Prevalence of Child Physical and Sexual Abuse in the Community

Results From the Ontario Health Supplement

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Context.—Although child maltreatment is considered common, few community surveys have examined the prevalence of more than 1 type of maltreatment among both males and females.

Objective.—To determine the prevalence of a history of physical and sexual abuse during childhood among the general population.

Design.—General population survey.

Setting.—Household dwellings in the province of Ontario, Canada.

Participants.—A random sample (N=9953) of residents aged 15 years and older participated in the Ontario Health Supplement.

Main Outcome Measure.—Self-administered questionnaire about a history of physical and sexual abuse in childhood.

Results.—A history of child physical abuse was reported more often by males (31.2%) than females (21.1%), while sexual abuse during childhood was more commonly reported by females (12.8%) than males (4.3%). Severe physical abuse was reported by similar proportions of males (10.7%) and females (9.2%). A greater percentage of females reported a history of severe sexual abuse (11.1%) compared with males (3.9%). Age of the respondent was not significantly associated with childhood abuse within any category for males. However, for females, the reported prevalence in childhood of sexual abuse, co-occurrence of physical and sexual abuse, and both categories of severe abuse decreased with increasing age of the respondent.

Conclusions.—A history of childhood maltreatment among Ontario residents is common. Child abuse may be more prevalent in younger women compared with older women, or there may be a greater willingness among younger women to report abuse.

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FEW STUDIES have examined the prevalence and correlates of child maltreatment in the community, although it is clearly a major public health problem associated with a heavy burden of suffering.[1-3] Estimates of the prevalence of child abuse and neglect typically have been derived from official reports to child protective agencies or from clinical populations.[4-7] Neither source of data accurately portrays the extent of child maltreatment in the community. Official reports generally underestimate the magnitude of the problem[5] because of factors that inhibit disclosure, such as social stigma and fear of consequences, as well as failure by professionals to recognize and report child maltreatment.[6] Clinical samples are usually small and not representative of the general population.[7] The Ontario Health Supplement (OHSUP) is the largest general population survey to date of 2 important types of child maltreatment, physical and sexual abuse. This article presents findings from the OHSUP on the prevalence and selected correlates of these 2 types of abuse. Such data are essential for developing interventions and informing policy in this important field.

METHODS

Sample

In 1990, a comprehensive population health survey, the Ontario Health Survey (OHS), was sponsored by the Ontario Ministry of Health to collect information about the physical health of Ontario residents. The OHSUP was carried out as a supplement to the OHS to collect more in-depth data about the epidemiology of mental disorders.

For the OHSUP, a random subsample of OHS respondents from the second half of data collection was reinterviewed between November 1990 and March 1991. Participants for the supplement were aged 15 years and older, and only 1 re-

When you were growing up, how often did any adult do any of the things on this list to you: often, sometimes, rarely, or never?

	Often	Sometimes	Rarely	Never
(i) Pushed, grabbed, or shoved you	01 ○	02 ○	03 ○	04 ○
(ii) Threw something at you	05 ○	06 ○	07 ○	08 ○
(iii) Slapped or spanked you	09 ○	10 ○	11 ○	12 ○

——— Physical Abuse

What about this next list? When you were growing up, how often did any adult do any of the things on this list to you: often, sometimes, rarely, or never?

	Often	Sometimes	Rarely	Never
(i) Kicked, bit, or punched you	13 ○	14 ○	15 ○	16 ○
(ii) Hit you with something	17 ○	18 ○	19 ○	20 ○
(iii) Choked, burned, or scalded you	21 ○	22 ○	23 ○	24 ○
(iv) Physically attacked you in some other way	25 ○	26 ○	27 ○	28 ○

——— Physical Abuse

- - - - Severe Physical Abuse

Figure 1.—Definition of childhood physical abuse from the Child Maltreatment History Self-Report. Questions were based in large part on violence items in the Conflict Tactics Scales.[10]

When you were growing up, did any adult ever do any of these things to you against your will?

	Yes	No
(i) Exposed themselves to you more than once?	1 ○	2 ○
(ii) Threatened to have sex with you?	3 ○	4 ○
(iii) Touched the sex parts of your body?	5 ○	6 ○
(iv) Tried to have sex with you or sexually attacked you?	7 ○	8 ○

——— Sexual Abuse

- - - - Severe Sexual Abuse

Figure 2.—Definition of childhood sexual abuse from the Child Maltreatment History Self-Report. Questions were based in large part on the items used for the National Population Survey (also known as the "Badgley Report").[11-13]

spondent was selected randomly within an OHS-participating household. Respondents aged 65 years and older were excluded if they had more than 10 errors on the standardized Mini-Mental State Examination.[8]

A detailed description of the OHSUP method is provided in a separate publication.[9] Briefly, for the OHS, the population of the province of Ontario was stratified by 42 Public Health Units, with each unit divided further based on population size. Excluded from the OHS were foreign service personnel, the homeless, people in institutions, First Nations people living on reserves, and residents of extremely remote locations. Persons aged 15 to 24 years within households were oversampled for the OHSUP to increase precision of the results in this important age group.

Measures

The Child Maltreatment History Self-Report (CMHSR) (H.L.M., D.R.O., and Y.A.R., unpublished questionnaire, 1990) was the self-administered questionnaire used to assess history of child physical and sexual abuse. Respondents were asked about their experiences of having been physically or sexually abused by an adult when they "were growing up." For physical abuse (Figure 1), questions were based on a number of the violence items included in the Conflict Tactics Scales, an instrument that measures behaviors used by family members in situations of conflict and has been shown to have acceptable psychometric properties.[10]

Questions dealing with unwanted sexual acts (Figure 2) were based on the instrument used for the National Population Survey (often referred to as the "Badgley Report"), a Canadian survey of sexual abuse.[11-13] The questionnaire used in the Badgley Report included more detailed items than the CMHSR, most of which asked about unwanted acts involving specific parts of the body.

The CMHSR was given to the respondent during the course of an interviewer-administered questionnaire about various aspects of psychiatric disorder. Respondents returned the completed questionnaire in a sealed envelope to the interviewer who then continued with the interview. Verbal consent was obtained for the OHSUP before administration of any questionnaires and interviewers received instruction about advising respondents of mental health resources, if required.

Questions were included in the CMHSR about the relationship between the individual and the perpetrator. Individuals were not asked to link perpetrators with specific acts of abuse within each category, but were asked to distinguish between the broad categories of physical and sexual abuse.

The correlates considered were age, sex, educational level of the parent (defined as "secondary school completed" or "not completed"), and place of residence before 16 years of age (categorized as "rural" or "urban"). For this compari-

son, rural was defined as a community with fewer than 3000 residents, and urban included small towns, medium towns, and cities (all with more than 3000 residents).

Statistical Analysis

Weighting procedures were used to account for the complex design and patterns of nonresponse in the OHSUP.[9] Analyses were done using Survey Data Analysis Software (SUDAAN), which makes appropriate statistical adjustments for survey design effects in the estimation of SEs. The χ^2 statistic was used to evaluate the statistical significance of differences between males and females in the reported occurrences of each type of abuse. A χ^2 test for linear trend was performed to examine whether reported abuse showed patterns of increase or decrease by age group. The trend analysis of age was restricted to 3 groups (ie, 25-44 years, 45-64 years, and ≥65 years) because the younger age group (15- to 24-year-olds) had not completed the period of risk. A statistically significant effect was defined as a probability level of .05 or less.

RESULTS

Sample

Of 14 758 eligible households, 13 002 (88.1%) participated in the OHS. The largest category of nonparticipation was due to inability to contact the occupant, followed by refusal to participate. Of the 13 002 potential respondents, 9953 (76.5%) individuals agreed to take part in the OHSUP. Table 1 summarizes the characteristics of the OHSUP respondents compared with the Ontario population. The overall response rate was 67.4% (9953/14 758). The characteristics of respondents and nonrespondents were compared using OHS data; nonrespondents tended to be male, be older, live in urban settings, have been born outside Canada, have fewer health problems, and speak a language other than English at home. However, on key measures of health status, employment, income, and marital status, there were few differences between respondents and nonrespondents.[9] Only 2.6% of respondents who participated in the OHSUP refused to complete the CMHSR.

History of Physical and Sexual Abuse in Childhood

Findings on the prevalence of a history of childhood maltreatment reported by males and females in 4 separate age categories and overall are summarized in Table 2. Similar findings for severe physical and severe sexual abuse are provided in Table 3.

Of particular note are the following statistically significant sex differences: reports of physical abuse were significantly more common in males than females in all age categories except the youngest (Table 2, column A), whereas sexual abuse was reported significantly more often by females than males in all age categories (Table 2, column B). The prevalence estimates for severe physical abuse did not differ significantly between males and females for any age group (Table 3, column A), while for severe sexual abuse, rates were significantly higher for females than for males in all age categories except for the oldest (Table 3, column B). Furthermore, females significantly outnumbered males in their reporting of co-occurrence of physical and sexual abuse (Table 2, column C) in all categories except the 65 years and older age group. This was similar to the case for the severe category (Table 3, column C); the differences in rates between males and females did not reach statistical significance in the 45- to 64-year-old and 65 years and older age

Table 1.—Characteristics of Ontario Health Supplement (OHSUP) Respondents Compared With the Ontario Population

Characteristics	Ontario Population in 1991,%* (n=8 029 645)	OHSUP Weighted, %† (n=7 772 358)	OHSUP Unweighted, % (n=9 953)
Sex			
Male	48.6	48.6	45.4
Female	51.4	51.4	54.6
Age, y			
15-24	17.7	18.3	19.0
25-44	42.6	41.9	40.1
45-64	25.0	25.1	22.4
≥65	14.7	14.6	18.5

*Data from Statistics Canada.[14]

†Weighting adjustments were tied to the 1986 population census counts. This explains the difference between the weighted sample number and the 1991 Ontario population number.

Table 2.—Prevalence of Child Physical and Sexual Abuse in the Ontario Health Supplement (OHSUP)*

Age of Respondents, y	A: Physical Abuse		B: Sexual Abuse		C: Both Physical and Sexual Abuse		D: Physical and/or Sexual Abuse	
	Male, % (95% CI)	Female, % (95% CI)	Male, % (95% CI)	Female, % (95% CI)	Male, % (95% CI)	Female, % (95% CI)	Male, % (95% CI)	Female, % (95% CI)
15-24	23.8 (20.0-27.6)	19.6 (16.1-23.2)	2.2 (0.9-3.5)	9.3 (6.9-11.7)	0.7 (0.0-2.0)	4.4 (2.9-5.9)	25.3 (21.4-29.2)	24.3 (20.5-28.1)
25-44	31.5 (27.9-35.1)	22.9 (20.1-25.7)	4.1 (2.9-5.3)	15.3 (12.6-18.0)	2.4 (1.5-3.3)	8.5 (6.8-10.2)	33.2 (29.5-36.9)	29.6 (26.4-32.8)
45-64	35.0 (29.6-40.4)	20.6 (16.4-24.8)	6.6 (4.1-9.1)	13.8 (10.0-17.6)	3.6 (1.8-5.4)	7.3 (4.3-10.3)	37.8 (32.1-43.5)	27.0 (22.4-31.6)
≥65	34.6 (27.4-41.9)	18.3 (13.9-22.7)	3.5 (0.4-6.6)	7.8 (5.2-10.4)	2.6 (0.0-5.6)	3.3 (1.4-5.2)	35.4 (28.2-42.7)	22.7 (18.2-27.2)
Total	31.2 (28.8-33.7)	21.1 (19.3-22.9)	4.3 (3.4-5.2)	12.8 (11.2-14.4)	2.4 (1.7-3.1)	6.7 (5.6-7.8)	33.0 (30.4-35.6)	27.0 (24.9-29.1)

*CI indicates confidence interval.

Table 3.—Prevalence of Severe Child Physical and Sexual Abuse in the Ontario Health Supplement (OHSUP)*

Age of Respondents, y	A: Severe Physical Abuse		B: Severe Sexual Abuse		C: Both Severe Physical and Severe Sexual Abuse		D: Severe Physical and/or Severe Sexual Abuse	
	Male, % (95% CI)	Female, % (95% CI)	Male, % (95% CI)	Female, % (95% CI)	Male, % (95% CI)	Female, % (95% CI)	Male, % (95% CI)	Female, % (95% CI)
15-24	8.3 (5.7-10.9)	8.5 (6.2-10.8)	1.9 (0.7-3.1)	8.8 (6.5-11.1)	0.1 (0.0-0.2)	3.0 (1.8-4.2)	10.1 (7.4-12.8)	14.1 (11.1-17.1)
25-44	11.5 (9.3-13.7)	10.5 (8.5-12.5)	3.8 (2.6-5.0)	14.0 (11.4-16.6)	1.6 (0.8-2.4)	5.4 (4.0-6.8)	13.7 (11.3-16.1)	19.0 (16.2-21.8)
45-64	11.9 (7.9-15.9)	9.4 (6.3-12.5)	5.8 (3.5-8.2)	10.5 (7.1-13.9)	2.1 (0.8-3.5)	4.6 (1.9-7.3)	15.6 (11.4-19.8)	15.2 (11.5-18.9)
≥65	9.1 (5.3-12.9)	5.7 (3.4-8.0)	3.3 (0.2-6.4)	6.3 (3.9-8.7)	0.5 (0.1-1.0)	1.7 (0.5-2.9)	11.9 (7.4-16.4)	10.2 (7.2-13.2)
Total	10.7 (9.1-12.3)	9.2 (7.9-10.5)	3.9 (3.0-4.8)	11.1 (9.6-12.6)	1.3 (0.8-1.8)	4.2 (3.3-5.1)	13.2 (11.4-15.0)	15.9 (14.2-17.6)

*CI indicates confidence interval.

groups. When any abuse was considered (Table 2, column D), the rates were significantly higher among males than females in most age categories except the youngest and the 25- to 44-year-old age groups. Within the category of any severe abuse (Table 3, column D), significantly higher rates were found among females in the total sample, as well as the youngest and 25- to 44-year-old age groups.

In linear trend analyses, there was no statistically significant association between age group of the respondent (25-44 years, 45-64 years, and ≥65 years) and a reported history of abuse among males. Among females, there were significant decreases in the recalled prevalence of abuse with increasing age for all categories ($P<.05$) except physical abuse.

Natural fathers were the persons most commonly identified as committing physical abuse, followed by natural mothers across age categories. "Some other persons" were most often indicated as perpetrators of sexual abuse followed by other relatives across age categories.

Rates of physical abuse reported by males were higher in families where the parent providing financial support had not completed secondary school education (35.0%; 95% confidence interval [CI], 31.9%-38.2%) than in families where the parent had completed secondary school (26.2%; 95% CI, 22.5%-29.9%). No such association was observed for physical abuse among females. Physical abuse reported by females was higher among those raised in rural areas (25.4%; 95% CI, 21.4%-29.5%) than in urban areas (19.5%; 95% CI, 17.5%-21.6%). No such association existed for males. Sexual abuse among males and females showed no relationship with the educational level of the parent or size of childhood community.

COMMENT

It is useful to compare the findings from this survey with other studies that have assessed the lifetime prevalence of child physical and sexual abuse in the general population.

Sariola and Uutela[15] found that of approximately 7000 15- and 16-year-olds in Finland, 8% reported having ever experienced (before 14 years of age) "severe violence" from their parents, whereas 72% had experienced "mild violence." Severe violence was defined as hit with fist, hit with something, kicked, threatened with a knife or gun, or use of a knife or gun. Mild violence included being pushed, shoved or shaken angrily, switched, slapped, beat up, or having one's hair pulled. Although the Finnish survey was similar to the OHSUP in its use of self-report of the victim, it focused only on abuse by parents, compared with abuse by any adult in the OHSUP.

Finkelhor and Dziuba-Leatherman[16] evaluated the scope of child victimization, including both physical and sexual assaults, in a national survey of US youth between the ages of 10 and 16 years. Completed or attempted victimization at some time during their lives was reported by 44.8% of girls and 57.6% of boys. Victimization in this survey included being bullied (by peers or older youth), so that a wider range of assaults was considered.

There have been several community surveys aimed at determining the lifetime prevalence of childhood sexual abuse as reviewed by Finkelhor.[17,18] He summarized the findings from US and Canadian community surveys published since 1980 that addressed sexual abuse.[17] The prevalence of adults disclosing a history of child sexual abuse ranged from 2% to 62% for females and from 3% to 16% for males. Finkelhor also referred to retrospective studies of child sexual abuse conducted in Europe, South Africa, Australia, New Zealand, and the Caribbean, and noted a similar distribution of findings to the US and Canadian studies.[17,18] He concluded that on an international basis most prevalence estimates for child sexual abuse cluster around 20% for females.[17] Males have been surveyed less often, but lifetime prevalence figures for most community surveys fall between 3% and 11%. The OHSUP findings of 12.8% for females and 4.3% for males fall in the lower range, most likely because the period of abuse was restricted to "while the person was growing up" and perpetrators were restricted to adults only. Many surveys with higher prevalence rates included abuse that was perpetrated by persons of any age, including nonadults.

Since the OHSUP is a province-wide survey conducted in Canada, it is most useful to compare findings about reports of child sexual abuse with those of the Badgley Report.[11-13] In this 1983 national survey, a probability sample of 2008 adults aged 18 years and older were asked about any unwanted sexual acts that had ever been committed against them and their age at the time of these incidents. Although different measures of abuse were used in the 2 surveys, 2 items used in the Badgley Report (unwanted touching of sexual areas, and attempted or achieved intercourse), approximate the measure of severe abuse in the OHSUP. In the Badgley Report, 8.2% of males and 17.6% of females reported experiencing such acts before their 17th birthday[12,13] compared with 3.9% of males and 11.1% of females in the OHSUP.

Two important differences in the questions used may account for these discrepancies in findings. In the OHSUP, childhood is simply defined as "when you were growing up" and perpetrators were restricted to "adults." The Badgley Report asked respondents to identify all forms of sexual assault, providing definitions of child sexual abuse through specification of the ages of the victim and the perpetrator. Many victims and perpetrators fall into the late adolescent group where childhood and adulthood are poorly defined. Using a narrower definition for victims and perpetrators in the Badgley Report leads to lower estimates of child sexual abuse—6% for males and 13% for females—which correspond to the findings from the OHSUP.[11-13]

Findings on selected correlates from the OHSUP can also be compared with those from other studies. In general, low socioeconomic status is considered a correlate of physical, but not sexual abuse.[7,17] In the OHSUP, low parental educational level was associated with a greater prevalence of physical abuse among males, but not females. Being raised in a rural area of fewer than 3000 residents in Ontario was associated with a greater likelihood of physical abuse among females, but not males. This finding has not been reported elsewhere to our knowledge.

The omission of race as a correlate in the OHSUP deserves mention given that US surveys often include race as a demographic characteristic.[19,20] In Canada, ethnic or cultural identity instead of race is usually measured. This was the case in the OHSUP where 50.7% of the sample identified themselves as Canadian and 22.3% indicated that they were Canadian plus some other ethnic identity (for example, German).

It is important to discuss the strengths and limitations of the OHSUP. Its major strength is in the use of sophisticated sampling techniques to ensure a sample representative of the general population. Also, poststratification weighting was used to minimize bias due to any sample loss associated with age and sex.

Limitations of this survey include the following: (1) prevalence of maltreatment is based on self-report without corroboration from other sources; (2) the information is collected retrospectively; and (3) certain groups were excluded from the survey.

In terms of the first limitation, it is rarely possible to corroborate episodes of abuse that were not reported to child protection agencies. Ethical and legal issues make it difficult to obtain contemporaneous information from general population samples.

Second, the OHSUP relies on retrospective reports to assess the prevalence of a childhood history of physical and sexual abuse. Brewin et al[21] review the potential sources of error in retrospective reports of childhood experiences, including normal limitations of childhood memory, recall deficits associated with psychopathology, and specific retrieval biases. They conclude that there is little evidence that these factors significantly interfere with the validity of retrospective reports of early experiences. They also conclude that most influences on memory will tend to inhibit recall, and suggest that positive reports of events should be given more weight than negative reports.

In support of this position, recent work comparing retrospective accounts of child abuse with earlier reports suggests that there is a tendency in adulthood to minimize, deny, or not recall experiences of abuse during childhood,[22,23] resulting in underestimation rather than overestimation of childhood experiences of maltreatment. For example, Williams[22] interviewed a sample of women in the early 1990s with previously documented histories of sexual victimization between 1973 and 1975. Almost two fifths of the women did not report the earlier child sexual abuse; through in-depth interviews, it was concluded that respondents did not appear to recall the abuse. Discussion about recall of childhood trauma has generally focused on child sexual abuse; little has been written about memories of physical abuse.

As for the third limitation, exclusion of certain subgroups of the population from the OHSUP such as the homeless, institutionalized, and First Nations people living on reserves could have also lead to underestimates of the prevalence of child maltreatment in that there is some evidence to suggest that these groups are vulnerable to such victimization.[24-26]

In summary, self-reports of childhood maltreatment were very common in the OHSUP, especially physical abuse among both sexes and sexual victimization among females. Even if the less serious types of abuse are excluded, the prevalence of severe maltreatment remains high across all age categories. The current findings suggest that the recalled prevalence of abuse does not vary by age of adult male respondents, but does decline with increasing age of adult female respondents. This could possibly represent a true increase since the 1940s in sexual victimization and severe physical abuse among females. It could also be the result of greater willingness to report abuse among younger women compared with older women. While other community surveys have examined rates of abuse by age group of respondent, it is not yet known whether the accuracy of reporting varies by age group. If further research confirms that sexual abuse and severe physical abuse are indeed on the rise in females, it will be important to determine the reasons for this increase to mount effective preventive efforts.

Much of the literature about interventions for child maltreatment focuses on sexual abuse.[16] Findings from the OHSUP suggest that physical abuse is a common problem. Given what is known about the serious morbidity associated with physical abuse,[1-3] more research effort should be directed toward its treatment, as well as the treatment of sexual abuse. Any strategy aimed at reducing the burden of suffering associated with either physical or sexual abuse will require a combination of preventive and treatment approaches.[27] Since many cases of abuse do not come to the recognition of official agencies, policies aimed at reducing this problem must be targeted at the community level.

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