

Title:

Sexual Assault Evidence Kits: Interprofessional Research on Submission Rates and Implications on Practice

Julie Valentine, PhD

College of Nursing, Brigham Young University, Provo, UT, USA

Session Title:

Nursing Research on Sexual Assault: Utilizing Data to Increase Knowledge and Improve Practice

Slot:

J 11: Saturday, 29 July 2017: 1:30 PM-2:45 PM

Scheduled Time:

2:10 PM

Keywords:

criminal justice system, interprofessional research and sexual assault kits

References:

Fallik, S., & Wells, W. (2015). Testing Previously Unsubmitted Sexual Assault Kits: What Are the Investigative Results? *Criminal Justice Policy Review*, 26(6), 598-619.

Patterson, D., & Campbell, R. (2012). The problem of untested sexual assault kits: Why are some kits never submitted to a crime laboratory? *Journal of Interpersonal Violence*, 27(11): 2259-2275.

Ritter, (2011). The road ahead: Unanalyzed evidence in sexual assault cases. National Institute of Justice Special Report. Retrieved from <https://www.ncjrs.gov/pdffiles1/nij/233279.pdf>

Sacco, L.N., & James, N. (2015). Backlog of sexual assault evidence: In brief. Congressional Research Service. Retrieved from <https://www.fas.org/sgp/crs/misc/R44237.pdf>

Shaw, J., & R. Campbell, R. (2013). Predicting sexual assault kit submission among adolescent rape cases treated in forensic nurse examiner programs. *Journal of Interpersonal Violence*, 28(18), 3400-3417.

Strom, K. J., & Hickman, M.J. (2010). Unanalyzed evidence in law-enforcement agencies.

Criminology & Public Policy 9(2): 381-404.

Telsavaara, T. V. T., & Arrigo, B.A. (2006). DNA evidence in rape cases and the Debbie Smith

Act: Forensic practice and criminal justice implications. *International Journal of*

Offender Therapy and Comparative Criminology, 50(5), 487-505.

Abstract Summary:

This presentation shares findings from an interprofessional research study linking forensic nurses and scientists in exploring the submission rates of sexual assault kits and their predicting variables, and the impact of these findings on a Western state in the United States.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Describe sexual assault kit submission rates and their predicting variables from a large-scale, retrospective study.	A. Briefly share background information on the problem of unsubmitted sexual assault kits in the United States. B. Provide an overview of the study purpose, design and methodology of evaluating sexual assault kit submission rates and predicting variables. C. Discuss the findings of sexual assault kit submission rates and the predicting variables of those variables found to be statistically significant.
Discuss the community response to the interprofessional study findings in making improvements to issues related to sexual assault to promote safer and healthier communities.	A. Share the community response to the study findings from this interprofessional study linking forensic nurses and scientists. B. Open a discussion on how learning this information on sexual assault kits submission rates and predicting variables can impact other communities. C. Challenge participants to consider research endeavors linking different professions, outside of health care providers, to benefit the safety and health of communities.

Abstract Text:**Purpose:**

The purpose of this presentation is to share findings from an interprofessional, retrospective study evaluating the submission rates of 1,874 sexual assault kits from multiple sites in a Western state in the United States, explore the predicting variables associated with sexual assault kit submissions, and discuss the implications of these findings on the community and state. Over the past few years, numerous reports have been published in the United States regarding large amounts of unsubmitted sexual assault kits found in LE custody indicating that many SAKs were not submitted to crime laboratories for analysis (Telsavaara & Arrigo, 2006; Strom & Hickman, 2010; Sacco & James, 2015). Yet, the discovery of unsubmitted sexual assault kits does not provide information on the actual submission rates of sexual assault kits and their predicting variables. This study focused on sexual assault kit submissions in Utah, a Western state in the United States, in locations with established SANE programs. As in most areas of the United States, the submission of sexual assault kits to the state crime laboratory for analysis has been up to the discretion of law enforcement.

Few studies have been completed on exploring the submission rates of sexual assault kits. The National Institute of Justice reported that the number of untested sexual assault kits throughout the United States is unknown, as most jurisdictions do not track submission rates of collected sexual assault kits or the amount of sexual assault kits in evidence storage facilities (Ritter, 2011). The studies that have been completed indicate that sexual assault kit submission rates are highly variable and based upon the jurisdiction in which the rape occurred (Fallik & Wells, 2015). In one study examining the submission rates of sexual assault kits collected at a sexual assault nurse examiner program in a large Midwestern county, it was found that 58.6% of SAKs were submitted to the crime laboratory for analysis (Patterson & Campbell, 2012). In another study focused on the submission rates of sexual assault kits collected at a sexual assault nurse examiner program from adolescent victims in two Midwestern communities, 59.3% were submitted to the crime laboratory (Shaw & Campbell, 2013).

In the limited studies exploring the predicting variables related to sexual assault kit submissions, a consensus of predicting variables has not been determined. In one study it was found that sexual assault kits were more likely to be submitted if the victim had physical injuries and the law enforcement agencies had high levels of engagement with the forensic nursing program (Patterson & Campbell, 2012). Another study on adolescent victims found that sexual assault kits from younger teens (13-15 years old), non-white victims, and victims of highly assaultive rapes were more likely to be submitted (Shaw & Campbell, 2013). This study adds valuable knowledge to understanding decision-making practices related to sexual assault kit submissions, a topic area with minimal research.

Methods:

Data was entered by from 1,874 sexual assault examination forms completed by forensic medical/nurse examiners into SPSS 20 statistical database. Approximately 200 variables were coded for each sexual assault case. As this was an interprofessional research study, data was linked from the sexual assault examination forms with data from the state crime laboratory. Forensic scientists from the crime laboratory received information on all fully collected SAKs including victims' names, date of assault, date of SAK collection, and law enforcement agency and case number to track SAKs and determine if submitted to crime laboratory. Reliability of the data entry was evaluated by recoding 10% of the examination forms, resulting in a final kappa across all variables of .955. Descriptive data analysis was completed on all variables. Generalized estimating equation logistic regression analysis was completed to evaluate legal and extralegal variables associated with SAK submission.

Results:

It was found that within a year of the assault only 22.8% of sexual assault kits were submitted by law enforcement to the state crime laboratory for analysis. An additional 15.4% were submitted in late 2014 through 2015 following community and media pressure for law enforcement to submit SAKs in storage. Sixty-two percent of SAKs were found not submitted; therefore, they remain in law enforcement custody, have recently been submitted, or have been destroyed. The site or jurisdiction of the sexual assault was found to be the primary factor affecting submission of sexual assault kits.

Statistical analysis of generalized estimating equation logistic regression controlling for site variability examined legal and extralegal characteristics statistically significant in predicting if SAKs submitted or not. Variables that increased odds of SAK submissions: male victims (46% more likely) and suspected drug-facilitated assaults (25% more likely). Variables that decreased odds of SAK submissions: victim used drugs prior to assault (22% less likely), victim bathed or showered following rape (17% less likely), victim with physical or mental impairment (17% less likely), and victim knew the suspect (16% less likely).

The results from this interprofessional study on the community and state include media attention, community discussions on improving response to sexual assault, increased submission rates of sexual assault kits by law enforcement, and increased reporting by victims for sexual assault forensic medical examinations. The study findings also lead to significant policy and statewide legislative changes, including legislation mandating submission and testing of all sexual assault kits.

Conclusion:

SAKs not submitted by law enforcement to the state crime laboratory for analysis indicates justice denied for victims of rape. The findings represent an inequity of justice, as there is great variability between SAK submission rates within the study sites. For example, in adjacent counties (Site B and C) the SAK submission rate within a year of assault for Site B was 4.1%, while Site C was 37.5%; submission rate from Site C is almost ten times the submission rate from Site B. This extreme variability of SAK submission rates suggests that subjectivity and bias within law enforcement agencies largely determines if SAKs are submitted or not.

Most jurisdictions do not track their SAKs from evidence collection through DNA analysis. Studies in other areas of the United States of similar methodology to this study have found SAK submission rates of approximately 60%. This study found SAK submission rate of only 22.8% within a year of the assault, almost 1/3 the submission rates in other studies.

The only legal characteristic found to predict SAK submissions was if the rape was a suspected drug-facilitated assault. The finding that SAKs collected from male victims were 46% more likely to be submitted indicates gender bias within law enforcement. The other variables predicting SAK submissions relate to characteristics of the victim or relationship between victim and suspect, not crime factors.

The findings from this interprofessional study linking forensic nurses and scientists generated widespread attention to issues related to sexual assault and sexual assault kits resulting in statewide policy changes. The multiple community forums and media stories triggered a community outcry to make statewide improvements in the response to victims of sexual assault. The overarching goal is that as the state improves in its response to sexual assault, communities will become safer and healthier with decreased incidences of sexual assault.