

Experiences of victimization among adolescents with Substance Abuse Disorders in Sweden

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Abstract

Background: Adolescents who initiate treatment for substance abuse often have a history of victimization in the form of physical, psychological, or sexual abuse. These experiences can have serious adverse consequences that may affect their lives and social functioning.

Objective: This article describes and analyzes victimization among adolescents who are in outpatient treatment for substance abuse disorders with respect to gender, social circumstances, alcohol and drug abuse, and mental health.

Method: This cross-sectional study is based on structured interviews with 748 adolescents from seven outpatient clinics in Sweden. Chi-squared tests were performed to examine significant differences between gender and victimization (or lack of victimization). The study also included a quantitative content analysis of interview utterances.

Results: The analysis showed that more than half of the adolescents had experienced violence or another type of abuse. There are also significant gender differences: two thirds of the girls and slightly less than half the boys had experienced abuse in some form, and the girls had more severe needs at treatment admission.

Conclusion: This study established that experiences of victimization and exposure to violence are widespread among adolescents with substance abuse disorders in Sweden. This is an important issue that requires attention and action, with preventive and therapeutic interventions needed to provide support for both substance abuse disorders and psychiatric symptoms.

Keywords: Adolescents; victimization; substance abuse; outpatient care

Introduction

Victimization during childhood is a serious risk factor for future substance abuse disorders (1-4), and adolescents who present for drug and alcohol abuse treatment frequently have a history of exposure to violence in the form of physical, psychological, or sexual abuse earlier in their lives (5). These experiences can have significant adverse consequences that may impact the lives and social functioning of these individuals.

An American study of 1655 adolescents found that 8% to 45% of those surveyed had been exposed to some form of violence during the past year (i.e., school violence, community violence, child abuse, or parental intimate partner violence) and that 5% to 30% had experienced two to three different types of violence, primarily exposure to violence outside of

the home (6). Another American study of a large national sample estimated that one third of adolescents reported exposure to multiple types of victimization (7). It is difficult to get a clear picture of the prevalence of victimization or exposure to violence among adolescents in Sweden in general, but a report on the living conditions of adolescents showed that 17% of 15- and 16-year-old students reported having been victims of minor violence and that 5% reported being victims of more serious violence (8). This article sheds light on the relationship between adolescent victimization and substance abuse disorders on the basis of the findings of interviews with adolescents from several outpatient clinics in Sweden.

Drug and alcohol use commonly begin during adolescence. Nascent substance abuse problems may

present and develop during this period, with future health risks and social problems as a result. Binge drinking and alcohol use among adolescents seem to have generally declined in Sweden during the last decade, but there was a minor increase between 2007 and 2013 in the percentage of upper secondary school pupils who had tried or used drugs, mostly cannabis. The increase was evident in both genders, with about 14% of boys and 10% of girls reporting drug use during the year prior (9).

During recent years, there have been several national initiatives aimed at adolescents who use drugs and alcohol. A joint project among the cities of Stockholm, Gothenburg, and Malmö under the auspices of the national Alcohol, Narcotics, Doping and Tobacco Strategy ran from 2012 to 2015 and had the main objective of reducing cannabis use among adolescents (10). Another research project was aimed at creating models for documentation and follow up in collaboration with the “Maria clinics,” which are specialized outpatient clinics that target adolescents with various types of substance abuse disorders and their relatives. Many of these adolescents report a history of various types of violence and abuse (11), and thus it would be useful to have a deeper understanding of the forms of victimization that they have experienced. How are these experiences related to their substance abuse and mental health? Are there differences between girls and boys?

There is a lack of general knowledge about adolescents who come into contact with outpatient care in Sweden for the treatment of substance abuse disorders (12). There are also no specifically Swedish studies of the link between victimization and substance abuse during adolescence, and there are relatively few international studies of the needs or post-treatment outcomes of adolescents with a history of victimization who begin treatment for substance abuse (13).

The purpose of this article is to describe and analyze victimization among adolescents who begin outpatient treatment for substance abuse disorders. Specifically, the relationships among gender, social circumstances, drug and alcohol abuse, and mental health will be investigated.

There are several definitions of the term *victimization* as it related to the abuse literature used by both researchers and practitioners. The term is usually linked to individuals’ experiences of physical, sexual, and psychological abuse and serious neglect during childhood (14), but exposure to family violence or community violence is sometimes included in the definition (6). The following more comprehensive definition of *victimization* has been suggested by Finkelhor:

...harms that occur to individuals because of other *human actors* behaving in ways that *violate social norms*. The human agency and norm violation components give victimizations a special potential for traumatic impact. It is different from other stresses and traumas, such as accidents, illnesses, bereavements, and natural disasters [emphasis....] (15; p. 10).

A distinction is commonly made between the concepts of *direct victimization* and *indirect victimization*. This concerns the idea of whether someone has been the target of direct violence versus whether he or she has witnessed violence between or involving people close to him or her. Another term that is sometimes used is *poly-victimization*, which means that an individual has been exposed to multiple types of victimization (16). In this article, the term *exposure to violence* is used interchangeably with *victimization*.

Victimization in relation to drug and alcohol use

Individuals with a history of abuse, exploitation, or neglect during childhood have an elevated risk for developing addictive disorders later in life as compared with individuals who lack such experience (2,4,7,17-19). Several studies have shown that the exposure of children and adolescents to violence or experiences of victimization has a significant correlation with drug abuse later in life (6,20). This group commonly initiates substance use earlier, uses multiple substances more frequently and at a higher rate (18,19), and develops substance-abuse-related problems more often (19).

The results are mixed with regard to alcohol use, with some studies establishing a connection between victimization during childhood and high alcohol consumption among older teenagers and young adults (17,21); other studies have not been able to find these correlations (6,22).

There are also some differences concerning the form of violence to which the individual has been exposed. Experiences of both direct and indirect victimization have been shown to influence later drug abuse among adolescents (22-24), although psychological abuse has a somewhat lower correlation with drug abuse as compared with physical and sexual abuse (1). The cumulative effect of poly-victimization is also related to more severe drug abuse (6,7,23), and adolescents who have been exposed to both physical and sexual abuse are at particularly high risk for drug abuse (1,7). Adolescents who witnessed community violence also exhibit higher rates of tobacco, alcohol, and drug use later in life (6,24).

A strong connection has been established between a history of victimization and elevated substance abuse; there is high consensus among the results of various studies, despite varying samples and methods (2). However, the causal direction is both bidirectional and complex. For example, adolescents who are involved in drug use early on are also at higher risk of later exposure to violence (25,26), and there may be other factors that affect the association: “[T]he relationship between childhood abuse and SUPs is not likely to be direct. Several different conditions or disorders have been found to mediate or moderate this relationship, including PTSD, depression, general anxiety symptoms, and conduct problems (2; p. 52).”

Because the causal connection is unclear, some researchers argue that victimization primarily results in various psychiatric symptoms (e.g., anxiety, depression, post-traumatic stress disorder, conduct disorder, risk taking of various kinds), which in turn may lead to both experimental drug use and later to addictive disorders of a more serious nature (3,7,22,27). The degree of victimization is often related to the degree of psychiatric disorder (2,28). Serious substance abuse problems among adolescents are seen as these individuals’ way of coping with the stress and painful emotions that arise from traumatic events (2,6,17,21,23,29). Alongside victimization, elevated substance abuse can probably also be explained by other factors, such as peer pressure and changed individual attitudes toward drugs (23,26). Other possible explanations are that contextual factors during childhood influence future substance abuse; for example, many of the victimized children and adolescents also suffer from other problems, such as growing up in a socially and economically disadvantaged neighborhood (19).

The relationship between victimization and drug and alcohol abuse is also characterized by clear gender differences. Several studies have established that girls with a history of victimization develop more severe addictive disorders as compared with boys (19,26,30). In addition, a history of sexual abuse is more predictive of alcohol and drug abuse among girls than among boys (17,25). However, some studies have shown that a history of childhood sexual abuse is strongly related to high alcohol consumption among boys (21,29).

Victimization among adolescents in treatment for substance abuse disorders

A significant proportion of adolescents who enter substance abuse treatment have experienced victimization earlier in their lives (13,20,28,30-32). Histories of multiple types of abuse are relatively common in this group, with between 40% and 90%

of these patients having such backgrounds (5). There seems to be a relationship between the severity of victimization and the seriousness of substance abuse; in other words, those who experience more severe forms and a higher frequency of victimization go on to use heavier drugs (13,20,26). It also seems that adolescents who have been exposed to more severe forms of abuse and violence are more likely to be found in inpatient care rather than outpatient care (13,30,31).

Girls in substance abuse treatment have been shown to have a history of multiple types of victimization to a significantly higher extent (39% to 68%) than boys (2% to 29%) (20,30,32). Other studies have shown that girls have more often experienced sexual abuse, whereas it is more common for boys to have experienced physical violence (13,32,33). Girls in both inpatient and outpatient care generally report more extensive drug use as compared with boys (30).

A history of abuse also has strong connections with psychiatric symptoms or having experienced other types of trauma: “...victimization is common among adolescents presenting for substance abuse treatment, often involving multiple types of trauma, and that there are major gender differences in the patterns of victimization, as well as differences in the extent to which people were ‘traumatized’ by the victimization (5; p. 5).”

Other studies have investigated how victimization can influence treatment outcomes and how the severity of victimization may predict treatment results. A history of various forms of abuse may have a negative impact on adolescents’ commitment to treatment; these individuals tend to have a higher dropout rate (2,3). Some studies show that treatment outcomes of adolescents with a history of victimization do not generally differ from the outcomes of those who do not have such a history (13). In addition, the severity of victimization does not seem to have any impact on treatment, but adolescents who are placed in residential treatment appear to be more successful as compared with those who undergo outpatient treatment (30,31). Nevertheless, in general, high levels of alcohol and drug use seem to linger for a longer time among those who have been more severely victimized (30).

Method

Sample

This cross-sectional study is based on data material collected by outpatient clinics in seven Swedish cities: Gothenburg, Helsingborg, Hässleholm, Kungälv, Linköping, Malmö, and Stockholm. The clinics provide various forms of treatment for alcohol and drug abuse as well as counseling and

support for adolescents and their families. The average treatment duration is 4 to 6 months. The clinics offer psychosocial and medical assessment related to the abuse of alcohol and drugs, drug testing, individual and family therapy, and manual-based treatment programs. The staff members include social workers, nurses, psychologists, and doctors.

Structured interviews were transferred to a database via the clinics that participate in the documentation system. In 2014, information about 788 adolescents from the seven different cities was reported to the database. Of these, there were 40 individuals for whom information was incomplete or missing. Ultimately, there remained 748 adolescents who had begun some form of treatment at the participating clinics. The gender distribution among the adolescents was 29% girls and 71% boys; the average age was 17 years (range, 12 to 25 years).

Instrument and procedures

UngDOK, an abbreviation of the Swedish words for Youth and Dokumentation, is a semi-structured interview that has been specifically developed for adolescents and young adults with substance abuse disorders (11). The purpose of this tool is to assess the young person's problems, needs, and current situation to enable the relevant assessment, planning, and delivery of treatment. The intake form associated with this interview covers the following life domains: housing and financial support, employment, alcohol and drugs, treatment history, criminality, childhood history, exposure to violence, family and relationships, and physical and mental health. The interview method is currently the subject of a validation study.

When the treatment intervention begins, data is collected through admission interviews using UngDOK; interviews may also be conducted at the end of treatment and in connection with follow-up assessments. Only the intake data were used in this study. The main variable from the UngDOK that was assessed was the following: "Have you ever been exposed to violence/abuse – physical, psychological and sexual?" This question is intended to identify the adolescent's subjective perceptions about his or her personal experiences. This question was answered either as "No" (0) or "Yes" (1). As a result of the close connection that exists between victimization and traumatic experiences, another variable was used: "Have you experienced a traumatic event that still affects you psychologically?" This may involve past violence, accidents, or disasters that still affect the adolescent's well-being in the form of such experiences as nightmares, hypervigilance, or the avoidance of situations that bring the traumatic event

to mind. The question is answered as either "No" (0) or "Yes" (1). If the answer is "Yes," this question is followed by an open-ended question in which the adolescent is asked to specify the traumatic event.

The interviews were conducted by therapists at each clinic after informed consent had been obtained from the adolescent and in accordance with a manual. Only de-identified data, with no connection to personal data, was used in this study.

Analysis

The analysis was performed in three stages. During the first stage, the three main variables physical, psychological and sexual violence were compiled individually and in the aggregate and were related to girls and boys. A chi-squared test was performed to more closely examine whether there were significant gender differences among various forms of exposure.

During the second stage, on the basis of the literature review, the relationships among victimization and several variables that describe the characteristics of the study group with regard to social circumstances, drug and alcohol use, and mental health were also analyzed with chi-squared testing. A victimization index (see Table 2) was also constructed, and it included exposure to any of the three forms of violence.

The third stage involved a quantitative content analysis. In this type of analysis, various forms of large text material, e.g., from documents or interviews, are compiled and categorized. Unambiguous and exclusive categories are created to the greatest possible extent (34). To do this the participating researchers independently categorized all 188 utterances from the study subjects regarding the types of traumatic events that affect mental health. There was agreement at this stage about 91% of the utterances. The researchers jointly created the presented compilation, which includes 98 utterances that can be specifically linked to victimization. The other 90 answers mainly concerned accidents and diseases and were therefore excluded.

Results

Table 1 presents the various forms of exposure of violence included in the index. It was constructed to illustrate the occurrence of victimization by gender.

A total of 54% of the adolescents who presented for outpatient treatment reported that they had at some time been exposed to some form of physical, psychological, or sexual violence/abuse. Girls reported this to a considerably higher extent, at 67%, than boys, at 48%. Of the adolescents, 45% reported having at some time been exposed to physical violence; 36% made reports of psychological

violence, and 11% said that they had experienced sexual violence. Girls were exposed to physical, psychological, and sexual violence to a greater extent

than boys, but there were no significant differences between girls and boys with regard to physical violence.

TABLE 1. Occurrence of various forms of violence and abuse included in a victimization index for the total study group

group	Total (N = 748)	Girls (n = 217)	Boys (n = 531)	p Value	N
Victimization index	54%	67%	48%	*	723
Physical violence	45%	50%	43%	NS	722
Psychological violence	36%	57%	27%	*	719
Sexual violence	11%	34%	2%	*	714
One form of violence/abuse [†]	24%	20%	26%	NS	723
Two forms of violence/abuse	21%	24%	21%	NS	723
Three forms of violence/abuse	8%	24%	1%	*	723

NS, Not significant

* $p < .05$

[†]These numbers are based on adolescent reports that he or she has been exposed to physical, psychological, or sexual violence or abuse during his or her lifetime

TABLE 2. Social circumstances, drug and alcohol use, and mental health in relation to victimized and non-victimized adolescents

	Total (N = 748)	Victimized Adolescents (n = 389)	Non-Victimized Adolescents (n = 334)	p Value	N
Lack of occupation	20%	26%	12%	*	721
School problems	64%	72%	54%	*	711
Convicted of a crime	37%	38%	34%	NS	697
Association with criminal peers	31%	40%	22%	*	709
Association with drug-abusing peers	65%	72%	57%	*	712
Problems in the childhood environment [†]	53%	68%	35%	*	720
Placement in foster care/residential home	18%	22%	11%	*	719
Risky alcohol consumption per AUDIT-C [‡]	48%	56%	37%	*	710
Primary drug: alcohol [§]	13%	14%	11%	NS	711
Primary drug: cannabis	76%	71%	82%	*	711
Other primary drug	12%	15%	7%	*	711
Frequency of use 2-3 days/week or more	44%	51%	36%	*	705
Polydrug use	28%	40%	15%	*	686
Previous substance abuse treatment	29%	37%	20%	*	718
Depression	35%	47%	21%	*	677
Anxiety	46%	61%	28%	*	683
Concentration difficulties	56%	69%	42%	*	688
Difficulties controlling aggressive behavior	21%	28%	13%	*	660
Suicidal thoughts	13%	19%	5%	*	644
Eating disorders	7%	12%	2%	*	636
Self-harming behavior	8%	14%	2%	*	652
Neuropsychiatric diagnosis	20%	21%	17%	NS	708
Prescription drugs for psychiatric disorders	19%	27%	9%	*	654
Previous psychiatric care	39%	50%	12%	*	718

AUDIT-C, Alcohol Use Disorders Identification Test-Consumption; NS, Not significant

* $p < 0.05$

[†]This variable is an index of three variables that pertain to substance abuse, psychiatric disorders, and violence/assault in the adolescent's childhood environment

[‡]The AUDIT-C consists of the three consumption questions in the original AUDIT screening instrument and is aimed at identifying risky drinking. These figures represent the percentage of individuals assessed as having risky alcohol consumption on the basis of the limits of 4 for girls and 5 for boys in the AUDIT-C (35)

[§]The term *primary drug* refers to the drug that causes the adolescent the most problems at the start of treatment (36)

A total of 21% of the adolescents reported that they had been exposed to two different forms of violence or abuse, and 8% reported three forms. Gender differences are apparent here, with 24% of girls having been exposed to all three forms of violence or abuse as compared with only 1% of boys.

Table 2 presents the relationship between victimization and the variables that describe the affected adolescents with regard to social circumstances, drug and alcohol use, and mental health.

This table shows that victimization is related to all three life domains and almost all study variables. The group of adolescents who have been exposed to violence in some form have a significantly higher level of problems than the non-victimized group in relation to social circumstances. These include a lack of occupation for the last three months; past or present problems in school; association with criminal and/or drug-abusing peers; previous placement in foster care or a residential home; and the occurrence of problems in the childhood environment related to substance abuse, mental health, and violence/assault. However, no significant differences were found between the groups with regard to criminal convictions.

A corresponding picture emerges concerning drug and alcohol use. Victimization is related to generally higher rates of the risky consumption of alcohol, cannabis, or other primary drugs; a high frequency of use of the primary drug in the last three months; polydrug use; and the occurrence of previous substance abuse treatment. However, no differences were found between the groups with regard to alcohol as the primary drug.

Corresponding differences can also be noted in the area of mental health. The adolescents who had been exposed to violence report various forms of psychiatric symptoms in the last 30 days to a significantly higher extent than the non-victimized group. These symptoms include depression, anxiety, concentration difficulties, trouble controlling aggressive behaviors, suicidal thoughts, eating disorders, self-harming behaviors, taking prescription drugs for psychiatric symptoms, and having previously received psychiatric care. Victimization does not, however, seem to be related to the occurrence of a neuropsychiatric diagnosis.

The empirical material also contains questions that are intended to identify various forms of trauma or traumatic events that affect the adolescent's mental health. A total of 29% of the adolescents reported this kind of problem at admission.

A total of 188 adolescents specified the event in response to an open-ended question. Four categories of violence exposure were created in the content analysis of the adolescents' utterances: physical, psychological, sexual, and witnessed violence. Answers having to do with other traumatic events that can be linked to accidents or diseases, for example, were placed in a fifth category.

A total of 98 utterances (52%) can be traced to the four different forms of victimization. Twenty-two percent of the utterances fell into the physical violence category: 16% for the girls and 26% for the boys. A few illustrative examples are provided here:

TABLE 3. Utterances concerning traumatic events that affect mental health in relation to gender

	Total (N = 188)	Girls (n = 81)	Boys (n = 107)
Physical violence	22%	16%	26%
Psychological violence	7%	5%	8%
Sexual violence	14%	31%	2%
Witnessed violence	9%	2%	14%
Other traumatic events	48%	46%	50%
Total	100%	100%	100%

“Gunfire in a gang fight”
 “Assaulted by a boyfriend”
 “Hit by my father”

A total of 7% of the utterances had to do with psychological violence: 8% for girls and 5% for boys. Here are some illustrative examples:

“Threats that have led to recurring violent nightmares”
 “Psychological abuse”
 “Fear that someone is going to hurt me”

There are clear differences between boys and girls when it comes to expressions of sexual violence: 2% for boys and 31% for girls. A few sample utterances follow:

“I was raped”
 “I have been sexual abused”
 “A man who exposed himself”

A total of 9% of the utterances provide information about the witnessing of various forms of violence. Boys reported this at a rate of 14%, which was higher than the 2% among girls. Examples include the following:

“I have seen violence and threats from my father against my mother”
 “I saw a friend stab a guy”
 “I have witnessed violence”

Discussion

The findings established that more than half of the adolescents who initiate outpatient treatment for substance abuse disorders have a history of victimization and various types of abuse. These results agree with the results that have emerged in previous studies (13,20,28,30-32). The prevalence of various types of exposure to violence is also generally high among the target group and varies from 11% to 45%.

As presented in the Results section of this article, there are also tangible gender differences: two thirds of the girls and slightly less than half of the boys had

experienced violence or abuse in some form, which is consistent with previous studies of adolescents in substance abuse treatment (13,20,30,32,33). These differences are also found in relation to the various forms of victimization and particularly correlated with psychological and sexual violence, which are considerably more common among girls. It is remarkable that one out of three girls who seek care at outpatient clinics report that they have been victims of some form of sexual abuse. The prevalence of sexual abuse among boys is low, but it is possibly under-reported on the basis of what has been discovered by previous research (2). In this study, the percentage of girls exposed to physical violence is slightly higher than that seen among boys, although this difference is not statistically significant. This result deviates from other studies, in which boys have been found to have experienced a higher rate of physical abuse as compared with girls (13,32,33).

The results also shed light on the strong link between victimization and other central domains in the lives of adolescents. Victimization appears to have a profound impact on the social situation, drug and alcohol use, and mental health of affected individuals.

Adolescents with a history of exposure to violence are over-represented in relation to all studied variables except criminality. As compared with non-victimized adolescents, they are more likely to lack an occupation, to have more problems in school, and to be associated with friends who are involved in criminal activity and drugs. In addition, they are twice as likely to have had difficult childhood conditions or to have been placed in foster care or residential treatment centers.

The prevalence of exposure to violence is strongly related to more serious drug and alcohol use, which is reflected in essentially all variables in this area, such as risky alcohol consumption, the choice of primary drug, the extent of drug use, the concurrent use of two or more substances, and a history of previous treatment for substance abuse disorders. This strong link is also supported by previous research (17-19,21).

A history of victimization is also strongly tied to current psychiatric symptoms of various kinds among adolescents, including depression, anxiety, difficulty concentrating, violent behavior, suicidal ideation, eating disorders, and self-harming behaviors; this finding is consistent with the results of earlier studies (2,3,7,22,27). Nearly one third of the study population had taken prescription drugs for these or other psychiatric disorders. Half of the adolescents with a history of exposure to violence have also been the recipients of previous psychiatric care.

Many adolescents also report having experienced various traumatic events that are still having negative effects on them. These are usually the result of various types of violence or abuse toward the adolescents themselves or toward people close to them. This link has also been confirmed by several previous studies (2,3,5,7,13,22,27,28). These experiences may cause adolescents to begin to use alcohol or drugs as a way of coping with painful memories and the psychological consequences of the events in which they have been involved (2,6,17,21,23,29). In this type of cross-sectional study, however, it is difficult to determine what the "chicken" is and what the "egg" is. Because it is difficult to draw such causal conclusions, it can be suggested that there may also be a risk that adolescent substance use can lead to contact with violent individuals, which may in turn lead the adolescent to being assaulted.

Some of the limitations of the study are due to the fact that the empirical material is based on self-reported information collected with the use of structured interviews. This requires the therapist to carefully document the adolescents' answers and utterances related to their experiences of violence and traumatic events. The construction of categories and the categorization of utterances in the content analysis may, of course, also be done on other methodological grounds. Nevertheless, the analysis provides a deeper understanding of the circumstances and living conditions that need to be considered within the framework of the treatment intervention.

Clinical Significance

This study has several implications for clinical practice, education, and research. The generally high prevalence of victimization among adolescents who begin outpatient treatment for substance abuse problems imposes specific demands upon these clinics and similar organizations. It is obvious that questions about exposure to violence and abuse need to be included in the intake assessment and that an adolescent's reporting of any such occurrence should give result in the planning and delivery of treatment interventions (20). If treatment focuses only on alcohol or drug abuse, there is risk of poorer outcomes for adolescents with a history of victimization (30). It may instead be relevant to provide some form of supplementary trauma therapy, either integrated or in parallel with the treatment of the substance use; a research review has shown that both forms reduce both trauma symptoms and substance abuse (37). If adolescents are provided with support in relation to both their substance abuse disorders and their psychiatric

symptoms, the need for drugs and alcohol for self-medication is likely to diminish. Moreover, it is urgent that therapists in adolescent substance abuse treatment settings should have some form of fundamental competence concerning victimization and access to relevant supervision.

In future research, it would be valuable to conduct longitudinal studies to conduct long-term follow-up with adolescents who have a history of victimization. It would be useful to examine how their social inclusion, mental health, and drug and alcohol use develop throughout adulthood.

In conclusion, we have established that experiences of victimization and exposure to violence are widespread among adolescents with substance abuse disorders in Sweden. This is an important issue that requires attention and action in the form of both preventive and therapeutic interventions from various actors in the community.

Ethics

The interviews were conducted at each clinic after informed consent was obtained from the adolescent. Permission from the Research Ethics Committee at the National Health Board in Sweden regarding storage and processing of data for research purposes (dated 2002-08-28). Only de-identified data with no connection to personal data was used in the study.

Conflicts of Interest

The authors declare no conflict of interest.

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