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## Suicidal phenomena and abuse in adolescents: a review of epidemiological studies<sup>☆</sup>

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### Abstract

**Objective:** To conduct a systematic review of the international literature to determine whether adolescents who had experienced abuse were more likely to also experience suicidal thoughts and behaviors than other adolescents, and to investigate the nature of this association.

**Method:** Reports of community- or school-based studies of adolescents on the association between the prevalence of suicidal phenomena and abuse were searched for via electronic databases, reviewing reference lists and contacting experts in the field.

**Results:** Ten relevant studies were identified. Adolescents who had been physically or sexually abused were significantly more likely to experience suicidal thoughts and behaviors than other adolescents. This association appeared to be direct in most studies in which multivariate analyses were conducted. There is evidence that other factors (e.g., low self-esteem) may play a mediating role in the relationship between abuse and suicidal phenomena.

**Conclusions:** There is a clear link between abuse and suicidal phenomena occurring during childhood and adolescence.

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*Keywords:* Suicidal phenomena; Sexual abuse; Physical abuse; Adolescents

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## Introduction

The prevalence of both childhood abuse and suicidal phenomena in adolescents are alarmingly high. It is estimated that approximately one third of women and one sixth of men have experienced some form of childhood sexual abuse (e.g., Finkelhor & Korbin, 1988). In a recent study of adolescents in the UK, a conservative estimate of the prevalence of suicide attempts in the past year was 11.2% for girls and 3.2% for boys (Hawton, Rodham, Evans, & Weatherall, 2002). Evidence from a case-control study found that women admitted to hospital after having taken an overdose were significantly more likely to have been sexually and psychologically abused (but not physically abused) than women admitted to hospital on the same day for other reasons (Coll, Law, Tobias, Hawton, & Tomàs, 2001).

The relationship between a reported history of abuse and subsequent suicidal behavior has been the focus of a large body of research. However, for a number of reasons the relationship between abuse and suicide remains far from conclusive (Rogers, 2003). Much of the evidence regarding suicidal phenomena and abuse during adolescence comes from studies of specific populations, such as runaway adolescents, and study participants have often been self-selecting. Such sampling strategies are likely to result in samples biased towards individuals who have been negatively affected by their experiences. Also, participants in studies of suicidal behavior are usually recruited during hospital attendance (Hawton, Fagg, & Simkin, 1996). There is a substantial body of evidence indicating that many suicide attempts or episodes of deliberate self-harm do not receive medical attention (Choquet & Menke, 1989; Hawton et al., 2002) and that those who do receive medical attention may differ in demographic and psychosocial characteristics from those who do not receive medical attention (Kann et al., 2000). Rogers (2003) argues that the generality of the results beyond specific samples is unknown. However, some community-based studies have been conducted to investigate the relationship between suicidal phenomena and abuse. The aim of this review is to assimilate the epidemiological research findings in this area.

The definitions of both suicidal phenomena and abuse have varied considerably between studies. This lack of consistency clearly presents a major obstacle to the comparability of results (Besharov, 1981; De Wilde & Kienhorst, 1994) and to drawing conclusions from the empirical literature (Rogers, 2003). One further aim of the present review was to identify the definitions that have been employed in research studies and how these relate to the prevalence and strength of associations.

Research in this area has most often focused on childhood abuse and suicidal phenomena occurring much later during adulthood (Santa-Mina & Gallop, 1998; Zlotnick, Mattia, & Zimmerman, 2001). Adult survivors of childhood sexual abuse have been shown to be significantly more likely to report suicide attempts than individuals without an abuse history (e.g., Zlotnick et al., 2001). The link between abuse and suicidal phenomena which occurs during childhood or adolescence has been less extensively studied. Evidence from a review article indicates that childhood sexual abuse also had immediate effects, with elevated rates of suicidal behavior in sexually abused children (Green, 1993). However, this conclusion is drawn from a clinical sample. Another aim of this review was to establish whether this association is present in the shorter-term in non-clinical samples.

In this review we have not been able to address all the limitations identified by Rogers (2003). Researchers have most often focused on investigating the co-occurrence of a history of abuse and suicidal behavior and establishing whether an association exists. Although the results of multivariate analysis may suggest whether the relationship is direct and identify possible mediating factors, such conclusions will be speculative and require confirmation from future research. Rogers (2003) also suggests that ideally re-

search should include sources of information other than self-report. However, although this would clearly yield some advantages there would also be some disadvantages. For example, such methods would result in a lack of anonymity and therefore adolescents whose history of abuse or suicidal phenomena had not been disclosed may be reluctant to reveal this information. Finally, Rogers (2003) suggests that research in this area has been largely pragmatically based and calls for more theoretically based research. Although we could not directly address this issue in this review, possible theories from the empirical literature are identified and will hopefully direct future research in this area.

To summarize, in this paper we present the findings of a systematic review of the international literature on studies in which the association between abuse and suicidal phenomena in adolescence was examined in community- and school-based studies. On the basis of the findings, recommendations regarding future research and clinical practice in this area are made.

## **Methods**

### *Identification of relevant studies*

A literature search using the following databases (dates covered) was carried out: PsychLit (1971 to December 2000), Medline (1966 to December 2000), EMBASE (1980 to December 2000), Sociological Abstracts (CSA) (1963 to December 2000), ERIC (1966 to December 2000), the Australian Education Index (1978 to December 2000), and the British Education Index (1976 to December 2000). The search terminology was as follows (\* indicates truncation): (suicid\* or parasuicid\* or overdos\* or self-harm\* or self-cut\* or self-poison\* or self-injur\*) AND (youth or adolescen\* or school or teen\* or child\*) AND (survey or questionnaire or interview). The reference lists of papers that were identified through the search and of review papers and chapters were also scrutinized for potential studies. The following Internet sites were also searched: National Institute of Health (USA), Centre for Disease Control (USA), National Children's Bureau (UK), Australian Clearinghouse for Youth Studies, New Zealand Health Technology Assessment Clearing House for Health Outcomes and Health Technology Assessment. Two international experts in the field (Madelyn Gould [USA] and George Patton [Australia]) reviewed a provisional reference list and advised us of any studies (published, unpublished or in-progress) they knew of which had not been identified by the search strategy outlined above.

### *Inclusion criteria*

Studies were included in the review if they met the following criteria: a prevalence figure for suicidal phenomena was reported; information on abuse history was presented; study participants had answered either a self-report questionnaire about suicidal phenomena or answered similar questions presented at interview; the majority (90% or over) of the participants were aged between 12 and 20 years; and the study sample was population-based.

### *Terminology of studies*

Problems in the categorization of suicide-related behaviors have been discussed by several researchers in this area (e.g., van Heeringen, 2002). The terminology used by the researchers in investigating suici-

dal phenomena is reported in the results. With regard to suicidal thoughts, “casual thoughts” of suicide, for example “thought about death or dying” (Andrews & Lewinsohn, 1992), were considered as not necessarily being associated with risk of suicidal behavior and were therefore excluded from this review.

Experiences of abuse were considered in three categories: *physical abuse*, *sexual abuse* and *other abuse or experiences of violence*. Studies were included in the former two categories if it was clear that the adolescents had reported being the victim of abuse and physical or sexual abuse were specifically referred to. The latter category included studies in which the nature of the abuse was not clearly specified (i.e., physical or sexual) but it was clear that they were the victims of an abusive experience.

The preferred format for reporting the findings from the studies was as odds ratios and confidence intervals. In papers in which the results had not been reported in this way but where sufficient data had been reported odds ratios and confidence intervals were calculated. If this was not possible, the results were reported in the same format as by the original author.

## Results

### *Descriptive information*

Nine studies were identified through the search as eligible for inclusion in the review. Characteristics of the study populations and methodologies are detailed in Table 1. The nine studies comprised 38,935 adolescents, and the mean number of participants per study was 4,326. All studies included both male and female participants.

### *Physical abuse*

Physical abuse was investigated in four studies, all from the USA (see Table 2). In one study the association with suicide attempts, but not the prevalence of abuse, was reported (Grossman, Milligan, & Deyo, 1991). In three of the four studies adolescents who reported a history of physical abuse were significantly more likely to report a history of suicidal phenomena. Although in one study no statistically significant association was found (Wright, 1985), a trend in the expected direction was reported. The association was investigated separately for males and females in one study, and a significant relationship was reported for both genders (Wagman Borowsky, Resnick, Ireland, & Blum, 1999).

Jones (1992) investigated the association between the frequency of being hit and suicide thoughts, plans and attempts. As the frequency of being hit increased so did the prevalence of suicide attempts. In addition, adolescents being hit seldom or occasionally were more likely to report suicide thoughts and plans than those who were never hit. However, adolescents who were hit *often* were less likely to report suicide thoughts than those who were hit seldom or occasionally and were also no more likely to experience suicide plans.

The results of multivariate analysis were reported in two studies. After controlling for age and gender, Grossman et al. (1991) found physical abuse to have an independent association with suicide attempts. Wagman Borowsky et al. (1999) conducted logistic regression analyses involving more than 60 variables and reported similar results for males and females analyzed separately.

Table 1  
 Characteristics of the studies included in the review

Reference; country	Number of subjects	Mean age (age range) <sup>a</sup>	Demographic information (gender and ethnicity) <sup>b</sup>	Survey methodology	Suicidal phenomena and prevalence, <i>n</i> (%) time frame	Type of abuse
Bensley et al. (1999); USA	4790	– (13–18 years)	52.1% female, 47.9% male 2.4% Black (not Hispanic), 75.0% White (not Hispanic), 9.1% Hispanic, 5.9% Asian (or Pacific Islander), 3.2% Native American, 4.3% other (or unknown)	Anonymous questionnaire	Suicidal thoughts: 364 (7.4) Suicide plan: 185 (4.0) Non-injurious attempt: 245 (5.3) Injurious attempt: 63 (1.4) Past year	Sexual Other
Buddeberg et al. (1996); Switzerland	1937	16.0 years (14–19 years)	57.4% female, 42.6% male No information on ethnicity	Anonymous questionnaire	Suicidal ideators: 439 (22.7) Suicide attempters: 45 (2.3)	Sexual
Choquet and Menke (1989); France	1601	– (13–16 years)	44% female, 56% male No information on ethnicity (only on nationality)	Questionnaire survey (anonymity was not specified)	Suicidal thoughts: – Rarely: 164 (10.8) Often: 110 (7.2)	Other
Fergusson et al. (1996); New Zealand	1019	18 years (18 years)	50.5% female, 49.5% male 86.2% European/Pakeha, 13.8% Maori/Pacific Islander	Structured interview (longitudinal study—not anonymous)	Suicide attempt: 55 (5.4)	Sexual
Grossman et al. (1991); USA	7241	– (11–18 years)	51% female, 49% male 100% Native American (American Indian)	Anonymous questionnaire	Suicide attempt: 15% (971) Lifetime	Physical Sexual
Jones (1992); USA	1206	– (13–19 years)	49.1% female, 50.9% male No information on ethnicity	Anonymous questionnaire	Suicidal thoughts: – Had thoughts: 328 (29.9) Planned: 94 (8.6) Suicide attempts: – In last 2 months: 22 (2.0) In last 12 months: 52 (4.7) 2+ years ago: 49 (4.5)	Physical

Table 1 (Continued)

Reference; country	Number of subjects	Mean age (age range) <sup>a</sup>	Demographic information (gender and ethnicity) <sup>b</sup>	Survey methodology	Suicidal phenomena and prevalence, <i>n</i> (%), time frame	Type of abuse
Rey Gex et al. (1998); Switzerland	9268	– (15–20 years)	43.1% female, 56.9% male No information on ethnicity (information on Nationality)	Anonymous questionnaire	Just thought about suicide: 2929 (31.6) Considered suicide: 2167 (23.4) Attempted suicide: 277 (3.0) Past year	Sexual
Wagman Borowsky et al. (1999); USA	11666	– (12–18 years)	52.1% female, 47.9% male 100% Native American (American Indian)	Anonymous questionnaire	Suicide attempts: 1984 (17.0) Lifetime	Physical Sexual
Wright (1985); USA	207	– (17–18 years)	47.3% female, 52.7% male No information on ethnicity	Anonymous questionnaire	Seriously considered a suicide attempt: 22 (10.6) Past 6 months	Physical

<sup>a</sup> For studies in the USA where age was not explicitly stated, Grade 1 was assumed to include individuals aged 6 to 7 years old, Grade 2 was assumed to include individuals aged 7 to 8 years old and so on.

<sup>b</sup> Information in parenthesis is that reported by the authors; this information was generalized into six categories: Black, White, Hispanic, Asian, Native American and other (including unknown/missing data).

Table 2  
Results of investigations of associations between physical abuse and suicidal phenomena

Reference	Abuse terminology prevalence	Comparison of the prevalence of suicidal phenomena in abused and non-abused adolescents, or of abuse in suicidal and non-suicidal adolescents
Grossman et al. (1991)	Physical abuse Prevalence: not reported	The prevalence of suicidal phenomena by abuse history was not reported OR (95% CI) = 1.9 (1.5 to 2.4)
Jones (1992)	Frequency of being hit by an adult in your family that made them bleed, left a scar, or left a noticeable bruise Never hit that way: 78.6% Seldom: 13.7% Occasionally: 5.6% Often: 2.1%	<i>Suicidal thoughts and plans</i> (thoughts/plans) Hit often: 27.3%/18.2% Hit occasionally: 45.2%/22.6% Seldom hit: 41.1%/17.9% Never hit: 26.9%/5.6% Chi-square = 78.96 (6 df), $p < .0001$  <i>Suicide attempts</i> (past year/>2 years ago) Hit often: 21.7%/4.3% Hit occasionally: 16.4%/18.0% Seldom hit: 10.6%/9.3% Never hit: 2.3%/2.7% Chi-square = 111.16 (9 df), $p < .0001$
Wagman Borowsky et al. (1999)	Physically abused by a family member or anyone else <i>Males</i> 7.6% <i>Females</i> 18.8%	<i>Male suicide attempts</i> Physically abused: 27.3% Not physically abused: 10.3% OR (95% CI) = 3.26 (2.61 to 4.07) <sup>a</sup>  <i>Female suicide attempts</i> Physically abused: 41.5% Not physically abused: 16.7% OR (95% CI) = 3.5 (3.1 to 4.1) <sup>a</sup>
Wright (1985)	Physical abuse by parent Prevalence: 8.7%	Suicidal thoughts (“seriously considered suicide”) Physically abused: 16.7% Not physically abused: 10.0% OR (95% CI) = 1.67 (.35 to 6.91) <sup>a</sup>

<sup>a</sup> Odds ratios and confidence intervals were calculated from the data provided in the article.

### Sexual abuse

Sexual abuse was investigated in five studies (see Table 3). In two studies the association with suicidal phenomena, but not the prevalence of abuse, was reported (Bensley, Van Eenwyk, Spieker, & Schoder, 1999; Wagman Borowsky et al., 1999). In all five studies, adolescents who reported a history of sexual abuse were significantly more likely to report a history of suicidal phenomena. Wagman Borowsky et al.

Table 3

Results of investigations of associations between sexual abuse and suicidal phenomena

Reference	Abuse terminology prevalence	Comparison of the prevalence of suicidal phenomena in abused and non-abused adolescents, or of abuse in suicidal and non-suicidal adolescents
Bensley et al. (1999)	Has anyone touched you in a sexual place, or made you touch them, when you did not want to? Prevalence: 14.7% (molestation plus abuse and molestation)	<i>Most serious suicidal phenomena</i> (suicidal thoughts/suicide plans/non-injurious suicide attempt/injurious suicide attempt) Abuse and molested: 15.7%/9.5%/19.7%/8.1% Molested: 9.5%/8.3%/6.7%/3.1% Not been abused or molested: 5.7%/2.6%/2.7%/1.3% <i>Association of abuse and molestation with suicidal phenomena</i> Suicidal thoughts: OR (95% CI) = 4.4 (3.1 to 6.2) Suicide plans: OR (95% CI) = 6.8 (4.4 to 10.4) Non-injurious attempt: OR (95% CI) = 12.0 (7.9 to 18.4) Injurious attempt: OR (95% CI) = 47.1 (23.2 to 95.3) <i>Association of molestation with suicidal phenomena</i> Suicidal thoughts: OR (95% CI) = 1.9 (1.2 to 2.8) Suicide plans: OR (95% CI) = 3.9 (2.2 to 6.7) Non-injurious attempt: OR (95% CI) = 2.7 (1.5 to 4.8) Injurious attempt: OR (95% CI) = 11.6 (3.2 to 42.3)
Buddeberg, Buddeberg, Gnam, Schmid, and Christen (1996)	Sexual abuse Prevalence: not reported	The prevalence of suicidal phenomena by abuse history was not reported A positive correlation was found with 'suicidality' for sexual abuse ( $\Phi = .16$ )
Fergusson et al. (1996)	Childhood sexual abuse (including information on type of abuse, e.g., contact/non-contact, see text for further information) Prevalence: 10.4% (all types of sexual abuse)	<i>Suicide attempts</i>  Sexually abused: 17.0% Not sexually abused: 4.1% Association of abuse with suicide attempts: adjusted OR (95% CI) = 4.8 (2.5 to 9.2) <sup>a</sup>
Grossman et al. (1991)	Sexual abuse Prevalence: not reported	The prevalence of suicidal phenomena by abuse history was not reported OR (95% CI) = 1.5 (1.2 to 1.9)

Table 3 (Continued)

Reference	Abuse terminology prevalence	Comparison of the prevalence of suicidal phenomena in abused and non-abused adolescents, or of abuse in suicidal and non-suicidal adolescents
Rey Gex et al. (1998)	Sexual abuse Prevalence: not reported	The prevalence of suicidal phenomena by abuse history was not reported Association of abuse with suicide attempts (compared with those with no suicidal thoughts or behaviors): OR (95% CI) = 1.5 (1.2 to 1.9) (no other data were reported)
Wagman Borowsky et al. (1999)	Ever been sexually abused by a family member or anyone else Prevalence: 8.3%	<i>Male suicide attempts</i> Sexually abused: 36.1% Not sexually abused: 10.7% OR (95% CI) = 4.7 (3.6 to 6.3) <sup>a</sup> <i>Female suicide attempts</i> Sexually abused: 38.6% Not been sexually abused: 17.8% OR (95% CI) = 2.9 (2.5 to 3.3) <sup>a</sup>

<sup>a</sup> Odds ratios and confidence intervals were calculated from the data provided in the paper.

(1999) investigated this separately for males and females and reported a significant association for both genders.

The results from the study by Bensley et al. (1999) strongly suggest that being both “abused” and “molested” (authors terminology) is much more strongly associated with suicidal phenomena than being “molested” alone. Fergusson, Horwood, and Lynskey (1996) assigned subjects to four categories reflecting the severity of exposure to sexual abuse. The prevalence of suicide attempts by abuse experience category was as follows: no childhood sexual abuse history—4.1%; non-contact childhood sexual abuse—3.3%; contact childhood sexual abuse—8.3%; and childhood sexual abuse involving intercourse—15.2%. These results indicate that less severe exposure is not associated with suicide attempts but more serious exposure is.

Multivariate analyses were reported in three studies. Grossman et al. (1991) found that sexual abuse made a significant independent contribution to the variance in suicide attempts when the authors controlled for age and gender. Similarly, in two of the other studies when the authors controlled for a large number and range of variables, sexual abuse made a significant independent contribution to the variance in suicide attempts (Rey Gex, Narring, Ferron, & Michaud, 1998; Wagman Borowsky et al., 1999). Wagman Borowsky et al. (1999) found this to be true for both males and females separately. Controlling for other psychiatric outcomes of childhood sexual abuse (e.g., major depression and conduct disorder) only abuse involving sexual intercourse was found to present an independent risk factor for suicide attempts; other less serious abuse experiences were not found to have an independent association with suicide attempts.

### *Other abuse or experiences of violence*

In two studies the association between suicidal phenomena and other abuse was investigated. In the first study, [Bensley et al. \(1999\)](#) asked adolescents whether they had been abused or mistreated by an adult and grouped adolescents into three categories: (1) no abuse history; (2) history of abuse; and (3) history of abuse and molestation. The associations with suicidal thoughts, suicide plans, non-injurious suicide attempts and injurious suicide attempts were investigated. Adolescents who reported a history of abuse and those with a history of both abuse and molestation were significantly more likely to report all suicidal phenomena than adolescents without such a history. Adolescents with a history of both abuse *and* molestation appeared to be much more at risk of suicidal phenomena than adolescents with a history of either abuse *or* molestation.

In the second study, [Choquet and Menke \(1989\)](#) asked adolescents whether they had been the victims of violence and, although this clearly establishes the individual as the victim, the experience was somewhat ambiguous in that it could include sexual or physical abuse. Analyses were completed separately for males and females. For both genders, individuals who had been the victim of violence were significantly more likely to report suicidal thoughts (both rarely and often). Multivariate analyses were not reported in either of these studies.

## **Discussion**

The findings from this systematic review demonstrate that there is a clear link between different types of abuse and suicidal phenomena occurring during childhood and adolescence. Of the four studies that examined the association with physical abuse, a significant association was found in three. (A trend that approached significance was reported in the fourth study.) The association between physical abuse and suicidal phenomena was also direct in the two studies in which it was investigated. There was considerable evidence for a strong and direct association between sexual abuse and suicidal phenomena. In all five studies in which this was investigated a significant association was found. The relationship was found to be direct in the three studies in which multivariate analyses were performed. These results are consistent with findings from studies of older subjects ([Chandy, Blum, & Resnick, 1996](#); [Coll et al., 2001](#)). There is evidence to suggest that adolescents with a more severe history of sexual abuse (e.g., involving intercourse) and physical abuse (e.g., being hit more often) are more likely to experience suicidal phenomena than adolescents with a less serious abuse history.

Results from hospital-based studies have suggested that the effect of sexual abuse may be even more profound for males ([Choquet, Darves-Bornoz, Ledoux, Manfredi, & Hassler, 1997](#)). In this review, the results from one study support this finding ([Wagman Borowsky et al., 1999](#)). However, the results from a more recent study suggest the effect to be approximately equal for both genders ([Hawton et al., 2002](#)). The sample in the former study consisted of a sample of Native American Indians whereas that in the second study was a sample of (mainly White) European adolescents. In considering the impact of abuse by gender it may also be important to consider culture and ethnicity.

A strong association was also found between physical abuse and suicidal phenomena. This is in line with findings from studies of adults and hospital-based studies. For example, [Straus and Kantor \(1994\)](#) found that retrospective recall of “corporal punishment” during adolescence was associated with later life suicidal ideation. However, in some studies of adolescents an association has not been found. For

example, Wright (1985) only found a non-significant trend for those who had experienced physical abuse by parents to be more likely to have had suicidal thoughts. Wright's study differed from the other studies in this review in that it was much smaller, the sample consisting of just 207 adolescents, whereas Jones' study (which was the smallest of those in which a significant association was found) included over 1,000 adolescents. Furthermore, Wright investigated the association with "seriously considering suicide in the past 6 months." The prevalence of suicidal ideation in this study was much lower than that in other studies, possibly due to the shorter time-frame or specification of the gravity of suicidal thoughts. Thus, it seems possible that Wright's study sample was too small to find a significant association.

Community-based studies of adolescents have frequently failed to identify the relationship between the victim and perpetrator of the abuse. In one study in this review, it was specified that the perpetrator of the abuse must have been a parent (Wright, 1985), whereas in most other studies the relationship between the perpetrator and the adolescent was not limited in this way. Serious abuse from a parent may be associated with a family history of mental health problems or drug and alcohol abuse and therefore the abuse may be associated with additional risk factors. This should be investigated in future research.

Results from the studies reported in this review suggest that the relationship between deliberate self-harm and physical abuse is direct (Grossman et al., 1991; Rey Gex et al., 1998; Wagman Borowsky et al., 1999). This is in keeping with the results from studies of adults (e.g., King, Coxell, & Mezey, 2002). However, it is of note that psychological variables (depression, low self-esteem, anxiety and impulsivity) were not controlled for in any of the studies included in this review. Low self-esteem has been proposed as an important mediating factor in the relationship between sexual abuse and suicidal behaviors, and Romans, Martin, and Mullen (1996) have demonstrated the damaging influence of childhood sexual abuse on self-esteem. It is possible that the relationship between abuse and suicidal phenomena is mediated by psychological variables and, had such variables been controlled for in these studies, the relationship may have been found to be indirect. Future research should attempt to determine the role of intervening variables (e.g., low self-esteem) as this may not only assist in furthering an understanding of the mechanism, but also have clinical implications.

Other research issues were highlighted by this review. One is the necessity to ensure that sufficient numbers of subjects are included in investigations so that important associations can be detected. This is particularly important when the effect of the relationship between the perpetrator of abuse (e.g., parents) and adolescent is being examined. As with any study of abuse, the terminology needed to specify it requires careful attention. The method used in the investigation (e.g., anonymous vs. non-anonymous inquiry) is likely to be particularly important when studying abusive experiences.

Although there is clear association between both sexual and physical abuse and suicidal phenomena, abuse is but one of several factors that may contribute to suicidal behaviors in adolescents. Others include, for example, psychiatric disorder, some personality traits and coping styles, emotional and socio-economic deprivation, interpersonal problems, social isolation, media influence and availability of methods for self-harm. It is not possible from the studies reviewed here to conclude the strengths of the association with abuse in comparison to such other factors.

We have attempted to provide as complete a review of the literature as possible, although there are some limitations. One shortcoming of this review is that no attempt was made to include all control groups from studies of psychiatric populations, even though these may have fulfilled the inclusion criteria. (However, it is likely that these groups would be small in comparison to community-based studies.) We have attempted to provide an overview of the results of multivariate analyses of the studies. A major problem with comparing such results is that in different studies different variables were entered into the

analyses. In some studies only a few variables were entered whereas in others a wide range were entered and this will inevitably influence the likelihood of a direct association being identified.

For the clinician there are perhaps two main messages from this study. First, inquiry about abusive experiences should be included in the routine assessment of attempted suicide patients (King et al., 2002) or individuals with suicidal ideas, especially young people. When caring for patients with known abusive experience, the clinician should check whether suicidal thoughts have occurred or whether there has been a suicidal act. Children are unlikely to talk spontaneously about adverse experiences and training people to ask questions increases the number of victims who disclose (Jones, 2003). Careful enquiry in the individual patient who has experienced both abuse and suicidal phenomena may reveal factors, such as low self-esteem, which link the two. A focus on these should then be part of therapy. Second, given the high prevalence of suicidal phenomena and abuse experiences, school-based strategies may be the most effective way to reach those in need of help. Primary prevention strategies, such as some mental health promotion programs (Wells, Barlow, & Stuart-Brown, 2001), have been found to have a positive impact on mental health. Furthermore, Jones (2003) indicates that working through others with whom the individual may have already established some degree of trust (e.g., nurses) could be a valuable way for clinicians to work. Finally, identification of adolescents who are ‘at risk’ and employing strategies to prevent these individuals from going on to make suicide attempts may be another effective approach in helping adolescents with abuse experiences (Shaffer & Gould, 2000).

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## Résumé

**Objectif:** Réaliser une revue systématique de la littérature internationale pour déterminer si les adolescents soumis à des antécédents de maltraitance étaient davantage susceptibles que d'autres d'avoir des pensées et des conduites suicidaires, et étudier la nature de cette association.

**Méthode:** Des rapports d'études communautaires et scolaires d'adolescents sur l'association entre la prévalence du symptôme suicidaire et la maltraitance ont été recherchés sur des observations publiées sur Internet, en faisant l'inventaire des listes de référence et en prenant contact avec les experts dans ce domaine.

**Résultats:** Dix études pertinentes ont été identifiées. Les adolescents qui ont été physiquement ou sexuellement maltraités étaient de façon significative plus susceptibles que d'autres d'avoir des pensées ou des comportements suicidaires.

**Conclusions:** Il existe un lien net entre maltraitance et phénomène suicidaire au cours de l'enfance et l'adolescence.

## **Resumen**

**Objetivo:** Llevar a cabo una revisión sistemática de la literatura internacional para determinar si los adolescentes que han experimentado maltrato tienen más tendencia a experimentar pensamientos y conductas suicidas que el resto de los adolescentes y para investigar la naturaleza de dicha asociación.

**Método:** A través de las bases de datos, listas de referencias y consultas a expertos, se revisan los estudios sobre asociación entre suicidio y maltrato en adolescentes.

**Resultados:** Se identificaron 10 estudios relevantes. Se concluye que los adolescentes que han sido víctimas de maltrato físico o abuso sexual tienen más probabilidades de experimentar pensamientos o conductas suicidas. En la mayoría de los estudios en los que se utilizan análisis multivariados, esta asociación parece ser directa. Hay evidencia de que otros factores (p.e., baja autoestima) pueden jugar un papel mediador en la relación entre el maltrato y el fenómeno suicida.

**Conclusiones:** Hay una clara relación entre el maltrato y el fenómeno suicida que ocurre en la infancia y la adolescencia.