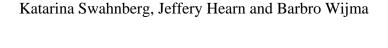
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Prevalence of perceived experiences of emotional, physical, sexual, and health care abuse in a Swedish male patient sample



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Katarina Swahnberg, Jeffery Hearn and Barbro Wijma, Prevalence of perceived experiences of emotional, physical, sexual, and health care abuse in a Swedish male patient sample, 2009, Violence and Victims, (24), 2, 265-279.

http://dx.doi.org/10.1891/0886-6708.24.2.265

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Running head: PREVALENCE OF ABUSE IN MALE SWEDISH PATIENTS

Prevalence of perceived experiences of emotional, physical, and sexual abuse and abuse in health care in a Swedish male patient sample

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Prevalence of abuse in male patients

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Abstract

The aim of the present study was to estimate the prevalence of, and current suffering from,

emotional (EA), physical (PA), and sexual abuse (SA) and abuse in health care (AHC) among male

Swedish patients, and compare prevalences of abuse between female and male patients at a Swedish

university hospital. For data collection we used the NorVold Abuse Questionnaire, which has been

validated in a female sample and in the present study. The lifetime prevalences were: EA, 12.8%;

PA, 45.7%; SA, 3.8%, AHC, 8.1%. Current suffering from abuse among participants was 1–9%.

The women reported higher rates than men of current suffering from all kinds of abuse, and more

severe forms of abuse, e.g. life-threatening PA. Health care staff should be aware of the

documented high prevalences of abuse, and learn to make good judgements as to when to ask male

as well as female patients about experiences of abuse.

Keywords: gender differences; violence; health care; questionnaire; validation

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Prevalence of perceived experiences of emotional, physical, and sexual abuse and abuse in health care in a Swedish male patient sample.

The knowledge of prevalence of abuse among adult men is limited, especially when compared to what is known about abusive experiences among women. Only a few instruments have been validated and used in male as well as in female samples more than once.

After a review of the literature we concluded that research on abuse towards men has mainly focused on prevalence of, and factors associated with, childhood sexual abuse (SA), and has been based on retrospective data among adult men (Dhaliwal, Gauzas, Antonowicz, & Ross, 1996; Finkelhor & Berliner, 1995; Holmes & Slap, 1998; Vander Mey, 1988; Watkins & Bentovim, 1992). There are a few retrospective studies among adult men and women about childhood experiences of physical abuse (PA) and emotional abuse (EA): childhood EA and PA seem to be more common among boys than girls, while prevalence of childhood SA is reported to be higher among girls than boys (Gorey & Leslie, 1997; Leth, Stenvig, & Pedersen, 1988; MacMillan et al., 1997; Sariola & Uutela, 1994; Schei, Muus, & Bendixen, 1994; Vissing, Straus, Gelles, & Harrop, 1991). Male adult experiences of several types of abuse, i.e. EA, PA, and/or SA, have been documented in only a few studies and mainly concerned partner abuse (Coker et al., 2002; Craft & Serovich, 2005; Harwell, Moore, & Spence, 2003; Martin et al., 1998).

The use of varying definitions of abuse makes it difficult to get a meaningful overview of the prevalence of abuse among men. This is especially the case for EA, since there is great disagreement over what to include in the concept EA (Loue, 2005). For instance, some studies focus on the behavior of the abuser and others the harmful result to the child, which produces different prevalence rates.

A background of childhood EA, PA, and/or SA has been recognized as a risk factor for revictimization in health care in a gynecologic patient sample (Swahnberg, Wijma, Wingren,

Hilden, & Schei, 2004 (B)). One-third of the women who reported abuse in health care (AHC) as an adult also reported experiences of childhood EA, PA, and/or SA. The more kinds of abuse reported, the higher the risk for perceived experiences of AHC in adulthood; e.g. childhood SA increased the risk 3.5 times (compared to no abuse) while in combination with childhood PA the risk was almost 7 times higher (Swahnberg Wijma, Wingren, et al., 2004 (B)).

We were not able to find any prevalence rates of male lifetime experiences of AHC.

The concept AHC differs from the other three kinds of abuse as it refers to a location where different kinds of abuse might take place. It shall be noted that the abusive event might have taken place in any health care setting in childhood and/or adulthood.

High prevalences of AHC in our female samples and our previous study about revictimization in health care motivated us to investigate all four kinds of abuse in the present study.

The aims of the present study were (1) to validate m-NorAQ in the male study sample, (2) to estimate the prevalence of, and current suffering from, lifetime experiences of EA, PA, SA, and AHC among adult male patients visiting six clinics at a University Hospital in Sweden, (3) to study to what extent demographic factors were associated with lifetime perceived experiences of EA, PA, SA, and AHC, and (4) to compare prevalences of perceived EA, PA, SA, and AHC between female and male patients at a Swedish university hospital.

Method

Participants

Nine departments at six clinics participated in the study. The choice of departments was based on the accessibility of male patients of different age groups. We recruited consecutive male in- and outpatients coming for a consultation at a University Hospital in southeast Sweden: 360 from a Center for Orthopedics, 94 from a Center for Reconstructive Medicine, 1011 from a Center for Surgery and Oncology (including urological patients), 282 from a Dermatological and Venereology Clinic, 479 from a Heart Center, and 53 from an Infectious Diseases Clinic. Since only a few patients were recruited at the Infectious Diseases Clinic, we administered 84 additional questionnaires to men visiting the vaccination reception desk at the Infectious Diseases Clinic. In total we recruited 75% (n = 2279) of the male patients coming for a new consultation at the hospital. Figure 1 displays subjects in the recruitment procedure. Inclusion criteria for recruitment were being male, age 18 years or more, and understanding the written Swedish language.

Sociodemographic background characteristics are displayed in Table 1. The vast majority were born in Sweden, were ≥50 years old (mean 59.5; range 18-91), had a maximum of 12 years of education, and lived with a partner. In the total sample the proportion of men who were retired, on sick leave or receiving social support was slightly higher than the proportion of employed men.

Measures

The NorVold Abuse Questionnaire (NorAQ) was originally developed by NorVold, a research network established in 1997, to measure prevalence of perceived experiences of four kinds of abuse; EA, PA, SA, and AHC, in a Nordic multicentre study among gynecological patients (Swahnberg & Wijma, 2003; Wijma, Schei, & Swahnberg, 2004; Wijma et al., 2003). Thus prevalences estimated with NorAQ are based on subjective reports; defined as whether or not one has experienced abuse according to cocrete examples given in NorAQ.

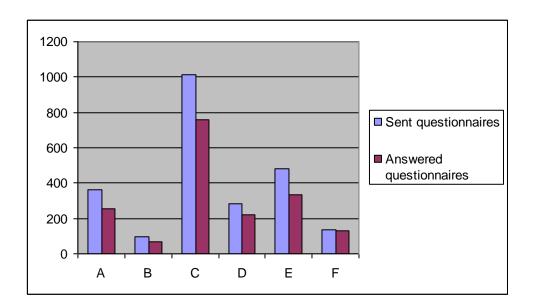


Figure 1. Recruitment of participants at each clinic (N = 1667).

A Center for Orthopedics

B Center for Reconstructive Medicine

C Center for Surgery and Oncology

D Dermatological and Venerealogy Clinic

E Heart Center

F Infectious Diseases Clinic, including 84 questionnaires handed out at the vaccination reception desk.

NorAQ has been translated from Swedish into four other Nordic languages, and into English, Russian, and Hindi. So far NorAQ has been used in nine independent female samples and was validated in a random Swedish female population sample (Swahnberg & Wijma, 2003; Wijma et al., 2003; Swahnberg, Wijma, Schei, Hilden, Irminger, & Wingren, 2004 (A); Wijma, & Liss, 2006).

For this particular study a male version of NorAQ (m-NorAQ) was developed to operationalize reports on abuse against men. A few necessary changes were made to generate m-NorAQ: questions about reproductive health, and the word "vagina" in questions about SA were removed. Moreover, four new questions concerning native country, income and both parents' educational level were added.

Table 1. Background characteristics (% of all men)

		Total sample		
		n (%)		
Age (years)	18–34	180 (10.2)		
	<i>35–49</i>	252 (14.3)		
	≥50	1329 (75.5)		
Education (years)	< 9	728 (41.4)		
	10–12	471 (26.8)		
	≥13	558 (31.8)		
Civil status	Single	357 (20.3)		
	Partner	1401 (79.7)		
Native country	Sweden	1690 (96.4)		
·	Other Nordic country	20 (1.1)		
	Other country	43 (2.5)		
Yearly income (SEK*)	<70,000	66 (3.8)		
	70–149,000	306(17.7)		
	150—249,000	674 (39.0)		
	250-449,000	547 (31.7)		
	450-649,000	98 (5.7)		
	>650,000	36 (2.1)		
Parents' education (years)	< 9	1438 (83.5)		
Mother	10–12	190 (11.0)		
	≥13	94 (5.5)		
Father	< 9	1386 (80.3)		
	10–12	200 (11.6)		
	≥13	139 (8.1)		
Occupation	Employed	812 (46.1)		
•	Unemployed	33 (1.9)		
	Student	58 (3.3)		
	Parental leave	4 (0.2)		
	Sick lv., soc. w.,	835 (47.4)		
	retir. Other	20 (1.1)		

Note: sick lv. = on sick leave over a long period; soc. w. = recipient of social welfare; retir. = retired (including temporary disability pension, disability pension).

* 100 SEK = 9.26 EUR (as of 28 February 2007)

All other items in m-NorAQ are identical with the NorAQ version used in all the female samples (Swahnberg & Wijma, 2003; Wijma et al., 2004).

Internal drop-out ranged from n = 5 to 45 (0.3–2.5%).

Statistics Sweden (SCB) tested the m-NorAQ at their pre-testing laboratory in March 2004 (Bergman, 1995). At the SCB laboratory, six male informants, 20–72 years old, were interviewed, read two introduction letters (one to received at the hospital and one accompanying m-NorAQ), and completed m-NorAQ. The interviews lasted from 25 to 50 minutes. In response to the results from SCB's test, we shortened and simplified the introduction letters, and made structural and layout changes in m-NorAQ; rephrased or omitted some questions, and clarified instructions in the questionnaire. m-NorAQ was further tested in a pilot study in May 2004 at the Infectious Diseases Clinic participating in the present study. The results from the pilot study were encouraging, and only one misleading instruction in m-NorAQ was changed as a result of the pilot study.

The m-NorAQ is divided into seven parts and consists of 67 questions in total. Besides abuse, m-NorAQ addresses socio-demography, self-estimated health and medical history.

Four identically structured sections cover questions about experiences of EA, PA, SA, and AHC. The content ranges from experiences of mild to severe abuse in childhood, adulthood or both, and permits a rough classification according to "degree of severity of the abusive act." EA, PA, SA, and AHC were defined as having answered "yes" to one or several of the three or four questions about each specified kind of abuse in the m-NorAQ (Table 2). If a man reported several degrees of a specific kind of abuse, he was classified according to the most severe act of abuse that he had reported. When the respondent had ever experienced the specified kind of abuse, he was instructed to answer more detailed questions about the abusive event.

He was also asked to estimate, separately for each kind of abuse, how much he currently suffered from his experience(s) on an 11-point scale (0 = no suffering, 10 = suffers terribly). Answers to the current suffering item were dichotomized in no/yes categories (no current suffering = 0 and current suffering = 1-10).

Table 2. Ques	tions about abuse in the male version of m-NorAQ
	EMOTIONAL ABUSE
Mild abuse	Have you experienced anybody systematically and for any longer period trying to
	repress, degrade or humiliate you?
Mod. abuse	Have you experienced anybody systematically and by threat or force trying to
	limit your contacts with others or totally control what you may and may not do?
Severe abuse	Have you experienced living in fear because somebody systematically and for a
	longer period has threatened you or somebody close to you?
	PHYSICAL ABUSE
Mild abuse	Have you experienced anybody hitting you, smacking your face or holding you
	firmly against your will?
Mod. abuse	Have you experienced anybody hitting you with his/her fist(s) or with a hard
	object, kicking you, pushing you violently, giving you a beating, thrashing you or
	doing anything similar to you?
Severe abuse	Have you experienced anybody threatening your life by, for instance, trying to
	strangle you, showing a weapon or knife, or by any other similar act?
	SEXUAL ABUSE
Mild abuse,	Has anybody against your will touched parts of your body other than the genitals
no gen. cont.	in a "sexual way" or forced you to touch other parts of his or her body in a "sexual
	way"?
Mild abuse,	Have you in any other way been sexually humiliated; e.g. by being forced to
emot. / sexual	watch a porno movie or similar <u>against your will</u> , forced to participate in a porno
humiliation	movie or similar, forced to show your body naked or forced to watch when
	somebody else showed his/her body naked?
Mod. abuse,	Has anybody <u>against your will</u> touched your genitals, used your body to satisfy
gen. cont.	him/herself sexually or forced you to touch anybody else's genitals?
Severe abuse,	Has anybody <u>against your will</u> put his penis into your mouth or rectum or tried
penetration	any of this; put in or tried to put an object or other part of the body into your
	mouth or rectum?
	ABUSE IN HEALTH CARE
Mild abuse	Have you ever felt offended or grossly degraded while visiting health services,
	felt that someone exercised blackmail against you or did not show respect for
	your opinion—in such a way that you were later disturbed by or suffered from the
	experience?
Mod. abuse	Have you ever experienced that a "normal" event, while visiting health services
	suddenly became a really terrible and insulting experience, without you fully
	knowing how this could happen?
Severe abuse	Have you experienced anybody in health service purposely - as you understood -
	hurting you physically or mentally, grossly violating you or using your body and
	your subordinated position to your disadvantage for his/her own purpose?
	ANSWER ALTERNATIVES (THE SAME FOR ALL QUESTIONS)
	1 = No
	2 = Yes, as a child (<18 years)
	3 = Yes, as an adult (≥18 years)
	4 = Yes, as a child and as an adult

Note: mod. = moderate, emot. = emotional, and gen. cont. = genital contact.

The descriptive analyses were done in the statistics program SPSS, version 12.0.1. Pearson Chi-Square was used to investigate differences between clinics. Significance level was set at p<0.05 (95% confidence interval).

Binary logistic regression was used to analyze factors associated with lifetime EA, PA, SA, and AHC in the total sample. Our model included all background variables (displayed in Table 1).

Procedure

On arrival to the clinic (index consultation), patients received a letter of information about the study from the receptionist staff. One to two weeks later a male version of NorAQ was sent out by post to everyone who had not declined to participate at the index consultation. In an information letter accompanying the questionnaire, subjects also learned where to apply for help. Two reminders were administered.

The recruitment period lasted from August 2004 to March 2005. At the Infectious Diseases Clinic patients signed a consent form before entering the study. At all other clinics a completed and returned questionnaire was considered the patient's informed consent.

A pilot study was conducted in May 2004 at the Infectious Diseases Clinic. Completed questionnaires were included in the present study since neither the questionnaire nor the procedure had been changed after evaluating the pilot study (n = 28).

The local ethical committee had approved the study.

Validation of m-NorAQ

The aims of the validation study were to investigate the concurrent validity of the abuse questions in m-NorAQ against an interview, and to estimate test-retest-reliability in all questions in m-NorAQ in a male clinical sample (N=1767)(only results for abuse questions are presented in this paper).

Eligible were 1764 patients from the study earlier presented in the present paper, who had reported experiences of at least one kind of abuse (n = 876; 49.7%) as well as patients who reported no experiences of abuse (n = 888; 50.3%) (Three participants had not answered any abuse questions). The recruitment period lasted from September 2004 to May 2005.

Men were randomly selected for the study within the two groups by an assistant who was otherwise not involved in the research process. Among the selected men, those who lived in the urban area of or close to Linköping were invited via telephone to participate in the validation session.

Approximately every second man who was called agreed to participate in the study (n = 93). Seven men, six from Sweden and one from Chile, who had made an appointment did not turn up to the interview (six with and one without experiences of abuse). Eventually, 86 men were included in the validation study (74 with one or more kinds of abuse and 12 without any history of abuse). Participants were not paid.

Data collection consisted of three steps: (1) m-NorAQ (I) had been answered at home, (2) m-NorAQ (II) was answered a second time, and thereafter (3) an interview was held. NorAQ II was administrated and the interview was held at the hospital.

Reliability for all 67 questions in the m-NorAQ was estimated by comparison between answers given in m-NorAQ I and m-NorAQ II. A maximum of eight months had passed between completion of m-NorAQ I and II (mean eight weeks). No participant reported abuse during the interval between the two reports in NorAQ.

Validity was only tested for the thirteen abuse questions. M-NorAQ II was considered the screening test, and the interview as the gold standard. The interviewer was blind to the participant's answers in m-NorAQ I and II. The interviews lasted from 20 minutes to 1.5 hours. The interview had four open questions about lifetime experiences of EA, PA, SA and AHC. If the respondent answered yes to the open-ended questions about abuse, more detailed questions were asked to complete the story; e.g. what happened, at what age, frequency and relation to the perpetrator.

Demographic differences between the total sample and the validation sample were evaluated with a Mann-Whitney test (computed in SPSS 12.0.1 for Windows).

Reliability was measured with test-retest reliability and Cohen's Kappa Test of Concordance. The validation sample consisted of men with more years of education (p = <0.01) and higher income (p = <0.05) than the total sample, but was representative concerning all other background variables.

All questions about abuse showed low internal drop out (range 0.9–2.7%).

m-NorAQ's ability to separate true positive answers (sensitivity) and true negative answers (specificity) was good (Table 3). m-NorAQ's ability to distinguish true positive answers was highest for EA and AHC, while in the validation of the female version of NorAQ, the ability to distinguish true positive answers was highest for PA (Swahnberg & Wijma 2003).

Test-retest reliability was for mild, moderate and severe abuse: EA 80–95%; PA 77–88%; SA 91–100%; AHC 84–92%. Highest test-retest reliability was measured for severe abuse in each of the four kinds of abuse. Kappa values confirmed high agreement for EA, SA and AHC and a somewhat lower agreement for PA.

Table 3. Validation of the 13 abuse variables in m-NorAQ with an interview as gold standard.

Validation concepts $n = 86$	Emotional abuse	Physical abuse	Sexual abuse	Abuse in health care		
Sensitivity	83.3	75.8	68.4	93.1		
Specificity	72.0	91.7	98.5	89.5		
Pre-test probability (prevalence)	41.9	72.1	22.1	33.7		
+ PV	68.2	95.9	92.9	81.8		
- PV	85.7	59.5	91.7	96.2		
LR	3	9	46	9		

Note: positive predictive value = + PV, negative predictive value = - PV, Likelihood Ratio = LR.

Short description of the corresponding study in a female patient sample

This cross-sectional study used NorAQ in four Swedish samples; patients at three gynecological clinics with different character and in different regions (n = 2439) and women in one randomized population sample (n = 1168). Only one clinic (from the same hospital as where the male study was conducted) was used for the comparisons between prevalences made in the present study (n = 842; answering rate 84%). Sociodemographic factors were studied in all four samples.

The vast majority of the female patients were less than 50 years old (mean 40.6; range 18-80), had more than 13 years of education, were employed, had one or more children and lived with a partner The mean age in the male sample was almost 20 years higher than in the corresponding female sample. The uneven age distribution between the two samples was most likely due to the fact that the female sample consisted of gynecological patients undergoing routine health checkups, while the male sample consisted mainly of admitted patients.

Comparisons between the male and the female sample are made in the discussion since results from the female study have already been published (Swahnberg, Wijma, Schei, et al., 2004 (A)).

Results

To enlarge the sample all subsamples were merged into one sample even though the lifetime prevalence of perceived experiences of EA and PA were more commonly reported at some clinics than others. The overall response rate was 74% (n = 1667) (range 69-78% between clinics). Prevalence of perceived experiences of the four kinds of abuse are presented in Table 4. Child PA was the most frequently reported kind of abuse (36.8%). Prevalence of reported lifetime experiences of life threatening PA (severe PA) was 6.5%. Child SA was reported by 2.9%. In general, only a few men reported perceived experiences of EA, PA, and SA in adulthood. Perceived experiences of AHC were more commonly reported in adulthood than in childhood, or in both

Table 4. Reported experiences of *emotional*, *physical*, *and sexual abuse*, *and abuse in health care*, in a male patient sample from a Swedish university hospital, according to severity, age of the victim when the abuse occurred, lifetime experiences of abuse, any abuse within the past 12 months, and current suffering from the abusive experience (% of all men in the sample).

	Emotional	Physical	Sexual	Abuse in
	abuse	abuse	abuse	health care
	n (%)	n (%)	n (%)	n (%)
Age, severity				
Mild				
<18 yrs	62 (3.5)	271 (15.6)	13 (0.8)	5 (0.3)
≥18 yrs	30 (1.7)	9 (0.5)	8 (0.5)	50 (2.9)
both	9 (0.5)	6 (0.3)	1 (0.1)	2 (0.1)
Moderate				
<18 yrs	19 (1.1)	291 (16.7)	27 (1.6)	14 (0.8)
≥18 yrs	27 (1.5)	80 (4.6)	9 (0.5)	37 (2.1)
both	2 (0.1)	25 (1.4)	1 (0.1)	7 (0.4)
Severe				
<18 yrs	47 (2.7)	43 (2.5)	5 (0.3)	7 (0.4)
≥18 yrs	24 (1.4)	65 (3.7)	1 (0.1)	20 (1.1)
both	5 (0.3)	5 (0.3)	0 (0)	0 (0)
Any abuse within the past 12 months	30 (1.7)	23 (1,4)	1 (0.1)	30 (1.7)
Any lifetime abuse	225 (12.8)	795 (45.7)	65 (3.8)	142 (8.1)
Current suffering	134 (7.7)	147 (8.8)	18 (1.0)	80 (4.6)

Note: Internal drop-out ranged from n = 12 to 36 (0.7–2.0%) for the age and severity variables in all four kinds of abuse.

(Table 4). The proportion of men with abusive experiences who currently suffered from abuse was highest for EA and AHC (Table 4). Only nine per cent had ever reported abuse to the police.

The lifetime prevalences of male experiences of SA were independent of background characteristics (Table 5). With one exception, no strong associations were found between lifetime prevalence of EA, PA, or AHC and the studied sociodemographic factors. Being born in a foreign country was strongly associated with a higher lifetime prevalence of perceived experiences of EA (OR 2.2 (1.2-4.0)) and AHC (OR 3.4 (1.8-6.6)) (Table 5). However, EA was also weakly associated with age <50

Table 5 Associations between perceived experiences of *emotional*, *physical*, *and sexual abuse*, *and abuse in health care* and age, education, occupation, civil status, native country, and social heritage (income/year, parents' education), in a male nation sample from a Swedish university hospital

		Emotional n = 1644 Adj. OR	1644	Physical n = 1629 Adj. OR	abuse CI	Sexual n = 1624	abuse CI	Abuse in n=1636 Adj. OR	
						Adj. OR			
Age (years)	18–49	1.6	1.1–2.4	1.4	1.0-1.8	1.1	0.6–2.2	1.2	0.7–2.0
≥50	≥50	1		1		1		1	
Education	< 12	1		1		1		1	
	≥13	1.3	0.9 - 1.8	1.6	1.3–2.1	1.4	0.8 - 2.4	1.4	1.0–2.2
Occupation	Employed	1		1				1	
	Unemployed	1.6	0.7 – 4.0	1.6	0.8 - 3.4	2.6	0.6 - 8.1	0.3	0.0-2.2
	Student	1.4	0.6 - 3.1	1.4	0.7 - 2.7	1.3	0.3 - 5.4	1.0	0.4 - 2.6
	Parental leave	0		2.7	0.3 - 26.4	0		3.7	0.4 - 37.1
	Sick lv., soc. w., retir.	1.2	0.8–1.7	0.9	0.7–1.2	0.8	0.4–1.5	1.1	0.7–1.6
	Other	1.3	0.4–4.7	1.0	0.4-2.7	1.3	0.2-10.1	2.0	0.6 - 7.4
Civil status	Single	1.6	1.1-2.3	0.9	0.7-1.2	1.4	0.8-2.5	1.3	0.8-2.0
	Partner	1		1		1		1	
Native country	Sweden	1		1		1		1	
·	Other	2.2	1.2-4.0	1.7	0.9 – 2.9	1.2	0.3–3.9	3.4	1.8–6.6
Yearly Income (SEK)	<149,000	0.9	0.5–1.9	1.0	0.6–1.5	0.7	0.2-2.2	1.8	0.7–4.8
,	150-449 000	1.1	0.6 - 2.1	1.2	0.8 - 1.7	0.9	0.4 - 2.3	2.0	0.9-4.9
	>450,000	1		1				1	
Mother	< 12	1		1		1		1	
	≥13	0.8	0.4 - 1.6	1.0	0.6-1.7	1.4	0.5 – 4.2	1.3	0.6-2.9
Father	< 12	1		1		1		1	
-	≥13	1.4	0.8 - 2.5	1.2	0.7-1.9	1.1	0.4-2.9	1.2	0.6-2.5

years (OR 1.6 (1.1-2.4)) and being single (OR 1.6 (1.1-2.3)), and PA with higher educational level (OR 1.6 (1.3-2.1)) (Table 5).

Discussion

m-NorAQ showed good sensitivity, and very good specificity and high Likelihood Ratio. Test-retest reliability was good for mild, moderate and severe abuse. It is valuable to have an instrument like NorAQ, that has been used in several samples, and that has been validated in a male and a female sample.

This study showed that men report experiences of EA, PA, SA, and AHC to a considerable extent. Only a few men reported adult experiences of EA, PA, and SA, i.e. the majority reported childhood experiences of abuse. It was also established that these four kinds of lifetime abuse caused current suffering, though PA to a less extent than EA, SA, and AHC. The highest proportion of reported suffering among both male and female patients was associated with EA and AHC (Wijma et al., 2003).

Limitation section

Our aim was to study perceived experiences of four kinds of abuse, and thereby adhering strictly to the subjective experience of the patient. The same perspective is also the basis of the classification of one of the severe consequences of abuse; Posttraumatic Stress Disorder, according to DSMIV (DSMIV, 1994). Most prevalence studies on abuse are in fact based on self reporting, like ours, since statistics on health care utilization, as well as police reports, and verdicts of guilt even more so, give underestimated prevalences. The validation of NorAQ showed that self-reports on the NorAQ corresponded fairly well with reports given in interviews. We therefore considered NorAQ suitable for our purpose.

The validity of self-reported data is dependent on the accuracy of the participant's memory. In the literature there is no consensus about how memory factors change prevalence estimates. Earlier research has shown that childhood abuse is generally underreported in adult women (Ellsberg, Heise, Pena, Agurto, & Winkvist, 2001; Moeller, Bachmann, & Moeller, 1993), while Coid et al.

women. This matter has not been investigated in male samples. However, people with repressed traumatic memories will most likely answer "no" to any question about abuse, whether they are male or female. Our prevalence rates are therefore more likely under- than overestimated.

Data from the six clinics were pooled to present prevalence for the total sample. This pooling might rightfully be questioned concerning prevalence of EA and PA, since these kinds of abuse were more commonly reported at some clinics than others. However, prevalences from each clinic would most likely be only of local interest.

(2001) found that older women were more likely to recall distant traumas than were younger

The answering rates varied from 69-78% among patients from the six clinics in our sample. This might have affected estimated prevalence rates. It is not known in which direction high or low answering rates affect prevalence of abuse in questionnaire studies among males (Gorey & Leslie, 1997). Over-reporting is not known to be a problem in research on violence in female samples (Ellsberg et al., 2001). Still, the relationship between prevalence rates, answering rates, and recall bias remains to be explored.

Prevalence rate comparisons between female and male samples

The estimated prevalence of reported *male child SA* in the present study (2.9%) is within earlier estimated ranges using similar definitions in the Nordic countries (Leth et al., 1988; Sariola & Uutela, 1994; Schei et al., 1994) and in accordance with results in an extensive international review from 1992 (Watkins & Bentovim, 1992). The estimated prevalence of reported *male child PA* is also in line with earlier studies (MacMillan et al., 1997). Martin et al. (1998) reported a much higher prevalence of *adult male PA* during the previous 12 months than we found. The difference is most likely due to their wider definition of *adult male PA*, which included not only physical assaults, but also threats and attempted assault.

With reservations made for the big age differences we conclude that EA, SA, and AHC were less and PA slightly more frequently reported in the current male patient sample than in corresponding female patient samples. The lifetime sex ratios were: 1:1.5 (male:female), PA 1:1, and SA 1:4 and AHC 1:2 (Swahnberg, Wijma, Schei, et al., 2004 (A)).

However, life-threatening PA (severe PA) was more commonly reported in the female sample (8.1%) than in the current male patient sample (6.5%).

In both samples, EA, PA, and SA were more commonly reported in childhood and AHC in adulthood (Swahnberg, Wijma, Schei, et al., 2004 (A)). In an extensive review, Watkins and Bentovim reported the sex ratio for childhood SA to be 1:4. Our study indicates that this proportion is valid also for lifetime reports of SA (Watkins & Bentovim, 1992).

Adding suffering from abuse increased existing sex differences, in particular for SA (1:9), but also for AHC (1:3), and EA (1:2), and adds a difference in PA (1:2). Suffering is a concept that probably is much more difficult to associate with masculinity than femininity, which might explain why the female patients reported more suffering than the male patients did. But the fact that women reported more severe abuse indicates that there might also be a difference in the character of abuse that is directed towards women and men. Gender-based analyses to evaluate the psychometric properties for the suffering scale could help us develop this reasoning in future. Though suffering most women did not talk spontaneously about abusive experiences, nor were they asked about these experiences by the gynaecologists, and only few had ever reported abuse to the police (16%). The present male sample also showed that statistic based on police reports are just the tip of an iceberg.

Associated factor comparisons between female and male samples

Being born in a foreign country was associated with a higher prevalence of lifetime reports of EA and AHC. It is not likely that these associations were overestimated because of the relatively low prevalences of reported EA (13%) and AHC (8%) (Szklo & Nieto, 2000). Both EA and AHC might

represent experiences of discrimination, e.g. not handling patient's language problems and cultural differences properly in health care.

Reports of lifetime experiences of EA were furthermore weakly associated with young age and being single, and lifetime reports of PA with higher educational level in the current male patient sample. We got similar findings in corresponding female patient samples using NorAQ. In general, more factors were associated with reported lifetime experiences of abuse in the female than in the male sample, i.e. experiences of abuse seemed to be reported more often at random in the male than in the female sample (Swahnberg, Wijma, Schei, et al., 2004 (A)).

Quality of life is known to be lower in victimized men than in nonvictimized men in a general population (Soares, Viitasara, & Macassa 2007). Male as well as female victimization is also associated to physical and depressive symptoms in male and female patients (Porcerelli et al., 2003). Still, implications of female and male victimization need to be explored further from a gender perspective in the present data set. In future, we aim to analyze this data set concerning sex and associations between different kinds of abuse, and different health outcome measures such as health care utilization; self-reported health, physical complaints, mental health problems, etc.

Conclusion

m-NorAQ showed good validity and test-retest reliability in a clinical male Swedish sample.

The prevalences of reported abuse in the male patient sample were high also in comparison with female patients' reports, but women reported higher rates of current suffering from abuse and more severe forms. However, health care staff should be aware of the documented high prevalences of abuse, and often consider including a routine like question about experiences of abuse in their history taking with male and female patients.

References

Bergman, L. R. (1995). Pretesting procedures at statistics Sweden's measurement, evaluation and development laboratory. *Journal of official statistics*, 11(3), 309–323.

Coid, J., Petruckevitch, A., Feder, G., Chung, W.-S., Richardson, J., & Moorey, S. (2001). Relation between childhood sexual and physical abuse and risk of revictimisation in women: A cross-sectional survey. *Lancet*, *358*, 450–454.

Coker, A. L., Davis, K. E., Arias, I., Desai, S., Sanderson, M., Brandt, H. M., et al. (2002). Physical and mental health effects of intimate partner violence for men and women. *American journal of preventive medicine*, 23(4), 260–268.

Craft, S. M., & Serovich, J. M. (2005). Family-of-origin factors and partner violence in the intimate relationships of gay men who are HIV positive. *Journal of interpersonal violence*, 20(7), 777–791.

Dhaliwal, G. K., Gauzas, L., Antonowicz, D. H., & Ross, R. R. (1996). Adult male survivors of childhood sexual abuse: Prevalence, sexual abuse characteristics, and long-term effects. *Clinical psychology review*, *16*(7), 619–639.

DSMIV. (1994). *Diagnostic and Statistical Manual of Mental Disorders (DSM -IV)*. Washington, D.C: American Psychiatric Association.

Ellsberg, M., Heise, L., Pena, R., Agurto, S., & Winkvist, A. (2001). Researching domestic violence against women: methodological and ethical considerations. *Studies in family planning*, 32(1), 1–16.

Finkelhor, D., & Berliner, L. (1995). Research on the treatment of sexually abused children: A Review and recommendations. *Journal of the American Academy of Child and Adolescent Psychiatry*, *34*(11), 1408–1423.

Gorey, K. M., & Leslie, D. R. (1997). The prevalence of child sexual abuse: Integrative review adjustment for potential response and measurement biases. *Child abuse & neglect*, 21, 391–398.

Harwell, T. S., Moore, K. R., & Spence, M. R. (2003). Physical violence, intimate partner violence, and emotional abuse among adult American Indian men and women in Montana. *Preventive medicine*, *37*(4), 297–303.

Holmes, W. C., & Slap, G. B. (1998). Sexual abuse of boys: Definition, prevalence, correlates, sequelae, and management. *JAMA*: the journal of the American Medical Association, 280(21), 1855–1862.

Leth, I., Stenvig, B., & Pedersen, A. (1988). Seksuelle overgreb mod börn og unge. Omfang og karakter. *Nordisk psykologi*, 40(5), 383–393.

Loue, S. (2005). Redefining the emotional and psychological abuse and maltreatment of children: Legal implications. *The Journal of legal medicine*, 26(3), 311–337.

MacMillan, H. L., Fleming, J. E., Trocmé, N., Boyle, M. H., Wong, M., Racine, Y. A., et al. (1997). Prevalence of child physical and sexual abuse in the community. Results from the Ontario Health Supplement. *JAMA*: the journal of the American Medical Association, 278(2), 131–135.

Martin, J., Nada-Raja, S., Langley, J., Feehan, M., McGee, R., Clarke, J., et al. (1998). Physical assault in New Zealand: The experience of 21 year old men and women in a community sample. *The New Zealand medical journal*, 111(1065), 158–160.

Moeller, T. P., Bachmann, G. A., & Moeller, J. R. (1993). The combined effects of physical, sexual, and emotional abuse during childhood: long-term health consequences for women. *Child abuse & neglect*, 17, 623–640.

Porcerelli, J. H., Cogan, R., West, P. P., Rose, E. A., Lambrecht, D., Wilson, K. E., et al. (2003). Violent victimization of women and men: physical and psychiatric symptoms. *The Journal of the American Board of Family Practice / American Board of Family Practice*, *16*(1), 32–39.

Sariola, H., & Uutela, A. (1994). The prevalence of child sexual abuse in Finland. *Child abuse & neglect*, 18(10), 827–835.

Schei, B., Muus, K. M., & Bendixen, M. (1994). Forekomst av seksuelle overgrep blant studenter i Trondheim. *Tidsskrift for den Norske laegeforening*, 114(21), 2491–2494.

Soares, J. J. F., Viitasara, E., & Macassa, G. (2007). Quality of life among lifetime victimized men. *Violence and Victims*, 22, 189-204.

Swahnberg, K., & Wijma, B. (2003). The NorVold Abuse Questionnaire (NorAQ): Validation of new measures of emotional, physical, and sexual abuse, and abuse in the health care system among women. *European journal of public health*, 13(4), 361–366.

Swahnberg, K., Wijma, B., & Liss, P.-E. (2006). Female patients report on health care staff's disobedience of ethical principles. *Acta obstetricia et gynecologica Scandinavica*, 85, 830–836.

Swahnberg, K., Wijma, B., Schei, B., Hilden, M., Irminger, K., & Wingren, G. (2004). Are sociodemographic and regional and sample factors associated with prevalence of abuse? *Acta obstetricia et gynecologica Scandinavica*, 83(3), 276–288 (A).

Swahnberg, K., Wijma, B., Wingren, G., Hilden, M., & Schei, B. (2004). Women's perceived experiences of abuse in the health care system: Their relationship to childhood abuse. *BJOG*: an international journal of obstetrics and gynaecology, 111(12), 1429–1436 (B).

Szklo, M., & Nieto, F. J. (2000). *Epidemiology Beyond the Basics*. Gaithersburg, MD: Aspen Publishers, Inc.

Vander Mey, B. J. (1988). The sexual victimization of male children: A review of previous research. *Child abuse & neglect*, *12*(1), 61–72.

Watkins, B., & Bentovim, A. (1992). The sexual abuse of male children and adolescents: A review of current research. *Journal of child psychology and psychiatry, and allied disciplines, 33*(1), 197–248.

Wijma, B., Schei, B., & Swahnberg, K. (2004). *NorAQ. The NorVold Abuse Questionnaire* (No. 2). Linköping: Division of Gender and Medicine, Faculty of Health Sciences, Linköping University.

Wijma, B., Schei, B., Swahnberg, K., Hilden, M., Offerdal, K., & Pikarinen, U., et al. (2003). Emotional, physical, and sexual abuse in patients visiting gynaecology clinics: A Nordic cross-sectional study. *Lancet*, 361(21), 2107-2113.

Vissing, Y. M., Straus, M. A., Gelles, R. J., & Harrop, J. W. (1991). Verbal aggression by parents and psychosocial problems of children. *Child abuse & neglect*, 15(3), 223–238.

Acknowledgements

The NorVold Abuse Questionnaire (NorAQ) was developed by NorVold, a research network established in 1997 to explore the prevalence of violence against women and its effects on women's health.

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Financial contribution

The Swedish Research Council and the Health Research Council in the Southeast of Sweden assisted in funding this study. The two authors are independent of the funding organizations.