

ORIGINAL ARTICLE

Somatic and psychological problems in a cohort of sexually abused boys: a six year follow up case-control study

L Price, A Maddocks, S Davies, L Griffiths

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See end of article for authors' affiliations

Correspondence to:
Dr A Maddocks,
Department of Community
Paediatrics, Swansea NHS
Trust, Central Clinic,
Orchard St, Swansea
SA1 5AT, Wales, UK;
alison.maddocks@
swansea-tr.wales.nhs.uk

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Aims: To obtain information about the health and well being of 108 boys six years after their involvement with the same paedophile.

Methods: Case-control study of the health records of 93 male victims of a major episode of school based child sexual abuse and 93 matched controls. Interviews with a sample of their general practitioners.

Results: The number and frequency of reported health problems were similar in both cases and controls. However, abused boys were more likely than controls to present with symptoms that persisted for more than a year (31 cases compared with 10 controls).

Conclusions: Boys who have previously suffered sexual abuse at school did not utilise primary health care services more than a group of age matched controls. They did not present with psychological or somatic problems different from those presented by non-abused boys. However, abused boys were more likely to complain of persistent somatic or psychological problems lasting more than a year. This pattern appeared to persist after the abuse had stopped and the perpetrator imprisoned.

Childhood sexual abuse involves a difficult and sensitive diagnosis. It is also inherently difficult to research because of the necessity to maintain confidentiality and because of the secrecy and shame that are associated with it. Watkins and Bentovim have stated: "research on sexually abused boys has lagged behind that of girls, partly because it has been seen as an uncommon if not rare, problem and partly because it was doubted that sexual abuse had significant effects on boys, or their subsequent development".¹ Recent reviews acknowledge that male sexual abuse is being recognised more frequently, but still argue that greater attention to male sexual abuse and its potential outcomes is warranted.^{2,3} Holmes and Slap estimated, from large sample studies, that 54-89% of abused male children are molested by someone other than a family member.³ The clinical manifestations identified in victims include post-traumatic stress disorder, emotional problems, and a wide range of somatic and behavioural symptoms.⁴⁻⁷ Many studies have reported that problems persist into adulthood of child victims of sexual abuse.⁸⁻¹³ Although the majority of work has been with female survivors, it is also documented that male victims are likely to have long term sequelae.¹⁴⁻¹⁶ Sexual abuse is subject to significant under-reporting, particularly where male children are involved. A number of factors may prevent boys from disclosing abuse, including their lack of the necessary language to "tell", their perception that it is not appropriate to do so, coercion by the perpetrator, fear of stigmatisation, and the failure of potential confidantes to recognise attempts at disclosure.

Holmes and Slap note that the literature on the sexual abuse of male children is small and methodologically limited, tending to rely on subjective recall of adults who admitted earlier abuse.³ Although there is a paucity of controlled studies, they conclude, it is common, under-reported, underestimated, and undertreated. They also suggest that negative sequelae are highly prevalent and may contribute to the evolution from young victim to older perpetrator.

The research we report utilises a group of boys, with matched controls, who had been sexually abused by a known extrafamilial perpetrator.

The abuser was a primary school teacher who targeted his victims in the classroom or on residential courses. Most victims were aged 8-10 years at the time of the offences and had been subjected to varying forms of abuse, including bottom handling and genital fondling over clothes. This progressed, if unchallenged, to oral sex, mutual masturbation, and anal fingering. The offences occurred between 1981 and the arrest of the teacher in 1993; they came to light following a complaint by one of the boys to the local education authority.

An initial study was carried out in 1993/94 following the perpetrator's arrest.¹⁷ It showed that there was no significant difference between the cases and age matched controls in the numbers who had presented with somatic and psychological symptoms (18 cases versus 21 controls). However, the difference between the cases and controls with problems lasting over a year was significant ($p < 0.05$). In our earlier study we drew attention to the type of abuse suffered by the individual boys who complained of specific somatic or psychological symptoms.

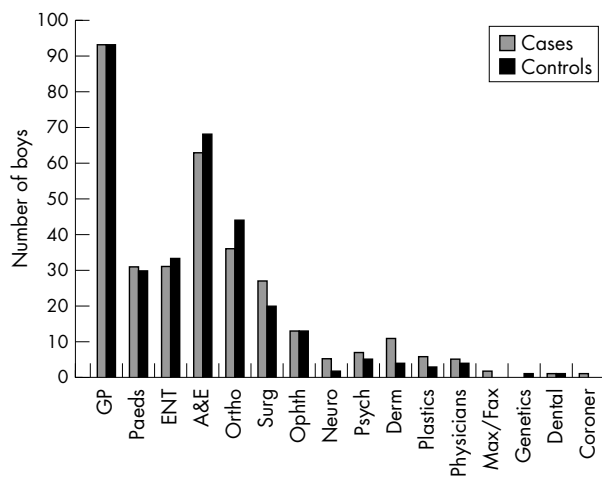
The present study involved a retrospective review of the medical records of the same group of boys to ascertain whether or not they developed (or continued to have) psychosomatic symptoms in comparison with matched controls.

METHODS

The study arose following an area child protection committee review in 1994. The case group was drawn from the 108 boys identified by the police as having been subjected to inappropriate sexual advances by a male teacher in one primary school over a period of at least 10 years. The 108 boys in the control group were identified in an adjacent community with similar demographic features to the study location. They were aged matched and attended one primary school feeding to the neighbouring comprehensive school. The cases were registered with seven group practices comprising 26 general practitioners and the controls with seven practices comprising 29 general practitioners.

Table 1 Reasons for referral to social services

Referral category	Number of referrals	
	Cases	Controls
Child protection concerns	23 (17 in 1993)	6 (1 in 1993)
Behaviour problems	8	3
Financial/material need	6	0
Educational problems	1	0
Advice re child	4	1
Registration	1	0
Supported caution	3	2
Appropriate adult	1	0
F11	5	3
Misc	1	0
Information	0	3
General social work support	0	2
Total	53	20

**Figure 1** Number of boys consulting each practitioner.

The records of 93 of the original cases were available; we also scrutinised records of 93 matched controls from the original study. Approval to access the boys' records was obtained from the Health Authority local research ethics committee. For both groups of boys, the school health records and general practitioner records were examined by LP and AM. In addition, information from child and adolescent mental health services and hospital admissions were available in the general practitioner records. Information about learning difficulties, further reported abuse, and primary health contacts were recorded (routine screening checks, immunisations, and preschool consultations were excluded). The duration of any recognised somatic or psychological problems was noted, recording the first and last attendance in primary health care for that problem. Symptoms were classified as somatic if the

boy/young man presented to his general practitioner with unexplained physical symptoms, which had no known pathological basis.¹⁸ Other mental health problems and substance misuse were classified as psychological disorders. The reason for the consultation and any diagnoses were coded using ICD10; data were analysed using SPSS.¹⁹ Information about any referrals made to the local social services department was obtained from their database. Anonymised data were also obtained from the police national computer (to comply with regulations it was not possible for us to search the police record for the individual boys).

Finally, a qualitative dimension of the study involved interviewing a purposive sample of general practitioners for some of the index cases. This will be reported elsewhere.

RESULTS

Those boys for whom no records were available had either moved with their families out of the area or were in the armed forces or away at college (when the family was still registered with the general practitioner). From the school health records it was noted that six boys in each group had a statement of special educational needs.

Of the 93 cases, 31.5% had been referred to the local social services department compared with 9.3% of the controls (17 referrals had been made as a result of the original inquiry, one boy generating nine referrals). Table 1 shows reasons for referral to social services.

Information obtained from the police national computer showed that 39 boys (25 cases, 14 controls) had criminal convictions or cautions reported against them. Offences included burglary, theft, drug offences, and assault. There was one recorded sexual offence (in a control boy). This difference is not statistically significant.

The overall number of contacts of both groups of boys with their general practitioner showed no statistically significant difference. There were variations in the number of consultations per year and the number of consultations per age group between the groups, which did not appear to be related to the time of the abuse. There was no difference between cases and controls in the pattern of attendance of the boys for secondary care, either as inpatients or outpatients (see fig 1).

The reasons for consultation were coded to ICD10 three character categories; table 2 shows the main presenting problems. There was no statistically significant difference in presenting problems between the groups. The number of problems that may have had a psychological basis or psychosomatic overlay was the same for both cases and controls (113 for each group). There were very similar numbers of boys with psychological and somatic problems in each group (see table 3).

The number of consultations concerned with psychological or somatic problems differed, with cases presenting more often than controls (see table 4). Using the χ^2 test, this is statistically significant ($\chi^2 = 14.138$, $p < 0.05$). The problems were noted to last for longer in cases compared to controls (see table 5).

Table 2 Presenting problems in rank order

Ranking	Cases		Controls	
	Problem	(Frequency)	Problem	(Frequency)
1st	Respiratory disease	(88)	Respiratory disease	(88)
2nd	Injury	(81)	Injury	(86)
3rd	Infectious disease	(70)	Diseases of eye and ear	(77)
4th	Diseases of eye and ear	(66)	Infectious disease	(74)
5th	Problems	(63)	Skin disease	(70)
6th	Skin disease	(59)	Problems	(65)

Table 3 Numbers of psychological and somatic problems presented

Problem	Number (percentage)	
	Cases	Controls
Psychological	20 (17.7%)	21 (18.6%)
Somatic	93 (82.3%)	92 (81.4%)

Table 4 Number of consultations for the same psychological or somatic problem

Number of consultations	Cases	Controls
1	48 (43.2%)	77 (68.1%)*
2-4	44 (39.6%)	26 (23%)*
5-9	15 (13.5%)	8 (7.8%)*
More than 10	4 (3.6%)	2 (1.8%)*

*Statistically significant ($p < 0.05$).**Table 5** Duration of problems

Duration	Cases	Controls
One month or less	57 (50.4%)	85 (75.2%)*
2-3 months	8 (7%)	7 (6.2%)*
4-6 months	9 (8%)	1 (0.9%)*
7-12 months	8 (7.1%)	10 (9%)*
More than 1 year	31 (27.4%)	10 (9%)*

*Statistically significant ($p < 0.05$).

Table 6 shows the long standing problems from both groups. Five of the cases who had significant problems had told their general practitioner that they had been abused by a schoolteacher. One of the case boys had committed suicide.

DISCUSSION

It is important when discussing the long term sequelae of child sexual abuse that limitations of the difficulties associated with the diagnosis and definitions are taken into account. The case boys in this study had by definition been sexually abused.²⁰ However, in comparison to the group described by Frothingham and colleagues, the epidemiology and external factors were strikingly different.²¹ They looked at school health and hospital records of 105 children seen by paediatricians in 1989 who had been diagnosed as sexually abused. There was no indication of the gender of the abused children in their study, and of the 56 identified perpetrators, 64% were family members. The same extrafamilial perpetrator, who was a fixated paedophile, had abused all the boys in our present study.

Some boys he "groomed" would have shown more resilience to his advances. It is postulated that the boys who are the most vulnerable are more likely to succumb and then go on to become victims of more persistent abuse. It is commonly assumed that boys subjected to more "serious" abuse may have more persistent or severe sequelae. It may, however, be the case that linking the severity or persistence of abuse to severity of symptoms can be misleading, given the variation in resilience of individual boys.

Gold and colleagues compared the psychiatric symptoms of women and men sexually abused as children.¹⁶ They concluded that male survivors of childhood sexual abuse have higher levels of symptomatology than women survivors and are more likely to experience depression, refuting previous findings that men and women survivors exhibit the same pattern of long term sequelae. He argues that there are definite gender differences in symptoms.

Notwithstanding the above, it is still of note that the boys who had been abused showed somatic and/or psychological symptoms for a significantly longer period of time than their matched controls; this has persisted since our initial study was undertaken. The main problems before abuse was detected were somatic and unexplained illnesses. Following the arrest of the abuser, and also with the increasing age of the boys, psychological problems of longer duration were more commonly reported. There is little published information about adolescents with psychiatric disorders (of either sex) who consult their general practitioner. Kramer and Garralda found 2% of 136 adolescents (assumed to be non-abused) presented with psychiatric complaints to their general practitioner, with 38% having had problems in the previous year.²²

It is significant that over the same period of time (eight years post-abuse) our subjects did not show the same morbidity as those of Frothingham and colleagues.²¹ In a review paper looking at the quality of evidence from research examining the impact of abuse on adult survivors, Ferguson noted the difficulties in interpreting data and the lack of consensus regarding the frequency of sexual abuse.²³ Many reported studies had methodological deficiencies and he emphasised the importance of controlled cohort studies. Our study attempts to show that the nature of the abuse and gender differences may contribute to long term sequelae. We would advise caution in extrapolating data from papers which report on the long term effects of child sexual abuse unless they are methodologically robust and controlled studies. We acknowledge that there are limitations in our case-control study which should be considered when drawing definitive conclusions. These include: practical difficulties in not being able to trace all our original subjects; inadequate and incompletely filled out records (which were on occasion almost illegible); and ethical restraints. We did not seek ethical consent to contact the case boys (or the controls), and although wider ranging information about the young men's health may have been forthcoming, we suspect that seeking personal contact would have caused unnecessary upset. Notwithstanding these

Table 6 Symptomatology of individual boys

Problems	Cases	Controls
Psychological (includes two subjects who also consulted their general practitioners for substance misuse)	Depression	(4 cases)
	Anxiety	(2 cases)
	Alcohol abuse	(1 case)
	Drug abuse	(1 case)
Somatic	Non-specific abdominal pain	(2 cases)
	Low back pain	(1 case)
	Painful knee	(1 case)
	Headaches	(1 case)
	Ankle pain	(1 case)
		Depression (1 case)
		Joint pains (1 case)
		Neck pain (1 case)
		Headaches (1 case)
		Knee pain (1 case)

limitations, we have found no other published reports which have looked at the health status of a group of boys sexually abused by a single extrafamilial perpetrator and compared the findings with matched controls.

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Authors' affiliations

L Price, A Maddocks, Department of Community Paediatrics, Swansea NHS Trust, Central Clinic, Orchard St, Swansea SA1 5AT, Wales, UK
S Davies, L Griffiths, School of Health Science, University of Wales, Swansea, Singleton Park, Swansea SA2 8PP, Wales, UK

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