

Relation between childhood sexual and physical abuse and risk of revictimisation in women: a cross-sectional survey

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Summary

Background Women who are physically and sexually abused in childhood are at increased risk of victimisation in adulthood. Research has concentrated on sexual revictimisation, and has not included investigation of other abusive experiences, nor examination of prevalence and effects of abuse on adult revictimisation. We aimed to examine the relation between childhood trauma and adult revictimisation, and identify confounding factors.

Methods We did a cross-sectional survey of 2592 women who were attending primary care practices in east London, UK, with self-administered anonymous questionnaires. We included questions on physical and sexual abuse in childhood; on domestic violence, rape, indecent assault, and other traumatic experiences in adulthood; and on alcohol and other drug abuse. We analysed associations between childhood and adulthood abuse with multiple logistic regression.

Findings 1207 (55%) of 2192 eligible women were recruited and completed the questionnaire. Abusive experiences co-occurred in both childhood and adulthood. Repetition and severity of childhood abuse were independently associated with specific types of adult revictimisation. Unwanted sexual intercourse (<16 years) was associated with domestic violence in adulthood (odds ratio 3.54; 95% CI 1.52–8.25) and with rape (2.84; 1.09–7.35); and severe beatings by parents or carers with domestic violence (3.58; 2.06–6.20), rape (2.70; 1.27–5.74), and other trauma (3.85; 2.23–6.63).

Interpretation Childhood abuse substantially increases risk of revictimisation in adulthood. Women who have experienced multiple childhood abuse are at most risk of adult revictimisation. Identification of women who have undergone childhood abuse is a prerequisite for prevention of further abuse.

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See *Commentary page 434*

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Introduction

Childhood maltreatment is a major health problem that is associated with a wide range of physical conditions, and leads to high rates of psychiatric morbidity and social problems in adulthood. Women who were abused as children have an increased risk of abuse in adulthood.^{1–16} Research has been focused mainly on whether childhood sexual abuse increases risk of sexual assault in adulthood. Results from a few studies have suggested that childhood sexual abuse increases the risk of domestic violence.^{2,4,5} A substantial proportion of women who were victims in childhood have also reported more than one form of abuse. We do not know whether multiple abusive experiences further increase the risk of abuse in adulthood, and little research has been done on possible associations between childhood abuse and similar or equivalent forms of abuse in adulthood. One group of investigators¹⁷ has shown that after controlling for confounding between childhood sexual and physical abuse, physical abuse was unrelated to rape in adulthood in female naval recruits. Nevertheless, sexual abuse per se might not be a specific or unique predisposing factor, and could be merely one of several abusive experiences in childhood that could increase vulnerability to various forms of abuse and revictimisation in adulthood.¹⁸ Different types of childhood abuse could be broadly defined as early stress—which increases the risk of abusive experiences in adulthood—rather than specific antecedents to adult experiences.

Few researchers have investigated revictimisation or examined an adequate range of abusive experiences in childhood and adulthood. Few data exist on other factors that could be associated with childhood experiences of abuse and further increase risk of revictimisation. Most studies of adult revictimisation have included selected populations,^{2–5,17,19} but some have been community based^{9,13,16} or have included students.^{1,10–12,14,15,18} Small sample sizes have weakened the conclusions that could be drawn from some studies. Furthermore, definitions of abusive experiences and their degree of severity differ considerably between studies. Childhood sexual abuse can mean anything from exhibitionism to rape, with upper age limits of abuse varying from 14 to 18 years, and with little objective justification for these criteria.¹⁶

We have surveyed women who were attending primary care in east London to assess the prevalence of self-reported childhood and adult abusive and traumatic experiences, measure the association between childhood abuse and adult abuse and trauma, test for specific or generalised associations between different forms of childhood and adult abuse, and identify factors that could confound the relation between childhood and adult abuse.

Methods

Patients and procedures

Between January and December, 1999, we surveyed adult female patients (16 years or older) in 13 general practices in Hackney, an innercity area of east London with substantial socioeconomic deprivation. We generated a list in random order of all 51 practices in Hackney and

approached them in consecutive order until 13 were recruited. Six practices declined to participate. Consecutive eligible female patients attending surgeries were invited to take part in the survey, and recruitment took place in seven randomised sessions per week for 2–4 weeks in each practice. Women were eligible to participate if they were registered with the practice, and were able to read English, Turkish, or Bengali (the questionnaire was translated into these languages). Those who were nursing an infant or who were too ill to participate were excluded.

If an adult female patient were eligible to participate, a research assistant introduced the woman to the survey and explained the aim of the study. Women were told that participation was voluntary, and that all information disclosed would be confidential and would not be given to their doctor or entered in their medical record. Before patients' recruitment we gave family practitioners and practice nurses an information pack that detailed local support and housing services for abused women. The survey questionnaire included an information sheet explaining the study in detail, a sheet detailing local support services for women, and a written consent form. Women were encouraged to take the information and support services sheet away with them.

We developed a self-administered questionnaire specifically for the survey. The questionnaire included demographic details; CAGE²⁰ questions to assess current and past alcohol abuse, self-reported use of illicit (street) drugs, and whether the woman had ever had difficulty reducing or controlling drug use; questions on violence in relationships, unwanted sexual experiences in childhood and adulthood, attitude to being questioned by their family practitioner or practice nurse about domestic violence and sexual abuse; and self-reported criteria for DSM-IV post traumatic stress disorder.²¹

Domestic violence was defined²² as a yes response to one or more questions about physical assault, or to a question about whether they had been forced to have sex by a present or any previous partner. Women were asked whether they had had unwanted sexual intercourse with anyone when they were a child (younger than 16 years) and whether they had been involved in unwanted sexual activities that had never reached full sexual intercourse. They were also asked whether they had been raped aged 16 years or older, and whether they had been sexually assaulted, but not raped. Women were asked whether as children they had been severely beaten by a parent, step-parent, or carer on one or more occasions. To establish the presence or absence of additional trauma, we asked them to think of events that had happened to them throughout their life: whether they had ever seen something so horrifying or frightening, or had had something so horrible happen to them, that they kept having dreams or nightmares or kept remembering it when they did not want to; whether this trauma included sexual abuse before age 16 years, sexual assault or rape aged 16 years or older, domestic violence, or "something else that you saw or that happened to you?" A positive answer to this last question was defined as an additional non-specific, or other traumatic event.

We aimed to recruit 5% of all women registered at every practice, which we achieved in 11 of the 13 practices. Women completed the survey questionnaire in the waiting room at each practice, and were asked not to take the questionnaire home. In one waiting area, seating arrangements made physical access to the women difficult. In another practice, a large proportion of patients was Orthodox Jewish, and the survey coincided with a

religious period in which women were not allowed to write. These factors reduced the number of women willing to take part in the survey in these two practices.

The study was approved by the East London and City health authority research ethics committee. We were not given permission to collect information from medical records about patients who declined participation in the study.

Statistical analysis

Data analysis was done with SAS statistical software, version 6.12. Univariate analyses were used to examine associations between demographic characteristics and adult experiences of abuse and trauma, with χ^2 test for frequencies. Multiple logistic regression models were constructed to investigate associations between childhood abuse variables and adult experiences, after adjustment for variables thought likely to confound the relation and affect the response rate. We adjusted for age, ethnic origin, education, home ownership, marital status, whether place of birth was the UK, and family practice. Odds ratios relative to a baseline reference were estimated for all these categories. Values for odds ratios were linked to adult experience—ie, values greater than one indicate an increased risk of a particular adult experience, and values less than one indicate a reduced risk of a particular adult experience.

Results

2592 women attended the surgeries: 243 (9%) were not approached because they seemed too ill to participate or were nursing an infant, and 157 (6%) were ineligible because they were unable to speak sufficient English to give consent. We approached 2192 women in waiting rooms; 781 (36%) refused to complete the questionnaire; 1411 (64%) consented and were eligible to take part in the survey. However, 169 (12%) women were called to see their doctor or practice nurse before they could sufficiently complete their questionnaire, and 35 (2%) did not complete theirs. 1207 (55%) eligible women were recruited and completed the questionnaire. Not all respondents completed 100% of their questionnaires, hence denominators for proportions varied slightly.

Participants' ages ranged from 16 to 85 years, with a mean of 37.2 years (SD 15.9); 569 (49%) reported that they were in a paid job at the time of the survey; 634 (54%) were white; 593 (51%) were currently living with a partner or spouse. 132 (12%) women gave two or more positive responses to the CAGE alcohol questionnaire, we ascertained no association with age. 222 (20%) women had at some time used illicit (street) drugs; significantly more women were young than old ($p=0.0001$).

88 (9%) participants reported unwanted sexual intercourse in childhood; 116 (11%) reported unwanted sexual activities but not intercourse; 48 (5%) reported being severely beaten by a parent or carer on one occasion, 112 (12%) more than once; and 17 women (2%) reported all three forms of abusive experience. There was no association between these childhood abuse variables and age.

For women who answered questions about adult (16 years and older) abusive and traumatic experiences: 425 (41%) fulfilled the study definition for domestic violence, 61 (17%) had experienced domestic violence with more than one partner, 79 (8%) had been raped, and 87 (9%) had been sexually assaulted (but not raped). After exclusion of women who reported that they had been forced to have sex by a partner, 33 (4%) reported that they had been raped. 200 women (21%) reported

Characteristics	Adjusted odds ratios (95% CI) for adult experiences of abuse and trauma (≥ 16 years)				
	Domestic violence (n=700)	Domestic violence (more than 1 partner) (n=172)	Rape (n=715)	Sexual assault (n=706)	Other trauma (n=689)
Age (years)					
16–29	1.00	1.00	1.00	1.00	1.00
30–44	0.83 (0.55–1.25)	1.16 (0.41–3.28)	2.21 (0.96–5.05)	1.82 (0.87–3.79)	1.64 (0.99–2.70)
45–59	0.71 (0.38–1.35)	1.86 (0.47–7.39)	2.64 (0.84–8.28)	0.86 (0.27–2.67)	1.25 (0.60–2.63)
≥ 60	0.67 (0.29–1.52)	0.80 (0.06–10.5)	1.55 (0.27–8.95)	0.47 (0.05–4.37)	0.59 (0.19–1.86)
Ethnic origin					
White	1.00	1.00	1.00	1.00	1.00
Black	0.59 (0.36–0.96)	1.10 (0.36–3.36)	0.62 (0.25–1.53)	0.37 (0.15–0.92)	0.50 (0.27–0.92)
Asian	0.97 (0.32–2.91)	1.26 (0.09–17.2)	1.21 (0.13–10.9)	0.75 (0.08–6.65)	1.10 (0.31–3.90)
Turkish/Kurdish	0.66 (0.27–1.59)	0.24 (0.03–2.19)	0.57 (0.20–1.60)
Other*	0.66 (0.33–1.29)	0.59 (0.10–3.42)	1.03 (0.37–2.89)	1.71 (0.68–4.30)	1.53 (0.76–3.08)
Education					
<13 years	1.00	1.00	1.00	1.00	1.00
≥ 13 years	0.66 (0.45–0.96)	0.58 (0.24–1.43)	1.03 (0.52–2.05)	1.44 (0.76–2.74)	0.72 (0.46–1.12)
Home ownership					
No	1.00	1.00	1.00	1.00	1.00
Yes	1.30 (0.87–1.95)	1.16 (0.39–3.39)	0.54 (0.23–1.27)	0.66 (0.30–1.41)	0.93 (0.57–1.53)
Marital status					
Married	1.00	1.00	1.00	1.00	1.00
Divorced/separated	6.12 (3.35–11.2)	1.32 (0.37–4.69)	2.60 (0.93–7.29)	3.32 (1.28–8.64)	1.13 (0.56–2.24)
Widowed	2.93 (1.12–7.71)	0.53 (0.04–7.37)	2.55 (0.45–14.6)	1.39 (0.14–13.6)	1.52 (0.47–4.94)
Single	1.85 (1.19–2.90)	1.61 (0.49–5.24)	1.86 (0.74–4.65)	1.56 (0.67–3.65)	1.23 (0.73–2.08)
Cohabiting	1.53 (0.84–2.80)	2.43 (0.41–14.4)	3.61 (1.20–10.9)	3.57 (1.32–9.64)	0.86 (0.40–1.81)
Born UK					
No	1.00	1.00	1.00	1.00	1.00
Yes	1.93 (1.27–2.93)	2.36 (0.66–8.49)	0.84 (0.39–1.79)	0.85 (0.42–1.71)	1.13 (0.69–1.84)
Severely beaten (<16 years)					
Never	1.00	1.00	1.00	1.00	1.00
Once	2.03 (0.92–4.49)	4.53 (1.27–16.2)	3.08 (1.06–8.97)	2.19 (0.68–7.10)	3.49 (1.51–8.06)
More than once	3.58 (2.06–6.20)	2.34 (0.89–6.17)	2.70 (1.27–5.74)	2.69 (1.31–5.53)	3.85 (2.23–6.63)
Unwanted sexual activities (<16 years)					
No	1.00	1.00	1.00	1.00	1.00
Yes	1.54 (0.82–2.88)	0.86 (0.29–2.52)	3.31 (1.44–7.59)	3.99 (1.81–8.80)	2.05 (1.06–3.98)
Unwanted sexual intercourse (<16 years)					
No	1.00	1.00	1.00	1.00	1.00
Yes	3.54 (1.52–8.25)	3.97 (1.17–13.4)	2.84 (1.09–7.35)	2.84 (1.07–7.53)	2.29 (1.02–5.15)

All models were adjusted for family practice (not significant). *Includes Turkish/Kurdish if no odds ratio shown for this ethnic group.

Effects of demographic characteristics and childhood abuse on adult experiences of abuse

witnessing or experiencing additional traumatic or stressful experiences (other than personal experiences of rape, sexual assault, and domestic violence) that they kept dreaming about or were unable to forget.

Childhood abusive experiences co-occurred: 53 (67%) women who had experienced unwanted sexual intercourse before age 16 years had also experienced other unwanted sexual activities (odds ratio 30.3; 95% CI 17.7–51.9), $p=0.0001$; 28 (39%) of the same subgroup had been beaten on one or more occasions (3.45; 2.07–5.75), $p=0.0001$; and 35 (35%) women who had experienced unwanted sexual activities (not intercourse) had been severely beaten on one or more occasions (3.00; 1.91–4.74), $p=0.0001$.

Adult experiences of abuse and trauma also co-occurred. Of women who reported domestic violence, 55 (14%) also reported rape (4.73; 2.76–8.11), $p=0.0001$; 54 (14%) sexual assault other than rape (3.34; 2.06–5.41), $p=0.0001$; and 113 (31%) other trauma (2.67; 1.92–3.70), $p=0.0001$. 41 (59%) women who reported being raped also reported other forms of sexual assault (30.0; 17.0–53.1), $p=0.0001$; 41 (56%) other trauma (5.93; 3.62–9.73), $p=0.0001$; and 40 (51%) of women who reported sexual assault other than rape also reported other trauma (5.06; 3.13–8.17), $p=0.0001$.

The table shows associations between different forms of

childhood abuse and abuse in adulthood, after adjustment for independent confounding variables. All three types of childhood abuse were associated with an increased risk of adult abuse. There were significant associations between unwanted sexual intercourse in childhood and all types of adult abuse. Associations were significant between unwanted sexual activities in childhood and rape, sexual assault, and other trauma in adulthood. Associations were also significant for more than one episode of childhood physical abuse and all forms of adult abuse, with the exception of domestic violence from more than one partner. A subgroup of 46 (5%) of 917 women (95% CI 4–7%) had experienced multiple childhood abuse. Further details of the distribution of demographic characteristics and childhood abuse variables with adult abuse categories are shown in the appendix at the end of this article.

Women who had been raped recently (≤ 10 years ago) and those raped in the past (> 10 years) did not differ with respect to the proportion who reported childhood sexual abuse. Similarly, women who had been recently sexually assaulted (≤ 10 years ago) and those assaulted in the past (> 10 years) did not differ with respect to the proportion who reported unwanted sexual intercourse in childhood. However, significantly more women who had been assaulted in the past reported unwanted sexual activities

as a child (4.06 [1.43–11.5]). Recent physical violence and childhood experiences were not associated.

Discussion

We have shown that childhood abuse is independently associated with adult abuse and trauma, after adjustment for significant confounding variables. We have confirmed that experiences of abuse do not occur in isolation; women who had had unwanted sexual intercourse in childhood were likely to experience other forms of unwanted sexual activity; and the occurrence of either of these increased their risk of physical abuse.

Less severe experiences of childhood abuse were specifically associated with similar forms of abusive experience in adulthood—ie, unwanted sexual activities were associated with rape, sexual assault and other trauma, but not with domestic violence. However, more severe childhood experiences of unwanted sexual intercourse and being severely beaten on more than one occasion were associated with both sexual and physical abuse in adulthood. These findings emphasise the effect of definitions of abuse and measures of repetition and severity. If criteria of abuse were broadened to include less severe forms, specific associations might be found. Our findings show that severe abuse in childhood is associated with generalised adult abuse. If childhood abuse is sufficiently severe, early and later abuse will not necessarily take the same form. An explanatory model has been proposed in which trauma symptoms of depression and dissociation can be both the consequences and causes of such severe experiences.^{18,23,24}

Misuse of alcohol and drugs was significantly related to increased risks of adult abuse and trauma. We could not examine the directional relation between these variables and childhood abuse because our study's cross-sectional design prevented further investigation of the women's event history.²⁵ However, recall bias did not seem to be a difficulty, because women in the older age groups were more likely to report distant childhood abuses than were younger women.

We did not obtain information on the sexual behaviour of our participants. However, sexual encounters that are characterised by heavy drinking are more likely to involve sexual aggression than sober ones.²⁶ Furthermore, women with many sexual partners could be at higher risk of victimisation by virtue of their contact with many men.¹⁰ Finally, sexually abused girls are more likely to engage in sexually inappropriate behaviours, which include sexual precocity and seductive behaviour towards adults.^{27–29} In adulthood, these women have higher frequencies of sexual activity than do non-abused women.^{1,11,17} Russell³⁰ has proposed a model of revictimisation, on the basis of Finkelhor and Browne's model,³¹ which specifies four dynamics resulting from child sexual abuse: traumatic sexualisation, betrayal, stigmatisation, and powerlessness.

High rates of adult revictimisation are associated with higher levels of unemployment, greater residential mobility, and lower socioeconomic status than non-revictimized adults.^{32,33} Sexual revictimisation has been specifically associated with unwanted pregnancies, multiple sexual partners, severe psychiatric morbidity, and use of psychiatric services.^{2,6,16,34} In our study, multiple abusive experiences in childhood increased the risks of multiple experiences of abuse and trauma in adulthood. Such childhood experiences are infrequently reported to health care professionals, and the contribution of multiple abuse to adult psychopathology can be missed. When these women present to services for help with the sequelae of childhood abuse as adults, clinicians might not realise

that abuse and trauma might currently be taking place or that these women continue to be at high risk of abuse in the future. We need to investigate therapeutic interventions for girls and young women who have experienced childhood abuse and are at risk of abuse in adulthood, as well as studies with women who have already experienced revictimisation.

Contributors

Jeremy Coid designed the study, and drafted and led revision of the report. Ann Petrukevitch analysed and interpreted data, and helped revise the report. Gene Feder designed the study, managed the survey, and helped revise the report. Shan Chung obtained data and helped revise the report. Jo Richardson designed the study, managed the survey, and contributed to revisions. Stirling Moorey designed the study and contributed to revision of the report.

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Appendix

Characteristics	Adult (≥ 16 years) experiences of abuse and trauma*									
	Domestic violence		Domestic violence (more than 1 partner)		Rape		Sexual assault		Other trauma	
	Absent (n=610)	Present (n=425)	Absent (n=179)	Present (n=68)	Absent (n=936)	Present (n=79)	Absent (n=911)	Present (n=87)	Absent (n=753)	Present (n=200)
Age (years)										
16-29	226	147	52	20	352	21	345	27	295	63
30-44	258	196	87	31	390	40	374	48	303	99
45-59	73	58	27	15	117	15	116	10	93	27
≥ 60	43	19	11	1	63	2	62	1	53	9
Ethnic origin										
White	320	262	109	42	526	50	513	53	431	121
Black	153	83	43	18	201	17	198	16	165	37
Asian	28	12	7	1	38	1	37	1	32	4
Turkish/Kurdish	40	29	3	1	76	1	74	3	54	14
Other	51	33	11	5	73	8	68	11	52	21
Education										
<13 years	256	210	90	44	418	39	415	35	325	104
≥ 13 years	284	167	76	18	408	32	390	42	342	79
Home ownership										
No	417	308	131	54	655	62	638	67	522	147
Yes	186	114	47	13	271	16	262	20	224	51
Marital status										
Married	243	104	39	10	324	14	321	14	259	53
Divorced/separated	34	86	47	20	103	16	98	19	78	33
Widowed	20	11	6	1	29	2	29	1	24	7
Single	228	164	67	27	349	32	337	34	282	78
Cohabiting	65	48	15	9	98	13	93	18	84	25
Born UK										
No	215	116	44	14	301	22	295	23	246	58
Yes	385	303	132	53	614	57	596	63	492	139
Severely beaten (<16 years)										
Never	458	256	107	28	692	36	673	48	583	112
Once	19	27	10	10	40	6	40	5	27	14
More than once	37	67	29	18	88	23	82	24	57	44
Unwanted sexual activities (<16 years)										
No	529	327	133	44	834	47	817	51	677	154
Yes	39	70	30	20	83	29	76	33	61	39
Unwanted sexual intercourse (<16 years)										
No	545	342	145	43	866	49	844	58	699	163
Yes	22	62	23	21	55	29	52	28	42	32

*Totals for individual variables vary because of missing data.

Frequency distributions of womens' characteristics