

## Sexual molestation of males: associations with psychological disturbance

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**Background** There are no epidemiological data in Europe on associations between sexual molestation in males and psychological disturbance.

**Aims** To investigate whether sexual molestation in males is a significant predictor of psychological disturbance.

**Method** We recruited men attending general practice and genitourinary medicine services. Participants took part in a computerised interview about sexual molestation as children or adults. We ranked reported sexual experiences into three categories of decreasing severity. Each category was treated as an independent predictor in a multivariate analysis predicting different types of psychological disturbance.

**Results** Men who reported child sexual abuse were more likely to report any type of psychological disturbance. Men who reported sexual molestation in adulthood were 1.7 (1.0–2.8) times more likely to have experienced a psychological disorder, but self-harm was the single most likely problem to occur (odds ratio=2.6, range=1.3–5.2). Men reporting 'consenting' sexual experiences when aged under 16 years also were more likely to report acts of self-harm (odds ratio=1.7, range=0–2.8).

**Conclusions** Sexual abuse as a child or adult is associated with later psychological problems. All forms of sexual molestation were predictive of deliberate self-harming behaviour in men.

**Declaration of interest** None.

Until recently, there were no epidemiological data in Europe on the prevalence of non-consensual sexual experiences experienced by men in adulthood or on differences in psychological health between these men and men who do not report such experiences. We recently undertook two studies of the prevalence and characteristics of sexual molestation of men attending general practitioners (Coxell *et al*, 1999) and genitourinary medicine (GUM) clinics (Coxell *et al*, 2000). Almost 3% of men in the general practice sample and 18% of men in the GUM sample reported sexual molestation as adults. Although there is evidence that unwanted sexual experiences are significant predictors of the first onset of a range of psychiatric disorders in both men and women, many studies are uncontrolled (e.g. Burnam *et al*, 1988). We previously reported a significant association between sexual molestation and various types of psychological disturbance in men attending general practitioner (GP) services by using univariate statistics (Coxell *et al*, 1999). In this paper we increase the power of our analysis by bringing the GP and GUM samples together in one multivariate analysis to identify psychological disturbance that is independently associated with sexual molestation of men either as children or adults. We aim to assess whether sexual molestation of males is a significant predictor of psychological disturbance after controlling for the effects of age, occupational class, ethnicity, sexual orientation and survey site.

### METHOD

The studies, which received ethical approval, were conducted in two primary medical care settings, namely general practice and GUM. We chose these settings for specific reasons. Ninety-eight per cent of people in England are registered with

GPs from whom they receive most of their primary medical care and some social care provision. The GP attenders may differ from the general population in terms of their current medical and social difficulties. However, because two-thirds of the population consult their GP in any one year, such differences are often negligible. We chose GUM as a second site for the study because we were aware that men attending such clinics are more likely than other men to give a history of sexual molestation (Bartholomew *et al*, 1994; Petrak *et al*, 1995). General practice and GUM are settings that people regard as confidential, but in which they expect sensitive questions to be asked.

In the GP survey we approached over 300 practices in England, of which 18 eventually took part. These consisted of nine practices in London, two in Manchester, three in small towns and four in rural areas. The commonest reasons for refusal were lack of space or time for the study. One GUM clinic in central London took part in the study.

We asked men aged 18 years and over who were consecutive attendees to the general practices or GUM clinics to take part in anonymous and confidential research on 'men and their sexual experiences'. We explained that we wished to ask participants questions about non-consensual sexual experiences. Men who consented were taken to a private room and shown how to operate the computerised interview. We used a computerised interview because of evidence that this mode of presentation increases the reporting of sensitive material (Millsten & Irwin, 1983; Turner *et al*, 1998). Little was said to the participants once the interview was under way. The researcher was present to guide the participant should he encounter difficulty with the computer program. Participant's responses were not visible to the researcher.

We asked men their age, ethnicity and current or most recent occupation, and to report their sexual orientation on a seven-point scale modelled on the Kinsey scale (Kinsey *et al*, 1948). No standardised instrument exists to assess the nature of experiences of sexual molestation of men and their possible psychological sequelae. Thus, we generated items for the computerised interview from a literature search, and our previous research (Mezey & King, 1992, 2000; King & Woollett, 1997) and clinical experience. As reported elsewhere

(Coxell *et al.*, 1999), we defined non-consensual sex as 'where a person(s) uses force or other means so that they can do sexual things to you that you did not want them to do' or 'where a person(s) uses force or other means to make you do sexual things that you did not want to do'. However, as sexual experiences before age 16 years may be predictors of later sexual experience, we also asked about sexual molestation before age 16 years. We used the same definition for non-consensual sexual experiences before and after the age of 16 years. Participants were also questioned about whether, before the age of 16 years, they had done sexual things that they had wanted to do with a person(s) who was at least 5 years older. In English law, any person under 16 years is incapable, either legally or practically (because of a lack of appreciation of the significance or consequence of the act), of giving consent to sexual activity (West, 1987). However, offences where the child apparently 'consents' are treated differently, depending upon the age of the perpetrator. Although the nature of the behaviour and the developmental level of the child are important in defining the seriousness of the abuse (Cantwell, 1988), a 5-year age difference between the perpetrator and the child has been used to define sexual abuse where no force is involved (Finkelhor, 1986). If men are asked only about non-consensual experiences in childhood, such abusive experiences may be missed.

Men who reported any of the above were asked in some detail about the sexual experience(s) and disclosure to others. We then asked all participants, regardless of their replies to questions about sexual molestation as an adult or child, whether they had experienced any of the following since the age of 16 years:

- (a) Symptoms of anxiety, depression, nightmares or severe insomnia experienced for more than 2 weeks at any one time. Any combination of these is referred to as psychological disturbance.
- (b) Problems relating to the use of alcohol and drugs. Potential alcohol difficulties were regarded as a score of 1 or more on the CAGE questionnaire (Ewing, 1984). Drug use was assessed by a question on whether the respondent had experienced a problem with drugs for 2 weeks or more.

- (c) Sexual difficulties were assessed by a question on whether the respondent had experienced a sexual problem lasting for 2 weeks or more.
- (d) Any episode in which the man had deliberately tried to harm himself or take his own life.

### Data analysis

We analysed the data using the Statistical Package for the Social Sciences (Version 6). Not all men answered every question posed. We give denominators in each instance where there are missing data.

Based on current knowledge, we ranked reported sexual experiences in three categories. Psychological disturbance is most common in men who report sexual abuse as children, the effects of which are severe and last into adulthood (Kendall-Tackett *et al.*, 1993). Thus, we regarded this experience as having potentially the greatest impact. So-called consensual sexual experience as a child was our last category. Even where the child considers sexual contacts with adults 'positive', such sexual experiences may be associated with various forms of negative affect at the time of the sexual contact. For example, in one study of 37 male and 26 female participants who reported engaging in sexual contact with an adult or older child, many reported feeling guilty (41%), frightened (35%) and/or ashamed (29%) at the time of the contact (Okami, 1991). Thus *a priori* we derived three categories of sexual abuse of decreasing severity:

- (a) child sexual abuse (irrespective of other experiences);
- (b) sexual molestation as an adult (irrespective of 'consensual' experiences);
- (c) 'consensual' sexual experiences as a child aged less than 16 years.

Each category was treated as an independent predictor in a series of one-step, multivariate, logistic regressions predicting different types of psychological disturbance. We included in the regression other risk factors and confounders of the potential association between sexual molestation and psychological disturbance. These were: age in years; social class (non-manual *v.* manual); ethnicity (White *v.* non-White); interview site (GUM *v.* GP) and sexual behaviour (reporting/non-reporting of consensual sex with men). There is evidence that people who report same-sex partners are more likely to report psychiatric

disorders than those who report opposite-sex partners (Sandfort *et al.*, 2001). Our data had also already shown that men who reported male sexual partners were significantly more likely to report sexual molestation in adulthood (Coxell *et al.*, 1999, 2000). Thus, we decided to include same-sex behaviour in the regressions. Reported psychological disturbance was grouped into five categories for use as dependent variables in five regression analyses: psychological disturbance (anxiety, depression and/or sleep disturbance); sexual problems; self-harm; drug and/or alcohol misuse; and any of these difficulties.

## RESULTS

### Sample populations

Of 3142 men approached in general practice, 2474 (79%) agreed to participate (Coxell *et al.*, 1999). The mean age of participants was 46 years (s.d.=17) and 2290 (93%) men were White, 85 (3%) were Black and 97 (4%) belonged to other ethnic groups. A total of 873 (35%) men were manual workers and 78 men (3%) reported that they were gay, bisexual or straight but sometimes had sex with men. Of 257 men approached in the GUM clinic, 224 (87%) agreed to participate (Coxell *et al.*, 2000). The mean age of the sample was 31 (s.d.=8) and 159 (71%) men were White, 50 (22%) were Black and 15 (7%) belonged to other ethnic groups. A total of 78 (35%) were manual workers and 50 (22%) men reported that they were gay, bisexual or straight but sometimes had sex with men.

### Prevalence of sexual molestation

In the GP sample 71 (2.9%; 95% CI 2.2–3.6) men reported non-consensual sexual experiences after age 16 years, 128 (5.3%; 95% CI 4.4–6.3) before age 16 years and 185 (7.7%; 95% CI 6.5–8.8) reported 'consensual' experiences under age 16 years. In the GUM sample, 40 (18%; 95% CI 13–23) men reported non-consensual sexual experiences after age 16 years, 25 (12%; 95% CI 8–17) before age 16 years and 55 (27%; 95% CI 21–33) reported 'consensual' experiences under age 16 years.

### Prevalence of reported psychological disturbance

Reported psychological disturbance that had been present for at least 2 weeks since

the age of 16 years was relatively common in these populations of men (Table 1).

### Multivariate analysis

After controlling for age, social class, ethnicity, sexual behaviour and the site of the survey (general practice or GUM clinic), men who had experienced sexual molestation as children had significantly increased odds for reporting each particular type of psychological or behavioural disturbance (Table 2). Men who reported sexual molestation in adulthood were more likely to have suffered any psychological disorder, but self-harm was the only behaviour that was more likely to be reported than others. Men who reported 'consenting' sexual experiences when aged under 16 years were also more likely to report committing acts of self-harm.

## DISCUSSION

Men who reported child sexual abuse were 2.4 times more likely to report any type of psychological disturbance and 3.7 times more likely to report deliberately harming themselves. Although men who had experienced sexual molestation only in adulthood and/or 'consensual' sexual experiences as a child commonly reported subsequent psychological difficulties, both experiences

were particularly associated with a raised likelihood of reporting deliberate self-harm.

### Strengths and weaknesses of the data

The main advantage of our study is that sufficient numbers of men reporting sexual molestation at different ages were directly compared with a large comparison group who gave no history of sexual molestation. This means that we had greater power to assess whether differences observed between groups remained significant after demographic and other confounding factors are controlled. A univariate analysis of data from a recent survey of adolescents suggested that although boys who had experienced a sexual assault were more likely than girls experiencing such assaults to consult a psychiatrist or psychologist, this gender difference was no longer significant once the age of the victims was controlled (Darves-Bornoz *et al*, 1998). Our sample size also means that the confidence intervals of our estimates are relatively narrow. One important limitation to our study, however, is our inability to make a temporal link between the reported problems and the sexual molestation. Thus, we can only report associations and cannot conclude that the links are causal. A second limitation is that our study lacks power to examine associations

between the nature and circumstances of particular sexual acts and reported psychological difficulties. Third, the fact that the GP sample was limited to a number of volunteer practices and our GUM sample to one inner-city clinic may limit the external validity of our results. Finally, and largely because of the length of the interview, standardised assessments of past psychological disorder were not applied, except in the case of alcohol misuse.

### Age at time of molestation

Sexual molestation of boys was associated with more reported psychological disturbance than sexual molestation of men. This finding has also been reported in a community survey of 432 men and women who reported sexual abuse as a child or adult. Burnam *et al* (1988) found that child as opposed to adult sexual assault was a significant predictor of the first onset of depression, alcohol misuse or dependence, drug dependence and phobia, for both men and women, as identified by structured clinical interview. Our findings for general psychological disturbance and substance misuse problems can be seen as support for these previous findings but our data go further in identifying child sexual molestation as a predictor of sexual difficulty and self-harm.

**Table 1** Prevalence of psychological disturbance

	Child sexual abuse, irrespective of other experiences (n=150)	Sexual molestation as an adult, irrespective of 'consensual' experiences (n=69)	'Consensual' sexual experiences as a child (n=191)	Total population (n=2698)
Psychological disturbance <sup>1</sup>	50%	35%	35%	32%
Sexual problems	16%	12%	7%	6%
Self-harm	23%	18%	13%	8%
Substance misuse	23%	23%	17%	13%
Any of the above	62%	56%	37%	39%

1. Anxiety, depression and/or sleep disturbance.

**Table 2** Associations with each type of sexual molestation (odds ratios and 95% confidence intervals)

	Psychological disturbance <sup>1</sup>	Sexual problems	Self-harm	Substance misuse	Any of these problems
Child sexual abuse	2.0 (1.4–2.8)	3.2 (1.9–5.4)	3.7 (2.3–5.8)	2.4 (1.5–3.6)	2.4 (1.7–3.5)
Adult sexual assault	1.0 (0.6–1.7)	1.9 (0.8–4.3)	2.6 (1.3–5.2)	1.6 (0.9–3.1)	1.7 (1.0–2.8)
'Consensual' sexual experiences when aged under 16 years <sup>2</sup>	1.1 (0.8–1.5)	1.5 (0.8–2.6)	1.7 (1.0–2.8)	1.3 (0.8–1.9)	0.9 (0.6–1.2)

1. Anxiety, depression and/or sleep disturbance.

2. No history of sexual molestation as a child or adult.

### 'Consensual' sexual experiences in childhood

So-called 'consensual' sexual experiences in childhood were associated with fewer psychiatric disorders than child sexual abuse. There are a number of possible explanations for this. First, male perpetrators were much more common in child sexual abuse (GP sample, 82%; GUM clinic sample, 80%) than in 'consensual' sexual experiences (GP sample, 14%; GUM clinic sample, 31%). (Percentages refer to occasions on which a male or female perpetrator was involved and can add up to >100 because both male and female perpetrators were involved on some occasions.) Sexual activity with a male perpetrator may involve more penetrative sex (see Coxell *et al*, 2000) and may lead to concerns about sexual function and confusion about sexual orientation. Furthermore, sex between a teenage boy and an older woman is popularly regarded in some cultures as an introduction to sexual matters and to manhood (Bolton *et al*, 1989). Second, child sexual abuse occurred at a younger mean age (GP sample, 11 years (s.d.=3); GUM clinic sample, 9.8 years (s.d.=3)) than 'consensual' sexual experiences (GP sample, 14 years (s.d.=1.9); GUM clinic sample, 14 years (s.d.=1.8)). These age disparities reflect large differences in sexual and psychological development. Finally, anxiety and depression may be associated with differential recall, attribution and/or labelling of the sexual experiences (Beck, 1976; Derry & Kuiper, 1981). Men who have not developed psychological disturbance as adults may be less inclined to describe childhood sexual experiences as unwanted. We note, however, that the rate of 'consensual' experiences was more than three times greater in the GUM sample (27%) than in the GP sample (8%). Thus, 'consensual' experiences may also be associated with subsequent sexual risk-taking behaviour. There is evidence that (Puerto Rican) men who have sex with men and who have a history of child sexual abuse are significantly more likely to engage in receptive anal intercourse and in unprotected anal intercourse than men without such a history (Carballo-Diequez & Dolezal, 1995). Men in this study who reported 'willing' sex with an older partner when aged 13 years or younger were ranked between the other two groups with respect to these behaviours (Carballo-Diequez & Dolezal, 1995).

### CLINICAL IMPLICATIONS

- Sexual abuse of male children is a significant predictor of psychiatric disorder in adulthood.
- 'Consensual' experiences in childhood and sexual molestation in adulthood are significant predictors of self-harm.
- Acts of self-harm in men should alert care professionals to a possible history of sexual molestation as an adult or child.

### LIMITATIONS

- The data are cross-sectional in nature and causal links between sexual molestation and psychiatric problems cannot be assumed.
- The study lacks the power to examine associations between particular sexual acts and psychological problems.
- The general practitioner sample was limited to a number of volunteer practices and the genitourinary medicine sample to one inner-city clinic, which may limit the generalisability of the results.

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### Type of psychological disturbance

Unwanted sexual experiences in adulthood were principally associated with reported self-harming behaviour. It is possible, however, that reporting self-harm is a proxy for other disturbed feelings, such as anxiety and depression, that have subsequently been forgotten. Self-harming behaviour may be recalled more easily because of acute pain, possible scarring and/or injury or medical attention received. There are a number of other reasons why these unwanted experiences may have failed to be significantly associated with other psychological disturbances. First, we conflated data from the victims of experiences perpetrated by men and women. There is some evidence that sexual assault of men by women is less disturbing than sexual assault by other men (Struckman-Johnson & Struckman-Johnson, 1994). We found a trend that confusion about sexual

orientation was more common after sexual molestation by another man (26%; 13/50) compared with sexual molestation by a woman (11%; 4/35;  $\chi^2=2.7$ , 1 d.f.,  $P<0.10$ ). Second, our data analysis strategy may have an impact on the findings pertaining to adult sexual molestation. We divided our sample in such a way that men who reported sexual assault as a child and as an adult were placed in the child sexual assault group, because we assumed that child sexual abuse was the most serious category of assault. We did not retain them as a separate group in the analysis because men reporting both types of assault were relatively uncommon. Had we placed these men with the group reporting only sexual assault as an adult, we may have found that adult sexual molestation was a significant predictor of a wider variety of disturbance. Third, our findings may also have been affected by the fact that not all persons



who reported sexual assault provided details about what had happened to them or answered questions about psychological disturbance. For example, 12 of 40 men in the GUM clinic sample who reported sexual assault in adulthood did not complete the interview.

Acts of self-harm are more common in women than in men and thus such behaviour in men may indicate sexual molestation as an adult or child.

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