



E74 Testing Sexual Assault Kits Supports the Principle of “Justice For All”

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Learning Overview: After attending this presentation, attendees will understand research data on Sexual Assault Kit (SAK) submission rates and DNA analysis findings that supports the testing of all SAKs to establish justice.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by strengthening the justification to test all SAKs with research data from a large, retrospective study.

In most areas of the United States, law enforcement agencies have been the decision-makers regarding the submission of SAKs to crime laboratories for analysis. SAKs not submitted have either been maintained in law enforcement storage or destroyed. Recently, law enforcement agencies have been encouraged to submit previously unsubmitted SAKs for DNA analysis. Victim advocacy groups have encouraged the submission and testing of all SAKs to ensure justice for victims.

This presentation provides research findings from a large, retrospective study on the submission rates of 4,038 SAKs (collected from 2010 to 2016) and subsequent DNA analysis findings. Predictors of SAK submission rates through Generalized Estimating Equation (GEE) logistic regression modeling will be shared. Research data on the apparent subjectivity in the decision-making process to submit SAKs for testing will be discussed. Short Tandem Repeat (STR) and STRs found on the male-specific Y-chromosome (Y-STR) DNA analysis findings of SAKs submitted within 1 month, 1–12 months, and 1 year or more from the date of assault and evidence collection will be provided. No significant differences were found between DNA analysis findings on SAKs submitted within 1 month, 1-12 months, and 1 year or more from the date of assault and evidence collection. This finding supports the submission and testing of all SAKs as those SAKs submitted soon after the crime had similar DNA analysis findings as those kits previously in law enforcement storage. Although DNA analysis findings from SAKs were similar between jurisdictions, the determination of DNA profiles as Combined DNA Index system (CODIS) -eligible profiles was found to have increased variability.

This retrospective study also explored the identification of sexual assault cases in which the DNA analysis findings excluded the identified suspect. It was found that approximately 2% of tested SAKs had DNA analysis findings that excluded the suspect, therefore also establishing justice for the accused. Testing SAKs is often touted as establishing justice for victims, but findings from this study also indicate testing SAKs is necessary to establish justice for both victims and the accused.

At the conclusion of this presentation, attendees will understand research data which supports the submission and testing of all sexual assault kits to support the principle of “Justice For All.”

Sexual Assault Kits, DNA, Justice