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SEXUAL ABUSE EVALUATIONS IN THE EMERGENCY DEPARTMENT: IS THE HISTORY RELIABLE?

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Abstract—The authors assessed agreement on perpetrator identification obtained at two interviews of child victims of sexual abuse. We reviewed charts for 141 children who had undergone both a screening interview by an emergency department physician and an investigative interview by an interdisciplinary team specializing in child sexual abuse evaluation. For 107 (76%) cases, information was consistent; for instance, identification occurred at both interviews or at neither interview. Of the 38 children not identifying the perpetrator at the screening interview, 17 (45%) made disclosure at the investigative interview. Children who made disclosure only at the investigative interview were more likely to have refused to speak to the physician in the emergency department ($p = .001$). No significant differences were found when data for interview site and perpetrator identification were analyzed by gender of child, time interval between assault and screening interview, time interval between the two interviews, relationship of the alleged perpetrator to the child, performance of the investigative interview on an inpatient versus outpatient basis, and report of genital contact. In conclusion, perpetrator identification obtained during emergency department screening interviews usually agreed with information obtained at the subsequent investigative interview. The investigative interview was most helpful in identification of perpetrators when the child was not the source of the history obtained in the emergency department.

Key Words—Emergency department, Forensic interview, Investigative interview, Screening interview, Sexual abuse evaluations.

INTRODUCTION

EACH YEAR, APPROXIMATELY 1% of children experience some form of sexual abuse (American Academy of Pediatrics, 1991). Because family, police, and child protective services frequently bring these children to the hospital emergency department, this site has become a primary point of entry into the medicolegal process for many children suspected of being sexually abused (Hibbard & Zollinger, 1992; Smith, Losek, Glaeser, & Walsh-Kelly, 1988). Unfortunately, the emergency department is far from being the ideal place to assess for sexual abuse. Interview by an interdisciplinary team composed of law enforcement, legal, social service, and medical professionals appears to be the optimal vehicle for such evaluation (American Academy of Pediatrics, 1991; De Jong & Finkel, 1990; Dubowitz, Black, & Harrington, 1992; Jaudes & Martone, 1992; Oates, 1989). However, this type of team is usually not

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immediately available to the emergency department, which is left to respond alone to the child, the family, and the child protective and legal systems.

Given the continuing involvement of the emergency department in the evaluation of suspected child sexual abuse, it is important to document the reliability of the histories obtained at that site. We assessed the reliability of information obtained at screening interviews conducted by emergency department physicians as compared with investigative interviews conducted at a later date by an interdisciplinary team specializing in evaluations of sexual abuse.

METHODS

We reviewed the medical records of all children suspected of being sexually abused who had undergone both a screening interview at Wyler Children's Hospital emergency department and a subsequent investigative interview by an interdisciplinary team specializing in child sexual abuse for the period July 1, 1989 through July 31, 1992. Wyler Children's Hospital is the pediatric acute care hospital for the University of Chicago Hospitals. The pediatric emergency department of this inner-city teaching hospital receives approximately 27,000 patient visits a year predominantly from a lower-income, minority population. The emergency department is staffed by pediatric and emergency medicine residents 24 hours a day, with an on-site attending physician present 16 hours a day. All residents receive an orientation manual that includes a chapter on child sexual abuse.

During the period in question, children who came to the emergency department for evaluation of possible sexual abuse underwent a screening interview and physical examination by either a pediatric or emergency medicine resident who then reviewed the case with an attending physician before discharge of the patient.

The screening interview consisted of history-gathering from the child or accompanying adult to secure any information that would lead a reasonable person to suspect that sexual abuse had occurred. The history was obtained preferentially from the child. If the child refused to speak to the emergency department physician, the accompanying adult was the source of the history. The identity of the alleged perpetrator and his or her relationship to the child were also sought. However, the screening interview, which followed no standard protocol, did not search for in-depth details of the event.

All children 3 through 14 years of age who were identified by the screening interview as probably victims of sexual abuse were directed to an investigative interview conducted by the Victim Sensitive Interview Program. This program was established at La Rabida Children's Hospital and Research Center in 1986 in order to decrease the number of interviews and interviewers the child and parent would have to encounter during the investigation of suspected sexual abuse. (La Rabida is a University of Chicago affiliate specializing in chronic pediatric diseases.)

The investigative interview used in-depth questioning to develop three areas of information: a detailed record of the suspected sexual abuse; the possibility of further risk to the child (and therefore the need for protection); and the credibility of the child, should prosecution of the alleged perpetrator ensue. The interview followed a standard protocol and involved a team that consisted of a medical social worker who conducted the interview, a pediatrician, a police officer, an assistant state's attorney, and a state child protective agency worker. The investigative interview was conducted on an inpatient or outpatient basis depending on the risk of further sexual abuse in the home.

Data from the interviews were abstracted independently by each co-author, who was unaware of the other's results. Information from these records included age and gender of the child, results of the physical examination, presence of sexually transmitted diseases, identity of the

emergency department historian, identity and relationship of the alleged perpetrator to the child, time of the most recent assault, type of assault, history of prior abuse, and outcome of the investigation by the state child protection agency. Physical examination results were coded as "abnormal" if erythema, discharge, abrasions, lacerations, ecchymosis, or enlargement of the hymenal opening were present. The relationship of the alleged perpetrator to the child was coded as "close family" (parent, step-parent, sibling, or step-sibling), "other family" (uncle, aunt, cousin, or grandparent), or "nonrelated" (maternal boyfriend or other nonrelative).

Statistical Analysis

We used standard statistical tests to measure differences among patients. Analysis of variance was employed for continuous variables such as age and time between interviews. For categorical variables, the chi-square test of independence was applied for comparisons of more than two groups; the Z-test for proportions was used for two-sample comparisons. Differences were considered significant at the $p < .05$ level.

RESULTS

One hundred forty-one children had both a screening and an investigative interview. Three additional medical records from the emergency department could not be traced and were therefore excluded from analysis. There were 125 (89%) females. Mean age of the children was 6.4 ± 3.1 years. Mean time between screening and investigative interviews was 6.2 ± 5.8 days. Seventy-six (54%) of the children had abnormal results on medical examination, and 14 (10%) had a sexually transmitted disease. Only 3 (2%) were evaluated by a social worker while still in the emergency department. Seventy-seven (55%) of the children were admitted to La Rabida Hospital for an investigative interview on an inpatient basis.

A pediatric resident or an attending pediatrician conducted 103 (73%) of the emergency department screening interviews and medical examinations. The remainder were conducted by an emergency medicine resident with on-site attending pediatrician supervision. Information regarding gender of the interviewers was not available.

Only 27 (19%) of children were treated in the emergency department between 12 midnight and 8 a.m. when the emergency department was staffed by second and third year pediatric residents. During these hours, review by telephone with the on-call attending physician of all cases of suspected sexual abuse prior to discharge of the child from the emergency department was mandatory.

Perpetrator Identification Groups

We classified patients into four groups based on whether the alleged perpetrator was identified and, if so, the interview site of identification (Table 1).

Group 1: Identification of perpetrator at both interviews. Children reporting more than one abusive event were more likely ($p < .001$) to identify the alleged perpetrator at both interviews. Also, identification occurred at both interviews in all cases involving multiple perpetrators.

Group 2: Identification of alleged perpetrator at screening interview. Later recanted at investigative interview. Children who recanted were younger (Group 2, 4.8 years) than those who identified a perpetrator at both interviews (Group 1, 7.1 years) ($p = .002$). No significant differences were found among children who recanted and other groups of children regarding the time interval between screening and investigative interviews, performance of the investigative

Table 1. 141 Cases of Child Sexual Abuse Distributed by Site of Identification of Alleged Perpetrator

Group	Alleged Perpetrator Identified at:		n (%)
	Screening Interview ^a	Investigative Interview ^b	
1	yes	yes	86 (61)
2	yes	no	17 (12)
3	no	yes	17 (12)
4	no	no	21 (15)

^a Conducted by the emergency department at Wyler Children's Hospital in Chicago.

^b Conducted by an interdisciplinary team at La Rabida Children's Hospital and Research Center in Chicago.

interview on an inpatient versus outpatient basis, report of the occurrence or non-occurrence of genital contact, or relationship of the alleged perpetrator to the victim (Table 2).

Group 3: Identification of perpetrator at only the investigative interview. Children who identified an alleged perpetrator at only the investigative interview were more likely ($p = .001$) to refuse to speak to the physician during the screening interview. These children did not differ significantly from the other children regarding age, time interval between screening and investigative interviews, relationship of the alleged perpetrator to the victim, performance of the investigative interview on an inpatient versus outpatient basis, and report of the occurrence or non-occurrence of genital contact (Table 2).

Group 4: No Identification of perpetrator at either interview. Children who never identified a perpetrator were significantly ($p = .002$) younger than children who made disclosure at both interviews (Group 4, 4.7 years, vs. Group 1, 7.1 years). Also, children who never identified a perpetrator tended ($p = .06$) to have a higher incidence of abnormal results on physical examination than did the other groups of children (Table 2).

Regarding the identification of the alleged perpetrator, results were consistent between both interviews (i.e., identification at both interviews [group 1] or at neither interview [group 4]) for a total of 107 (76%) cases. When results were inconsistent, the second interview either provided identification (Group 3, $n = 17$) or challenged the existing identification (Group 2, $n = 17$). Of the 38 cases in which the perpetrator was not identified at the screening interview (Groups 3 and 4), identification did occur at the investigative interview for 17 (45%).

No significant differences were found among groups regarding gender of the child, time interval between the most recent assault and the screening interview, time interval between screening and investigative interviews, performance of the investigative interview on an inpatient versus outpatient basis, relationship of the alleged perpetrator to the child, and report of the occurrence or non-occurrence of genital contact (Table 2).

Age

The mean ages of children who recanted (Group 2, 4.8 years) or did not identify a perpetrator at either interview (Group 4, 4.7 years) were significantly ($p = .002$) lower than the mean ages of those who did identify a perpetrator (Group 1, 7.1 years; Group 3, 6.4 years) (Table 2).

Table 2. Characteristics of 141 Cases of Child Sexual Abuse When Grouped by Interview Site of Identification of Alleged Perpetrator

Characteristic	Group ^a :				p-Value
	1 (n = 86)	2 (n = 17)	3 (n = 17)	4 (n = 21)	
Mean Age (years)	7.1	4.8	6.4	4.7	.002
Gender (Female)	92%	82%	71%	95%	.05
Child was Historian at Screening Interview	79%	59%	41%	52%	.001
Abnormal Results on Medical Examination	51%	47%	47%	83%	.06
Presence of a Sexually Transmitted Disease	4%	18%	18%	24%	.01
Indicated by State ^b	91%	29%	71%	62%	<.001
Perpetrator was "Close Family Member"	53%	29%	50%	0%	NS
Report of Genital Contact	67%	47%	77%	0%	NS
Most Recent Assault was <24 hours before Screening Interview	44%	38%	100%	67%	NS
Days Between Screening and Investigative Interviews	5.9	8.7	5.0	6.5	NS
Investigative Interview Done on Inpatient Basis	55%	53%	53%	57%	NS

^a Group 1: identification of alleged perpetrator was made at both the screening interview and the investigative interview; Group 2: identification made at the screening interview but recanted at the investigative interview; Group 3: identification made at only the investigative interview; Group 4: identification made at neither interview.

^b Officially indicated by the state as a child sexual abuse case based on the existence of evidence that would lead a reasonable person to believe that sexual abuse had occurred.

NS = Not significant.

Source of History Obtained at Screening Interview

Overall, 30% of the children refused to speak to the emergency department physician, leaving the accompanying adult to act as historian. The likelihood that the child would be the historian during this initial interview was significantly ($p = .001$) higher when identification of the alleged perpetrator occurred at both interviews (Group 1, 79%) than when it occurred at only the investigative interview (Group 3, 41%).

Medical Findings

Children who did not identify a perpetrator (Group 4) showed a trend toward abnormal results on physical examination ($p = .06$). This group was also the youngest.

The relationship between the presence of a sexually transmitted disease and the unwillingness or inability to identify an alleged perpetrator at the screening interview (Groups 3 and 4) was statistically significant ($p = .007$) (Table 2).

Outcome of the State Investigation

Outcome of investigation by the state child welfare agency was significantly ($p < .001$) related to identification of the alleged perpetrator. The ability of the state to conclude officially that sexual abuse had occurred was much higher when the child identified the alleged perpetrator in at least the investigative interview (Group 1, 91%; Group 3, 71%) than when the child recanted at the second interview (Group 2, 29%). Despite the absence of identification for

Group 4, the state was able to officially indicate 62% as sexual abuse cases, primarily on the basis of the presence of a sexually transmitted disease or an abnormal examination (Table 2).

DISCUSSION

The history obtained from the child is the key component in the evaluation of suspected sexual abuse (Giardino, Finkel, Giardino, Seidl, & Ludwig, 1992; Heger, 1991; Jaudes & Zimo, 1992). The information elicited and documented during history-gathering is often the only evidence obtained. Successful prosecution of sexual abuse appears to depend more on the quality of verbal evidence than on the presence of physical evidence (De Jong & Rose, 1991).

Given the critical importance of the child's testimony, many studies have suggested that children should be interviewed by only an interdisciplinary team comprised of specially trained medical and mental health professionals who are experienced in child development and child sexual abuse. This team would be best able to interview children and their families and integrate resulting statements with historical information and behavioral and diagnostic observations (De Jong & Finkel, 1990; Dubowitz, Black, & Harrington, 1992; Jaudes & Martone, 1992; Oates, 1989).

Because geographic, time, and financial constraints often mean this type of investigative interview is not readily available, the emergency department remains a focal point for evaluation of sexual abuse. The limitations of using the emergency department are well documented: in particular, the lack of 24-hour availability of experienced social workers and the inadequate training of the emergency department physician in this evolving field (Cupoli & Sewell, 1988; Hibbard & Zollinger, 1990; Ladson, Johnson, & Doty, 1987; Smith, Losek, Glaeser, & Walsh-Kelly, 1988). These drawbacks increase the potential for inadequate evaluation and follow-up. Use of the emergency department also perpetuates the myth of sexual abuse as a medical diagnosis that can only be confirmed by definitive results on medical examination. For these reasons, De Jong and Finkel (1990) consider it a disservice to refer victims of sexual abuse to the emergency department if more than 72 hours have elapsed since the event.

Limited resources dictate that some cases of suspected child sexual abuse will continue to be seen in the emergency department. Because the child's testimony is critical in evaluation of suspected sexual abuse, it is important to ascertain the reliability of the information obtained at that site.

We found that information obtained in the emergency department screening interview usually agreed with information later obtained by an interdisciplinary team in the investigative interview. This result is reassuring given the frequent use of the emergency department for evaluation of sexual abuse.

The interdisciplinary investigative interview was most helpful when the child was not the source of the history obtained at the emergency department screening interview. Patients who identified the perpetrator only at the investigative interview (Group 3) were more likely not to have been the historian at the emergency department interview.

The young age of those children who did not identify the perpetrator at either interview (Group 4) coupled with the higher incidence of sexually transmitted diseases and abnormal results on medical examination in the same group suggests that, in some instances of true sexual abuse, there will be no disclosure by the child. This is consistent with observations by Lawson and Chaffin (1992) of children suspected of being sexually abused who had undergone specialized interviews. Only 43% of 28 children who had a sexually transmitted disease confirmed sexual contact verbally. The remaining 57% never disclosed any sexual contact and, based on the presence of sexually transmitted disease, were considered by the authors to

represent false-negative interview results. In addition, Dubowitz and colleagues (1992) reported that of 28 children who had abnormal physical findings indicating sexual abuse, 25% did not disclose any information pertinent to sexual abuse, even to skilled interviewers.

Why do some victims of sexual abuse never disclose such information? In our study, the age of the child was the key variable. Preschool children are considered the group most under-reported for sexual abuse (De Jong & Finkel, 1990). Detection of sexual abuse among preschool children is hampered by the child's limited verbal communication skills and credibility. In our study, some cases of abuse in Group 4 would probably have gone undetected if not for the presence of a sexually transmitted disease.

Finally, one should be cautious in interpreting our results. Data were collected by retrospective chart review, and screening interviews were not standardized. However, this lack of standardization reflects the usual situation in many emergency departments, in which interviewing is done by medical staff who have no specialized training.

Additionally, the small number of children in some of the groups limits the power of analysis. Also, because the study population consisted primarily of inner-city, low-income African-American female children, findings may not be reproducible in other populations. Lastly, this initial study used only a limited marker to assess reliability of emergency department data: the agreement between two interviews on perpetrator identification.

CONCLUSIONS

In this sample of urban children seen at a tertiary care hospital, disclosure of the alleged perpetrator to emergency department physicians during screening interviews of children suspected of being sexually abused was usually confirmed at the later investigative interview. The investigative interview was most helpful in identification of perpetrators when the child was not the source of the history obtained at the screening interview.

Although the degree with which information from both interviews agrees is reassuring, our data should not be considered an affirmation of use of the emergency department as the sole locus for the evaluation of suspected child sexual abuse. The primary role of the emergency department as a provider of acute medical care dictates that it cannot guarantee unhurried and uninterrupted care to victims of sexual abuse who are not injured acutely. Nor is the emergency department the optimal setting for disclosure interviews.

We urge emergency departments to link with sexual abuse programs that conduct interdisciplinary investigative interviews in order to ensure timely and thorough evaluation of children who are suspected of being sexually abused. Furthermore, those in law enforcement and social welfare agencies should be mindful of the limitations of the emergency department and refer patients to such sites only when acute medical and forensic issues dictate.

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Résumé—Ayant interviewé des enfants victimes d'agression sexuelles à deux reprises, les auteurs ont évalué si les enfants étaient cohérents à propos de l'identité de l'agresseur, d'une entrevue à l'autre. Ils ont étudié les dossiers de 141 enfants qui avaient été interviewés d'abord par un pédiatre dans un service d'urgence puis par une équipe pluridisciplinaire. Dans 107 cas (76 p.c.) il y avait cohérence dans les renseignements, c.-à-d. que les enfants identifiaient l'agresseur dans les deux entrevues, ou bien étaient incapables de le faire dans les deux cas. Des 38 enfants incapables d'identifier l'agresseur dans un premier temps, 17 (45 p.c.) l'ont fait durant la deuxième entrevue. Les enfants qui ont dévoilé seulement à la deuxième entrevue étaient plus aptes à avoir refusé de parler au médecin ($p = .001$). Ni les renseignements, ni le contexte de l'entrevue, ni l'identification de l'agresseur étaient affectés par les variables suivantes : le sexe des enfants, l'intervalle entre l'agression et la première entrevue, l'intervalle entre les deux entrevues, le lien de parenté entre l'enfant et l'agresseur, le rendement durant la deuxième entrevue des patients internes ou externes et le signalement d'un contact génital. À titre de conclusion, il semble que lorsqu'il y a identification de l'agresseur durant la première entrevue, ceci concorde habituellement avec les renseignements obtenus dans la deuxième entrevue. Cette dernière entrevue s'avère plus utile pour identifier l'agresseur lorsqu'on ne se base pas sur le témoignage de l'enfant.

Resumen—En la presente investigación se evaluó el acuerdo en la identificación del abusador sexual obtenido en dos entrevistas realizadas a niños víctimas de abuso sexual. Se revisaron los registros de 141 niños que habían sido sometidos a una entrevista de "screening" realizada en el departamento médico de urgencias y a otra entrevista de investigación realizada por un equipo interdisciplinario especializado en la evaluación del abuso sexual infantil. En 107 casos (76%) la información de ambas entrevistas era consistente, por ejemplo, la identificación se produjo en ambas entrevistas o en ninguna de las dos entrevistas. De los 38 niños que no identificaron el abusador en la primera entrevista, 17 (45%) lo hicieron en la entrevista de investigación. Los niños que realizan la revelación del abusador únicamente en la entrevista de investigación, habían presentado una mayor tendencia a rechazar hablar con el médico en el departamento de urgencias ($p = .001$). No se encontraron diferencias significativas, cuando se analizaron los datos del tipo de entrevista y la identificación del abusador, ni en función del sexo del niño, ni del tiempo transcurrido entre el abuso sexual y la primera entrevista, ni de la realización de la entrevista de investigación en un ambiente de clínica interna o externa, ni de la notificación de contacto genital. En conclusión, la identificación del abusador obtenida en la entrevista realizada en el departamento de urgencias es habitualmente concordante con la información obtenida en la posterior entrevista de investigación. La entrevista de investigación era la más eficaz en la identificación de los abusadores sexuales cuando el niño no fue la fuente de información de la historia obtenida en el departamento de urgencias.