	"Anogenital trauma was significantly associated with legal outcome [charges filed] (OR: 1.9, 95% CI: 1.1, 3.3)…, whereas general body trauma was not" (p.1640)
Cahill 2004 (38) **United States**	Not Reported	Genital injury (28/72, 39%): acute (4/72, 6%), non-acute injuries (24/72, 33%)	Sperm (1/72, 1%)	"A chi-square test of independence exploring the relationship between physical findings [acute hymenal lacerations, acute abrasions, lacerations or bruising to labia, perihymenal tissue, and posterior fourchette, healed hymenal transection, hymenal notch nearly to vaginal floor, prior rape, + pregnancy test, anogenital human papilloma virus (HPV)] and legal outcome (trial v.. no trial) failed to demonstrate statistical significance" (pp.38–39)

In another 31 studies du Mont identified, that were not specifically designed to identify the association between medico-legal evidence and legal outcomes, it was possible to examine

the presence of injury as one of a range of factors potentially associated with the criminal justice system handling of the cases (14). Of these, 27 studies had victim injury data, and in 44% (12 of 27) victim injuries were associated with the legal outcome; while in 7(23%) of the studies, there was an association with decisions to prosecute; and in another 3 of the studies there was a positive association with guilty pleas or verdicts (NOTE: the last two studies reported a negative association) (14).

Studies conducted since 2007 also have mixed results on the association between medico-legal documentation and legal outcomes. Some suggested a positive association between medico-legal documentation and legal outcomes (61, 62), while others found no link between the medico-legal documentation of injuries and legal outcomes (63).

When considering the context of this study, we also have to look at studies conducted locally. A South African study conducted in 2006 in the Gauteng Province, published after Du Mont's review, showed that of 226 cases, 142 cases were removed from the system before plea; 84 cases went to trial; 55 cases were found to be not guilty (41 acquitted & 14 discharged) and one case was withdrawn; there were only 28 (12.4%) convictions (13 verdicts and 14 pleas); 30 cases went to trial with no medico-legal report (22). Of the 55 cases that were found to be not guilty, none had a record of DNA evidence being presented during the trial (22).

Another study conducted in Gauteng province found that good clinical records of physical findings and injuries were associated with the initiation of court cases and convictions of perpetrators (12). This study was conducted just two to three years after the collection of specimens for DNA evidence in rape cases began and at the time, the forensic laboratories were manually run and overwhelmed by a backlog of cases.

Similarly, the studies from other countries occurred with similar timelines in relation to the advent of specimen collection for DNA analysis. It is therefore important to note that with more time and experience and the automation of laboratory analysis, DNA specimens could become more useful.

Since research into DNA evidence in the South African context is currently still pending, we can say that at this point, medico-legal documentation could be of more value than DNA

evidence in the prosecution of cases through the judicial system, particularly in developing countries, like South Africa, where resources are often limited (12). In the least case scenario, it adds value and strength to the prosecution's case.

Not many healthcare providers fully appreciate the importance of comprehensively filling out the J88 form for future prosecution and conviction (23, 24). Few healthcare providers realise that the burden of proof lies on the prosecution to prove, beyond reasonable doubt, that the accused is guilty. Any inconsistencies in the evidence produced, including poor documentation by the healthcare provider, can substantially affect the outcome of the case (22, 23). Poorly completed forms can lead to weak medico-legal evidence presented in court, leading to the case being dismissed. Alternately, poorly completed forms can lead to a missed opportunity to influence the case with strong evidence. Additionally, the more comprehensive and decipherable a form is, the smaller the chance that the healthcare provider would have to appear in court to testify (23). It is always ideal to have the healthcare worker to testify to their findings, but a well completed form leaves a smaller chance of the examiner's findings being called into question.

From the evidence presented above, one can conclude that how healthcare providers complete the J88 form that documents the medico-legal findings of the medical examination is important to the case outcome. It is therefore, of significant consequence, that healthcare providers complete the J88 form in such a way that it can be well understood by the legal system and properly used in the process of prosecution.

1.4. AIM

The aim of this study is to develop a Quality Index Tool and to assess the quality of completion of J88 forms in South Africa using the tool.

1.5. SPECIFIC OBJECTIVES

Objective 1

To develop a Quality Index Tool that assesses the quality of completion of J88 forms by drawing on expert views.

Objective 2

To assess the quality of completion of J88 forms nationally for rape survivors between 1 January and 31 December 2012 using the quality index tool. Specifically:

a. To assess the factors associated with higher quality of completion of J88 forms nationally between 1 January 2012 and 31 December 2012 using the quality index tool.
b. To determine whether higher quality of the completion of J88s was associated with writing better quality conclusions on the J88 nationally.

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CHAPTER 2: METHODOLOGY

This study has two distinct objectives and so the methodology for the first objective will be presented first, followed by the methodology for the second objective.

2.1. DEVELOPMENT OF A QUALITY INDEX TOOL (QIT) [OBJECTIVE 1]

2.1.1. Study Design

The initial part of the study used the Delphi method to explore the opinions of medical and legal experts about quality issues in how healthcare providers complete J88 forms. These issues were then rated and ranked to create a Quality Index Tool (QIT).

2.1.1.1. The Delphi Method

The Delphi method was first developed in the 1950s at the Rand Corporation, as a qualitative predictive technique and a means of gaining agreement on a difficult topic among a panel of experts (1). It gathers the combined knowledge and proficiency of different area specialists to answer a difficult problem (1). It has been used in several fields of study and has been proven to be quite robust in forecasting and decision-making (64).

When compared with traditional survey methods, the Delphi method is found to have certain benefits. It is able to explore questions of high ambiguity and presumption; it has good construct validity because it employs field or area specialists to validate the researcher's understanding; it tends to have a high response rate and low attrition (experts are the participants and due to their interest in the field, tend to follow through); and there is an abundance of data because there are multiple repetitions and revisions to responses from the experts (65).

The Delphi method has been used in the field of healthcare for several reasons, often to develop some type of tool that brings together the experience and knowledge of a group of area experts. Table 2 shows studies conducted in the healthcare sector in the last sixteen years that were used to develop a tool of some sort. These tools were usually for use in some kind of quantitative survey. Of the five studies described, three used modified Delphi methods

(66-68) and only two (69, 70) used the standard Delphi method. Of the five studies, three used the Delphi method as a part of a broader methodology and two used the Delphi method as the main methodology.

Table 2: The Use of the Delphi Method in Health Care Research

STUDY & AUTHORS	YEAR	AREA	PURPOSE	NUMBER OF EXPERTS	METHOD	TOOL DEVELOPED
Emergency nurse practitioner's documentation: development of an audit tool Cooper et al (66)	2000	EMERGENCY NURSING "The quality of clinical documentation was examined during a randomised controlled trial of emergency nurse practitioner (ENP) led care (). In order to measure the quality of ENPs and A&E senior house officers (SHOs) documentation, a reliable and valid tool had to be developed." (66)	To measure the quality of clinical documentation (66)	Not reported	Modified Delphi Method	Documentation Audit Tool (DAT)
A Process for Measuring the Quality of Cancer Care: The Quality Oncology Practice Initiative Neuss et al (69)	2005	ONCOLOGY "Medical record abstraction measures based on practice guidelines and consensus-supported indicators of quality care." (69)	Self-assessment of the quality of cancer care delivered (69)	Seven Physicians from seven oncology groups (69)	Delphi Method	Self-assessment Tool
Emergency Medicine Practitioner Knowledge and Use of Decision Rules for the Evaluation of Patients with Suspected Pulmonary Embolism: Variations by Practice Setting and Training Level Runyon et al (67)	2007	EMERGENCY MEDICINE "Several clinical decision rules (CDRs) have been validated for pre-test probability assessment of pulmonary embolism (PE)." (67)	To characterize clinicians' knowledge of and attitudes toward two commonly used CDRs for PE (67)	Three experts – the authors of the study (67)	Modified Delphi Method	Two-page survey questionnaire
Searching for an Operational Definition of Frailty: A Delphi Method Based Consensus Statement. The Frailty Operative Definition-Consensus Conference Project Rodríguez-Mañas et al (68)	2012	GERIATRICS: "A modified Delphi process was used to attempt to achieve consensus regarding the definition of frailty for clinical uses. Experts were selected from different fields and organized into five Focus Groups. A questionnaire was developed and sent to experts in the area of frailty." (68)	Consensus regarding the definition of frailty for clinical uses (68)	"Five Focus Groups of experts (geriatricians, non-geriatrician physicians, other health professionals, basic scientists, & social and nongovernmental workers). Each FG was composed of 5 – 7 experts and a chairman." (68)	Modified Delphi method	Identification of six domains of frailty for inclusion in a clinical definition
Referral letters from General	2013	GENERAL PRACTITIONERS "This descriptive cross	This scoring system was	Not reported (multidisciplinary	Delphi Method –	Scoring System

Practitioners to Hospitals in Sri Lanka Lack information and clarity Ramanayake et al (70)		sectional study was conducted in four hospitals of different levels of care provision in Sri Lanka about referral letters received by the OPDs. A check list to extract data was developed based on the items of information expected in a referral letter and legibility. Each item was assigned a score." (70)	validated using a panel of experts by means of Delphi method. Maximum score possible for a letter was 30. (70)	panel of medical experts (comprising family physicians, a general physician, a paediatrician, a general surgeon and a community physician (70)).	the scoring system used was validated by a Delphi method	

This study used the Delphi method to combine the knowledge and experiences of medical and legal experts who made regular use of J88 forms.

2.1.2. Sampling

Eight individuals from the medical field who regularly examined and treated victims of rape and completed J88 forms; and eight individuals from the legal field, who were regular users of J88 forms in the prosecution of rape cases within the South African criminal-justice system, were selected for the Delphi process. Experts were identified from across the country with the aim of national representation. Legal experts were purposively sampled with the help of the National Prosecuting Authority (NPA). The selection of legal experts was fairly representative of the country in that there were experts identified from Gauteng, Limpopo, Mpumalanga, North West Province, Northern Cape, Western Cape, KwaZulu-Natal and the Free State Province. Unfortunately, even though an expert was identified from the Eastern Cape, this person did not respond.

Purposive sampling of medical experts was done through consultation with key informants. Representatives were identified from KwaZulu-Natal, Free State, Western Cape and Gauteng.

Inclusion and exclusion criteria for legal experts

The legal panelists worked in the field of rape prosecution for at least five years and have prosecuted at least 15 rape cases. Those prosecutors who had worked for several years but were now in managerial positions and not actually prosecuting rape cases were excluded.

Inclusion and exclusion criteria for medical experts

The medical panelists had to be doctors or nurses who had at least eight years' experience working specifically with rape survivors, and using J88 forms in regular practice. They had to have seen at least 20 rape survivors in the preceding year and have appeared in court as expert witnesses in at least 15 trials related to rape cases. Those who had many years of experience but did not regularly see rape cases and complete J88 forms were excluded.

Identification and selection of experts

The National Office of the National Prosecuting Authority (NPA) was contacted to identify contact people for each province (see Appendix C). They identified members of the provincial Sexual Offences and Community Affairs (SOCA) Unit, who then identified a prosecutor per province and at the national level. Each of these identified prosecutors was then contacted by the national office of the NPA to introduce the study to them.

Similarly, the Maternal, Child and Women's Health Directorate at the National Department of Health (NDoH) was initially contacted in an effort to identify medical experts in each province and nationally (See Appendix D). As this was not fruitful, I then approached researchers in the field of gender-based violence who had spent many years working in this area and asked them to identify contact people in each province. Key informants identified medical experts based in four provinces who met the selection criteria (Gauteng, Free State, KwaZulu-Natal and Western Cape). In the provinces where no contact person was identified, I contacted Thuthuzela Care Centers (TCCs) located within each of these provinces (Limpopo, Mpumalanga, Northern Cape and Eastern Cape) to identify experts. TCCs are one-stop facilities that operate within public hospitals close to communities where the prevalence of rape is particularly high. These facilities were established by the Sexual Offences and Community Affairs Unit (SOCA) of the Department of Justice. Many doctors and nurses who worked in these facilities were contacted as potential experts but did not fit the set criteria for a medical expert or did not want to participate in the study. Because of the high turnover of staff in these facilities, there were rarely any individuals who had worked in the field for longer than two years.

When approaching a potential expert, an email with a brief introduction and overview of the study was sent with a more detailed information sheet (Appendix E) and consent form (Appendix E) attached. In the case of those experts who did not respond, two follow-up emails were sent, each two weeks apart. If only a telephone number had been provided for the expert, an initial call was made to introduce the study and to request an email address or fax number to send the information sheet and consent form to.

Description of Experts

Figure 1 shows the provincial representation in the selection of Medical Experts for this study. Of the eight medical experts who participated in the study, there were three from three

provinces: KwaZulu Natal (25%), Western Cape (25%) and Free State (25%). The remaining two medical experts each represented National and Gauteng Province.

Table 3 shows the demographic characteristics of the medical and legal experts, also demonstrating their level of expertise in years of experience working with cases of rape and how they fit the set criteria.

The medical experts were all doctors who had eight to twenty-six years of experience with rape survivors. There were three males and five females.

The legal experts were all prosecutors with five to nineteen years of experience. There was only one male legal expert while the other seven were female.

Table 3: Demographic Characteristics of Medical and Legal Experts

MEDICAL EXPERTS (ME)	**Provincial Representation**	**Sex**	**Working Title**	**Years of Experience with Rape Cases**
ME 1	Free State	F	Doctor	8 years
ME 2	Gauteng	M	Doctor	14 years
ME 3	Western Cape	F	Doctor	12 years
ME 4	Free State	F	Doctor	15 years
ME 5	National	M	Doctor (Paediatrician)	26 years
ME 6	Western Cape	M	Doctor	13 years
ME 7	KwaZulu Natal	M	Doctor	29 years
ME 8	KwaZulu Natal	F	Doctor	20 years
LEGAL EXPERTS (LE)				
LE 1	KwaZulu Natal	F	Advocate	16 years
LE 2	Western Cape	F	Advocate	10 years
LE 3	Limpopo	F	Advanced Regional Court Prosecutor	10 years
LE 4	National/ Gauteng	F	Advocate	8 years
LE 5	Free State	F	Junior State Advocate	6 years
LE 6	Mpumalanga	F	Advocate	5 years
LE 7	Northern Cape	M	Advocate	19 years
LE 8	North West	F	Advocate	16 years

2.1.3. Data Collection

Telephonic interviews were conducted using a semi-structured interview guide to elicit the thoughts of the experts on areas of the J88 form. The J88 form is itself structured into sections that deal with different issues. Following that structure, the interview guide was developed around the each of these sections. The questions themselves were open-ended with the aim of allowing the expert interviewed to direct the flow of the responses. Different probes were used depending on the nature and flow of the discussion. The guide was reviewed by two content experts (supervisors) well versed in the J88 form and its details, before being used in the expert interviews.

Round 1

The first round consisted of a telephone interview (see Appendix F) with each member of both the medical and legal panels, where they were requested to identify factors that they thought, in their expert opinions, defined the quality of a completed J88 form. Prior to the telephonic interview, each panelist had the J88 form (see Appendix B) sent to them via email to have on hand as they considered pertinent issues during the telephonic interview. This facilitated and directed the discussion during the interview.

Round 2

Once all sixteen interviews had been conducted, 63 quality issues were identified and tabulated and recirculated to the panel of experts. The purpose of this was to allow the other experts to give input into what their fellow experts believed affected the quality of the completed J88 form. A scoring system ranging from 1 (Strongly disagree) to 8 (Strongly agree) was added to allow other experts to communicate whether they agreed or disagreed with the significance of each of the identified factors of quality.

The table also allowed for additional comments or concerns to be recorded. A level of agreement of over 60% was set. This meant that at least 10 out of the 16 experts had to mark between 5 and 8 on the score sheet, indicating that they agreed that the designated quality issue did indeed affect the overall quality of the completed J88 form.

Round 3

After assessing the items that had the highest level of agreement among the expert panel 49 quality issues were found to have over 60% agreement between the experts. I had expected to

find contradictory views among the experts (where half agreed strongly with a statement while half disagreed) and if that occurred the plan was to set up an email discussion to iron out whether or not these factors were significant. However, none of the issue seemed to be particularly contentious. There was either a clear level of agreement or disagreement, even between the two groups (medical and legal).

The 49 quality issues were then compiled into a similar table with a similar scoring system and sent back to the experts to establish a higher level of agreement of 80% or more (which was defined as having 13 of the 16 experts agree that an issue affected the quality of the completed J88 form). The third round also allowed for the experts to comment on any issues or concerns.

Of the 49 quality issues circulated in this round, 24 of them reached an 80% level of agreement (at least 13 of the 16 experts agreed on them). These 24 quality issues formed the Quality Index Tool (QIT).

2.1.5. Data Analysis

Round 1

Interviews with experts were transcribed verbatim and a content analysis was carried out. Codes were identified after a deep reading of the transcripts representing common factors of quality that were raised within the defined sections of the J88 form, with some factors affecting the whole form (like legibility of the healthcare worker's handwriting). The codes were then applied to all the transcripts. Sixty-three issues that affect the quality of completed J88 forms were identified (see Table 4).

The identified issues that affected the quality of J88 forms were then grouped together based on which part of the form they affected. These issues were tabulated under the section headings of the J88 form.

Round 2

In Round 2, the identified issues, structured as Quality Statements (QS), were compiled into a table. The purpose of the table was to allow the experts to engage with each of the statements and to score each QS based on whether or not, and to what level, they agreed or disagreed with the QS. A Likert scale was used for each QS with response categories graded from 1 for "Strongly Disagree" up to 8 for "Strongly Agree". An even number of options was chosen

with 4 on the "Disagree" side and 5 on the "Agree" side so that there would be no neutral position to choose. These scores allowed for the QS to obtain a quantitative Level of Agreement (LA). To ensure that only quality statements that had a high level of agreement between the experts were selected, a 60% cut-off was used. This meant that at least 10 of the 16 experts had to indicate that they thought that the QS was a significant issue in the quality in completed J88 forms. Of the initial 63 QS elicited from the qualitative interviews, 49 QS achieved a level of 60% agreement, or higher. The 49 QS were included in the third round of data collection (see Table 4).

Round 3

In Round 3, an 80%, or higher, level of agreement was sought for the QS (at least 13 of the 16 Experts had to agree that the QS was a significant issue of quality). This was an iterative process that provided the Experts with an opportunity to reassess the 49 QS they had selected in Round 2. They repeated the process of scoring each QS based on whether or not, and to what level, they agreed or disagreed with the QS. Each QS was graded from "Strongly Disagree" at 1, to "Strongly Agree" at 8. At the end of this process, 24 Quality Statements achieved 80% agreement, or higher. These QS were then compiled into the Quality Index Tool.

There were certain QS that applied only to children, or only to female patients or male patients. This meant that the total score achievable on the QIT was different, depending on whether the patient was an adult or a child (< 18 years), and on whether they were male or female (see Table 4).

Table 4: Total score achievable based on whether a patient is an adult or a child and based on their sex

	Adult	Child
Male	47	50
Female	52	55

The final QIT was then used in Objective 2 of the study.

2.2. ASSESSING THE QUALITY OF J88 FORMS COMPLETED [OBJECTIVE 2]

2.2.1. Study Design

To answer the second objective the QIT was applied to completed J88 forms. The J88 forms were collected as part of a larger retrospective cohort study, which is looking at the attrition of rape cases from complaint to conviction, and is being conducted by the Medical Research Council. The main study is following up rape cases reported nationally to the police between 1 January 2012 and 31 December 2012 to determine the outcome of the case, for example, case withdrawn, still under investigation, gone to trial (71). Permission was obtained from the Principal Investigator to code the J88 forms collected for this study (Appendix G). Permission for the Rape Attrition Study was obtained from the South African Police Service, the Department of Constitutional Development and Justice, and the Department of Health (Appendices H, I and J).

The primary study: Rape Attrition Study South Africa

The primary study gathered data from South African Police Service (SAPS) case dockets, the charge sheet, and transcripts of court cases.

Population, sampling and sample size: South Africa has a total of 1133 police stations and 92 were sampled for the primary study (72). Police stations were sampled using a random sampling technique, where police stations were stratified by province, station size and case load. At each police station, 30 cases were randomly sampled from all the cases of rape opened between 1 January and 31 December 2012. The planned number of cases was 600 per province, from 20 police stations and 360 cases from the Northern Cape, from 12 police stations. The number was adjusted for the Northern Cape as the number of rape cases reported is far below that of other provinces.

During data collection for the primary study a portable scanner was used to scan the J88 forms. Not all the dockets contained J88 forms. With a previous study conducted in 2008 in Gauteng alone, it was found that only 70% of the dockets reviewed contained J88 forms. At

the end of data collection for the main study, 2828 J88 forms were collected. All the J88 forms collected as part of the primary study were eligible for inclusion in the secondary data analysis that assessed the quality of the J88 forms using the Quality Index tool developed through the Delphi process.

2.2.2. Sampling for the Secondary Data Analysis

Based on the assumption that 60% (with a range of 50%-60%) of the forms would have a high quality score with a 99% confidence level a sample size of 151 J88 forms was required. This sample size was calculated using Epi-Info 3.5.4. An additional six were sampled for inter-rater agreement and this was then rounded up to 160. Therefore a total of one-hundred and sixty J88 forms were randomly sampled from the 2828 collected for the primary study. A random-number generator was used.

2.2.3. Data Collection

The QIT was used to score 160 J88 forms randomly sampled from the main study. Each form was manually scored by the primary researcher using the QIT developed in the Delphi study. Each dimension of the QIT was assigned a score (for example, "completely legible"=3, "partially legible"=2, "illegible"=1) or a dichotomous response (true=2 and false=1). A few patient and provider characteristics were coded and captured for each form. These included whether the provider was a nurse or doctor, whether the patient was an adult or child, male or female, and whether an anal, genital and physical examination was conducted. An excel spreadsheet was used to capture each variable from the J88 form.

We wanted to assess whether the QIS could predict whether providers wrote better conclusions on the J88. Better conclusions are considered to be important in assisting in the prosecution of rape cases. For the variable measuring whether or not the conclusions that were made were strong or weak, I drew on the criteria for stronger conclusions that were developed using input from the 16 experts. Strong conclusions were described as those that summarized the findings stated on the form and made a relevant medico-legal conclusion based on the findings. This meant that, if injuries were noted on the form they would have to be summarized in the conclusion; rape or assault should not be excluded because of a normal examination; and the word rape should not be used in the medical conclusion since it is a legal term.

2.2.4. Inter-rater agreement

The inter-rater agreement for the QIT was sought to assess whether having only one primary rater for the second part of the study would bias the rating process and subsequent scores. To assess the inter-rater agreement of the QIT, four independent healthcare workers scored the same set of six J88 forms to calculate the inter-rater agreement.

These four healthcare workers were purposively selected based on the following criteria. All came from a medical background. All had at least five years of clinical experience. All were currently involved in seeing rape cases and completing J88 forms. All were involved in post-graduate studies involving research techniques. All had received some degree of in-service training on post-rape care. All were able and willing to participate in the study. A 30 minute briefing session on the use of the tool was given prior to the raters scoring the J88s.

The agreement between the scores obtained from the four raters for each of the six J88 forms, were then tabulated and compared to the primary rater's scores in STATA 13 using a Fleiss' Kappa score.

The mean Kappa score was 0.86 and a range from 0.77 to 0.92 for the six J88 forms scored, showing substantial to near perfect agreement. This means that the QIT shows robustness in attaining similar scores, even with different raters and minimal training.

2.2.4 Data Analysis

The Quality Index Scores (QIS) and a few key variables from the J88 form were captured in Microsoft Excel. The data were imported into STATA 13 for analysis.

There was a need to standardise the QIS due to the different denominators based on whether the patient was an adult or a child and whether they were male or female. For the purposes of being able to compare and analyse the QIS across different sub-groups, I converted the QIS into percentages. The QIS percentages calculated from the scoring process were then analysed as a continuous variable.

Descriptive statistics were first calculated. These included frequency and percentage of J88s by province, provider characteristics (whether the healthcare worker was a doctor or a nurse)

and patient characteristics (adult/child; male/female). These were done to assess the distribution of the continuous QIS Percentage (QIS%) variable.

Two-sided t-tests were carried out to compare the mean quality percentage between groups including healthcare provider category; adult/child; and sex of the patient. A one-way Anova was performed to compare the mean percentages for the categorical variable "Province". A two-way Anova tests was calculated to compare the mean quality percentages of provinces between groups of providers.

A multiple regression model was run to identify predictors of higher quality percentages while accounting for the other variables as potential confounders. The model included "Healthcare worker Category", "whether the patient was an adult or a child", "Province", "Genital Injuries", "Anal Injuries" and "General Body Injuries".

I chose to keep "Adult/child" in the model as an adjustment variable because it had been significant in a previous study (19). "Sex" was removed as it was not statistically significant (p= or >0.05), nor did it operate as a confounder in the multiple regression model.

A logistic regression model was built to test the hypothesis that a higher quality percentage was associated with stronger conclusions on the J88. Models adjusted for provider and patient characteristics.

2.3. Ethical Issues

Ethics approval for this study was obtained from the University of Witwatersrand Human Research Ethics Committee (M140903) (See Appendix K).

In the Delphi portion of the study, the subjects were experts in their fields. Their participation was voluntary and they were informed that they could leave the study at any time if they chose to do so. Due to their interest in the subject matter, no experts chose to stop participation until the study was completed. Information sheets and consent forms (see Appendix D) were sent to each of the panellists before commencing with the interviews. Informed consent was obtained prior to the initiation of the study. The identities of the

participants were kept confidential and not revealed to any of the other participants in the study.

The second part of the study was a secondary data analysis. No information was obtained directly from individual patients. Key variables were obtained from J88 forms and did not involve any contact with identified human subjects.

Approval to access the J88s was granted for the primary study by the Principal Investigator (Appendix G) and included the approvals the primary study team received from their primary data collection sources, the South African Police Services, and the Department of Justice and Constitutional Development (Appendix H and I) and the ethical approval the Principal Investigator received from the Medical Research Council (Appendix J).

Even though I was working with documents, the information contained within them still belonged to individuals and therefore had to be treated with the utmost respect and confidentiality. The J88 forms scanned at the police stations were regarded as confidential files and were stored in a password protected confidential data system by the Principle Investigator of the main study. The identifying information of complainants, alleged perpetrators and healthcare providers were present on the scanned J88 forms but were not recorded when they were captured for analysis as this information was not required. Thus I was able to analyse de-identified data, that did not compromise the rape victims or their perpetrators or the healthcare providers involved in caring for the victims. Cases were tracked through the CAS numbers that were allotted to each case so that the J88 form could be tracked if I needed to go back to recheck information. Identifying information from the J88 forms was not captured.

CHAPTER 3: RESULTS

3.1. DEVELOPMENT OF A QUALITY INDEX TOOL (QIT) [OBJECTIVE 1]

3.1.1. Round 1: Structured Interviews that Gathered the Statements on Quality

The analysis of the interviews conducted with experts identified 63 aspects of quality. Most of these aspects of quality were stated by more than one expert. In these cases, the various comments were compiled into one statement that captured all the different angles of the specific quality issue.

Variable quality

The most common emerging theme was that most experts felt that the quality of how J88 forms were completed varied between healthcare workers. As ME3 said, ***"Well my general feeling is that the quality differs from person to person."***

The legal experts also expressed similar views. As LE1 said, ***"Look it really does depend from doctor to doctor, I have to be honest because some doctors or forensic nurses that are completing these forms really well and then we got some shocking, you know doctors completing them terribly."***

Legibility

There was also general agreement that the legibility of the completed J88 form was an important dimension of quality. The reason that both medical and legal experts considered it to be important was because of it affected whether or not the form could be read and effectively understood in the court setting. There was also a feeling that nurses tended to have more legible handwriting than doctors. As ME3 said, ***"I will mention myself here, my handwriting is not so bad, but I know generally shame that is a problem. It obviously deteriorates after midnight, yes."*** Added to that there was also a perception that females (most nurses were female) tended to have more legible handwriting that males. As LE6 said, ***"Our forensic nurses are quite well … they … they … most of them are female so I am not sort of saying anything by that, but most of the male doctors we do have a problem with their handwriting, yeah."*** The consequence of this dimension not being well-completed was

perceived to be that the form could not be used on its own in court and the healthcare worker would then need to be summoned to testify in support of the illegible documentation.

Missing contact information

Legal experts identified practical contact information for the healthcare worker who completed the form as important since they experience great difficulty in contacting the healthcare workers when they need them to testify in court. However, this was not raised by many of the medical experts as they felt that being able to contact the facility where the examination took place should provide enough information for the prosecutors and that the J88 form should be sufficient for presentation of the case in court.

Medical experts identified having a signed 212 statement (Signed statement by the healthcare worker that they examined said patient) accompanying the J88 form as important, since this should mean that the healthcare worker would not need to appear in court to testify at the trial. However, this was not raised by many of the legal experts since they stated that healthcare workers would still have to act as expert witnesses whether or not the 212 Statement was completed.

These 63 aspects were then compiled into a table of Quality Statements, which were then sent back to the Experts in Round 2. Table 5 shows the list of the 63 quality issues that were then sent to the experts where they could record their level of agreement or disagreement with each statement.

Table 5: Issues of Quality Identified in Round 1 of the Delphi Study (63 Quality Issues)

	IDENTIFIED ISSUES THAT COMPROMISE THE QUALITY OF THE J88 FORM	RETAINED AFTER ROUND 2	RETAINED AFTER ROUND 3 FOR FINAL QIT
A. GENERAL ISSUES COMPROMISING QUALITY			
1	The healthcare worker's handwriting is illegible.	Yes	Yes
2	There is more than one handwriting on the J88 form.	Yes	No
3	The healthcare worker's signature is **absent** on any of the 4 pages of the J88 form.	Yes	No

4	The healthcare worker's qualifications are **NOT** documented.	Yes	No
5	Parts of the form are left incomplete without explanation.	Yes	No
6	The 212 Statement (Signed statement by the healthcare worker that they examined said patient) is **NOT** available with the J88 form.	No	No
7	Abbreviations are used on the form without explaining what they mean.	Yes	Yes
8	Medical jargon is used on the J88 form.	Yes	Yes
9	Where there is an error that has been corrected on the J88 form, it has **NOT** been initialled by the healthcare worker.	Yes	Yes
10	The J88 form is completed with something other than a black pen (e.g. Blue pen, pencil etc.)	No	No
B. DEMOGRAPHIC INFORMATION [SECTION A ON J88 FORM]			
11	The date of examination of the patient is **NOT** documented.	Yes	No
12	The time of examination of the patient is **NOT** documented.	Yes	No
13	Practical contact information for the healthcare worker (e.g. telephone number) is **NOT** documented.	Yes	No
14	Identifying information for patient like full name, date of birth (especially in children/ adolescents) and sex are **NOT** documented.	Yes	No
15	A police stamp is present where the healthcare facility stamp should be.	No	No
C. GENERAL HISTORY [SECTION B ON J88 FORM]			
16	The patient's medical history and medication history are **NOT** documented.	No	No
17	Details of the sexual offence and the perpetrator are recorded under "General History".	Yes	No
18	The time interval between assault and presentation to the healthcare worker is **NOT** documented (especially in children).	Yes	No

19	Disabilities, learning disorders, behavioural disorders and communication difficulties are **NOT** clarified.	Yes	Yes
20	The patient's HIV status is documented.	No	No
21	In the case of children, their exact words are **NOT** used to describe the history.	Yes	Yes
D. GENERAL EXAMINATION [SECTION C ON J88 FORM]			
22	The condition of the patient's clothing is not recorded (when sexual assault has happened just prior to presentation).	Yes	No
23	The patient's height and mass at the time of examination are **NOT** recorded (especially in children and adolescents).	Yes	No
24	The patient's general body build at the time of the examination are **NOT** commented on (especially in children and adolescents).	Yes	No
25	The patient's mental health and emotional status are described as "Normal" without further explanation.	Yes	Yes
26	When mental health and emotional status are **NOT** normal, the statement is not explained or clarified.	Yes	Yes
27	The patient is described as "intoxicated" or "drunk" but no clinical features of intoxication are indicated.	Yes	Yes
28	The patient is described as "intoxicated" but there is no clarification of whether it may be due to drug use or alcohol abuse.	Yes	No
29	The information documented in the notes does not correspond to information denoted on the diagrams provided on the form.	Yes	No
30	Injuries documented are not adequately described in size, shape, borders and type of force (blunt vs sharp).	Yes	Yes
31	There is no concluding statement summarising the General Examination findings.	Yes	Yes

32	The concluding statement after the general examination comments about sexual offence findings.	Yes	No
33	The phrase "Does not exclude" is used in the concluding statement.	Yes	No
34	The concluding statement does not include comments on medical history and medication, condition of clothing, intoxication and mental status when they are relevant and have been mentioned in those sections.	Yes	No
E. HISTORY IN CASE OF ALLEGED SEXUAL ASSAULT [SECTION D ON J88 FORM]			
35	If the patient is pre-pubertal, it is not stated on the J88 form.*	Yes	No
36	All of Section D on the J88 form is not completed in pre-pubertal children. *	No	No
37	All of Section D on the J88 form is not completed in male patients.	Yes	Yes
38	When "condom use" is ticked, it is not clarified whether it was used with a consensual partner or during the sexual assault.	Yes	Yes
39	The number of a patient's consensual sexual partners is recorded.	No	No
40	The date and time of a patient's last consensual sexual intercourse is **NOT** completed.	No	No
F. GYNAECOLOGICAL EXAMINATION [SECTION E ON J88 FORM]			
41	A digital examination was conducted and documented as the number of fingers inserted.	Yes	Yes
42	A speculum examination was conducted in an adult female and reason for the examination was **NOT** stated.	No	No
43	A speculum examination was conducted in a child or adolescent.*	No	No
44	Boxes under the gynaecological examination are completed with ticks or crosses or "NAD" or "N/A", and **NOT** explanatory statements.	Yes	Yes

45	Boxes under the gynaecological examination are completed with "Normal", and **NOT** explanatory statements.	Yes	Yes
46	The transverse and vertical diameter of hymenal orifice are completed in female children. *	No	No
47	The hymenal configuration is **NOT** described in female children.*	Yes	No
48	Tanner staging of breast development and pubic hair are **NOT** completed for children. *	No	No
49	There is **NO** concluding statement about the sexual assault history and gynaecological examination after "Samples taken for Investigation" - Section F on J88 form.	Yes	Yes
50	If a conclusion is made, it does **NOT** correlate with information denoted on the diagrams provided.	Yes	No
51	The word "rape" is used in the concluding statement.	Yes	No
G. SAMPLES TAKEN FOR INVESTIGATION [SECTION F ON J88 FORM]			
52	There is no Rape Kit number on the J88 form and an explanation is **NOT** given as to why it is absent.	No	No
53	The rape kit number is hand-written in, there is no sticker present on the form.	No	No
H. ANAL EXAMINATION [SECTION G ON J88 FORM]			
54	Section G is **NOT** completed, or "NAD" or "N/A" are written with no other explanation.	Yes	Yes
55	There is **NO** concluding statement of anal examination findings or lack thereof.	Yes	Yes
56	A rectal digital examination was done (especially in children and adolescents).*	No	No
I. MALE GENITALIA [SECTION H ON J88 FORM]			
57	In the case of male patients Section H is **NOT** completed or "NAD" or "N/A" are written with no other explanation. #	Yes	Yes

58	There is **NO** concluding statement of male genitalia findings or lack thereof. #	Yes	Yes
59	The **FINAL** concluding statement does not take into account findings from previous sections.	Yes	Yes
60	The **FINAL** concluding statement excludes sexual abuse due to a normal examination.	Yes	Yes
J. DIAGRAMS TO DENOTE INJURIES			
61	Diagrams that are not completed are **NOT** crossed out.	Yes	Yes
62	When diagrams are crossed out, no explanation is given as to why diagrams were crossed out.	Yes	Yes
63	When diagrams are crossed out, there is no signature in signature boxes.	Yes	Yes

*Quality Statements that apply only to children; #Quality Statements that apply only to male patients

3.1.2. Round 2: Level of Agreement by Experts on the 63 identified Quality Statements

At the end of Round 2, 49 of the 63 QS sent out achieved a 60% LA, meaning that at least 10 of the 16 experts considered these QS to be significant aspects of quality, when considering how the J88 forms had been completed. These 49 QS are listed in Table 6 below.

Fourteen of the quality statements did not have 10 experts who thought they were significant enough to affect the overall quality of the completed J88 form. These fourteen QS were dropped at the end of Round 2. The only section that was completely dropped because of this was the section on "Samples taken for Investigation". Neither of the two quality statements in this section achieved a 60% Level of Agreement. For the remaining 49 QS, the number of experts who agreed with them is reflected in Table 6 (all 10 or more experts).

Table 6: Quality Issues that achieved more than 60% Agreement between the Experts

QUALITY ISSUES IDENTIFIED THAT HAD MORE THAN A 62.5% AGREEMENT BETWEEN THE EXPERTS		NUMBER OF REVIEWERS WHO AGREED WITH THIS QS (OUT OF 16)	QS RETAINED FOR FINAL QIT
A. GENERAL ISSUES COMPROMISING QUALITY			
1	The healthcare worker's handwriting is illegible.	14	Yes

2	There is more than one handwriting on the J88 form.	10	No
3	The healthcare worker's signature is **absent** on any of the 4 pages of the J88 form.	11	No
4	The healthcare worker's qualifications are **NOT** documented.	9	No
5	Parts of the form are left incomplete without explanation.	11	No
6	Abbreviations are used on the form without explaining what they mean.	15	Yes
7	Medical jargon is used on the J88 form.	14	Yes
8	Where there is an error that has been corrected on the J88 form, it has **NOT** been initialled by the healthcare worker.	14	Yes
B. DEMOGRAPHIC INFORMATION [SECTION A ON J88 FORM]			
9	The date of examination of the patient is **NOT** documented.	8	No
10	The time of examination of the patient is **NOT** documented.	9	No
11	Practical contact information for the healthcare worker (e.g. telephone number) is **NOT** documented.	11	No
12	Identifying information for patient like full name, date of birth (especially in children/ adolescents) and sex are **NOT** documented.	8	No
C. GENERAL HISTORY [SECTION B ON J88 FORM]			
13	Details of the sexual offence and the perpetrator are recorded under "General History".	11	No
14	The time interval between assault and presentation to the healthcare worker is **NOT** documented (especially in children).	11	No
15	Disabilities, learning disorders, behavioural disorders and communication difficulties are **NOT** clarified.	13	Yes
16	In the case of children, their exact words are **NOT** used to describe the history.*	14	Yes
D. GENERAL EXAMINATION [SECTION C ON J88 FORM]			
17	The condition of the patient's clothing is not recorded (when sexual assault has happened just prior to presentation).	8	No

18	The patient's height and mass at the time of examination are **NOT** recorded (especially in children and adolescents).	9	No
19	The patient's general body build at the time of the examination are **NOT** commented on (especially in children and adolescents).	12	No
20	The patient's mental health and emotional status are described as "Normal" without further explanation.	14	Yes
21	When mental health and emotional status are **NOT** normal, the statement is not explained or clarified.	15	Yes
22	The patient is described as "intoxicated" or "drunk" but no clinical features of intoxication are indicated.	14	Yes
23	The patient is described as "intoxicated" but there is no clarification of whether it may be due to drug use or alcohol abuse.	12	No
24	The information documented in the notes does not correspond to information denoted on the diagrams provided on the form.	12	No
25	Injuries documented are not adequately described in size, shape, borders and type of force (blunt versus sharp).	13	Yes
26	There is no concluding statement summarising the General Examination findings.	13	Yes
27	The concluding statement after the general examination comments about sexual offence findings.	12	No
28	The phrase "Does not exclude" is used in the concluding statement.	12	No
29	The concluding statement does not include comments on medical history and medication, condition of clothing, intoxication and mental status when they are relevant and have been mentioned in those sections.	12	No
E. HISTORY IN CASE OF ALLEGED SEXUAL ASSAULT [SECTION D ON J88 FORM]			
30	If the patient is pre-pubertal, it is not stated on the J88 form.*	12	No

31	All of Section D on the J88 form is not completed in pre-pubertal children.	12	No
32	All of Section D on the J88 form is not completed in male patients.	13	Yes
33	When "condom use" is ticked, it is not clarified whether it was used with a consensual partner or during the sexual assault.	14	Yes
	F. GYNAECOLOGICAL EXAMINATION [SECTION E ON J88 FORM]		
34	A digital examination was conducted and documented as the number of fingers inserted.	13	Yes
35	Boxes under the gynaecological examination are completed with ticks or crosses or "NAD" or "N/A", and **NOT** explanatory statements.	16	Yes
36	Boxes under the gynaecological examination are completed with "Normal", and **NOT** explanatory statements.	13	Yes
37	The hymenal configuration is **NOT** described in female children.*	12	No
38	There is **NO** concluding statement about the sexual assault history and gynaecological examination after "Samples taken for Investigation" - Section F on J88 form.	13	Yes
39	If a conclusion is made, it does **NOT** correlate with information denoted on the diagrams provided.	11	No
40	The word "rape" is used in the concluding statement.	12	No
	G. ANAL EXAMINATION [SECTION G ON J88 FORM		
41	Section G is **NOT** completed, or "NAD" or "N/A" are written with no other explanation.	15	Yes
42	There is **NO** concluding statement of anal examination findings or lack thereof.	13	Yes
	H. MALE GENITALIA [SECTION H ON J88 FORM]		
43	In the case of male patients Section H is **NOT** completed or "NAD" or "N/A" are written with no other explanation. #	13	Yes

44	There is **NO** concluding statement of male genitalia findings or lack thereof. #	13	Yes
45	The **FINAL** concluding statement does not take into account findings from previous sections.	12	No
46	The **FINAL** concluding statement excludes sexual abuse due to a normal examination.	13	Yes
	I. DIAGRAMS TO DENOTE INJURIES		
47	Diagrams that are not completed are **NOT** crossed out.	16	Yes
48	When diagrams are crossed out, no explanation is given as to why diagrams were crossed out.	15	No
49	When diagrams are crossed out, there is no signature in signature boxes.	13	Yes

*Quality Statements that apply only to children # Quality Statements that apply only to males

3.1.3. Round 3: Level of Agreement by Experts of the 24 Quality Statements that achieved 80% for higher Agreement

At the end of this round, 24 QS achieved an 80% (or higher) level of agreement. This meant that at least 13 of the 16 experts had to agree that each QS was significant enough to affect the overall quality of completion of the J88 form.

Only two of the QS achieved complete agreement (16 out of 16) among both legal and medical experts. Each had a mean score from the expert of 7.1. They are reflected in Table 7.

Table 7: Quality Statements that achieved complete agreement between the 16 Experts (100% LA)

No.	QUALITY STATEMENT	Mean Score
15	Boxes under the gynaecological examination are left blank/ completed with ticks or crosses or "N/A", and **NOT** explanatory statements, in **female** patients.	7.1
23	Diagrams that are not completed are crossed out.	7.1

For three of the QS, 15 out of 16 experts agreed that there were significant issues of the quality of completion of the J88 form. They are reflected in Table 8. Though there was one

expert who disagreed on each of these issues, it is interesting to note that they all chose a score of 4 which represents mild disagreement as opposed to strong disagreement. Of those who agreed with the QS, their mean scores 7.1, 7.2 and 7.2 respectively, as reflected in Table 8.

Table 8: Quality Statements that achieved agreement in 15 out of 16 Experts (93.75% LA)

No.	QUALITY STATEMENT	MEAN SCORE OUT OF 8
2	Medical Abbreviations are used on the form without explaining what they mean.	7.1
8	When mental health and emotional status are **NOT** normal, the statement is explained or clarified.	7.2
18	Section G (Anal Examination) is **NOT** completed, or "NAD" or "N/A" etc. are written with no other explanation.	7.2

For seven of the Quality Statements, 14 of the 16 Experts agreed that they were significant enough to affect the overall quality of the completed J88 form. They are listed in Table 9. There was no consistency in which experts tended to disagree with the QS. It should be noted that experts were given the option to omit choosing a score if they felt they were unable to comment on a particular QS. Only one of the medical experts had substantial experience with paediatric cases and this expert refrained from answering QS that did not relate to paediatric patients. Most of the experts who disagreed with the QS chose scores of 4 indicating mild disagreement. Only one medical expert strongly disagreed (score of 1) with QS 7 and another medical expert strongly disagreed (score of 1) with QS 13.

Table 9: Quality Statements that achieved agreement in 14 out of 16 Experts (87.5% LA)

No.	QUALITY STATEMENT	MEAN SCORE OUT OF 8
1	The healthcare worker's handwriting is illegible.	7.3
3	Medical jargon is used on the J88 form.	6.9
4	Where there is an error that has been corrected on the J88 form, it has **NOT** been initialled by the healthcare worker.	7.0
6	In the case of children, their exact words are **NOT** used to describe the history.	7.4
7	The patient's mental health and emotional status are described as "Normal" without further explanation.	7.2

9	The patient is described as "intoxicated" or "drunk" but no clinical features of intoxication are indicated.	7.1
13	When "condom use" is ticked, it is not clarified whether it was used with a consensual partner or during the sexual assault.	7.6

The remaining 12 QS achieved an agreement of 13 out of the 16 experts. They are listed in Table 11. Again it can be noted that most of the Experts who disagreed chose scores ranging from 4 to 2 (mild to moderate disagreement). Only QS14 elicited strong disagreement (a score of 1) from all three experts who disagreed with it. All 12 QS had mean scores of 6.5 and above as reflected in Table 10, from the Experts who agreed with them.

Table 10: Quality Statements that achieved an agreement of 13 out of 16 Experts

No.	QUALITY STATEMENT	MEAN SCORE OUT OF 8
5	Disabilities, learning disorders, behavioural disorders and communication difficulties are **NOT** clarified.	7.1
10	Injuries documented are not adequately described in size, shape, borders and type of force (blunt vs sharp).	6.8
11	There is no concluding statement summarising the General Examination findings.	6.6
12	All of Section D on the J88 form is not completed in male patients.	7.5
14	A digital examination was conducted and documented as the number of fingers inserted.	6.9
16	Boxes under the gynaecological examination are completed with "Normal", and **NOT** explanatory statements.	7.4
17	There is **NO** concluding statement about the sexual assault history and gynaecological examination after "Samples taken for Investigation" - Section F on J88 form.	7.8
19	There is **NO** concluding statement of anal examination findings or lack thereof.	6.7
20	In the case of male patients Section H is **NOT** completed or "NAD" or "N/A" are written with no other explanation.	6.6
21	There is **NO** concluding statement of male genitalia findings or lack thereof.	6.7
22	The **FINAL** concluding statement excludes sexual abuse due to a normal examination.	6.5
25	When diagrams are crossed out, there is no signature in signature boxes.	7.0

These 24 QS were used to compile the final Quality Index Tool (QIT) which was used in Round 4 and in Objective 2. The final Quality Index Tool is shown in Table 11 below. This QIT uses a Likert scale to score each QS.

Table 11: The Quality Statements in the Quality Index Tool

	J88 CAS Number				
ISSUES OF QUALITY IDENTIFIED BY EXPERTS (>81.25% AGREEMENT =13 or more of 16)		**PLEASE CIRCLE THE APPROPRIATE SCORE**			
	GENERAL ISSUES COMPROMISING QUALITY				
1	The healthcare worker's handwriting is illegible.	COMPLETELY ILLEGIBLE = 1	PARTIALLY LEGIBLE = 2	CLEARLY LEGIBLE = **3**	
2	Medical Abbreviations are used on the form without explaining what they mean.	MANY ABBREVIATIONS = 1	SOME ABBREVIATIONS = 2	NO ABBREVIATIONS = 3	
3	Medical jargon is used on the J88 form.	A LOT OF MEDICAL JARGON USED = 1	SOME MEDICAL JARGON USED = 2	NO MEDICAL JARGON USED = **3**	
4	Where there is an error that has been corrected on the J88 form, it has **NOT** been initialled by the healthcare worker.	MANY UNINITIALLED ERRORS = 1	SOME UNINITIALLED ERRORS = **2**	NO UNINITIALLED ERRORS = **3**	NO ERRORS = 3
	GENERAL HISTORY [SECTION B ON J88 FORM]				
5	Disabilities, learning disorders, behavioural disorders and communication difficulties, when recorded, are clarified.	NO PROBLEMS ARE CLARIFIED = 1	SOME PROBLEMS ARE CLARIFIED = 2	ALL PROBLEMS ARE CLARIFIED = 3	NONE RECORDED = 2
6	In the case of **children**, their exact words are used to describe the history.	NONE OF THE HISTORY RECORDED IN CHILD'S OWN WORDS = 1	SOME OF THE HISTORY RECORDED IN CHILD'S OWN WORDS = **2**	ALL OF THE HISTORY IS RECORDED IN CHILD'S OWN WORDS = **3**	
	GENERAL EXAMINATION [SECTION C ON J88 FORM]				
7	The patient's mental health and emotional status are described as "Normal" without further explanation	NOT EXPLAINED = 1	EXPLAINED = 2		NOT NORMAL = **2**
8	When mental health and emotional status are **NOT** normal, the statement is explained or clarified/ not completed	EXPLAINED = 2		NOT EXPLAINED = 1	NORMAL = 1
9	When the patient is described as "intoxicated" or "drunk", the clinical features of intoxication are indicated	INDICATED = 2		NOT INDICATED = 1	NOT INTOXICATED OR DRUNK = **2**
10	Injuries documented are adequately described in size, shape, borders and type of force (blunt vs sharp).	INJURIES NOT DESCRIBED = 1	INJURIES PARTIALLY DESCRIBED = 2	INJURIES FULLY DESCRIBED = 3	NO INJURIES RECORDED = **1**
11	There is a concluding statement summarising the General Examination findings.	IRRELEVANT OR NO SUMMARY OF GENERAL EXAM FINDINGS = 1	PARTIAL SUMMARY OF GENERAL EXAM FINDINGS = 2	CONCLUSIVE SUMMARY OF GENERAL EXAM FINDINGS = 3	
	HISTORY IN CASE OF ALLEGED SEXUAL ASSAULT [SECTION D ON J88 FORM]				
12	The relevant parts of Section D on the J88 form are completed in **male** patients. (ONLY COMPLETE IF PATIENT IS MALE).	TRUE = **2**		FALSE = 1	

13	When "condom use" is ticked, it is clarified whether it was used with a consensual partner or during the sexual assault.	TRUE = 2		FALSE/ NOT COMPLETED = 1	
	GYNAECOLOGICAL EXAMINATION [SECTION E ON J88 FORM]	**ONLY COMPLETE THIS SECTION IF PATIENT IS FEMALE**			
14	A digital examination was conducted and documented as the number of fingers inserted in **female** patients.	TRUE = 1	FALSE = **2**		NOT COMPLETED = 2
15	Boxes under the gynaecological examination are left blank/ completed with ticks or crosses or "N/A", and **NOT** explanatory statements, in **female** patients.	ALL BOXES LEFT BLANK/ HAVE TICKS/ NAD/ N/A = 1	SOME BOXES LEFT BLANK/ HAVE TICKS/ NAD/ N/A = 2	ALL BOXES HAVE EXPLANATORY STATEMENTS = 3	
16	Boxes under the gynaecological examination are completed with "Normal"/ "NAD" / "intact"/ "none"/ "no injuries"/ "nil", in **female** patients, and **NOT** explanatory statements.	ALL BOXES HAVE "NORMAL" = 1	SOME BOXES HAVE "NORMAL" = 2	ALL BOXES HAVE EXPLANATORY STATEMENTS = 3	
17	In **female** patients, there is a concluding statement about the sexual assault history and gynaecological examination after "Samples taken for Investigation" - Section F on J88 form.	IRRELEVANT OR NO SUMMARY OF HISTORY & GYNAE EXAM FINDINGS = 1	PARTIAL SUMMARY OF HISTORY & GYNAE EXAM FINDINGS = 2	CONCLUSIVE SUMMARY OF HISTORY & GYNAE EXAM FINDINGS = 3	
	ANAL EXAMINATION [SECTION G ON J88 FORM]				
18	Section G is **NOT** completed, or "NAD" or "N/A" etc. are written with no other explanation.	TRUE = 1	FALSE = 2		
19	There is a concluding statement of anal examination findings or lack thereof.	PRESENT = **2**		ABSENT = 1	
	MALE GENITALIA [SECTION H ON J88 FORM]	**COMPLETE THIS SECTION ONLY IF PATIENT IS MALE**			
20	Section H is **NOT** completed or "NAD" or "N/A" are written with no other explanation.	NOT COMPLETED/ NAD/ N/A = 1	COMPLETED = **2**		
21	There is a concluding statement of male genitalia findings or lack thereof.	PRESENT = **2**		ABSENT = 1	
22	The **FINAL** concluding statement excludes sexual abuse because of a "normal examination". (ONLY IF EXAMINATION WAS NORMAL).	TRUE = 1		FALSE = **2**	NO FINAL CONCLUDING STATEMENT = **1**
	DIAGRAMS TO DENOTE INJURIES				
23	Diagrams that are not completed are crossed out.	ALL UNCOMPLETED DIAGRAMS NOT CROSSED OUT = 1	SOME UNCOMPLETED DIAGRAMS NOT CROSSED OUT = 2	ALL UNCOMPLETED DIAGRAMS ARE CROSSED OUT = 3	
24	When diagrams are crossed out, there is **NO** signature in the two relevant signature boxes.	NO SIGNATURES = 1	ONE SIGNATURE PRESENT = 2	BOTH SIGNATURES PRESENT = 3	
TOTAL SCORE					

MAXIMUM SCORE FOR EXAMINATION OF A FEMALE CHILD = 55

MAXIMUM SCORE FOR EXAMINATION OF AN ADULT FEMALE = 52

MAXIMUM SCORE FOR EXAMINATION OF A MALE CHILD = 50

MAXIMUM SCORE FOR EXAMINATION OF AN ADULT MALE = 47

3.2. USING THE QIT TO DETERMINE THE QUALITY OF COMPLETED J88 FORMS COLLECTED BETWEEN 1 JANUARY 2012 & 31 DECEMBER 2012 [OBJECTVIE 2]

This section provides results on the scoring of 160 J88 forms that were collected during the primary Rape Attrition Study, using the Quality Index Tool that was developed in the first part of the study.

3.2.1. Characteristics of the J88 forms

Table 12 shows the number of forms sampled from each province. Most of the J88 forms were from the Eastern Cape and KwaZulu-Natal (57/160). The fewest forms (n=7) came from the Northern Cape. Six patients were male (3.8%) while the vast majority were female (n=154; 96.2%); 94 were adults over the age of 18 years (n=94; 58.8%); and 124 were completed by doctors (77.5%).

Table 12: Number and proportion of J88 forms sampled from each province (n=160)

	NUMBER	PERCENTAGE (%)
PATIENT CHARACTERISTICS		
SEX		
Male	6	3.8
Female	154	96.2
ADULT/ CHILD		
Adult	94	58.8
Child	66	41.2
PROVINCE		
Limpopo	10	6.3
Mpumalanga	16	10.0
Gauteng	15	9.4
Free State	19	11.9
North West	14	8.8
Eastern Cape	29	18.1
KwaZulu-Natal	28	17.5
Western Cape	22	13.8
Northern Cape	7	4.4
PROVIDER CHARACTERISTICS		
DOCTOR/ NURSE		

DOCTOR	124	77.5
NURSE	36	22.5

3.2.2. Quality of completed J88 forms

The distribution of this new continuous QIS Percentage (QIS%) variable is presented in Table 13. The mean of the QIS% was 72.1 with a Standard Deviation of 7.1. The skewness was -0.1 and the kurtosis was 2.4. All QIS achieved scores above 50%, with the smallest value being 53.8% and the largest value being 88.5%.

A well-completed J88 is important and providers should strive to achieve 100%. However, we wanted to select a valid cut off point of an acceptable QIS when using the QIT in practice. 75% was identified as an acceptable cut off point. Table 13 shows the different scores that would act as cut off points when using the QIT in practice, to define whether a J88 form had been completed acceptably or not. The use of these scores in the final QIT can be seen in Appendix L.

Table 13: Determining the acceptable QIS for J88 forms when the QIT is being used to determine Quality of Completion in Practice

	Adult		Child	
	Total	Acceptable score (75% or above)	Total	Acceptable score (75% or above)
Male	47	35	50	38
Female	53	39	55	41

3.2.3. Factors associated with higher quality percentages

I used the QIS % to compare whether there were differences in the mean score between groups.

When comparing the QIS% between the adults and the children (Tables 14), a statistically significant difference in the mean scores was found (p=0.005). The mean QIS% was three percent higher for adults than for children suggesting that the J88 forms completed for adults were of a better quality than those completed for children.

When comparing the QIS% between the males and the females (Table 14), there was no statistically significant difference.

When comparing the QIS% between doctors and the nurses who completed the form (Table 14), there was a seven percent difference between the mean scores, suggesting that the J88 forms completed by nurses were of a significantly higher quality than those completed by doctors.

Table 14: The Distribution of the QIS% for each characteristic

The Distribution of the QIS% for Each Variable	Number out of 160	Mean of the QIS%	Standard Deviation	Range	P-value
Patient Characteristics					
Male	6	74.2	6.8	(67.4 - 81)	0.17
Female	154	72	7.1	(64.9 - 79.1)	
Adult	94	73.4	6.9	(66.5 - 80.3)	0.04
Child	66	70.9	7.1	(63.8 - 78)	
Provider Characteristics					
Doctor completed J88 form	124	70.6	6.6	(64 - 77.2)	<0.001
Nurse completed J88 form	36	77.3	6.4	(70.9 - 83.7)	

There was a statistically significant difference between provinces, showing that if a J88 form was completed in certain provinces like Limpopo or Free State, they were more likely to have higher QIS than those completed in certain other provinces like the Eastern Cape, KwaZulu-Natal and Mpumalanga (Table 15).

Table 15: Distribution of the QIS% for the Provinces

PROVINCE	MEAN	STANDARD DEVIATION	RANGE	P-value
LIMPOPO	77.4	6.9	(70.5 – 84.3)	0.01
MPUMALANGA	70.4	6.0	(64.4 – 76.4)	0.00
GAUTENG	73.1	7.3	(65.8 - 80.4)	0.29
FREE STATE	76.3	6.4	(69.9 – 82.7)	0.13
NORTH WEST	72.3	5.7	(66.6 – 78.0)	0.18
EASTERN CAPE	69.9	7.9	(62.0 – 77.8)	0.03
KWAZULU NATAL	70.0	6.6	(64.4 – 76.6)	0.05
WESTERN CAPE	71.7	7.4	(64.3 – 79.1)	0. 10
NORTHERN CAPE	73.6	4.8	(68.8 – 78.4)	0. 04

3.2.4. Multiple Regression Analysis

Multiple regression analysis was also done to describe the association between the patient and provider characteristics and a higher quality percentage. The results are shown in Table 16.

Nurses who completed the J88 form, adult patients , and the provider having conducted an anal examination, regardless of whether or not an injury was present, all showed statistical significance with having a higher QIS%. There was a negative association if the forms were completed in Mpumalanga, KwaZulu-Natal, Northern Cape or the Eastern Cape compared to Limpopo Province. This means that in these provinces the QIS% was significantly lower than Limpopo province.

Table 16: Multiple Regression Model showing the relationships between Independent Variables

	COEFFICIENT	t	P> t	95% CI	
NURSE vs DOCTOR	5.12	3.92	0.00	2.50	7.70
CHILD vs ADULT	-2.02	-2.13	0.04	-3.80	-0.10
PROVINCE (LIMPOPO AS COMPARISON)					
MPUMALANGA	-8.12	-3.60	0.00	-12.60	-3.70
GAUTENG	-2.40	-1.07	0.29	-6.80	2.00
FREE STATE	-3.24	-1.51	0.13	-7.50	1.00
NORTH WEST	-3.15	-1.35	0.18	7.70	1.40
EASTERN CAPE	-4.70	-2.27	0.03	-8.80	-0.60
KWAZULU NATAL	-4.18	-2.02	0.05	-8.30	-0.90
WESTERN CAPE	-3.53	-1.63	0. 10	-7.80	0.70
NORTHERN CAPE	-5.50	-2.04	0. 04	-10.80	-0.20
GENITAL INJURIES ("NOT COMPLETED" AS COMPARISON)					
COMPLETED, NO INJURIES	2.71	1.49	0.14	0.90	6.30

COMPLETED, INJURIES	1.87	0.99	0.32	-1.90	5.60
ANAL INJURIES ("NOT COMPLETED" AS COMPARISON)					
COMPLETED, NO INJURIES	6.19	6.43	0	4.3	8.1
COMPLETED, INJURIES	9.09	4.55	0	5.2	13
PERSONAL INJURIES ("NOT COMPLETED" AS COMPARISON)					
COMPLETED, NO INJURIES	3.92	1.32	0.19	-1.9	9.8
COMPLETED, INJURIES	5.85	1.9	0.06	-0.2	11.9

3.2.5. Multiple logistic Regression Analysis of the QIS and writing better conclusions

A multiple logistic regression model was built (Table17) to establish whether a higher QIS was associated with a better conclusion and showed that for every 1% increase in score there is a 0.16 increase in the likelihood of a better conclusion being made while adjusting for provider and patient characteristics.

Table 17: Logistic Regression Analysis of factors associated with a better conclusion to the J88 form

	ODDS RATIO	95% CI		P-value
QIS	1.15	1.06	1.2	<0.01
NURSE (DOCTOR AS COMPARISON)	3.83	0.82	11.85	0.09
PROVINCE (LIMPOPO AS COMPARISON)				
MPUMALANGA	0.86	0.09	8.11	0.9
GAUTENG	6.91	0.79	60.77	0.08
FREE STATE	6.07	0.7	52.32	0.1
NORTH WEST	3.85	0.51	28.64	0.19
EASTERN CAPE	3.02	0.46	19.87	0.25
KWAZULU NATAL	7.1	1	46.95	0.04
WESTERN CAPE	5.75	0.83	39.81	0.07
NORTHERN CAPE	9.16	0.33	113.83	0.22
ANAL INJURIES (NOT COMPLETED AS COMPARISON)				

COMPLETED, NO INJURIES	0.89	0.62	12.76	0.93
COMPLETED, INJURIES	3.43	0.2	58.8	0.4
PERSONAL INJURIES (NOT COMPLETED AS COMPARISON)				
COMPLETED, NO INJURIES	0.88	0.34	2.27	0.8
COMPLETED, INJURIES	2.24	0.23	21.59	0.49

CHAPTER 4: DISCUSSION

4.1. Introduction

Medico-legal documentation for cases of rape in the South African context is largely dependent on the J88 form. This form therefore forms a key piece of evidence in the prosecution of rape cases (22). The Delphi process undertaken led to the development of a 24-item QIT which was used to determine the quality of how J88 forms are completed by healthcare providers. The key finding of the first part of this study is that medical and legal experts agreed on most of the dimensions of quality of completing J88s. Many of the experts mentioned that quality varied greatly from one provider to another and this was verified when applying the QIT to a sample of J88s from across the country. The QIS ranged from 53.8% to 88.5%, showing a broad range of the quality of how J88 forms were completed.

The quality of how J88 forms were completed varied by province. Higher quality in the completion of J88 forms was associated with the provider being a nurse. Nurses have only been permitted to conduct medico-legal examinations and complete J88 forms in the last 10 to 15 years in South Africa. This followed evidence from the United States and elsewhere that nurses could complete the examination as competently as doctors (73). The finding from this study reinforces the fact that nurses can achieve a high level of competency in medico-legal examinations.

Conducting an anal examination (regardless of whether any injuries were reported) was also associated with a better QIS. This suggests that providers who do a visual examination of the anal area and complete the relevant section of the form regardless of whether the patient reported anal penetration were more thorough in how they completed the form overall and this could be used as an indicator of higher quality in the completion of J88 forms.

4.2. Quality of completed J88 forms

As explored in the literature review, it is well known that the quality of post-rape services offered to rape survivors is not optimal across different settings (13, 18, 20, 46, 47). Post-rape care has two important functions. The first is to provide quality management of the survivor that includes counselling, pregnancy, STI and HIV prevention and treating any injuries (48). The second is to document and collect evidence to support the investigation and prosecution of the case. The completion of the J88 form is critical for the latter. This study found that

more than half of the J88 forms reviewed fall under the desired QIS% of 75%. We should in fact, be aiming for a hundred percent quality score and not just for 75%.

4.3. Using the Delphi Method to Develop a Quality Index Tool

The idea of developing the QIT was initially to support and provide feedback to clinicians so that they can reflect on how well they complete the J88 form. The QIT was designed to be as user friendly as possible so that if it were to be used by clinicians at some stage, it could be used with ease and without needing too much time to use it.

In a context where limited literature exists that is locally relevant to the quality in the completion of J88 forms, it was important to develop a tool that could be used to measure quality. A research technique that can be used to effectively gather information in a logical and clear manner, from the local context is important. The Delphi method proved to be useful in developing a tool to measure quality. It allowed for exploration in an area where there could be ambiguity and assumptions and through the subsequent ranking process, it was able to reach some agreement in which aspects of quality were considered by experts to be the most important.

The quality of medical documentation has been studied in many different contexts, particularly in relation to emergency and surgical procedures due to the significance of good medical documentation to potential medico-legal outcomes (74-76). Worldwide no research has been conducted to define the measures for quality of the completion of medico-legal documentation. In South Africa, defining measures of quality for the J88 form has not been previously attempted. The J88 form has been improved in the past, but it is still found to be lacking in several respects (19, 77). Because of this, it was difficult to distinguish between J88 forms that were of poor quality due to problems with the construction of the form itself and those that were of poor quality because there was poor insight on the part of the healthcare worker about what information they were trying to communicate through the form. It was therefore important to bring together the opinions of experts in both the medical (producers of the completed J88 form) and legal (users of the completed J88 form) fields.

Considering the need to bring together the expertise of two very different groups, the healthcare workers who produce the information on the J88 forms, and the lawyers who are users of the completed J88 form in the process of prosecution of cases, a method that could amalgamate two distinct and separate schools of thought was necessary. The Delphi method

allows for distinct views to be expressed and weighed, to allow overall discussion of the issues and to come to an overall conclusion about what should be considered significant. The Delphi method has previously been used within the healthcare sector to develop expert opinions (78), evaluate programmes (67), assess issues of quality (69) and develop auditing tools (66) because of its robustness in bringing together the opinions of various experts in the field of study. This study contributes to the body of literature on the application of the Delphi process for the development of a tool that can be used by health care practitioners and researchers.

Even though there were two distinct groups of experts, medical and legal, there was a large degree of agreement between the two groups, even in the first round of the Delphi, in what aspects of the completion of J88 forms were considered to affect the final quality of the form.

Of the twenty-four QS that made it into the final tool, the extent of disagreement was minimal, with most of the experts who disagreed, doing so only to a mild to moderate extent. The one issue that garnered strong disagreement from those experts who disagreed was whether or not a digital vaginal examination should be conducted and recorded as the number of fingers inserted or not. Of the three experts who strongly disagreed that this was an indication of poor quality, two were medical experts and one was a legal expert. Research has repeatedly shown that genital injuries are found and defined more effectively by toluidine blue staining and colposcopy than by visual examination (35, 79, 80). It is known that victims of rape often deal with secondary victimization within the healthcare system, part of this being their experience of the physical examination (81). When we consider this information in combination, a digital examination seems to serve little benefit in gathering forensic information and at the same time can lead to the further traumatisation of the patient. It is striking therefore that it is still considered acceptable practice by some to conduct a digital vaginal examination.

4.4. Quality Statements on the QIT

The twenty-four quality statements that made it into the final QIT, did so because of the number of experts who agreed that these statements significantly affected the quality of the completed J88 form. However, it is significant to note that many of these QS picked up on issues like whether or not a part of the form had been completed or not, and some of the issues that addressed the content of how the form was completed dropped off during the

rounds of review . As an example quite a few QS that spoke to how the conclusions were written did not reach a level of agreement that allowed them to make it into the final QIT, but those that did make into the final tool that related to conclusions had more to do with whether they were present of absent. This suggests that the QIT does not necessarily pick up on some aspects that could be considered more meaningful in a prosecution of a case, such as, a provider writing that there was no indication of rape. However, from the multivariate analysis, it can be seen that a higher QIS is predictive of a better written conclusion. This finding suggests that the QIS does work as an indicator of the quality of the examination overall. It may be that the more conscientious healthcare workers, who make sure all the relevant parts of the form are completed, are also the same healthcare workers who are conscientious about the types of conclusions they write.

Expert agreement also selected “The patient's mental health and emotional status are described as "Normal" without further explanation” as a QS. There have been suggestions that the perception of a survivor of rape, who is not upset and crying, perhaps because she or he is numbing out, may be less believable or not considered to be a genuine (30, 31, 82). Currently, providers are trained to simply fill in that mental health is normal without further explanation. This suggests that there is inadequate training of health providers on the mental health following trauma and there is a question about whether this question about the mental health and emotional status of the patient should be part of the J88 form at all.

The multiple regression analysis also showed that the presence of personal bodily (non ano-genital) injuries improved the likelihood of a better QIS. This could be an indication of how healthcare workers respond to a patient with visible injuries on first sight. It seems that some healthcare workers may be more likely to believe the victims’ account and therefore complete a better quality form, if there are visible injuries to prove their accounts.

4.5. Uses of the Quality Index Tool

Once the QIT was developed, the inter-rater reliability was used to check the consistency across raters using the QIT. A high consistency meant that the items in the QIT were consistently applied by different people (83). This is a measure of the extent to which the data collectors or the raters (since it is a scoring tool) assign the same score to the same variable (83). This means that it can be reliably stated that the QIT allows for the assignment of similar scores with minimal training and little experience with the tool.

The use of the QIT by four independent healthcare workers and in rating identical J88 forms served as a pilot for the tool. In interacting with the healthcare workers before and after they used the tool, I was able to edit to the QIT to make it more understandable and easier to use and apply, so that it can be used with minimal training. The QIT can be used as an audit tool by service managers, to monitor and evaluate the kind of care provided in their facilities. Researchers can also use this QIT to do broader studies of quality in the J88 form and in other medico-legal documentation. The QIT can also be used as a tool in the training of healthcare workers who attend to victims of rape. When teaching healthcare workers how to complete J88 forms, it would be helpful to use the QIT to show them how their completion of the form affects the final quality of the J88 form. In improving the understanding of healthcare workers in this way, by making them more conscious of their role in the medico-legal chain of events, we can improve the post-rape services offered to victims of rape.

4.6. Assessing the Quality of Completed J88 Forms using the Quality Index Tool

In reviewing where the greatest variability was on two particular items, on the use of abbreviations and medical jargon, both these areas scored high on most of the J88 forms scored indicating that there was very limited variability. A further iteration of the QIT could consider removing these two items to determine whether they make any difference to the overall categorisation of scores using the QIT. The fact that most of the J88 forms are scoring well in these two areas are clear signs of improvement from the past and is likely to be attributable to both undergraduate training and in-service training (21).

4.7. Factors related to better quality J88 Forms

Being a nurse strongly favoured a better QIS. This point had come up in some of the interviews with the experts, both medical and legal, with both groups stating that nurses trained in forensics tended to complete J88 forms to a better standard than doctors. It was even more interesting since, through the selection process, none of the medical experts were from a nursing background. All were medical doctors. It is an interesting contrast to a previous study that showed that levels of knowledge tended to be higher for doctors than nurses who saw rape victims and completed J88 forms (20). This could be an indication of effective in-service training programs in the area of forensic nursing related to rape cases. A potential explanation for this is that nurses who attend to sexual assault victims have to be

forensically trained to see these patients. However, any doctor, even a junior doctor can attend to a sexual assault victim and may have had minimal undergraduate training and no in-service training as to how to manage a case of sexual assault. This suggests that in-service training on how to manage sexual assault cases and how to complete J88 forms should be directed more towards doctors, without taking away from the training that nurses are already receiving. Universities e.g. Free State and Wits offer forensic nurse training, however, there are issues with the scope of practice (Nursing Council of South Africa)

Of the total sample of 160 J88 forms, 66 (41.25%) of them were completed for children, that is patients below the age of 18 years. There was a statistically significant difference between the QIS achieved for adults and children. Multiple regression analysis showed an association, in that a better QIS was associated with being an adult. A previous study showed that the presence of recorded ano-genital injuries in children is more likely to lead to case going to trial whereas in adults, the presence of other recorded injuries is more likely to gain a conviction (12). It is concerning that J88 forms completed for children have lower QIS, since better quality J88 forms should improve the throughput of case through the legal system.

One would expect the J88s completed for children to be of a higher quality since even more care should be taken when attending to a young patient, but this does not seem to be the case. This may have to do with the fact that many cases of child sexual assault tend to present more than 72 hours after the assault, therefore reducing the chance of any significant findings due to the time lapse between assault and examination. It is also far more traumatising for the healthcare worker to attend to a younger rape victim and this could affect the way they conduct the examination and record findings. Dealing with children also includes working with the broader family who may have brought the child in for examination and this may mean that the perpetrator is sometimes present. This can inhibit the information provided and captured. Since children, particularly those under the age of 12 years, require parental consent for medical examinations, this can further complicate and confound the information captured.

There was a statistically significant difference between the QIS achieved in the nine provinces of the country. In the multiple regression analysis, where Limpopo (which had the best percentage of better QIS) was used as the comparison, there was a statistically significant difference for Mpumalanga, Eastern Cape, KwaZulu-Natal and the Northern Cape, with a negative association. J88 forms completed in these provinces were more likely

to have poorer QIS. It is unclear why provincial variation occurred, and it is important to study this further to understand the underlying causes.

The Eastern Cape, KwaZulu-Natal and Mpumalanga had the lowest QIS means in the one-way ANOVA analysis. This indicates which Provinces need to have their training of healthcare workers in the completion of J88 forms boosted. Further research is required to understand why these provinces are achieving lower QIS and what can be done to improve the situation.

The QIS were further analysed by whether or not the three different sections on injuries (personal bodily, genital and anal) were completed on the J88 form, and if completed, whether injuries were present or not. There was no significant statistical difference between the three groups (not completed; completed with no injuries and completed with injuries) for genital and general body injuries.

There was however, a significant statistical difference between non-completion and completion for anal injuries. Multiple regression analysis demonstrated a strong association between completion of the anal examination and good QIS. This indicated that healthcare workers who completed the anal examination section, irrespective of whether or not an injury was present, were more likely to complete better quality J88 forms and achieve a higher QIS. As demonstrated in the tracking justice study, the presence of anal injuries, particularly in children was associated with prosecution and conviction (22). Many other studies around the world have also demonstrated this (14).

It could therefore be postulated that the completion of the anal examination on the J88 form could be used as a quick reference of the quality of how the J88 form has been completed.

Another variable that was considered was whether or not the conclusions were robust or weak.

There was a significant statistical difference between the QIS achieved for J88 forms with a robust conclusion when compared to those with a weak conclusion. Logistic regression demonstrated an association between a robust conclusion and a better QIS. Those that had robust conclusions were more likely to achieve better QIS. This indicates that a good, relevant conclusion could also be used as a quick assessment of the overall quality of the completion of a J88 form.

4.8. Limitations of the Quality Index Tool

The Quality Index Tool has been demonstrated to be a fairly robust tool in capturing certain defined issues of quality. It must however be noted that it has its limitations.

The QIT can be used to pick up major areas which affect the use of form, like leaving sections of the J88 blank or incomplete or entering incorrect information on the form. It cannot pick up finer aspects of quality, like how healthcare workers interpret the findings of the examination conducted. This means that the presence or absence of a conclusion is scored rather than the interpretation which is beyond the scope of the tool. However, in further analysis the QIT in its current form did predict the quality of conclusions which makes the score on the QIT a good predictor of the health care workers' interpretation. The problem that this poses is that even though the tool can be used to identify a J88 form of poorer quality, it does not necessarily guide the healthcare worker or auditor in terms of how that specific healthcare worker can improve the quality of the J88 forms they complete. The QIT is a good Litmus test of quality of completion but that is the extent of its use.

It should also be noted that during the pilot and inter-rater reliability testing it was noted that some degree of training (a brief ten to twenty minute explanation) is necessary for raters to be able to use the tool effectively. The QIT cannot therefore simply be another piece of paper given to Managers or Auditors It will require some investment in training or in an explanatory document that can guide the rater completing the form and as such would be of more use as an auditing tool which could be used by managers, trainers and researchers.

4.9. Limitations of the Study

The results of the study should be interpreted in the light of several limitations:

For the Delphi process, the hope was to achieve provincial and national representation so that the findings could be applied nationally and locally. Unfortunately this was not entirely possible. The Eastern Cape was not represented with the legal experts due to a lack of response from the nominated expert.

The medical experts were even less representative since experts were only identified from four provinces, with three provinces (KwaZulu-Natal, Free State and Western Cape) over-represented. Due to a lack of involvement by the National Department of Health and time limitations, after three months of repeated trying, the recruitment phase had to be stopped. This means we cannot assume national representation of the views expressed by the experts.

Due to the iterative nature of the Delphi study, there was a risk of people being unwilling to participate and dropping out during the process. This was definitely the case during the recruitment phase. However, there were no drop outs during the process of the Delphi study. This compromises the generalizability of the study findings since not all provinces had a medical expert who contributed to the QIT.

Of the medical experts, all eight were medical doctors and none were nurses. Even though an effort was made to recruit nurses, they either did not meet the set criteria, or if they did, they were unwilling to participate in the long iterative process of the Delphi method. This could have affected the information gathered in the initial qualitative interviews and in the subsequent scoring of the QS, since nurses hold different views on certain areas when compared to doctors.

For the legal experts, only the National Prosecuting Authority was approached to identify representatives. Therefore, only prosecutors working for the state were identified as legal experts. No defence attorneys were approached to act as legal experts. This was done since it was felt that the prosecutors were the primary users of interest to the medical fraternity. There was also the consideration that defence attorneys could potentially negatively bias the sample since their interest lies in acquittal and not conviction. It is however important to note that there may have been some important inputs from the defence side that could have been valuable in this study.

Considering that the quality of completion of the J88 form is dependent on how the form is constructed and what it asks for, and acknowledging that the J88 form in its current state is not ideal, the poor construction of the J88 form is a likely confounder to the actual completion of the forms, which cannot be accommodated for. The quality of completion of the J88 form is thus limited by the reliability and validity of the J88 form itself.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1. Conclusion

This study began with the aim of quantifying the quality of J88 forms for survivors of rape. Through the Delphi method, a Quality Index Tool was developed with the in depth input of eight medical experts and eight legal experts. Using that QIT on a sample of J88 forms collected in 2012, I was better able to understand and quantify the quality of completion of these forms.

In conducting this study I have come to understand the significance of evaluating medico-legal documentation in the South African context. The J88 form is unique to South Africa. Many years into the use of this form, as we critically evaluate its use as a form of medico-legal documentation, it is clear that what healthcare providers are producing is not always sufficient for the prosecution of these cases in the legal realm of law.

In better understanding the quality of our product as healthcare providers, we can start to address the gaps that have been identified in this study. By considering the opinions of both medical and legal experts, this study has brought together the expertise of both the producers of the completed J88 form and the end users, to produce a tool that can objectively quantify the quality of how J88 forms are completed.

There is no question that further research into this area is necessary. This study has just touched the tip of the iceberg that is medico-legal documentation. If our end goal is to improve the throughput of reported cases of rape or sexual assault to convictions, we have to spend more time in training our healthcare workers about their role in the medico-legal process. We have to invest more time and training in certain parts of the country where the problems are greater. Most of all, we have to invest more in further research to better understand the beast of poor quality so we can capture and tame it.

5.2. Recommendations

The Quality Index Tool produced through this study has shown robustness in defining the quality of J88 forms completed for rape survivors and has demonstrated good inter-rater reliability. Through the process of this study, certain variables have been identified that can act as areas of application in attempting to improve the quality of completion of J88 forms.

5.2.1. Changes to be made with services

Our goal as healthcare providers should be to provide our patients with the best service possible, within the financial constraints that we often function under. Changing services to suit the needs of our patients begins with understanding where the problems lie.

During the recruitment phase, it was difficult to recruit nurses from the TCCs since few had been there for longer than two years and therefore did not meet the criteria for the medical experts. This suggests a high rate of turnover of staff, also noted in other studies (84). Staff retention strategies need to be implemented and the training of staff need to be scheduled in a manner that takes into account these high turnover rates.

The QIT can be used as a regular audit tool that will help identify gaps in one of the outputs (the J88 form) of the service being offered. Considering the rapid turn-over of medical and nursing staff in most public health facilities, including post-rape services, it is particularly important to regularly review the quality of J88 forms being produced.

5.2.2. Changes to be made with training

The QIT can act as a tool for the in-service training of both doctors and nurses who see victims of rape. It can be used during training to show healthcare workers where they can change their practices of completing the J88 form to improve the quality of the completed J88 form. Given the variation in quality between provinces, particular provinces may need training to be strengthened, for example, the Eastern Cape.

5.2.3. Changes to be made to the J88 form

It should be noted that the J88 form that is currently in use, the format on which this study is based, is under review and is likely to be restructured in the near future. This tool may still be applicable depending on what changes are made to the form. However, the structural changes that will be made to the form may address many of the issues picked up in this study and thus deal with the confounders in the structure of the J88 form itself.

The J88 form as it currently exists is not ideal. The process of putting together this QIT has identified areas where healthcare workers need to think very carefully to avoid the pitfalls of the form and provide a good quality document. Some of those areas are:

- The type of contact details requested for the healthcare provider should be reviewed. Fax numbers are no longer commonly used, but email addresses may be a good way of getting a hold of healthcare providers who have moved facilities. Mobile phone

numbers should be requested instead of landlines since this gives a direct contact number for the healthcare provider.

- Where condom use is queried, there should be a space provided for the healthcare worker to clarify whether it refers to condom use with a consensual partner of during the rape.
- There should be a section that allows for the brief recording of the events of the rape (as recommended by WHO).
- There should be a clear area for a conclusion after each section of the form and there should be another space allotted to a final summary and conclusion.

5.2.4. Further research

Considering that more than half of J88 forms in my sample had poor QIS, it is important to further investigate the quality of J88 forms on a larger scale. This study suggests that J88 forms are lacking in quality and this needs to be addressed. It will require a re-evaluation of the current training of healthcare providers, particular doctors. There may even be a place to recommend that rape survivors only be attended to by forensic nurses or doctors dedicated to understanding and treating victims of rape and sexual assault, and not simply by inexperienced or untrained healthcare staff. It is however important to note that it would be difficult to monitor and implement this due to the known healthcare human resource shortages in the country. Even though the shortage of healthcare providers is a stark reality in the South African context, it should not compromise the care received by patients who have already been seriously harmed, leading to secondary victimization.

It can also be seen that there may be particular provinces that need more intervention than others. There are many other potential factors that may be affecting the quality of J88 forms in these provinces but these have not been fully explored in this study. It is important to do a wider study of the quality of J88 forms to understand other, more subtle factors that could be influencing these QIS.

The QIT can also be used as a guide for other medico-legal documentation audit tools and further study into this area is recommended.

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APPENDIX A – Plagiarism Declaration

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | FACULTY OF HEALTH SCIENCES

PLAGIARISM DECLARATION TO BE SIGNED BY ALL HIGHER DEGREE STUDENTS

SENATE PLAGIARISM POLICY: APPENDIX ONE

I Moushumi Ann Mathews (Student number: 383334) am a student registered for the degree of Master of Medicine Public Health Medicine in the academic year 2016.

I hereby declare the following:

- I am aware that plagiarism (the use of someone else's work without their permission and/or without acknowledging the original source) is wrong.
- I confirm that the work submitted for assessment for the above degree is my own unaided work except where I have explicitly indicated otherwise.
- I have followed the required conventions in referencing the thoughts and ideas of others.
- I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my own unaided work or that I have failed to acknowledge the source of the ideas or words in my writing.

Signature: _____ Date: 14/04/2016

14/04/2016

APPENDIX B – THE J88 FORM

ORIGINAL TO POLICE

REPORT BY AUTHORISED MEDICAL PRACTITIONER ON THE COMPLETION OF A MEDICO-LEGAL EXAMINATION

To be completed in legible handwriting and signed on every page

A. DEMOGRAPHIC INFORMATION

1. Police Station:	2. Cas No.:	3. Investigating officer: Name and number:	4. Time ☐☐:☐☐ Day ☐☐ - Month ☐☐ - Year ☐☐☐☐

5. Name of medical practitioner:
6. Registered qualifications:
7. Phone number:
8. Fax number:
9. Place of examination:

10. Physical practice address or stamp

11. Full names of person examined: 12. Sex: M☐ F☐ 13. Date of birth/apparent age:

B. GENERAL HISTORY

1. Relevant medical history and medication:

C. GENERAL EXAMINATION

1. Condition of clothing:

2. Height (cm)	3. Mass:	4. General Body Build

5. Clinical findings: In every case the nature, position and extent of the abrasion, wound or other injury must be described and noted together with its probable date and manner of causation. The position of all injuries and wounds must also be noted on the sketches.

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6. Mental health and emotional status:

7. Clinical evidence of drugs or alcohol:

8. CONCLUSIONS

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Signature of medical practitioner

D. HISTORY IN CASE OF ALLEGED SEXUAL OFFENCE

1. Age of menarche ☐☐	2. Number of pregnancies ☐☐	3. Number of deliveries ☐☐	4. Duration of pregnancy (if applicable) ☐☐ weeks
5. Contraceptive (indicate with X): Yes ☐ No ☐		7. First date of last menstration:	
6. Method and last date of application/ingestion:		8. Duration of period ☐☐	9. Duration of cycle ☐☐
10. Date and time of last intercourse with consent:	11. Number of consensual sexual partners during last 7 days:		12. Condoms Yes ☐ No ☐
13. Since the alleged offence took place, has the person (indicate with X):	bathed ☐	washed ☐ douched ☐	showered ☐ urinated ☐ changed clothing ☐

E. GYNAECOLOGICAL EXAMINATION (State clinical findings)

1. Breast development: Tanner stage 1-5		2. Pubic hair: Tanner stage 1-5		3. Mons pubis:	
4. Clitoris:		5. Frenulum of clitoris:			
6. Urethral orifice:		7. Para-urethral folds:			
8. Labia majora:		9. Labia minora:			
10. POSTERIOR FOURCHETTE:					
Scarring:		Bleeding:			
Tears:		Increased friability:			
11. FOSSSA NAVICULARIS:					
12. HYMEN: Configuration:		13. Opening diameter (mm):	Transverse ☐☐	Vertical ☐☐	
14. Swelling:		15. Bumps:		16. Clefts:	
17. Fresh tears (position):		18. Synechiae:		19. Bruising:	
20. VAGINA: Number of fingers admitted:		Bleeding:		Tears:	
		Discharge:			
21. CERVIX:		Erosion:		Discharge:	
		Bleeding:		Other:	
22. PERINEUM:					

Signature of medical practitioner

F. SAMPLES TAKEN FOR INVESTIGATION

Forensic specimens taken: urine sample for pregnancy test:	POSITIVE ☐ NEGATIVE ☐
Seal number of evidence collection kit:	

2. SPECIMENS HANDED TO:	
Name:	
Rank and force number:	
Signature:	

3. CONCLUSIONS:

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G. ANAL EXAMINATION (State clinical findings)

SKIN SURROUNDING THE ORIFICE:

1. Hygiene:		4. Abrasions:		7. Redness/erythema:	
2. Pigmentation:		5. Scars:		8. Bruising/haematoma:	
3. Fissures/cracks:		6 Swelling/thickening:		9. Tags:	

ORIFICE:

10. Tears/fissures:		13. Reflex dilatation:		16. Twitchiness/winking:	
11. Swelling/thickening of rim (tyre sign):		14. Shortening/eversion of anal canal:		17. Discharge:	
12. Funnelling:		15. Cupping:			

DIGITAL EXAMINATION:

18. Presence of hard faeces in rectum:		20. Thickening of anal verge:	
19. Laxity (pressure on anal orifice):		21. Tone (sphincter grip):	

22. CONCLUSIONS:

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H. MALE GENITALIA

1. Genital development: Tanner stage 1-5:		6. Pubic hair: Tanner stage 1-5:		11. Prepuce and frenulum:	
2. Glans:		7. Shaft:		12. Scrotum:	
3. Testes:		8. Epididymus:		13. Vas deferens:	
4. Ulceration:		9. Penile discharge:		14. Smegma:	
5. Presence of faeces:		10. Circumcision:		15. Urethral orifice:	

16. CONCLUSIONS:

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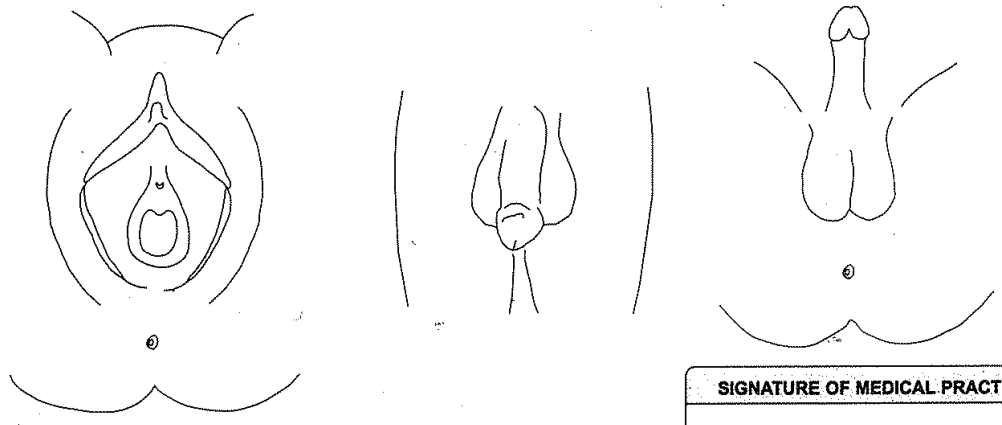
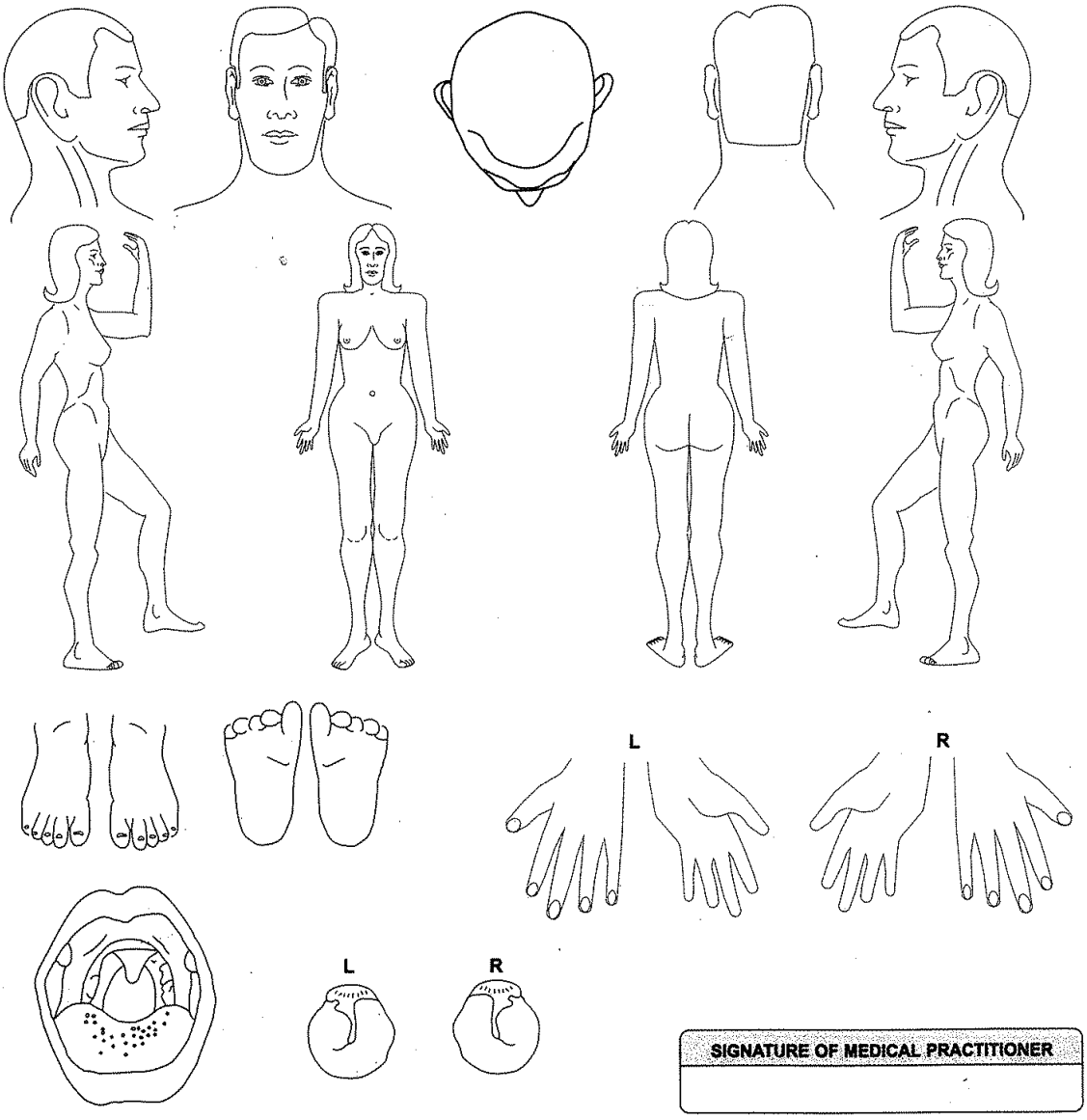
Signature of medical practitioner



SIGNATURE OF MEDICAL PRACTITIONER



SIGNATURE OF MEDICAL PRACTITIONER

APPENDIX C – Letter to Identify Legal Experts

Dear Sir/ Madam,

I obtained your contact details from _____.

My name is Dr Moushumi Ann Mathews. I am a public health medicine registrar with the University of the Witwatersrand, currently working with the Gender & Health Research Unit in the Medical Research Council.

I will be conducting a **national study of the quality of the completion of J88 forms for rape survivors using a Quality Index Tool.**

I am being supervised in my research by **Dr Ruxana Jina** (Public Health Medicine Specialist – WITS) and **Prof Rachel Jewkes** (Head of the Gender and Health Unit- Medical Research Council).

In this study we plan to collect data from **medical** and **legal experts** who work in the field of **rape services**. Expert opinions on what is considered to be a well completed J88 form of high quality will be compiled over a four-stage process of refinement. This study will help us to better understand the *quality of completed J88 forms*.

In order to collect data that is nationally representative I would like to select experts from each of the provinces.

I would like to request your kind assistance in identifying these experts. Your input would be appreciated in identifying a contact person per province and at the national level:

- This contact person could serve as the expert for that province or at national level, if they meet the criteria listed below;
- Or could assist in identifying a list of potential experts in their province with their level of experience and contact details.
- The experts on the list will be approached consecutively until one agrees to participate.
- If none of the experts in a particular province agree to participate, they will not be replaced by another expert from another province.

Criteria for legal experts

The legal panelists will:

- Have to have worked in the field of rape prosecution for at least 5 years
- Have had to have prosecuted at least 15 rape cases
- There will be those prosecutors who have worked for several years but are now in managerial positions and not actually prosecuting rape cases. To assure that those who are currently practicing are selected, we will depend on you for guidance in those you suggest as potential candidates.

Your assistance in identifying an expert per province and at the national level would be appreciated.

We have obtained ethics approval for this study from the University of Witwatersrand. I can email you the Ethics Clearance Certificate on request.

If you require any further information about the study or clarification please contact:
Dr Moushumi Ann Mathews
University of Witwatersrand – School of Public Health
Medical Research Council – Gender & Health Research Unit
Email: **moushumiann@gmail.com**
Tel: 011 717 2316 Fax: 086 531 2448
Cell: **084 502 1178**

Thank you, your help is appreciated.

Kind Regards,
Dr Moushumi Ann Mathews
(MBChB, DCH, DipHIVMan)
Public Health Medicine Registrar
University of Witwatersrand
Tel: 0117172316
Fax: 0865312448

APPENDIX D – Letter to Identify Medical Experts

Dear Sir/ Madam,

I obtained your contact details through _____.

My name is Dr Moushumi Ann Mathews. I am a public health medicine registrar with the University of the Witwatersrand, currently working with the Gender & Health Research Unit in the Medical Research Council.

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- Or could assist in identifying list of potential experts in their province with their level of experience and contact details.
- The experts on the list will be approached consecutively until one agrees to participate.
- If none of the experts in a particular province agree to participate, they will not be replaced by another expert from another province.

Criteria for medical experts

The medical panelists will:

- Have to be doctors or nurses who have at least 10 years of experience working specifically with rape survivors, and using J88 forms in regular practice;
- Have to have seen at least 20 rape survivors in the preceding year;
- Have to have appeared in court as expert witnesses in at least 15 trials related to rape cases.
- To assure that healthcare providers selected are currently practicing, we will seek your input in identifying potential candidates.
- Those who have many years of experience but do not regularly see rape cases and complete J88 forms will be excluded.

Your assistance in identifying an expert per province and at the national level would be appreciated.

We have obtained ethics approval for this study from the University of Witwatersrand. I can email you the Ethics Clearance Certificate on request.

If you require any further information about the study or clarification please contact:
Dr Moushumi Ann Mathews
University of Witwatersrand – School of Public Health
Medical Research Council – Gender & Health Research Unit
Email: **moushumiann@gmail.com**
Tel: 011 717 2316 Fax: 086 531 2448
Cell: **084 502 1178**

Thank you, your help is appreciated.

Kind Regards,
Dr Moushumi Ann Mathews
(MBChB, DCH, DipHIVMan)
Public Health Medicine Registrar
University of Witwatersrand
Tel: 0117172316
Fax: 0865312448

APPENDIX E – Information Sheet and Consent form for Panellists

INFORMATION SHEET FOR EXPERTS PARTICIPATING IN A DELPHI STUDY

A national study of the quality of the completion of J88 forms using a Quality Index Tool

My name is Moushumi Ann Mathews. I am a public health medicine registrar with the University of the Witwatersrand, currently working with the Gender & Health Research Unit in the Medical Research Council. As part of a larger study into the attrition of rape cases in South Africa for the year 2012, I am undertaking a study to determine the quality of how J88 forms are completed by healthcare providers.

In this study we plan to collect data from medical and legal experts who work in the field of rape services. Expert opinions on what is considered to be a well completed J88 form of high quality will be compiled over a four-stage process of refinement. This study will help us to better understand the quality of completed J88 forms. In order to collect data that is nationally representative we have selected experts from each of the provinces.

I would like to invite you to be one of our experts in medical/ legal field in this study.

The study will consist of four rounds. Prior to the first round, a J88 form will be sent to you, so that you can look through it to consider quality issues and have it on hand during the telephonic interview. The first round will involve a twenty minute phone conversation where I will ask you to think over and reflect on factors affecting the quality of a completed J88 form.

Once this round is completed, a Quality Index Tool (QIT) will be compiled and sent to you via email in the second round. You will be requested to go through the form and rate the importance of various factors that affect the quality of completed J88 forms.

When the second round is completed, the QIT will be revised considering input from all experts. In the third round, a consensus statement will be built after discussion with other experts participating in the study. An email conversation will be set up, including all participants, allowing for an exchange of ideas with all other participants. Your identity will be kept anonymous from other participants in the study and you will be allocated an anonymous email address to participate in the discussion.

There are no apparent risks involved in participating in this study.

The information you provide will be used for research purposes only. The identities of participants will not be revealed in any publications or reports that may arise from this process. In the fourth and final stage, each participant's identity will be kept anonymous through the use of email addresses created by me. No remuneration will be offered for participating in this Delphi process. Participation is voluntary and you may discontinue participation at any time during the study, if you so wish.

We anticipate that the findings of this research will be very valuable for the police and criminal justice system as well as the healthcare providers who deal with rape. This study will provide a baseline of

the quality of completed J88 forms, as well as, a Quality Index Tool (QIT) which can be used to create Quality Index Scores (QIS) for J88 forms in future. This can also focus further interventions to improve the quality of completed forms in the future.

We have obtained ethics approval for this study from the University of Witwatersrand (see attached document).

If you agree to assist us, please sign the attached consent form and fax it back to me on 086 531 2448 or scan and email it to moushumiann@yahoo.com. I will then contact you to set up the initial interview at a convenient time. Please retain the original copy of the information sheet and consent for your records.

If you require any further information about the study or clarification please contact:

Dr Moushumi Ann Mathews
University of Witwatersrand – School of Public Health
Medical Research Council – Gender & Health Research Unit
Email: moushumiann@gmail.com
Tel: 011 717 2316 Fax: 086 531 2448

Thank you, your help is appreciated.

CONSENT FORM

A national study of the quality of completed J88 forms

Research ID number _____

I have read and understand the information sheet on the above study.

I understand that my participation is voluntary and that I can withdraw from the study at any time. I understand that there are no evident benefits or risks involved with participating in this study.

I agree to participate in the study:

……

(Signature)

Date……..

APPENDIX F - Round 1 Telephonic Interview

PRIMARY INTERVIEW OF EXPERTS FOR QUALITY OF THE COMPLETION OF J88 FORMS STUDY

Introduction:

Hello, my name is Dr Moushumi Ann Mathews. I had contacted you earlier about the study we are doing on the quality of J88 forms and you have consented to participate as an expert panellist.

This is the first round of the Delphi process. I would like to spend 20 minutes interviewing you about your thoughts on quality issues related with the completed J88 form. Please feel free to skip any questions or to stop me if you need to leave. In that case, I would appreciate it if we could reschedule another date and time to complete the interview.

Questions:

1. What are your thoughts about the current quality of completed J88 forms?
2. How would you define a "good quality" completed J88 form?
3. If you were assessing the quality of a completed J88 form, what issues would you consider in each of the following sections of the form?
    - Demographic Information
    - General History
    - General Examination
    - Conclusion after General Examination
    - History in Case of Alleged Sexual Offence
    - Gynaecological Examination
    - Samples Taken for Investigation
    - Anal Examination
    - Male Genitalia
    - Conclusions after Genital and Anal Examination
    - Diagrams to Denote injuries
    - Signature box for attending Healthcare Provider on each page
4. How would you change the J88 form in order to complete it better?
5. Do you think there are other factors affecting the quality of how J88 forms are completed?

Targeted Questions (if any point already mentioned in previous response, skip the question)

1. Do you think the handwriting of the healthcare provider is relevant to the quality of the completed J88 form? Why?
2. Is it significant that the whole form be completed in the same handwriting (except Sect F. 2. where the Investigating Officer should sign)? Why?
3. Do you think providing the contact details of the healthcare provider (the ability to contact them again) affects the quality of the J88 form? Why?
4. Do you think that healthcare providers should record the history of the sexual offence on the form? Why?
5. Which medical conditions do you think should be captured on the form? Why?
6. Does correlation between injuries recorded in writing and injuries recorded on the diagrams affect quality of a completed form? Why?
7. Should healthcare providers make a note of suspicion of intoxication if no clinical signs have been noted? Why?
8. If the word "rape" is mentioned in the concluding statements, is this helpful or unhelpful? Why?
9. Are there parts of the form that should not be completed to improve the quality of the information provided? Why?
10. If certain blocks are left unfilled and not scratched out, is this helpful or unhelpful? Why?
11. Should the healthcare provider clarify whether a condom was used in previous consensual sex or during the rape in Sect D.12? Why?
12. If there is no sticker/ written number for forensic specimens collected (when there is an indication that patient had a rape kit completed), how does this affect the quality of how the J88 form is completed?
13. If a line is drawn through the anal examination and the male genitalia sections, how does this affect the quality of the completed J88 form?
14. If the anal examination is not completed in the case of a male victim, how does this affect the quality of the J88 form?
15. If the diagrams to denote injuries do not have a line drawn through them and are not completed, how does this affect the quality of the completed J88 form?
16. Does having the healthcare provider's signature provided on each page affect the quality of the completed J88 form? Why?

APPENDIX G - Letter of Permission from Principal Investigator of RAPSA Study

SOUTH AFRICAN MEDICAL RESEARCH COUNCIL

VICE-PRESIDENT: RESEARCH SUPPORT

PRETORIA
1 Soutpansberg Road, Pretoria
Private Bag x385, 0001 Pretoria, South Africa
Tel: +27 (0)12 339 8525; Fax: +27 (0)12 339 8582
E-mail: rachel.jewkes@mrc.ac.za
www.mrc.ac.za

CAPE TOWN
PO Box 19070, Tygerberg 7505, Cape Town, South Africa
Francie van Zijl Drive, Parow Valley, Cape Town
Tel: +27 (0)21 938 0219; Fax: +27 (0)21 938 0606
E-mail: rachel.jewkes@mrc.ac.za
www.mrc.ac.za

29 July 2014

Dr Moushumi Ann Mathews
University of the Witwatersrand

Dear Ann

RE: A National Study of the Prosecution and Adjudication of Sexual Offence Cases: Medical Research Council

I am delighted that you want to use our data from the above study for your MMed thesis. I am the Principal Investigator and I hereby grant you permission.

Yours sincerely

RK Jewkes

Prof Rachel K Jewkes MBBS MSc MFPHM MD
Acting Vice-President (Research Support), and
Director, Gender & Health Research Unit,
Medical Research Council

APPENDIX H - National Approval from South African Police Service

South African Police Service  Suid-Afrikaanse Polisiediens

Private Bag X94 Fax No: (012) 393 3178

My reference: 3/34/2

DEPUTY NATIONAL COMMISSIONER
CORPORATE SERVICE MANAGEMENT
SOUTH AFRICAN POLICE SERVICE
PRETORIA
0001

Enquiries: Col J Schnetler
Lt Col GJ Joubert

Tel: 012 393 3177/3118

A. The Divisional Commissioner
DETECTIVE SERVICE

B. The Divisional Commissioner
FORENSIC SERVICES

C. All Provincial Commissioners

RE: RESEARCH STUDY: A NATIONAL STUDY OF THE PROSECUTION AND ADJUCATION OF SEXUAL OFFENCES: THE SOUTH AFRICAN MEDICAL RESEARCH COUNCIL (MRC) RESEARCHER: DR RACHEL JEWKES (PRINCIPAL INVESTIGATOR)

A-C 1. The research application, pertaining to the above mentioned topic, was received from the South African Medical Research Council, Gender and Health Research Unit. The Principal Investigator for the study is Prof Rachel Jewkes.

2. The aim of the study is to undertake a national study regarding the prosecution and the adjudication of rape matters as reported to the police. The findings will form the basis for recommendations to reduce case attrition in the criminal justice system and improve police investigations, training of court officials and the management of cases in court (see attached research proposal).

3. The research will be conducted for a period of 18 months from October 2013 to 2015. The data collection phase is expected to take 10 months, commencing in January 2014.

4. The study is a retrospective cohort of cases of rape reported to the police, and the cases will be identified through a multi-stage random sampling strategy. MRC will sample 600 cases per province from 20 randomly selected police stations, but 360 cases in the Northern Cape from 12 police stations. The study utilises data gathered by the police in the case docket,

the charge sheet, and transcripts from court cases. This includes data recorded in the J88 victim medical examination report form, and data on DNA analysis. Most of the data will be abstracted from these documents by fieldworkers employed at the MRC, but if cases are still open, data will be collected through a face to face or telephonic interview with the investigating officer on the case. J88 and DNA forms will be scanned and analysed by trained health professionals and personnel of the SAPS Forensic Services Division, respectively.

5. The key findings will be reported to the National Prosecuting Authority and the SAPS, followed by a series of peer reviewed journal articles and conference presentations.

6. A legal opinion on the issue was obtained from Legal Services, Head office. The legal opinion highlighted the following with regard to the research proposal:

6.1 Case dockets would have to be made available, many of which would be "open dockets" for which the prosecutor's permission must be obtained in each case. After obtaining the permission from the relevant prosecutor, it would be necessary to designate a member or members to assist the researcher to ensure that the integrity of the case dockets are secured and that the identities of witnesses are protected. Withdrawing the dockets from investigators for purposes of the research could also jeopardise the investigation of such case, even if the withdrawal of the docket is for a short period of time.

6.2 Closed dockets may, under certain circumstances, be made available for research purposes, after consultation with the relevant line functionary. No copies may be made of any dockets or documents contained therein. It must also be noted that investigation techniques may not be disclosed as this may jeopardize future investigations. The identities of victims and witnesses must be protected.

6.3 The sensitivity of the said cases and the impact it may have on the service delivery of the Service must also be considered before allowing the person to research the said cases. It would also be necessary to obtain the inputs of each investigating official or branch commander to whom the identified cases have been or was assigned to.

7. The research study is hereby approved in terms of National Instruction 1 of 2006 and the relevant line managers are requested to assist the MRC in obtaining the required information within the legal framework as outlined in par. 6 above.

RE: RESEARCH STUDY: A NATIONAL STUDY OF THE PROSECUTION AND ADJUCATION OF SEXUAL OFFENCES: THE SOUTH AFRICAN MEDICAL RESEARCH COUNCIL (MRC) RESEARCHER: DR RACHEL JEWKES (PRINCIPAL INVESTIGATOR)

With kind regards,

MAJOR GENERAL
HEAD: STRATEGIC MANAGEMENT
M MENZIWA

Date: 2014.01.23

Recommended / ~~not recommended~~

Supported.

LIEUTENANT GENERAL
DEPUTY NATIONAL COMMISSIONER: POLICING
KJ SITOLE (SOE)

Date: 2014-01-30

Approved / not approved

LIEUTENANT GENERAL
DEPUTY NATIONAL COMMISSIONER: CORPORATE SERVICE MANAGEMENT
CN MBEKELA

Date: 2014/02/04

APPENDIX I - Permission from the Department of Justice and Constitutional Development

the doj & cd
Department:
Justice and Constitutional Development
REPUBLIC OF SOUTH AFRICA

Private Bag X 81, PRETORIA, 0001 • Momentum Centre, 329 Pretorius Street, PRETORIA
Tel (012) 315 1259, Fax (012) 315 1851

Ref: 22/05/2014
Enq: Adv. Kambula
E-mail: pkambual@justice.gov.za

OFFICE OF THE NATIO[illegible]IRECTOR
2014 -06- 06
NATIONAL PROSECUTING AUTHORI[illegible]

Mr. M. Nxasana
The National Director of Public Prosecution
Private Bag X752
Pretoria
0001

Dear Mr. Nxasana

SUBJECT: REQUEST FOR THE APPROVAL OF MEDICAL RESEARCH COUNCIL TO CONDUCT RESEARCH COMMISSIONED BY NPA AT SELECTED COURTS

This letter serves as a response to the memorandum received from the National Prosecuting Authority (NPA) dated 22 April 2014 concerning the National Study of the Prosecution and Adjudication of Sexual Offences Cases which the NPA commissioned the Medical Research Council (MRC) to conduct at selected courts in all provinces.

The Department welcomes this research initiative and expresses its support towards the achievement of its goals. It is a study embarked on at a perfect time when our Department is in a process of developing the Monitoring and Evaluation Strategy for the Management of the newly-established Sexual Offences Courts. It is therefore anticipated that the outcome of your study will serve as a baseline critical to the collective management of our Sexual Offences Courts.

I therefore hereby authorize access to our charge sheets and case records by the MRC Council under the guidance and oversight of the Regional Head of each research site, and in accordance with the relevant Departmental prescripts. It must be noted that access to the MRC is granted to operate in terms of your agreement with them, and its validity will cease on the date of the finalization of the research.

I am looking forward to the findings and recommendations of this study, and will greatly appreciate if you could favour our Department with the research report as soon as it is available.

Yours faithfully

Ms. N. Sindane
Director-General: Department of Justice and Constitutional Development
Date: 03/06/2014

Received by PRNG on 30/4/14.

Sexual Offences and Community Affairs Unit

NATIONAL PROSECUTING AUTHORITY

HEAD OFFICE

Tel: +27 12 845 6000
Fax: +27 12 845 7375

Victoria & Griffiths
Mxenge Building
123 Westlake Avenue
Weavind Park
Silverton
Pretoria

P/Bag X752
Pretoria
0001
South Africa

www.npa.gov.za

TO: 1. MS NONKULULEKO SINDANE
DIRECTOR GENERAL
DEPARTMENT OF JUSTICE AND CONSTITUTIONAL DEVELOPMENT

2. MR T MALEMA
ACTING DDG (COURT SERVICES)
DEPARTMENT OF JUSTICE AND CONSTITUTIONAL DEVELOPMENT

3. ADV PRAISE KAMBULA
HEAD: PROMOTION OF THE RIGHTS OF VULNERABLE GROUPS UNIT, DEPARTMENT OF JUSTICE AND CONSTITUTIONAL DEVELOPMENT

FROM: ADV THOKO MAJOKWENI
SPECIAL DIRECTOR OF PUBLIC PROSECUTIONS
HEAD: SEXUAL OFFENCES AND COMMUNITY AFFAIRS UNIT, NPA

SUBJECT: INTRODUCING MRC RESEARCH

ENQ: MS PUMEZA MAFANI

DATE: 22 APRIL 2014

REF: 7/4/2

1. The National Prosecuting Authority, through the Sexual Offences and Community Affairs Unit (SOCA), will be working with a number of partner organisations over the next five years to increase services to survivors of sexual violence. The partnership includes establishing 4 new Thuthuzela Care Centres (TCCs), providing additional training to a range of stakeholders who deal with survivors of sexual violence and raising awareness in communities of the services offered at the TCCs, as well as raising awareness of issues relating to gender-based violence and conducting research into sexual violence prosecutions. The partners are the Foundation for Professional Development (FPD), the Medical Research Council (MRC), Sonke Gender Justice Network and Soul City.

2. The South African Medical Research Council Gender and Health Research Unit (GHRU) has been commissioned within this partnership by the NPA's SOCA Unit to conduct a national study to investigate prosecution and adjudication of rape matters (including attempted rape). The research will entail the collection of data from police case dockets, charge sheets, trial transcripts and interviews with investigating officers and prosecutors. A target of 4500 rape cases, drawn using

random sampling from all 9 provinces, will be traced in their progression through the criminal justice system from the time a case is reported to Police to the case closure through a legal outcome or otherwise. They will collect data from police dockets and then require access to the court data, namely charge sheets and trial transcripts (where cases went to trial but not *sub judice*). The aim is to investigate and understand amenable factors in attrition. The nature of the study requires the support and collaboration of the different arms of the Justice System including the Police, Courts and Prosecutors. There is a multi-sectoral group of project investigators and steering committee for the project, which includes Ms Ntibidi Rampete, Director of Gender at DOJCD. We have been given access by the Police to the dockets and Ms Karen Tewson is assisting with gaining support from Senior Prosecutors in the Courts.

3. In order to conduct the planned research we request your support and assistance in accessing courts across the country and obtaining trial transcripts of cases that are in the research series. We would very much welcome a letter of support that we could show to courts and which would facilitate access to this information.

4. The MRC will deploy researchers who will visit courts and request information on specified case numbers. This will include sight of the charge sheet and the researchers will request a copy of the trial transcript. If the trial has not yet been transcribed we will be willing to pay for this to be done. A system will be created for data coding and capturing in our Pretoria Offices. The MRC will employ a lawyer through the Centre for Applied Legal Studies of the University of the Witwatersrand to analyse the transcripts and consider the application of law in these cases as well as the impact of management of cases on their legal outcome (e.g. availability of witnesses, use of subpoenas etc). Thereafter the results from the transcript analysis will be compiled together with results from the other research with Police, victims and suspects. Findings of the research will be shared with relevant Departments. I have attached for ease of reference a copy of the research proposal.

5. Your assistance and partnership will be highly appreciated in this study. We look forward to an exciting and productive collaboration with all our partners.

Kind Regards

Adv Thoko Majokweni
Special Director of Public Prosecutions: SOCA Unit
National Prosecuting Authority

XX

APPENDIX J - MRC Ethics Approval

SOUTH AFRICAN MEDICAL RESEARCH COUNCIL

ETHICS COMMITTEE

PO Box 19070, 7505 Tygerberg, South Africa
Francie van Zijl Drive, Parowvallei, 7500
Tel: +27 (0)21 938-0687; Fax: +27 (0)866-854023
E-mail: adri.labuschagne@mrc.ac.za
http://www.sahealthinfo.org/ethics/ethics.htm

2 April 2014

Prof R Jewkes
Director: Gender and Health Research Unit
MRC Pretoria

Dear Prof Jewkes

Protocol ID: EC020-11/2013
Protocol title: A national study of the prosecution and adjudication of sexual offences
Meeting date: 25 March 2014

Thank you for your response, dated 3 March 2014. I am pleased to inform you that the Committee granted ethics approval for the study.

Please note that the approval is valid for 1 year, i.e. from 25 March 2014 to 24 March 2015. Any changes to the research protocol must be submitted as an amendment. Any protocol deviations have to be reported.

Wishing you well with your research.

Yours sincerely

PROF. D DU TOIT
CHAIRPERSON: MRC ETHICS COMMITTEE

SOUTH AFRICAN MEDICAL RESEARCH COUNCIL

ETHICS COMMITTEE

PO Box 19070, 7505 Tygerberg, South Africa
Francie van Zijl Drive, Parowvallei, 7500
Tel: +27 (0)21 938-0687; Fax: +27 (0) 866-854023
E-mail: adri.labuschagne@mrc.ac.za
http://www.sahealthinfo.org/ethics/ethics.htm

4 April 2014

Prof R Jewkes
Director: Gender and Health Research Unit
MRC Pretoria

Dear Prof Jewkes

Protocol ID: EC020-11/2013
Protocol title: A national study of the prosecution and adjudication of sexual offences
Meeting date: 25 March 2014

Thank you for your application to the Committee for an amendment, dated 3 March 2014. The Committee acknowledged that the proposed amendment is a comprehensive proposal, but decided that since the focus of the two sub-studies are very different from the main study they first need to be peer reviewed. The Committee also wants to protect minors; the studies have a potential for negative repercussions. The Committee did, however, make some comments that require attention – please address these first and then the protocols will be sent for peer review:

1. Will feedback on the result be given to participants to empower them? Will people refusing to participate due to social dynamics be referred for counselling?
2. *Appendix 1:* Par 2, last sentence: rather split the sentence: first say that it will be appreciated if they are willing to talk to the researchers, and then in a next sentence mention the payment. Par 3: instead of 'participate', say 'we would like you to tell us…'. A sentence on data storage should be added, on how long it will be stored and when it will be destroyed. There are also elements missing, such as confidentiality, voluntary participation, and the funder of the study.
3. Interviews with rape victims will probably make them relive the traumatic experience of rape, and this could potentially damage them emotionally if not handled well. How do you plan to minimise this risk? In addition to the EAP wellness programme, can staff also talk to the PI?
4. To Committee was concerned about victimisation. The process of locating and accessing the complainant's home and how the researchers will approach the matter when they arrive at the complainants' home is unclear. Please provide a detailed explanation of this process.

5. This study will include minors: the South African Health Act (2007) provides that if the study is not therapeutic in nature and includes minors, approval from the Minister of Health is required.
   In case where the minor and or parent/guardian discloses in the interview that they do not want to continue with the case because they were threatened, how will the best interests of the child be ensured in that case?
6. Participant information leaflet for parents/guardians and consent forms for minors should be included in the submission.

Yours sincerely

PROF. D DU TOIT
CHAIRPERSON: MRC ETHICS COMMITTEE

APPENDIX K – Ethics Approval for this Study

R14/49 Dr Moushumi Ann Mathews

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

CLEARANCE CERTIFICATE NO. M140903

NAME: (Principal Investigator)	Dr Moushumi Ann Mathews
DEPARTMENT:	Community Medicine Medical Research Council Gender and Health Unit
PROJECT TITLE:	Development of a Quality Index Tool to Assess the Completion of J88 Forms for Rape Suvivors in South Africa
DATE CONSIDERED:	03/10/2014
DECISION:	Approved unconditionally
CONDITIONS:	
SUPERVISOR:	Dr Ruxana Jina
APPROVED BY:	Professor C Feldman, Co-Chairperson, HREC (Medical)
DATE OF APPROVAL:	17/12/2014

This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Secretary in Room 10004, 10th floor, Senate House, University.

I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated, from the research protocol as approved, I/we undertake to resubmit the application to the Committee. **I agree to submit a yearly progress report.**

Principal Investigator Signature Date

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

APPENDIX L – The final Quality Index Tool

	J88 CAS Number				
ISSUES OF QUALITY IDENTIFIED BY EXPERTS (>81.25% AGREEMENT =13 or more of 16)		**PLEASE CIRCLE THE APPROPRIATE SCORE**			
	GENERAL ISSUES COMPROMISING QUALITY				
1	The healthcare worker's handwriting is illegible.	COMPLETELY ILLEGIBLE = 1	PARTIALLY LEGIBLE = 2	CLEARLY LEGIBLE = **3**	
2	Medical Abbreviations are used on the form without explaining what they mean.	MANY ABBREVIATIONS = 1	SOME ABBREVIATIONS = 2	NO ABBREVIATIONS = 3	
3	Medical jargon is used on the J88 form.	A LOT OF MEDICAL JARGON USED = 1	SOME MEDICAL JARGON USED = 2	NO MEDICAL JARGON USED = **3**	
4	Where there is an error that has been corrected on the J88 form, it has **NOT** been initialled by the healthcare worker.	MANY UNINITIALLED ERRORS = 1	SOME UNINITIALLED ERRORS = **2**	NO UNINITIALLED ERRORS = **3**	NO ERRORS = 3
	GENERAL HISTORY [SECTION B ON J88 FORM]				
5	Disablities, learning disorders, behavioural disorders and communication difficulties, when recorded, are clarified.	NO PROBLEMS ARE CLARIFIED = 1	SOME PROBLEMS ARE CLARIFIED = 2	ALL PROBLEMS ARE CLARIFIED = 3	NONE RECORDED = 2
6	In the case of **children**, their exact words are used to describe the history.	NONE OF THE HISTORY RECORDED IN CHILD'S OWN WORDS = 1	SOME OF THE HISTORY RECORDED IN CHILD'S OWN WORDS = **2**	ALL OF THE HISTORY IS RECORDED IN CHILD'S OWN WORDS = **3**	
	GENERAL EXAMINATION [SECTION C ON J88 FORM]				
7	The patient's mental health and emotional status are described as "Normal" without further explanation	NOT EXPLAINED = 1	EXPLAINED = 2		NOT NORMAL = **2**
8	When mental health and emotional status are **NOT** normal, the statement is explained or clarified/ not completed	EXPLAINED = 2		NOT EXPLAINED = 1	NORMAL = 1
9	When the patient is described as "intoxicated" or "drunk", the clinical features of intoxication are indicated	INDICATED = 2		NOT INDICATED = 1	NOT INTOXICATED OR DRUNK = **2**
10	Injuries documented are adequately described in size, shape, borders and type of force (blunt vs sharp).	INJURIES NOT DESCRIBED = 1	INJURIES PARTIALLY DESCRIBED = 2	INJURIES FULLY DESCRIBED = 3	NO INJURIES RECORDED = **1**
11	There is a concluding statement summarising the General Examination findings.	IRRELEVANT OR NO SUMMARY OF GENERAL EXAM FINDINGS = 1	PARTIAL SUMMARY OF GENERAL EXAM FINDINGS = 2	CONCLUSIVE SUMMARY OF GENERAL EXAM FINDINGS = 3	
	HISTORY IN CASE OF ALLEGED SEXUAL ASSAULT [SECTION D ON J88 FORM]				
12	The relevant parts of Section D on the J88 form is completed in **male** patients. (ONLY COMPLETE IF PATIENT IS MALE).	TRUE = **2**		FALSE = 1	
13	When "condom use" is ticked, it is clarified whether it was used with a consensual partner or during the sexual assault.	TRUE = 2		FALSE/ NOT COMPLETED = 1	

	GYNAECOLOGICAL EXAMINATION [SECTION E ON J88 FORM]	**ONLY COMPLETE THIS SECTION IF PATIENT IS FEMALE**			
14	A digital examination was conducted and documented as the number of fingers inserted in **female** patients.	TRUE = 1	FALSE = **2**		NOT COMPLETED = 2
15	Boxes under the gynaecological examination are left blank/ completed with ticks or crosses or "N/A", and **NOT** explanatory statements, in **female** patients.	ALL BOXES LEFT BLANK/ HAVE TICKS/ NAD/ N/A = 1	SOME BOXES LEFT BLANK/ HAVE TICKS/ NAD/ N/A = 2	ALL BOXES HAVE EXPLANATORY STATEMENTS = 3	
16	Boxes under the gynaecological examination are completed with "Normal"/ "NAD" / "intact"/ "none"/ "no injuries"/ "nil", in **female** patients, and **NOT** explanatory statements.	ALL BOXES HAVE "NORMAL" = 1	SOME BOXES HAVE "NORMAL" = 2	ALL BOXES HAVE EXPLANATORY STATEMENTS = 3	
17	In **female** patients, there is a concluding statement about the sexual assault history and gynaecological examination after "Samples taken for Investigation" - Section F on J88 form.	IRRELEVANT OR NO SUMMARY OF HISTORY & GYNAE EXAM FINDINGS = 1	PARTIAL SUMMARY OF HISTORY & GYNAE EXAM FINDINGS = 2	CONCLUSIVE SUMMARY OF HISTORY & GYNAE EXAM FINDINGS = 3	
	ANAL EXAMINATION [SECTION G ON J88 FORM]				
18	Section G is **NOT** completed, or "NAD" or "N/A" etc. are written with no other explanation.	TRUE = 1	FALSE = 2		
19	There is a concluding statement of anal examination findings or lack thereof.	PRESENT = **2**		ABSENT = 1	
	MALE GENITALIA [SECTION H ON J88 FORM]	**COMPLETE THIS SECTION ONLY IF PATIENT IS MALE**			
20	Section H is **NOT** completed or "NAD" or "N/A" are written with no other explanation.	NOT COMPLETED/ NAD/ N/A = 1	COMPLETED = **2**		
21	There is a concluding statement of male genitalia findings or lack thereof.	PRESENT = **2**		ABSENT = 1	
22	The **FINAL** concluding statement excludes sexual abuse because of a "normal examination". (ONLY IF EXAMINATION WAS NORMAL).	TRUE = 1		FALSE = **2**	NO FINAL CONCLUDING STATEMENT = **1**
	DIAGRAMS TO DENOTE INJURIES				
23	Diagrams that are not completed are crossed out.	ALL UNCOMPLETED DIAGRAMS NOT CROSSED OUT = 1	SOME UNCOMPLETED DIAGRAMS NOT CROSSED OUT = 2	ALL UNCOMPLETED DIAGRAMS ARE CROSSED OUT = 3	
24	When diagrams are crossed out, there is **NO** signature in the two relevant signature boxes.	NO SIGNATURES = 1	ONE SIGNATURE PRESENT = 2	BOTH SIGNATURES PRESENT = 3	
TOTAL SCORE					

ACCEPTABLE SCORES FOR EACH PATIENT CATEGORY (>/= 75%)	
FEMALE CHILD	>/= **41** out of **55**
FEMALE ADULT	>/= **39** out of **52**
MALE CHILD	>/= **38** out of **50**
MALE ADULT	>/= **35** out of **47**