

## RESEARCH SUMMARY

# The uses and impacts of medico-legal evidence in sexual assault cases: A global review<sup>1</sup>

### Background

**T**he review summarized here provides a global overview of the uses and impacts of medico-legal evidence in cases of sexual assault of adolescents and adults. It examines the existing peer-reviewed scholarly and grey literature from industrialized and developing regions. Over 400 items on sexual assault, including books, journal articles, news articles, research reports, annual reports, discussion papers and monographs, were examined.

The review outlines the historical and contemporary medico-legal responses to sexual assault victims, broadly describing the professionals, protocols and procedures involved in the collection and processing of medico-legal evidence. Findings are presented from studies that have evaluated the legal impact of such evidence in sexual assault cases, and factors that may create barriers to its successful use in criminal justice proceedings are discussed. The review identifies salient knowledge gaps and offers research recommendations for addressing them.

### Findings

#### Context

The sexual assault of adolescents and adults is a common, widespread and insidious problem that has serious physical, psychological, emotional and social consequences. Anti-woman attitudes and rape myths have fuelled its prevalence and

shaped the ways in which victims have been treated by health services, the police, the judiciary and in law. As a result, victims have frequently chosen not to report their assaults or have been filtered out of criminal justice systems, resulting in low charge filing and conviction rates. In many instances, the collection of medico-legal evidence, often demanded in law or policy for corroborative purposes, has been inconsistent, severely limited in quality and scope, or not undertaken.

#### Medico-legal services

Medico-legal services have increasingly been developed worldwide to provide better care to victims and improve the collection of medico-legal evidence. These services document and collect available evidence (e.g., general physical injuries, ano-genital injuries, sperm and semen) in order to corroborate accounts of sexual assault for courts of law. The settings, staff and protocols of such services operate on different models and are unevenly developed and implemented across and within regions.

#### Impact of medico-legal evidence on legal outcomes

Only a few dozen studies have evaluated the relationship between medico-legal evidence and legal outcomes (e.g., charge filing and conviction). All but two were conducted in industrialized countries. The 13 studies undertaken specifically to examine the association between legal outcome and particular types of medico-legal evidence such as seminal fluid were carried out in countries representing only two regions (North

<sup>1</sup> This review was commissioned by the World Health Organization for the Sexual Violence Research Initiative. It was written by Janice Du Mont and Deborah White.

America and Europe (Scandinavian countries). Almost all have been urban-based, retrospective, and limited by the nature and level of consistency and completeness of information available in official records. Drawing comparisons across studies is difficult, as differently defined medico-legal evidence variables have been examined at various levels of criminal justice systems. Moreover, these variables have been drawn from diverse sources of information and analysed using different procedures. Complicating matters further, some research has included in its design a handful of children, and adolescent and adult men.

The findings summarized from these studies must be understood in the light of such limitations. Bearing this in mind, across cases reported to the police, supportive medico-legal evidence was available in only a limited number of sexual assault cases, many of which did not proceed beyond the police level of processing. A substantial proportion of victims did not sustain general physical injuries (10% to 71%) or ano-genital trauma (33% to 91%). The proportion of those for whom there was no documented sperm or semen present was greater (41% to 99%). Large numbers of cases were not recorded as a crime (unfounded/no-crime) and were documented as unsolved, inactive, the suspect was not apprehended, the warrant was denied, and the victim withdrew her complaint or refused to proceed, thereby rendering the potential impact of medico-legal evidence in the courts moot. Of all cases reported to the police, fewer than half (15% to 47%) resulted in charges and less than a third (7% to 32%) in convictions.

A variety of factors were found to be associated with the progression of cases through criminal justice systems. These often included the characteristics of the woman (e.g., whether her character or reputation were perceived as being negative) and her behaviours before (e.g., she engaged in “risk-taking” activities such as walking alone at night), during (e.g., she did not resist the assailant) and following an assault (e.g., she did not report the assault promptly to the police). With respect to medico-legal evidence, no study found a significant relationship between legal outcome and the detection of sperm or semen specifically, nor with the documentation of the victim's emotional state. Collection of biological/non-biological samples and the occurrence of ano-genital trauma were related to the legal resolution of cases in fewer than a third of pertinent studies (31% and 29%, respectively).

The documentation of injury was the strongest predictor of a positive legal outcome. In just under half (44%) of those studies that examined the presence of general physical injuries, a significant association was found. Moreover, some studies found that when a victim sustained moderate-to-severe injuries (e.g., injuries to the head, neck or face, attempted strangulation, and fractures) having suffered such injuries was most strongly associated with charging and conviction. Some descriptive studies noted that medico-legal evidence appears to be of minimal importance to the courts and not always necessary for a case to progress.

### **(Sociocultural) conditions of the use of medico-legal evidence**

The apparent limited impact of medico-legal evidence on the legal resolution of sexual assault cases may be partly due to the dearth of studies evaluating this association, as well as to the design limitations of those that have been conducted. At the same time, as presented in this research, there appears to be a notable relationship between legal outcome and the documentation of certain victim characteristics and behaviours. The effect of negative perceptions of women is further evidenced in the literature on how medico-legal evidence is used across regions. In this regard, sociocultural forces, in particular anti-woman and rape-supportive attitudes, foster the screening out of sexual assault cases from criminal justice systems and shape the existence, quality and impact of medico-legal evidence. These forces may influence the availability of trained staff, adequate facilities, supplies and equipment, the use of effective protocols and technologies, as well as the behaviours of the professionals responsible for collecting, processing, analysing and testifying to medico-legal evidence (see Box). Consequently, without eliminating cultural biases against women, there may be limited value in collecting such evidence. Given this knowledge, the emphasis on medical forensic examination in the sexual assault context must be carefully weighed and further evaluated.

### **Promising initiatives to improve medico-legal evidence collection and processing**

It should be recognized that in many regions constructive initiatives are emerging in attempts to address the limitations of existing research and

## ▼ BOX

### Lessons learned from the literature

Sociocultural contexts characterized by male-dominance, anti-woman biases and rape-supportive attitudes present a number of barriers to the effective use of medico-legal evidence. In these (and other) contexts, the

#### ■ collection of viable medico-legal evidence requires:

- easily accessible, cost-free (to the victim) male and female sexual assault examiners who are well-trained and authorized to gather evidence properly and testify to it in court, and who are sensitized to the negative impacts of erroneous beliefs and attitudes regarding sexual assault and sexually assaulted women;
- suitable facilities distributed across urban and rural areas, available 24 hours a day, seven days a week, that house adequate supplies and equipment and that can secure the protection of the medico-legal evidence;
- collaborative networks and effective communications across the health care, law enforcement and legal sectors, and non-governmental and community organizations such as rape crisis centres;
- well-constructed standardized protocols adaptable to local circumstances and suitable technologies that are readily available.

#### ■ processing of viable medico-legal evidence requires:

- access to forensic facilities with adequate resources, staffed by properly trained analysts who can both process and testify to it without the interference of personal biases and demands from other post-sexual assault professionals;
- proactive involvement of police specially trained to maintain the chain of custody and to handle cases in a timely and sensitive manner, free from anti-woman, rape-supportive beliefs and attitudes, and corruption;
- prosecutors, defence attorneys, judges and other court staff sensitized to the detrimental impact that anti-woman biases and rape myths can have on its use in the courts.

enhance the collection and processing of medico-legal evidence to improve criminal justice outcomes for victims of sexual assault. In South Africa, a large, systematic and methodologically rigorous study exploring the relationship of particular types and the quality of medico-legal evidence on the outcomes of sexual assault cases is currently under way in Gauteng province. While many of the more recent service-oriented efforts have limitations and still require systematic evaluation, some that appear to have value include the development and increasing establishment of forensic nurse examiner programmes and the creation and distribution of standardized medico-legal guidelines adaptable across settings with respect to varying resources, policies and procedures. Other more specific examples are an African cross-national medico-legal workshop held to foster intersectoral, interdisciplinary sharing of knowledge and skills; the development and replication of one-stop crisis

centres such as the Thuthuzela Care Centres in South Africa, which were set up to house specialized medical, law enforcement and prosecutorial professionals and are linked, in some instances, to designated sexual offence courts; and a woman-friendly hospital initiative in Bangladesh that addresses the attitudes, values and assumptions of hospital staff working with victims of violence.

### Knowledge gaps and research recommendations

Globally, there is a striking paucity of information and evaluative studies from which to assess the impact of medico-legal evidence on sexual assault cases. The design limitations of the research conducted are such that it is not possible to draw robust conclusions, nor generalize from the findings, particularly to low- and middle-income

countries. To date, it has not been determined what the minimum amount of available medico-legal evidence is for aiding the courts, nor which components of the medical forensic examination (e.g., documentation of injury or collection of specimens) are most effective in specific circumstances (e.g., rapes by acquaintances). Moreover, it is unknown whether there are differences among subgroups of victims (e.g., children, adolescents and men) with respect to the impact of medico-legal evidence on legal outcomes. The many ways in which sociocultural factors may influence the use of medico-legal evidence have not been accounted for systematically and, although there is a general belief that improved training for sexual assault examiners, law enforcement officers and legal professionals can increase its efficacy, the results of existing initiatives have not been rigorously evaluated. Finally, from the perspectives of victims, the importance and relevance of the collection and processing of medico-legal evidence is neither clear nor self-evident.

To address these gaps and shed further light on whether and how medico-legal evidence might be used more effectively, it is crucial that funds be made available to build research capacity in jurisdictions with limited resources. Research focusing on medico-legal evidence in relation to

sexual assault could then be pursued. Questions to be addressed should include:

- What is the minimum amount of medico-legal evidence necessary to aid in the adjudication of a case?
- In which circumstances are particular types of medico-legal evidence most valuable?
- Are there differences between subgroups of individuals with respect to the relationship to legal outcome of medico-legal evidence?
- What are the direct influences of socio-cultural factors on the operations of services, the development of protocols and the practices of sexual assault professionals?
- Does improved training of sexual assault personnel enhance the value of medico-legal evidence?
- Do medico-legal policies and protocols improve the efficacy of medico-legal evidence?
- What is the value and meaning of the medical forensic examination for sexual assault victims?

There is also a need to further examine alternative measures for enhancing justice for victims of sexual assault. An important question to be answered is, How might such measures be prioritized in terms of resource allocation vis à vis existing criminal justice and medico-legal practices?

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