MEDICAL PRACTICE

Contemporary Themes

Sexual abuse of children in Leeds

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Abstract

Temporal trends in physical and sexual abuse of children within a geographically defined area were examined, and cases of suspected sexual abuse referred to paediatricians during 1984 were studied in detail. After remaining static for four years referrals due to all types of abuse trebled between 1979 and 1984, and referrals due to sexual abuse increased from none to 50 a year. In 1984, 50 children (39 girls) aged 1-16 were referred because of possible sexual abuse. Abuse was confirmed or considered to be likely in 30 (28 girls). The perpetrator was a male relative or family friend in 17 cases and a man participating in a child sex ring in seven cases. Physical examination often did not show anything remarkable, but three girls had venereal infections.

These figures suggest that paediatricians and child psychiatrists will increasingly be presented with cases of sexual abuse in children.

Introduction

The recognition of child abuse as a major problem in paediatrics has led to increased reporting of sexual abuse of children. Advances in diagnosis, management, and, perhaps more importantly, prevention have followed, with North America leading the way. In the United Kingdom there have been few studies of sexual abuse, and in many areas adequate strategies for its management are either non-existent or only just evolving. Prevention is likely to prove the most effective form of intervention. Before such measures are accepted as necessary, however, increased awareness of the scale of the problem by both the public and professionals will be required. This will inevitably lead to increased recognition of sexually abused children, who will need investigation and treatment. To determine the implications for the health service I examined cases of possible sexual abuse of children referred to paediatricians within a defined geographical area.

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Patients and methods

Cases of suspected child abuse or neglect referred to paediatricians in Leeds are examined by a medical member of the child abuse team. Details of each case are recorded in a daybook, and, in addition to the hospital notes, a confidential medical report is produced. Details of all cases of possible physical abuse, neglect, and sexual abuse were obtained for the years 1976-85. In addition, the records of children referred in 1984 because of suspected sexual abuse were analysed in detail. Information on children who had been sexually abused and referred for treatment during 1984 was obtained from the departments of child psychiatry and psychological medicine. For comparison, cases of possible sexual abuse of minors notified to the police during the same year are reported.

Results

Table I shows the number of children referred to the child abuse team because of possible neglect or abuse during each year from 1976 to 1985.

TABLE I—*Numbers of referrals because of sexual abuse, physical abuse, and neglect, 1976-85*

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Sexual abuse					3	5	7	9	50*	161†
Physical abuse and neglect	38‡	88	86	86	110	189	188	208	231	332

* Abuse confirmed or considered to be probable in 30 cases.
† Abuse confirmed or considered to be probable in 106 cases.
‡ Cases of neglect not available for this year.

Almost all the children came from the catchment areas of the Leeds Western and Eastern health authorities, which have a combined population of 712 200, of whom 146 000 are aged under 16. A threefold rise in referrals to

the abuse team from 1979 to 1984 was accompanied by a dramatic increase in the number of cases of sexual abuse. Though referred cases of physical abuse and neglect rose steadily, referred cases of sexual abuse increased much more rapidly.

In 1984, 50 children from 40 families were seen because of possible sexual abuse. They comprised 39 girls and 11 boys, age 1-16 (mean 8·6 years). Seven of the children were in the care of the local authority at the time the abuse occurred, and three had previously been in care.

Patterns of referral were varied. The person or agency initiating referral was usually the mother (11 cases), the child (seven), or the social services (10) (table II). Other agencies referring patients included the police, the probation service, children's homes, the gynaecology department, and general practitioners. No referrals were received from or through schools. Chains of referral were often long, averaging 1·7 "steps" per child (range 1-4 steps).

TABLE II—*Patterns of referral in 40 families*

Person/agency initiating referral	Person/agency initially contacted	No
Mother	Police	4
Mother	Social services	4
Mother	General practitioner	2
Mother	Casualty department	1
Child	Sibling	2
Child	Mother	3
Child	Social services	2
Social services	Paediatrician	10
Family friend	NSPCC	2
Police	Paediatrician	4
Children's home	Paediatrician	3
Probation service	Paediatrician	1
Gynaecology department	Paediatrician	1
General practitioner	Paediatrician	1
Total		40

NSPCC=National Society for the Prevention of Cruelty to Children.

Of the 50 cases of possible sexual abuse referred in 1984, 30 were confirmed or probable and in 20 suspicions of abuse could not be confirmed (18 cases) or proved to be incorrect (two). Most (28) of the patients in whom sexual abuse was confirmed or considered to be likely were girls (table III). Fondling or masturbation, or both, were the commonest offences and were generally committed by the girl's father, a male relation, or a cohabitee of the mother. Unlawful sexual intercourse was almost as common, and the perpetrator was usually known to the child. In seven cases the girls had participated in a child sex ring; the activities reported included fondling, masturbation, sexual intercourse, and child pornography. Over 100 schoolgirls and 11 men, who in some cases were known to each other, participated in the sex rings.

TABLE III—*Details of cases of confirmed or probable sexual abuse*

Sex of child	Perpetrator	Type of abuse	No of cases
F	11 men (sex rings)	Fondling, masturbation, pornography	7
F	Father	Fondling or masturbation, or both	6
F	Relation or male cohabitee	Fondling or masturbation, or both	4
F	Unknown	Fondling or masturbation, or both	2
F	Cohabitee	Unlawful sexual intercourse	3
F	Father/uncle/unknown*	Unlawful sexual intercourse	3
F	Brother/neighbour/unknown*	Attempted sexual intercourse	3
M	Unknown	Anal intercourse (and sometimes oral sex)	2
Total			30

* One of each.

Of the 20 children seen because of unsubstantiated suspicion of sexual abuse, nine were boys and 11 girls (table IV). Boys were usually referred because of definite sexual abuse of a sibling or because of an alleged homosexual contact. Girls were referred because of allegations of fondling by their father, genital injury, allegations that sexual abuse might have occurred, or possible sexual activity with under age boys.

Physical examination was performed and clinical findings recorded in 26 of the 30 cases of definite or probable sexual abuse (table V). In 10 girls there were no abnormal findings on physical examination and no evidence of vaginal dilatation; two others had minor local trauma without vaginal dilatation. Eleven girls were considered to have moderate vaginal dilatation (introitus diameter 0·5-0·9 cm in the horizontal plane), accompanied in two cases by local trauma and in four cases by an abnormal discharge. There was more pronounced dilatation in two girls, one of whom had a vaginal trichomonas infection. Two of the girls with no abnormal physical signs had gonococcal infections. There were no other venereal infections. One of the two boys had a dilated anus; the other was not examined. In none of these 30 definite or probable cases were there other injuries suggesting physical abuse, apart from occasional minor bruising.

TABLE IV—*Reasons for referral of unsubstantiated cases*

Sex of child	Reason for referral	No of cases
F	Possible fondling by father	3
F	Genital lesions (trauma or infection)	3
F	Possible risk of sexual abuse	3
F	Possible sexual intercourse with under age boys	2
M	Definite sexual abuse of sibling	6
M	Alleged homosexual activity with adult	3
Total		20

TABLE V—*Abnormalities found on examination of vulval area in 25 definite or probable cases of sexual abuse*

Vaginal size (horizontal plane)	Total No of girls	No with local trauma	No with discharge
<0·5 cm	12	2	2
0·5-0·9 cm	11	2	4
≥1·0 cm	2		1

TABLE VI—*Sexual offences against children under 16 in Leeds Metropolitan District 1984*

Offence	No reported	No successfully investigated	No of prosecutions
Buggery	5	4	4
Indecent assault on boy	39	31	23
Rape	6	6	3
Indecent assault on girl	134	118	66
Unlawful sexual intercourse:			
Girl under 13	8	9	4
Girl under 16	51	41	12
Incest	6	6	6
Total	249	215	118

Two boys and 23 girls were offered and received treatment from the departments of child psychiatry and psychological medicine. Referrals were usually initiated by paediatricians (11 cases), social services (six), and general practitioners (four). Abuse tended to be longstanding and to have occurred within the family, the perpetrator being the father or stepfather in 14 cases and a male relative in a further four.

Table VI shows for comparison cases of suspected sexual abuse of children reported to the police in 1984. Most cases reported were successfully investigated by the police, who were satisfied that in all but two cases the reported offence had been committed. Almost half of the reports of sexual offences resulted in prosecutions, and in many other cases the offender was cautioned.

Discussion

The number of cases of child abuse referred to this department has increased considerably since 1979. This is probably due to two main factors. From 1979 to 1981 a sharp increase in cases of physical abuse and neglect coincided with rising unemployment and poverty.[1] It is hardly surprising that these types of abuse increased

in parallel with the number of families bringing up children in adverse social circumstances, but it is remarkable how closely the rate of referral has followed changes in unemployment.

From 1982 cases of neglect and physical abuse continued to rise steadily while referrals of cases of sexual abuse increased dramatically. This is unlikely to have been due to an increase in the incidence of sexual abuse as the number of sex offences recorded by the police fell by almost 20% between 1973 and 1983.[2] The increase in cases of sexual abuse that we observed was primarily due to an alteration in patterns of referral, resulting from greater publicity and understanding of the problem. There is also growing evidence that the collection of evidence by police and police surgeons may be damaging and that abused children often do not subsequently receive advice or treatment.[3] These factors have led to the development of "child centred" management strategies,[4] in which professionals experienced in child care ensure more sensitive investigation and the provision of appropriate counselling and treatment. If this trend continues, as it has done in North America,[5] demand for paediatric specialists to participate in the investigation and treatment of children who have been sexually abused will increase rapidly.

In agreement with other studies of sexual abuse of children we found that it was predominantly girls who were referred.[6 7] We were also able to confirm abuse of girls more commonly than abuse of boys. These higher rates of referral and confirmation were partly due to the presence of diagnostic physical abnormalities such as genital injury or infection being more common in girls. This may be one of the reasons why, in retrospective studies, women report sexual abuse in childhood only twice as commonly as men[8 9] whereas girls outnumber boys by over four to one in most studies of children who have been sexually abused.[6 10]

One fifth of the children referred had been or were in care; this is comparable with the 11% of children in care in a previous study.[11] Such children are more vulnerable to abuse, and their circumstances probably increase the chances of its being detected and reported. As children in care often lack the support of a stable family they may also be more likely to be seen as needing help and to be referred for investigation and treatment. In this context most families referred to us were socially inadequate, and this was often partly why they came to the attention of the authorities. Because of a predominantly punitive response to sexual abuse, cases occurring in middle class families are less likely to result in disclosure.

Children who have been sexually abused present with a wide variety of symptoms and signs[12] and may be seen initially by one of several different agencies.[13] This results in an inconsistent response to sexual abuse, as few agencies have uniform procedures of management and coordination between agencies is often poor. Moreover, as the present study shows, children are often seen sequentially by several agencies, which results in duplication of the initial investigation and increases the distress caused by the abuse. The apparent failure of schools to detect or refer children was disconcerting, as workers in the United States have suggested that disclosure to teachers may be fairly common.[14] The recent implementation of new procedures for teachers in cases of suspected sexual abuse, however, has led to several children being referred by schools.

The abuse reported was often longstanding. In many cases it had begun in early childhood with fondling and masturbation and if undetected progressed to sexual intercourse, sometimes many years before adolescence. The average age of the 30 children who had definitely or probably been abused was 8·6 years, which is similar to that in other reports of sexual abuse in children and emphasises the early onset of this type of abuse.[5 7 10-12 15] Perpetrators were usually male and living in the family home, fathers and stepfathers being the commonest culprits. In contrast to previous reports, however, one quarter of the girls had taken part in child sex rings, usually as ringleaders.[16] With the help of two or three deputies they had provided sexual favours for, and introduced younger girls to, the male abuser, usually for money. Several of the ringleaders were known to have been sexually abused within the family home. Each sex ring contained an average of 20 girls, making this an important type of abuse that appears to be widespread.

Histories obtained from the children were often explicit, and the use of anatomically correct dolls was also helpful in establishing the exact nature of the abuse. Physical examination confirmed sexual abuse of several children and in other cases provided supportive evidence, such as injury to the genital area, abnormal vaginal discharge, and anal abnormalities. Measurement of the vaginal opening in the horizontal plane is a simple procedure. A diameter of 5 mm or more in a prepubescent girl is associated with sexual abuse in a high proportion of cases.[17] Venereal disease not acquired during birth is virtually diagnostic of sexual abuse and is present in up to 13% of cases.[18 19] During the examination sexually precocious behaviour and extreme ease in examining the genitalia may also be observed. The physical examination of a sometimes distressed child is best performed by a paediatrician: in my department we have not encountered any difficulties in recording evidence or obtaining appropriate specimens and have found help readily available from colleagues in genitourinary medicine. Advice on the legal aspects of collecting physical evidence can be obtained from the police.

Immediately after the initial investigation has been completed support and advice should be given to the child and family. This "first aid" is particularly important for the small number of families who subsequently refuse further help. It should include a simple explanation of events, emphasising that the fault lies with the adult perpetrator. The victim should be given advice on how to avoid inappropriate sexual advances[20] and the family briefly counselled on the social, emotional, and legal implications of the abuse. Arrangements for follow up and the possibility of referral for programmes of treatment can be discussed with the family at this time. The social worker responsible for protecting the child and investigating the reported abuse should be informed of the doctor's findings. If further sexual abuse is considered to be likely or there is great concern a case conference is normally arranged by the social services, who must be provided with a medical report.

Psychological damage is a common sequel to sexual abuse and may occur after a single episode.[8] Factors associated with a poor long term outcome include prolonged abuse and penetration,[9 21] participation in child pornography,[21] and, most importantly, abuse accompanied by physical violence.[8] Mrazek and Kempe in a review of reports identified three types of adverse long term effect —namely, psychological problems such as neurosis, psychosis, depression, and low self esteem; problems in sexual adjustment including dysfunction during intercourse, promiscuity, prostitution, homosexuality, and sexual molestation of children; and interpersonal problems such as conflict with marital partner, parents or in laws, and social isolation.[6]

After disclosure of sexual abuse close liaison between paediatricians and the police is important and beneficial to both parties. Sensitive questioning and careful examination of victims in appropriate surroundings by a paediatrician will often provide the evidence required by the police for prosecution. Paediatricians often require help from the police to protect the victim and other children even when the perpetrator is not a member of the family. In cases of incest legal pressure is usually required to stop further abuse and to ensure that the perpetrator and family participate in a programme of treatment. In most cases of incest non-custodial sentences with a requirement to undertake treatment appear to be effective,[22] and the necessary legal mechanisms already exist in the United Kingdom[13]; custodial sentences are not therapeutic and in most cases merely delay therapeutic intervention.

Initial management should provide care for acute medical, emotional, and social problems, ensure that the abuse stops, and encourage the formulation of plans for treatment while complying with legal requirements.[13] Careful assessment by the police and social workers before the start of either legal or social intervention is vital as several options exist, depending on the nature and severity of the offence. Professionals have to make important decisions at this time and require appropriate training and support.

The long term management of the child, family, and perpetrator is complex. Active intervention is usually indicated, as long term problems are less common if victims receive appropriate treatment[22] and have the support of their families.[23] Professionals carrying out

programmes of management or treatment are normally part of a multidisciplinary team drawn from the health and social services, voluntary agencies, and the police and probation service. Each agency should identify volunteers who agree to undertake this work, as many people have great difficulty in coping with sexual abuse. One advantage of forming a small group of interested professionals is that skill and interdisciplinary liaison develop rapidly and a focus for referrals is established. The priorities of each agency will differ slightly, but the interests of the child must always remain paramount.

Treatment of children who have been sexually abused and their families is usually provided by child psychiatrists, clinical psychologists, and social workers, with support from other professionals and voluntary workers. A plan for treatment should be discussed and agreed at the outset before workers concentrate on helping individual members of the family. Most treatment centres use a combination of family, individual, and group therapy, with groups for parents, perpetrators, and male and female victims of similar ages. In cases of incest an early family meeting is useful, allowing the father to admit sole responsibility and ensuring that all family members understand the facts.[13] At this meeting the parents can reach agreement about the future care of their children and, if required, arrangements for separation can be made. Subsequent aims of treatment should include prevention of further abuse, improvement in relationships between victim and parents, and resolution of sexual conflicts between parents.[24] Appropriate care for the emotional problems of the victim and other members of the family must also be provided. Self help groups have proved an effective adjunct to formal programmes of treatment, and in many centres groups have been established for male and female victims, parents, perpetrators, and siblings.[13]

Our data and those of the police confirm the findings of earlier studies, which reported that sexual abuse of children is common and widespread.[3 25] Facilities for treatment in Leeds and elsewhere are limited[24] but have been underutilised,[6] primarily because society's response has been within a legal framework. From a child's viewpoint past strategies and facilities for the investigation and treatment of sexual abuse have been less than adequate. Paediatricians and child psychiatrists must accept responsibility for providing the required services in much the same manner as they already do for physical and emotional abuse.

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What is the present policy on BCG vaccination of babies born to mothers who have been treated for tuberculosis of the lung?

It is doubtful whether at present there is a general policy regarding BCG vaccination of babies born to mothers who have been treated for tuberculosis of the lung—and indeed perhaps there should not be. If the mother's treatment has been effective and there is no evidence of disease there would be little justification for giving BCG to the newborn child. There are exceptions to this general statement. If the family concerned lives in an area with a high incidence of tuberculosis a general policy of vaccinating newborn children would be advisable. This would apply to districts with many Asian families. It is also desirable to consider the mother's own views. If she is particularly worried about the risk of tuberculosis and positively requests BCG vaccination it would be reasonable, since BCG vaccination is so safe, to accede to her request.—G W POOLE, respiratory physician, London.

ten Dam HG. Pathogenesis of tuberculosis and effectiveness of BCG vaccination. *Tubercle* 1982;63:225-33.

The antibiotic currently recommended for pertussis (and likely pertussis) is erythromycin for 10 days. Is this duration of treatment based on clinical trials or is it just a best guess?

The use of erythromycin for pertussis is based on work showing that this drug reduced the number of days in which patients with pertussis remained culture positive compared with non-treated controls[1] and the finding that erythromycin may reduce complications arising from this disease.[2] It is assumed, though not proved, that positive cultures imply infectivity. In two controlled trials erythromycin failed to reduce the attack rates in household contacts[3] and there is no proved evidence for its use in this way. No trials have compared 10 with 14 day treatment periods with regard to reduction of spread of the disease or its complications. Some studies, however, have reported the results of nasopharyngeal cultures longitudinally in children receiving erythromycin. Henry *et al* found that bacteriological relapse occurred in some children treated for seven days.[2] In another study one of 10 children treated for 10 days had a bacteriological relapse one day after stopping treatment and that case remained culture positive for a further four days.[1] In a large series reported by Islur *et al* 96% of children treated with erythromycin were culture negative by the fourth day and all were by day six.[4] It would seem that children treated with erythromycin will become culture negative within six days and most will not relapse if treatment courses last seven or 10 days. With this information and because there has been no report of bacteriological relapse after 14 days' treatment with erythromycin some authors strongly recommend at least 14 days' treatment[5] and this is the accepted approach for many clinicians. It remains uncertain whether seven to 10 day courses are reasonable alternatives on the basis of convenience, reduced cost, and less likely organism resistance problems.—G RYLANCE, consultant in paediatrics and paediatric clinical pharmacology, Birmingham.

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