The 72 Hour Rule for Forensic Medical Examinations in Sexual Assault Cases: Truth or Myth?

Theodore P. Cross Thaddeus Schmitt
University of Illinois at Urbana-Champaign
Megan Alderden
Illinois Criminal Justice Authority

American Society of Criminology Meeting
November 2018

Medical examinations and biological evidence in sexual assault cases

- Sexual assault victims are unique in the criminal justice system: both witnesses and crime scenes
- Victims undergo demanding medical examinations to provide samples that can be analyzed by crime lab
- System of examiners, evidence kits and crime lab analysis
- Yet case data research on the yield in biological evidence is limited

Uses of DNA and other biological evidence

- Can help identify stranger suspects
- Can undercut suspect claims of lack of sexual contact with victim
- Sometimes supports victim's account of what happened vs. suspect's (e.g., location of sperm)
- Demonstrates prosecutor's thoroughness ("CSI" expectation)

The “72 hour rule”

- For many years, many communities have not done forensic exams more than 72 hours after the assault
- 72-hour rule derived from the medical community
  - Window in which emergent examination thought to be necessary vs. scheduled appointment (American Association of Pediatrics, 1994),
  - Yet research on likelihood of forensic evidence over time is limited
- Recent DOJ guidelines from 2016 now recommend the exam be performed at any time after the assault

Sample (see Cross, et al., 2014)

- Massachusetts statewide sample of emergency department exams in sexual assault cases that were reported to police
- Years: 2008-2010
- N=563
- Victims age 1 to adult
- Relevant age cutoffs:
  - Pediatric kit: Age 11 and younger – less invasive and collects less information by design
  - Age of consent: 16
- 94% of exams took place within 72 hours of assault

Types of Data Collected

State Medical Exam Database

- Victim age, sex, race/ethnicity
- Location of assault (city and surroundings)
- Location/date/time of exam
- Exam provider (SANE/non SANE)
- Number of assailants
- Assailant-victim relationship
- Weapon type
- Description of assault
- Reported to police
- Completion of evidence kit/toxicology

Crime Laboratory Data

- Injury type, frequency, location
- Type of examinations completed
- Type of evidence collected (physical, forensic)
- Date/time of evidence kit collected
- Date/time kit arrival to lab
- Date/time of report of lab results
- Laboratory results

Some data not collected for victims age 11 and younger

Research questions

- What is the rate of DNA and other biological evidence > 72 hours after the assault?
- Do cases getting examinations > 72 hours differ from cases examined earlier? Does that affect evidence obtained?

Examinations conducted after 72 hours have lower rates of biological evidence

But rates are well above zero

Crime lab testing of evidence kits by time since assault

Hours Since Assault	n	f tested by lab	%
0 thru 6	158	123	84.2%
7 thru 12	86	69	80.2%
13 thru 18	56	44	78.6%
19 thru 24	44	28	63.6%
25 thru 48	58	41	70.7%
49 thru 72	22	15	68.2%
73 thru 263	28	13	46.4%

Recovery of biological evidence by time since assault

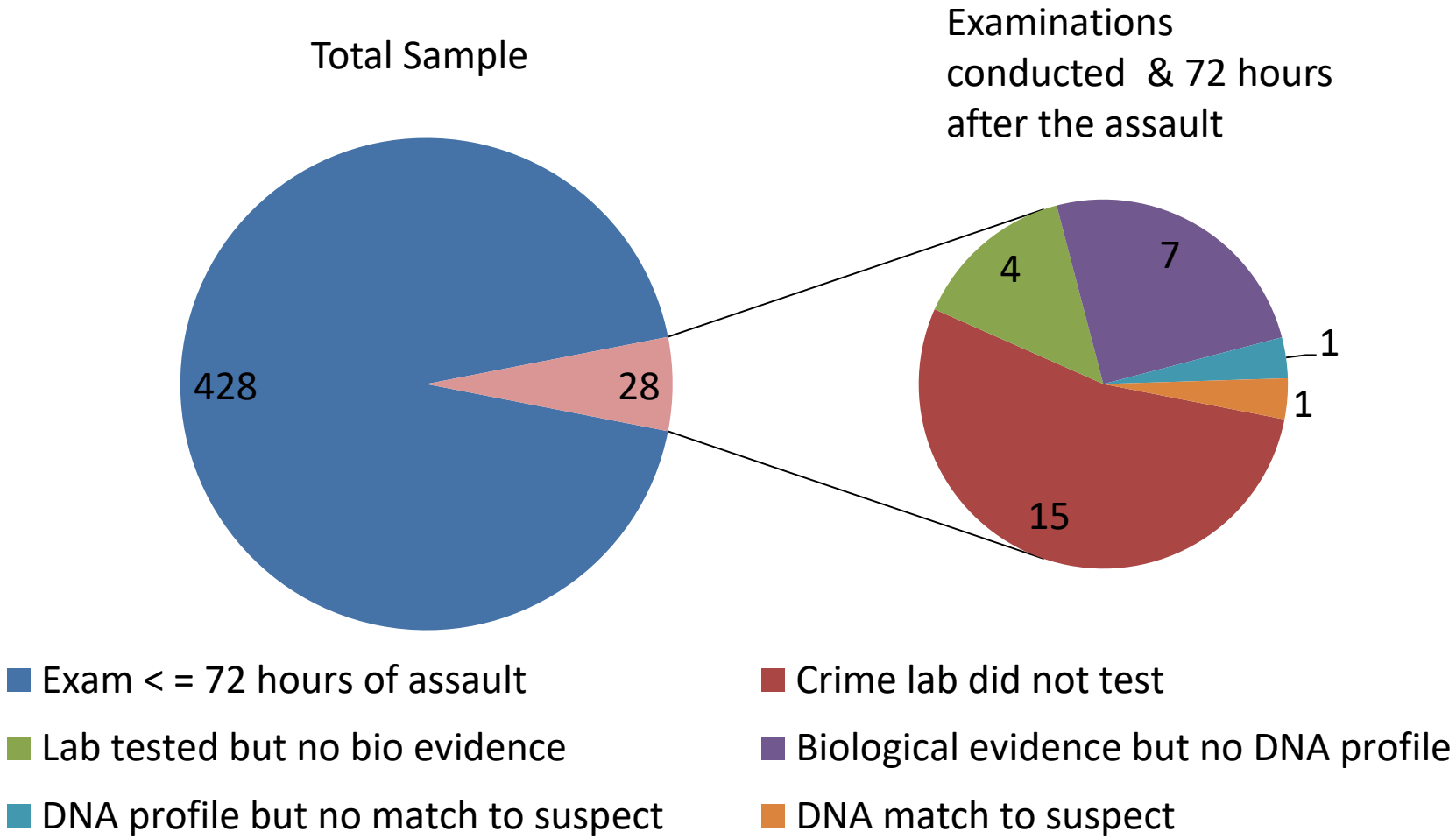
Hours Since Assault	n tested by lab	f bio evidence	%
0 thru 6	133	117	88.0%
7 thru 12	69	61	88.4%
13 thru 18	44	38	86.4%
19 thru 24	28	24	85.7%
25 thru 48	41	34	82.9&
49 thru 72	15	12	80.0%
73 thru 263	13	9	69.2%

DNA profiles generated by time since assault

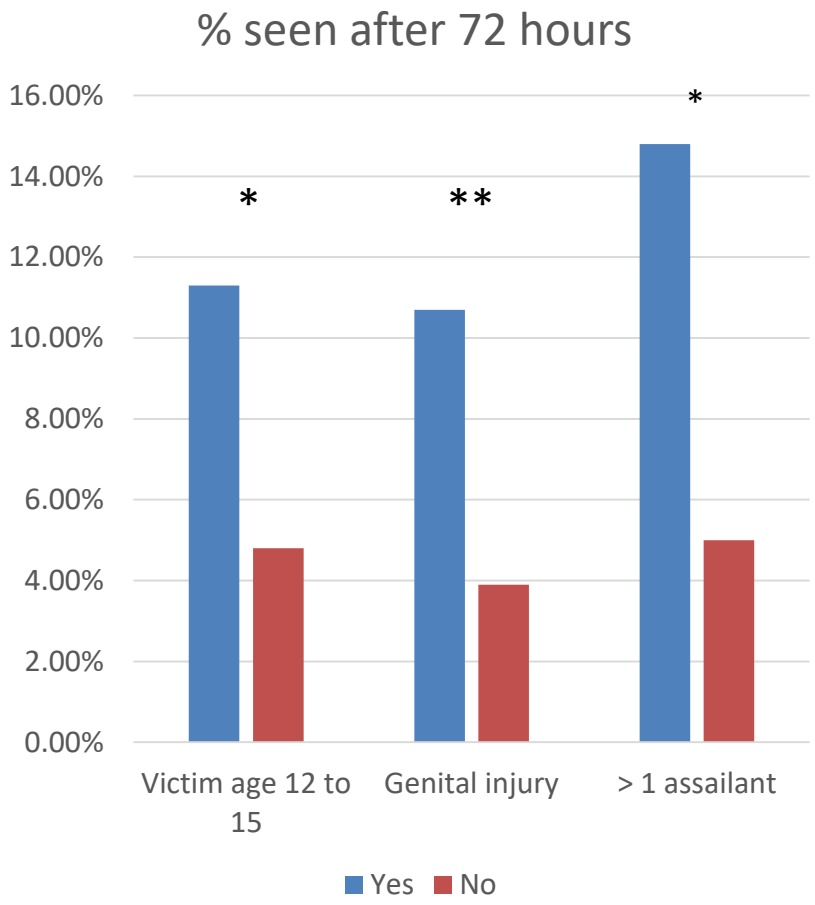
Hours Since Assault	n tested by lab	f DNA profile	%
0 thru 6	127	48	27.8%
7 thru 12	63	25	39.7&
13 thru 18	42	20	47.6%
19 thru 24	28	10	35.7%
25 thru 48	38	6	15.8%
49 thru 72	15	4	26.7%
73 thru 263	13	2	15.4%

How many > 72 hour cases had DNA testing?

Biological evidence 72 hours after assault



Do cases with exams > 72 hours differ from cases examined earlier?



- 3 variables related to whether cases are seen > 72 hrs
- Other variables not significant: victim race, stranger assailant, penetration, non-genital injury
- However, no third variables significantly affected % of cases with biological evidence after 72 hours
- Limitation: small cell sizes

* $p < .05$, ** $p < .01$

Conclusions

- Biological and DNA evidence can be available after 72 hours, though rates may be low
- Hard to determine rate of evidence after 72 hours
  - Not all kits are tested
  - Not all tested kits receive DNA testing
  - Kits after 72 hours are less likely to be tested
    - This could bias rates up if kits are tested more selectively after 72 hours
- Rate of evidence after 72 hours not a function of type of case
- Dedicated research on this topic is needed
  - Costs and benefits should be studied
- Does belief in 72 hour rule affect whether kits are tested?

References

Cross, T.P., Alderden, M.A., Wagner, A., Sampson, L., Peters, B., Spencer, M. & Lounsbury, K. (2014). *Forensic evidence and criminal justice outcomes in a statewide sample of sexual assault cases*. Final Report. Award number 2011-WG-BX-0005, National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. Retrieved from https://www.ncjrs.gov/pdffiles1/nij/grants/248254.pdf

American Association of Pediatrics (1994) Sexual assault and the adolescent. *Pediatrics, 94*, 781-765.

Contact info

Ted Cross

tpcross@illinois.edu

781-640-4532

See our Center's webpage on sexual abuse and assault:

http://cfrc.illinois.edu/publications.php?dim=topic#SexualAbuseandAssault