Innovative Methods for Improving Healthcare Access and Scientific Rigor through Collaborations with Child Protection Agencies

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Abstract text
Objectives

This symposium involves four presentations cutting across multiple conference themes to report needed methodological advancements for the child maltreatment population that are translating into improved healthcare access for underserved populations and enhanced rigor in scientific methods and results.

Methods and Results

Presentations will describe: 1) integration of child protective services and electronic medical records to sustain healthcare access for foster care youth, 2) successful implementation of evidence-based forensic sexual abuse examinations in rural communities; 3) methods for tracking internet use, exposure to pornography, and risk for sexual exploitation; and 4) enhanced detection of unobserved maltreatment in control conditions used to research child maltreatment effects.

Dr. Beal will demonstrate changes in healthcare quality and access for a cohort of 200 young people in out-of-home care by implementing an automated, shared, and linked child welfare and health records data platform for caseworkers and healthcare providers. The data sharing platform, IDENTITY, updates information every 24 hours and makes limited health and child welfare information available to caseworkers and healthcare providers within 24 hours of a child entering protective custody. Flags in the electronic health record alert healthcare providers and care coordinators to a child's placement into out-of-home care. The platform has been available since 2019, and preliminary evaluation data indicated that IDENTITY increased preventative healthcare use and saved staff time in collecting and reviewing children's records. Recruitment for a new cohort of 200 young people newly entering out-of-home care was completed in January 2024, with quarterly surveys administered to young people ages 10 and older and caregivers of all enrolled youth (ages 0-17 years) to assess healthcare access, experiences with care coordination, knowledge of health needs, timing of enrollment in school, and other quality of life indicators over the first two years of a child's first entry into out-of-home care. Dr. Beal will present findings from this cohort and how healthcare utilization has improved since IDENTITY implementation.

Dr. Miyamoto will review the novel, Sexual Assault Forensic Examination Telehealth (SAFE-T) model. The SAFE-T model is enhancing equitable access to quality sexual abuse care in both rural and underserved communities through innovative telehealth technology that delivers evidence-based training of on-site nurses and the delivery of expert sexual abuse care, quality assurance, mentoring, and proper evidence collection 24/7. Studies on the SAFE-T model show evidence of increasing geographical access to care, increased workforce stability via nurse confidence and retention, and positive impacts on patient experience and improved quality of care. SAFE-T recently launched a multi-site, roll-out implementation study to further evaluate the impact of the SAFE-T model on adolescent care quality, healthcare and advocacy service utilization, health and well-being, and prosecutorial decision-making. Dr. Miyamoto will present the use of innovative approaches such as e-consent and remote data capture to facilitate research and data collection in remote communities. Methods for understanding the impact of expert care on adolescent health and well-being outcomes, including novel approaches to compiling control groups, community-engaged partnership to access health care, community advocacy and mental health resource utilization, and unique approaches to understand judicial decision-making related to prosecution of crimes will be presented.

Dr. Noll will present findings from a multi-wave, prospective cohort study of 460 females aged 12-16 years where innovative methods objectively recorded 4 weeks of Internet activity and quantified that activity into common use categories (entertainment, social media, gaming, pornography, and education) via open-sourced databases. YouTube and Netflix keywords were quantified for adult content (illicit drug use, sexual content, and violence) and a sophisticated machine-learning algorithm was developed to ensure that quantified Internet activity was limited to that of study enrollees. Females and caregivers were also interviewed in-person to assess psychosocial risk, protective factors, and victimization histories both prior to laptop assignments and then again annually for follow-up assessments. The sample included 156 females with confirmed child sexual abuse (CSA) via protective service records and 304 matched comparisons. Adolescent females exposed to CSA spent significantly more time engaging in pornography than comparisons and were at increased odds of being cyberbullied and being lured into offline meetings with strangers two years later. The methods used in this study significantly advance the rigor of Internet research and provide unique insight into vulnerabilities that signal trauma-informed and AI solutions to Internet safety for the child maltreatment population.

Dr. Shenk will highlight recent advancements in child maltreatment assessment that corrects contamination bias in national and international research. Contamination occurs when people who have experienced maltreatment are erroneously classified into a control condition. Contamination affects 15%-65% of individuals in existing control conditions and, when unaddressed, weakens the statistical significance and magnitude of child maltreatment effects. Dr. Shenk will present results from two studies estimating the causal effects of child maltreatment on behavior problems before and after correcting contamination using a novel, multi-method, and time-varying screening of child maltreatment. The first is a prospective cohort study (N=1354) that combined official case records and self-report measurements to generate causal effects using synthetic control methods. The second is a national probability sample (N=5872) of children in the child welfare system where propensity score methods generated maltreatment effects after combining official case records and caregiver reports. In both studies, correction of contamination bias resulted in statistically significant causal effects, in the expected directions, with increased effect magnitudes for all outcomes. Ways to implement multiple-method screening of child maltreatment in future research will be discussed.

Conclusions

Results speak to how innovative methods applied across the research and practice continuum are reaching underserved populations, promoting healthcare access and equity, and elevating scientific rigor.

Takeaway Points:

- Child protective service and healthcare records can be integrated safely, efficiently, and effectively to improve healthcare access for foster care youth
- Forensic, sexual abuse telehealth evaluations enhance access to high-quality care with rural and underserved populations
- Sexual abuse is associated with greater exposure to sexual content online and the risk for sexual exploitation offline
- Enhanced detection of contamination improves causal estimates of child maltreatment effects across diverse health outcomes