Out of the Woods: A Case for Using Anatomical Diagrams in Forensic Interviews

by Amy Russell, MSED, NCC

Using Anatomical Diagrams

Many people have expressed concerns with utilizing anatomical diagrams in forensic interviews, citing issues of suggestibility in the interview process, traumatization of the child witness, or lack of evidence supporting the use of anatomical diagrams to enhance children’s reports. This article clarifies some of the purposes of utilizing anatomical diagrams in a forensic interview for child abuse investigators and prosecutors and demonstrates the efficacy of anatomical diagrams in facilitating communication with children.

Purpose for Using Anatomical Diagrams

A forensic interview is conducted when there is suspicion that a child has been a victim of sexual or physical abuse, or when a child may have witnessed violent crime. The purpose of an interview is to determine what, if anything, a child may have experienced, with interviewers attempting to elicit a complete, accurate and legally defensible report from the child.6

Several interview protocols and child abuse advocates endorse the use of anatomical diagrams, body outlines, body maps or touch surveys, particularly with young children, to arrive at a common language for body parts, to evaluate a child’s sexual abuse experience or to explore a child’s willingness and ability to communicate about touch.7 One reason to sanction the use of anatomical diagrams during a forensic interview is the importance of reflecting and utilizing the terminology the child himself uses.8 This common language establishes comfort for the child, reduces issues of suggestibility in the interview and prevents interviewer confusion or misperception of the child’s report.9 The value of encouraging the child to use his or her own words is underscored by the U.S. Supreme Court decision Idaho v. Wright.10 In this decision, the Court emphasized that one measure of reliability of a child’s statement is the “use of terminology unexpected of a child of similar age.”11 When interviewers do not have a method of determining and subsequently utilizing the child’s own terminology for body parts and language to describe the alleged incident, they run the risk of suggesting information to the child and diluting the reliability of the child’s report.12 Using anatomical diagrams to name body parts in the pre-disclosure phase of the interview also reinforces to the child the acceptability of his or her words or language.13

The two most critical elements for effective utilization of anatomical diagrams are that the interviewer understand, and be able to articulate, the purposes for using the diagrams with children.14 Articulated uses of anatomical diagrams with a child include identifying body parts, establishing a child’s ability to differentiate between genders, identifying the location on the body where the alleged touching occurred, and clarifying the child’s verbal report.15 Full understanding of the use of anatomical diagrams incorporates an understanding of appropriate timing for introducing diagrams. While some child abuse professionals recommend that the interviewer should introduce diagrams after a child has made a disclosure of abuse,16 this practice discounts the value of establishing a common language for body parts prior to a child’s report. Doing so grants the child permission to use language that may be considered inappropriate in casual conversation17 but may be necessary for the child to describe his or her experiences. The process of arriving at a common language is also a continuation of the evaluation of the child’s developmental level and ability to communicate with the interviewer, a necessary practice during the initial stages of a forensic interview.18 When a child names the body parts with the interviewer, the interviewer can repeat the names to the child and write the names provided by the child on the diagram.19 This process enables the child to correct the interviewer if necessary, reassures the child that the words she uses in the interview are acceptable or appropriate in this setting, and enables multidisciplinary team members observing the interview to more clearly hear a child’s language who may be speaking softly.20

Another advantage of the use of anatomical diagrams prior to introduction of the topic of concern is that it may lead to a spontaneous disclosure of sexual abuse from the child.21 While this impulsive declaration is not a primary purpose for using anatomical diagrams, nor is it the goal of the anatomy identification stage of an interview, a child’s spontaneous statement of abuse is generally considered more reliable than one elicited through direct and extensive questioning.22 However, as with any other interview aid or prop utilized in a forensic interview, anatomical diagrams, in and of themselves (and in the absence of verbal elaboration from the child being interviewed) are not diagnostic of abuse.23 The interviewer should appreciate the purpose of the initial introduction of the anatomical diagrams, to arrive at a common language for body parts, and must seek additional verbal reports of age-appropriate details to support any determination of abuse.24 For example, if a child reports that she has seen a penis when she names the penis on the anatomical diagram, the interviewer should inquire, in an age-appropriate manner, as to whose penis the child has seen, where and when the child saw it, and under what circumstances the child saw the penis.25

Developmental Capabilities of the Child

Children as young as two or three years of age understand that a picture can be an intentional symbol of another object,26 and three- and four-year-old children can recognize drawings as representations of themselves.27 Furthermore, when interviewers tell three- and four-year-olds that drawings help communicate information to adults, this practice enhances the drawing’s symbolic function for the children.28 Children must achieve “dual representation” of objects to not only perceive them as objects on their own, but as symbols of something else as well.29 This understanding of symbolic representation of drawings for objects is critical when people attempt to share information with each other in the absence of direct experience, particularly when discussing complex topics such as sexual activity with children who may not have the linguistic ability or the comfort level to verbally describe their victimizations.30

Research has found pictures are less problematic for very young children to achieve dual representation than other three-dimensional objects because pictures are less salient and less interesting than corporeal objects which can be held;31 however, research demonstrates that the symbolic object must have physical similarity to the represented object to enhance the performance of very young children with the symbolic object.32 Therefore, effective utilization of anatomical diagrams in a forensic interview necessitates the diagrams employed by interviewers be similar enough to a child’s body, and the body parts represented therein, to allow the child to see the diagrams as symbolic of the child himself. Anatomical diagrams utilized in the pre-disclosure stage should be representative of the age and ethnicity of child and should not be reflective of the age or ethnicity of alleged offender.33 At this point in the interview, the child has not yet disclosed or identified a perpetrator, and the interviewer should be careful not to make assumptions or maintain preconceived ideas of what the child may report later in the interview based on the initial allegation of abuse.34

Further, it has been well established that young children are concrete
In light of this, the use of stick figures, gingerbread cutouts, mere body outlines or diagrams of clothed children are not as effective as unclothed outline drawings of children with representative genitalia when naming parts of the body with a child in an interview. Finally, interviewers may effectively utilize anatomical diagrams with adolescents after they make a disclosure for clarification purposes with adequate explanation to the youth that the purpose for introducing the diagrams is to allow interviewers better understanding of the adolescents’ statements.

### Research & Recommendations on Anatomical Diagrams

The majority of the research conducted on the efficacy of anatomical diagrams has examined their use as a post-disclosure technique for clarification purposes or to supplement disclosures of abuse, instead of the primary purpose discussed—as a pre-disclosure tool to arrive at common names for body parts. When utilized as a post-disclosure technique to elicit additional information from children alleging sexual abuse, some research suggests human figure drawing may be most useful with children ages four to seven, although beneficial with adolescents, as well. After exhaustive use of verbal questioning techniques, additional information may still be elicited from children: as much as 27 percent of forensically-relevant details from an interview were elucidated following the introduction of human figure drawings. However, with such information comes a price. Researchers warn the utilization of drawings to elicit additional information is generally accompanied by more direct, or even suggestive, questioning of children, possibly reducing the accuracy of the information obtained. Interviewers utilizing anatomical diagrams as a post-disclosure prompt for recognition memory of allegedly abusive events are cautioned to use appropriate question techniques that follow direct, focused questions with indirect, free-recall questions.

Another study suggests nude human figure drawings do not assist five-to-seven-year-old children with disclosures when introduced in an interview post-disclosure, irrespective of whether open questions or instructions to the children accompanied the diagrams. However, these results also illustrate the presentation of unclothed human figure drawings to children are not inherently suggestive in the interview process, as they elicited no more forensically relevant information from the child than did questioning in the absence of drawings.

An additional study evaluating the use of clothed body maps with five- and six-year-old children found less than half of the children interviewed with diagrams reported they had received touches. As further evidence that body diagrams are not overly suggestive, and that children are more likely to under-report abuse rather than over-report it, these errors of omission were obtained through the use of misleading questions. The researchers did indicate several children in this study falsely reported touches to their genitalia and their breasts; however, there was no indication in the findings that these children were asked to report more detail about these alleged sexual touches, or whether they maintained these reports if asked for more detail. Furthermore, it is unclear where, specifically, the children reported receiving the touches on their bodies, as the diagrams were clothed. As discussed previously, when a child reports sexual contact through the use of anatomical diagrams and other interview props, interviewers should then ask the child to provide additional age-appropriate verbal details regarding her experiences to obtain a more reliable statement.

As is sometimes the case with forensic interviewing protocols, best practices and policies, interview recommendations can be perceived as or develop into an inflexible formula, without consideration of or adaptation for the individual needs of the child or modifications or adjustments based on current research. The recommendations found in forensic interview guidelines and best practices advocating for the use of diagrams without genitalia are contraindicated by research finding that younger children perform more accurately when symbolic objects are more similar to the objects they are meant to represent. In other words, “[t]he younger the child, the more difficult it is to appreciate the representational relation between a symbol—including a picture—and what it stands for.” Therefore, the use of diagrams or body maps of clothed children is not recommended as it is difficult to understand with specificity where the child may have received the touch on his body. Further, drawings made by the child himself during the interview may not be sufficiently detailed, accurate or realistic to discuss touches with precision and clarity.

Concerns with traumatizing or sexualizing young children during forensic interviews through the utilization of anatomical diagrams appear to be unfounded. Similar concerns regarding sexual traumatization of children have been raised and dispelled with regard to the use of anatomical dolls. While there has previously been some controversy regarding the use of anatomical dolls, many researchers currently prescribe anatomical dolls when interviewers trained in their use employ them in the absence of leading and suggestive questions and behaviors. Further, the use of anatomical dolls during a forensic interview does not result in sexual acting out behaviors of young children, and mothers of children interviewed with anatomical dolls do not perceive the dolls as traumatizing to their children. While children as young as 24 months are able to learn new information and reenact new skills from reading colored picture books, research also indicates this repeated behavior is more likely to occur when an attending adult simultaneously provides a narrative regarding the depicted object or activity while revealing the actual object or activity to the child. Moreover, children are more successful in reenacting these new skills when the picture is more iconic, or representative of the actual object. Accordingly, current research suggests children will not reenact sexualized behaviors based on their use of anatomical dolls without some external or preexisting sexual knowledge. Undoubtedly, this research on anatomical dolls can be generalized to the use of nude anatomical diagrams in forensic interviews to facilitate children’s statements.

It is also fair to say that visual depictions of male and female anatomy are neither foreign nor particularly shocking to children in American culture today. In 2005, Wolak, Mitchell and Finkelhor conducted study of 1,500 young Internet users, ages ten through seventeen, using a telephone Youth Internet Safety Survey. Thirty-four percent of children surveyed reported unwanted online exposure to sexual materials, such as pictures of naked people or people having sex. Nearly three-quarters of the youth reporting this unwanted exposure indicated that the incidents were only a little upsetting or not upsetting at all. Due to the high incidence of exposure to sexualized material through the internet and the media, and the apparent low prevalence of distress that such material generates, introduction of anatomical diagrams in forensic interviews with these youth in a sensitive, responsible and purposeful manner by a trained forensic interviewer is unlikely to be either traumatizing or sexualizing in nature. Further, when children reach ten years of age, they are generally no more suggestive than an adult, and they are unlikely to fabricate elaborate stories of abuse incidences merely as a result of viewing nude anatomical diagrams.

### Legal Use and Implications

Civil and criminal courts across the country have recognized the effectiveness and legitimacy of using anatomical diagrams with children in the forensic interview process and in the courtroom for multiple purposes. The Federal Rules of Evidence permit the use of a writing to refresh the recollection of a witness either prior to or during testimony. In this way, anatomical diagrams utilized during a forensic interview may be helpful to both the interviewer and the child witness in a court hearing that takes place months, or even years, after the interview itself. Diagrams employed during the forensic interview may be admitted in court and may provide clarity for, and increase the reliability of, a child’s interview statement. One child, after identifying male and female body
parts on a diagram, reported that "her father's 'pee pee' was big and hard and that a pink substance came out of it," a statement consistent with a sexual experience.44 Another child used the diagrams in an interview to color the mouth and vagina to demonstrate where her father had touched her, and while coloring the vagina of a diagram representative of an adult female, stated that she was forced to lick a woman and that it tasted "nasty" and "smelled like private."45 Anatomical diagrams and gesturing can also serve to corroborate children's interview and testimonial statements.

New York State courts have accepted anatomical diagrams into evidence when a forensic interviewer includes them as part of a written affidavit.46 By contrast, some courts have permitted the diagrams to go to the jury, finding they have no testimonial value in and of themselves.47 In fact, the Court of Appeals of Georgia found no violation of the continuing witness rule when anatomical diagrams were provided to the jury. The Court found the rule is not applicable to demonstrative evidence, such as anatomical diagrams, that serve only to illustrate the witnesses' testimony.48

Attorneys also use anatomical diagrams in court to facilitate witness testimony. In U.S. v. Archdale, the prosecution utilized anatomical diagrams to facilitate the court testimony of a 12-year-old victim who testified that the defendant made her "suck his thing," identified as the penis on an anatomical diagram.49 The Courts of Appeals of Minnesota permitted the use of diagrams over challenges from the defendant, determining that their use is discretionary to the court, and diagrams do not unfairly summarize witness testimony or affect the verdict.50 The court reasoned the use of anatomical diagrams is neither cumulative nor particularly probative in nature, and therefore, may be permitted.51

Courts have overruled hearsay objections to the admission of anatomical diagrams, citing either residual hearsay exceptions52 or rejecting the theory that anatomical diagrams are testimonial in nature.53 The Court of Appeal of Louisiana held anatomical diagrams were not hearsay when the forensic interviewer utilized them in court to explain techniques employed in the forensic interview.54 Courts also found no abuse of discretion in admitting anatomical diagrams from forensic interviews as a means to enable the child victim or witness to indicate the child's names for body parts,55 or to permit the child to use anatomical diagrams to identify body parts involved in the alleged abuse event when the child is unable to verbally state the names of the parts on the body.56 In a New York State case, a caseworker conducting an interview used detailed anatomical diagrams of both genders, and the child voluntarily marked the penis on the drawings in reference to her statement describing sexual contact by her father.57 Indeed, a defendant convicted with aggravated sexual assault of a twelve-year-old child argued the evidence was insufficient to support that his sexual organ touched or penetrated the anus of the child victim because anatomical dolls or diagrams were not utilized to clarify whether the abuse implicated the child's buttocks or her anus.58

Multiple states across the country also permit the use of demonstrative evidence in conjunction with court testimony.59 Arguably, this form of demonstrative evidence should accordingly be permitted in forensic interviews, as well. A forensic interview is not a court proceeding, and while techniques and props utilized must be purposeful, defensible and research-based, the standard of proof is not as great as a courtroom setting. Furthermore, in evaluating the use of diagrams during a forensic interview or in the courtroom setting, the interviewer or legal professional must be able to effectively and credibly articulate the purpose for using diagrams, and the timing of the introduction of the diagrams. Further, the questions employed in conjunction with the diagrams must be appropriate to the child's developmental level and report of abuse. The totality of the information provided by the child and of the techniques utilized by the interviewer must be evaluated. Single statements or techniques or specific individual questions are very rarely indicative of a child's experience on the whole. Finally, if interviewers utilize anatomical diagrams during interviews, diagrams must be adequately marked and maintained as part of the interview records.60

Conclusion

The use of anatomical diagrams has been incorporated into several forensic interviewing protocols, including the RATA® protocol developed by CornerHouse Interagency Child Abuse Evaluation and Training Center61 and the National Child Protection Training Center62 as a program called Half a Nation by 2010. This forensic interview training has been replicated in seventeen states to date, all teaching this same protocol.63 Founded in research, and incorporated in recommendations for multiple investigative protocols, the purposeful and concrete use of anatomical diagrams in the early stages of forensic interviews with children is prudent and defensible. Gingerbread diagrams, body outlines, stick figures and gender-neutral drawings are more suited for and best left to therapeutic settings that permit a more extensive evaluation, including intensive assessment and interpretation of children's disclosures and behaviors.

American author Stephen King wrote, “The most important things are the hardest to say … because words diminish your feelings. … That's the worst [when] a secret stays locked within not for want of a teller but for want of an understanding ear.”64 When forensic interviewers use the tools and resources that best support clear, effective, and probative communication with alleged child victims of abuse, we enable children to tell us those difficult, but critically important, things.

Endnotes

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1. Id., at 821.


4. Holmes & Finnegan, supra note 3.

5. Id. See also Holmes & Vieth, supra note 3, at 7.


11. See Bourg, et. al., supra note 14, at 130; Kathleen Coubourn Faller, Anatomical Dolls: Their Use in Assessment of Children Who May Have Been Sexually Abused, 14 JOURNAL OF CHILD SEXUAL ABUSE, 1, 13 (2005); Dendre A. Brown, Margaret-Ellen Pipe, Charlie Lewis, Michael E. Lamb & Yael Orbach, Supportive or Suggestive: Do Human Figure Drawings Help 5- to 7-Year-Old Children to Report Touch? 75 JOURNAL OF CONSCIENT AND CLINICAL PSYCHOLOGY 33, 40 (2007).


13. Both the male and female anatomical diagrams are presented to children following the rapport-building stage of the interview to assess the child’s ability to differentiate between genders and to demonstrate interviewer neutrality. For more extensive discussion, see Holmes & Finnegan, supra note 3. See also Holmes & Vieth, supra note 3, at 6.


15. Id.

16. Id., at 68.


18. APRI, supra note 9, at 336.


22. | Walker, supra note 4, at 11.
| APRI, supra note 9, at 62.
| See, e.g., Jan Aldridge, Michael E. Lamb, Kathleen J. Sternberg,Yael Orbach, Phillip W. Esplin, & Lynn Bowler, Using a Human Figure Drawing to Elicit Information From Alleged Victims of Child Sexual Abuse, 72 JOURNAL OF CONSULTING AND CLINICAL PSYCHOLOGY 304 (2004); Brown, et. al., supra note 19; Emma Willcock, Kirstie Morgan & Harlene Hayne, Body Maps Do Not Facilitate Children’s Reports of Touch, 20 APPLIED COGNITIVE PSYCHOLOGY 607 (2006).
| Holmes & Finnegan, supra note 3.
| Aldridge, et. al., supra note 34, at 309.
| Id.
| Id., at 310; Conna Brown, et. al., supra note 19, at 40 (finding that responses to open, free-recall questions about an incident a child remembers poorly are more likely to be less accurate, including errors of commission, than responses to direct questions that employ children’s recognition memory).
| Id.
| Brown, et. al., supra note 19, at 40.
| Id., at 41.
| Willcock, et. al., supra note 34, at 611-12.
| Id., at 610 & 612. (Children in these experiments were taken to a fire station or an Early Learning Project laboratory where they were subjected to innocuous touches while being dressed in a fire hat and a shirt or a fire service costume. The interviewers introduced the body maps to the children during the interview with instructions that began with, “I heard that …,” repeated the event to the child, and asked the children to point on the diagram where they had been touched. Arguably, this type of questioning suggests to a child that the interviewer has information that the child should confirm and expand upon, and is best left out of a forensic interview).
| Id., at 611 & 613.
| Id., at 3.
| See, e.g., New York State Children’s Justice Task Force. Forensic Interviewing Best Practices 20 (2003) (recommending that drawing should be “neutral and non-detailed”, such as gingerbread diagrams, stick figures or teddy bears).
| Id., note 48 at 1357.
| Brown, et. al., supra note 19, at 40.
| Id.
| See Kathleen Coubourn Faller. Anatomical Dolls: Their Use in Assessment of Children Who May Have Been Sexually Abused, 14 JOURNAL OF CHILD SEXUAL ABUSE 1 (2005).
| Boat, et. al., supra note 50, at 398.
| Id., note 48 at 1354.
| Id.
| Id. at 29.
| Id. at 33.
| Dennis L. Reed. Findings from Research on Children’s Suggestibility and Implications for Conducting Child Interviews 1 CHILD MALTREATMENT 105 107 (1996).
Bizarre & Fantastic Elements: A Forensic Interviewer’s Response, Part I

by Anne Lukas Miller

(Author’s Note: This is the first article in a three-part series. In Part I, Empowerment Statements are identified as one type of strange, ill-fitting or improbable claims made by children during sexual abuse disclosures. Parts II and III will identify and categorize several other possible explanations for the appearance of bizarre or fantastic elements. These categories are based on clinical experience and are drawn on the theorized mechanisms identified in Everson’s 1997 publication, “Understanding Bizarre, Improbable and Fantastic Elements in Children’s Accounts of Abuse.” Strategies and techniques are also offered to assist interviewers in determining how to best respond to the appearance of bizarre or fantastic information.)

“Bizarre and fantastic elements” can be defined as any strange, ill-fitting, or improbable claims made by children during sexual abuse disclosures. There is not a large body of empirical data regarding the occurrence of fantastic elements; however, in 1996, Dalenberg examined over 600 interviews of three to 17-year-old children reporting sexual abuse and found an overall occurrence rate of about two percent. In this study, cases were divided into groups, based on uncertainty that abuse occurred and severity of the abuse reported. Dalenberg found that fantastic elements were present at the highest rate within the group of cases that had been identified as those where abuse was both most certain and most severe. In 2002, when the data set from the 1996 study was revisited and expanded, it was found that reports of fantastic elements occurred most often in interviews involving four- to nine-year-old children.

In apparent contrast, Bruck, Ceci, and Hembrooke (2002) reported that their study yielded a greater frequency of improbable information in false, rather than true, narratives by children. It should be noted that this study involved only 16 children, and that it employed the intentional and repeated use of highly suggestive and leading interview techniques. It should also be noted that the study found implausible information in reports that were otherwise accurate, although the occurrence rate was lower than what was found by Dalenberg. In a 1995 Frontline interview regarding child sexual abuse, co-author and researcher Stephen Ceci acknowledged that, “in true disclosures... where a child was really abused, you often get a combination of bizarre unbelievable details with plausible details.”

While fantastic elements may not be typical in child sexual abuse reports, they occur often enough to be recognized as an issue—and frequently, the issue is one of credibility. Historically, the appearance of improbable information has had a significantly negative impact on a child’s overall report. In 1989, Evenson and Boat reported that improbable elements in a child’s disclosure were second only to recantation as the most common reason that child protection workers judged a child’s report of sexual abuse to be false. Dalenberg (1996) noted that when children offered implausible information, interviewers were less likely to be neutral and more likely to be skeptical or challenging in their responses. Yet it is important that interviewers keep an open mind when fantastic elements present in an interview. There are numerous feasible explanations that could account for such reports; accordingly, an immediate disbelieving response from an interviewer could be indicative of interviewer bias.

In 1997, Everson published an article that included an exhaustive list of mechanisms that might explain the occurrence of bizarre and fantastic elements in children’s reports of sexual abuse. The following discussion draws on Everson’s theorized mechanisms, as well as the author’s clinical experience, to identify some of the most common types of improbable elements seen in forensic interviews. Strategies and techniques are also offered to assist interviewers in determining how to best respond to the appearance of improbable information. The discussion will be presented in three segments, beginning with a widely familiar grouping of bizarre or fantastic—statements of Empowerment. Subsequent publications will address Developmental Issues, Reality Distortion, Exaggeration,