

Addressing the Outliers: Urging Consensus in Child Sexual Abuse Evaluations

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Abstract

Attached is a commentary written by the four nurse practitioners at Our Kids Center in Nashville, Tennessee. It was written as a response to and in support of “Interpretation of Medical Findings in Suspected Child Sexual Abuse: An Update for 2023” authored by Kellogg, Farst, and Adams and published in September 2023. It further highlights the need for consistency in practice and evidence-based interpretation of findings in child sexual abuse forensic medical exams. Our Kids Center is an outpatient clinic of Nashville General Hospital and affiliated with Monroe Carell Jr. Children’s Hospital at Vanderbilt. The nurse practitioners are adjunct faculty at the Vanderbilt University School of Nursing. In the 37+ years of providing care to children with concerns of sexual abuse, Our Kids Center has evaluated over 31,000 children and serves approximately 47 counties across middle Tennessee.

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An updated version of the “Interpretation of Medical Findings in Suspected Child Sexual Abuse” was published in September 2023 (Kellogg et al., 2023) along with a supporting editorial by Starling (2023). Since its inception in 1992, it has been an ever-evolving, comprehensive review of research related to providing medical evaluations to children for whom there are concerns of sexual abuse. It has been published eight times over the course of 30 years by specialists in child abuse pediatrics. With each iteration, new research and practice recommendations are added to reflect scientific updates and improve trauma-informed care. This publication has been, and continues to be, an evidence-based guide for clinicians in the field of child maltreatment, highlighting recommendations for interpretation of medical findings and the testing, treatment, and interpretation of sexually transmitted infections (STIs). Despite these evidence-based recommendations, providers in this field repeatedly practice outside of these guidelines.

Problematic Practice

With the most recent update, there is an evident focus on the variation in rates of exam findings depending on examiner discipline, exam techniques, and interpretation criteria used. In the latest update, studies conducted over the last 20 years were reviewed and rates of anogenital injury for each were included (Kellogg et al., 2023). These studies were categorized according to whether they adhered to the “2018 Interpretation of Medical Findings” criteria. The prevalence of injury in acute exams varied widely (from 14.2% to 85%) and were higher when providers included findings such as redness, edema/swelling, and positive uptake of toluidine blue, which are not specific to or diagnostic of trauma. The rate of positive findings was lower when the exams were conducted by child abuse pediatricians or child abuse specialists (Kellogg et al., 2023).

A similar difference in accurately identifying and defining findings was previously observed in a 2012 survey conducted by Joyce Adams and colleagues. The study examined providers who evaluate children with concerns of sexual abuse and their ability to interpret normal and

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abnormal exam findings. It sought to determine if and how education, experience, participation in peer review, and remaining up to date with child abuse literature influenced providers' interpretation of exams. General pediatricians, sexual assault nurse examiners (SANEs), and advanced practiced nurses who examined fewer than five children per month scored significantly lower than child abuse experts. The paper went on to say that providers who consistently perform multiple exams, stay up to date on child abuse research, and participate in expert peer review are more likely to correctly identify both normal and concerning findings on anogenital exams (Adams et al., 2012). Although access to care is paramount for children who have experienced sexual abuse, the goal of having a provider in every community, virtually ensuring a low patient volume, is not trauma informed. We must not place convenience over experience and expertise.

In our experience, there is a wide variation in the quality and accuracy of the content used in some child sexual abuse/assault training. There is content (assessment tools, exam techniques, and interpretation criteria) taught in some pediatric SANE courses that is outdated and unsupported by research. One such example is the Hymen Estrogen Response Scale (HERS), which is promoted as a useful tool to assess changes in the hymen and genital structures with pubertal development (Alexander et al., 2017). This tool is concerning given several of the variables such as "sensitivity to touch" and "distensibility" used in the scale to assess that estrogen's effect on the hymen would be painful and invasive if used in prepubertal females. Another such tool is the TEARS criteria (tears, ecchymoses, abrasions, redness or swelling), which includes non-specific diagnostic criteria, redness, and swelling as definitive for trauma (Baker & Sommers, 2008; Rossman et al., 2004; Rossman et al., 2021).

In the preface of *Child Sexual Abuse Assessment: SANE/SAFE Forensic Learning Series*, the authors stress that to provide the best care for their patients, one "must regularly supplement their base of knowledge and experience with continuing

education, training, and review of current best practice in their field" (Speck et al., 2018, p. ix). After such a forward-facing call to evidence-based practice in the preface, there are several recommendations that are not standard of care and are either unnecessary and invasive to children or long outdated. The suggestion that the antiquated Woods' lamp be used as an alternative light source during acute exams is incorrect given that its specific light frequency has been shown to be ineffective (Eldredge et al., 2021). In the same course material, it is recommended to type anogenital warts in children (Speck et al., 2018, p. 29). Given warts are extremely common in children and both cutaneous and mucosal HPV subtypes can be found in the anal or genital region, wart subtyping is not helpful in differentiating sexual and non-sexual transmission (Kellogg et al., 2023) and is an unnecessary and painful procedure for children. There has always been variation in the training, qualifications, and practice of providers in this field. While the background of providers can remain diverse, there is a great need to come together on how we define injury/trauma and the research we use to support these definitions. Over the past three decades, there have been papers that are "outliers" and take an opposing view to what is currently held as scientific fact, such as the article by Hariton (2012) arguing that a child cannot be penetrated and have a normal genital exam or the 2007 paper by Goodyear-Smith opining that gonorrhea can be frequently transmitted in a nonsexual manner.

There are also publications that are seemingly helpful to new child abuse providers but are fraught with highly concerning recommendations. In *Child Abuse: Quick Reference* published in 2017, there are recommendations and statements that are not only inaccurate but also ethically questionable and break from empirically supported practice. These include recommendations such as using a small pediatric speculum on "peripubertal" girls, if under conscious sedation, to assess their transverse hymenal diameter to determine if a foreign body, such as an erect male penis, could fit; using a gloved finger to palpate a hymenal transection for scar

tissue; stating definitively that a burning sensation while passing stool following anal penetration is diagnostic of trauma; and that enlargement of the hymenal opening is concerning for residual trauma (Alexander et al., 2017).

Many of these “findings” have been repeatedly studied for the past 30 years. Providers in the field now know that many findings previously thought to be the result of trauma are nonspecific or normal variants of anogenital anatomy such as erythema, venous congestion, or the size and shape of the hymenal orifice (Berenson, 1998; Berenson et al., 2002; Heger et al., 2002[b] McCann et al., 1989; McCann et al., 1990; Myhre et al., 2001; Myhre et al., 2003). It appears that in recent years, there is a much greater divergence in child sexual abuse literature, best practices, exam recommendations, and findings. We have seen this “alternative” side of child sexual abuse literature passing for quality research seep into classrooms, exam rooms, and ultimately court rooms.

Our Recommendations

If providers are performing forensic medical exams in relationship with a Child Advocacy Center (CAC), there are basic medical standards that must be met for the CAC to be or remain accredited. In section 5 of the 2023 National Children’s Alliance (NCA) standards, it states that providers must show documentation of their participation in continuous quality improvement activities and that all exams in which there are abnormal findings or findings “diagnostic” of trauma must be reviewed by an “advanced medical consultant.” Furthermore, it stresses that the accuracy of the exam is critical not only for the safety and well-being of the child but also for the integrity of the investigative and judicial processes (National Children’s Alliance, 2023).

We know that the history provided by the child is the greatest diagnostic clue that he or she has experienced sexual abuse. We know that most children delay in reporting; that most offenders are known and trusted by the family, and that evidence and injury are rare (Adams et al., 1994; Gallion



et al., 2016; Gewirtz-Meydan & Finkelhor, 2020; Heger et al., 2002[a] Heppenstall-Heger et al., 2003; Hornor et al., 2022; McCann, 1998; Smith et al., 2017; Thackeray et al., 2011). We also know that the more exams you perform the more accurate your diagnoses will be (Adams et al., 2012; Gavrill et al., 2012), which is likely true of all professions, is it not? If so, why are expert providers in this field not demanding that training in forensic medical evaluations, including exam techniques, high quality digital imaging or video, STI testing, and the correct interpretation of any findings, be accomplished using evidence-based and peer-reviewed literature? We must build a better infrastructure for accountability to ensure best practices.

Beyond training, if a provider is unable to capture high-quality digital imaging on exam *and* have expert review on all cases, he or she is doing a disservice to the victims served in this field by continuing to practice without these supports. Research indicates that one of the most important factors in diagnostic accuracy over time is consistent expert review (Adams et al., 2012). The *National Protocol for Sexual Abuse Medical Forensic Examinations: Pediatric* mirrors these recommendations for evidence-based training; consistent peer review; mentoring by experts in the field; and ongoing education (U.S. Department of Justice [USDOJ], 2016). Without upholding these crucial components of our field, providers risk overcalling exam findings (Adams et al.,

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2012; Campbell et al., 2010; Gavril et al., 2012; USDOJ, 2016). These false positives can lead to a miscarriage of justice and impact the natural resiliency of children and families.

Conclusion

We want to prevent a new generation of child sexual abuse providers from being trained inaccurately and practicing ineffectively. Despite their own good intentions, providers may misinterpret medical findings and negatively affect the outcomes for victims—emotionally, physically, and judicially—for years to come. As we move forward, it is incumbent upon both new and seasoned providers

alike to adhere to evidence-based practice and hold each other accountable, regardless of education, years in the field, or number of exams performed. As Starling suggests in her editorial, widespread adoption of the scientifically rigorous Adams criteria could reduce error and improve diagnostic accuracy (Starling, 2023). We must all be on the same page, or it will be the families and children we serve that will pay the price. As the 2023 Update so eloquently stated, providers, regardless of discipline or experience, must work together to reach consensus on what is interpreted as anogenital trauma and agree to adhere to the research that underpins these findings (Kellogg et al., 2023). Now is the time.

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