

# The uses and impacts of medico-legal evidence in sexual assault cases: a global review

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A desk review commissioned by  
the SVRI



# Desk review scope:

- Literature from journal articles & grey literature
- Northern & Southern countries
- Perspectives of law, medicine, sociology, psychology & criminology
- Published in English (actually nothing was found not in English)
- Focus on adult and adolescent sexual assault
- ML evidence: documented ano-genital injuries or non-genital injuries; samples & specimens taken from a victim solely for legal purposes (hair, saliva, seminal fluid, fibre, debris, urine etc)



# The desk review outlines:

- The professionals, procedures and protocols involved in the collection and processing of medico-legal evidence
- The evidence of the legal impact of this evidence in sexual assault cases
- The factors that create barriers to its use in criminal justice proceedings
- The salient knowledge gaps and research recommendations



# Purpose of medico-legal evidence

- to corroborate the victim's account of sexual assault for a court of law
- *“To prove (or exclude) a physical connection between individuals, objects or places”*
- To determine the occurrence of recent sexual activity
- Identify the assailant
- Establish the use of force
- Indicate the inability to consent due to drink, drugs or mental incapacity



# Circumstances of the collection of medico-legal evidence

- International diversity
- Examination may be voluntary (eg. US & Canada) or mandatory (eg. Bangladesh, countries of former USSR)
- Sexual assault survivors may go on their own for this or may need referral from the police or authorisation from a judge or the prosecution
- In Belize the police must attend as observers during the examination!!!



# Circumstances of the collection of medico-legal evidence

- Wide variety of settings where examinations are performed
- Range of staff conduct the examination (drs, nurses, forensic examiners etc)
- Some countries now have protocols for the examination
- Physical evidence for DNA is usually collected in better resourced settings
- The samples for this have to be appropriately prepared (by drying) and securely stored in order to be useful. Often special kits are used for specimen collection.
- In some countries lab findings and records of injuries with testimony may be introduced in court. In the US forensic analysts often comment on their results or further interpret them

In South Africa & Belize evidence may be admitted by a prosecutor without testimony, unless further explanation is requested



# Evidence of the legal impact

- Medico-legal evidence: It has been asserted that the outcome of rape investigators and trials “[are] likely to depend on it” (Temkin)
- Is this true?
- This desk review represents the first attempt to scrutinise available evidence globally



# What is the evidence base?

- 13 studies undertaken to measure the impact of ML evidence on legal outcomes
- All from the US, Canada and Scandinavia
- Sample size: only 3 had >500 cases; and 3 were under 100 cases
- Why does this matter? The conviction rate was an average 16% (range 10-32%); and physical injury rate (range 57-59% for moderate injury) and genital injury rate (range 9-67%)
- So the studies were severely lacking in power to detect an association



# What was found?

- In 12 studies the findings could be more readily interpreted
- In 50% (6/12) 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
- In none of the studies were biological specimens associated with legal outcome



# Other studies

- 31 studies were identified where it was possible to examine the presence of injury as one of a range of factors potentially associated with CJS processing of cases, 27 had victim injury data
- In 44% (12 of 27) victim injuries were associated with the legal outcome
- In 7 (23%) it was associated with police decisions to prosecute
- In 3 it was positively associated with guilty pleas or verdicts (but two studies reported a negative association)



# Studies examining ML evidence as a whole

- South Africa: 226 cases
  - 142 removed from system before plea
  - 84 went to trial
    - 55 not guilty (41 acquitted & 14 discharged) & 1 case withdrawn
    - 28 convictions (13 verdicts and 14 pleas)
- 30 cases went to trial with no ML report
- Of the 52, “ there was not one record showing that forensic evidence was led during trials”
- Canada: ML evidence presented in 26 of 61 court cases (12/26 resulted in a guilty verdict)
  - *“in 18 cases where the physical evidence obtained through the exam proved ambiguous the court nonetheless reached a guilty verdict”*



# Non-ML factors that influence cases

- Acquaintance (can work in both directions depending on context)
- Social evaluation of woman (age, poverty, drink, drugs, sex work, psychiatric history)
- Context of assault
- Delay in reporting
- Aggravating factors → more likely to be a conviction: previous convictions, multiple charges, weapons, more force, witnesses



# Use of ML evidence in the CJS

- Rape cases have to be understood as taking place within the broader social context of rape which is generally misogynist and anti-woman. Biases of police, doctors and judges may be more important in case outcomes than ML evidence
- There are no formal rules related to corroboration of women's evidence in many countries, but there is a continued demand for corroboration (often framed as ensuring sufficient evidence to prosecute).
- In many countries there are few resources for sexual assault services which impedes evidence collection and processing
- Many of the staff examining women have had little or no training, as a result the quality of evidence may not be terribly high

ML evidence that is presented may be undermined in court under cross-examination



# Conclusions

- Insufficient evidence to establish whether collection and processing of ML evidence improves criminal outcomes for sexual assault victims
- There is still a great deal we do not know.
- e.g.
  - The minimum amount of ML evidence needed to impact in court has not been established
  - Are there differences in impact in sub-groups? Women v. men; adults v. children?
  - How socio-cultural factors influence the use of ML evidence
  - Whether training to better collect and utilise evidence changes its impact
  - How important and relevant ML evidence collection is for victims



# Research gaps:

- What is the minimum amount of ML evidence needed to aid in the adjudication of a case?
- In which circumstances are particular types of ML evidence most valuable?
- Is the collection of biological samples for DNA analysis useful in cases where the assailant is known and defense is consent?
- Are there differences between sub-groups of individuals with respect to the relationship of ML evidence to legal outcomes?
- What are the 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 ML evidence?
- Do ML policies and protocols positively affect the impact of ML evidence?
- What is the value and meaning of the ML examination for sexual assault victims?
- How might alternative measures for enhancing justice for sexual assault victims be prioritised in terms of resource allocation vis a vis existing CJ and ML practices?

