

Exposure to traumatic experiences among people addicted to alcohol

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Summary

Aim. The aim of this study was to analyze differences in experiencing traumatic events between people addicted to alcohol and non-addicted individuals.

Material. The study involved 240 people – 120 people were addicted to alcohol (clinical group), including 60 women and 60 men, and 120 people were not addicted to alcohol (control group), including 60 women and 60 men.

Methods. All people from the study group were asked to complete: The TAA-SR traumatic events assessment questionnaire, the structured interview checking the presence of experienced trauma and the severity of post-traumatic symptoms (PTSD) according to DSM-IV, and the personal survey.

Results. People addicted to alcohol experienced more traumas than non-addicted ones. The number of traumas of addicted women was significantly lower compared to addicted men. People addicted to alcohol reported the first experience of trauma much faster than non-addicted ones. The vast majority of people from the clinical group (addicted individuals) declared that the addiction symptoms occurred after experiencing the first trauma.

Conclusions. The present studies point to high, i.e., approx. 70%, presence of at least one traumatic event over the life of people addicted to alcohol.

Key words: alcohol addiction, traumatic event, trauma

Introduction

A multidimensional approach to searching for the factors of the development of addiction, as well as effective treatment of alcohol addiction has been a challenge for science for years. This literature on this issue provides equivocal results. It indicates that this is a phenomenon of complex bio-psycho-social etiology [1–3].

More and more studies also show that the experience of traumatic events may be an important cause of the development of addiction and, consequently, failure in therapy [4–6]. A number of scientific reports show that a variety of stressful, traumatic

events are observed in a population of addicted people. Alcohol allows to suppress the emotions associated with experienced trauma (e.g., fear and powerlessness often experienced by the victims of traumatic events) [7, 8].

The studies suggest that the risk of problems associated with alcohol increases in people who suffered from trauma [9–11]. People abusing psychoactive substances declare their experience of trauma more often than most other groups, and are more likely to develop symptoms of the post-traumatic disorders [5, 12]. Seligman et al. [10] indicate that the development of disorders caused by experienced trauma may determine the existence of such disorders as related to alcohol. Few studies so far carried out in Poland confirm the high incidence rate of traumatic events in the groups of people addicted to alcohol [13–16].

The coexistence of these two phenomena is also important not only because of the frequency of coexistence, but also because of the more complex clinical management in relation to these patients. The relationship between traumatic experiences and disorders resulting from the use of psychoactive substances affects the treatment. Such people are often diagnosed with other psychiatric disorders, have more psychosocial and somatic problems, use healthcare more often, and also show a lower response rate compared to patients only with PTSD or disorders associated with the use of psychoactive substances [17, 18].

Aim

The aim of this study was to analyze differences in experiencing traumatic events between people addicted to alcohol (clinical group) and non-addicted individuals (control group). Based on such specified main problem, the following detailed purposes were specified:

1. Checking and discussing the differences in the prevalence of traumatic events among the group of people addicted to alcohol and the group of non-addicted people, and between men and women addicted to alcohol.
2. Comparative analysis between a group of people addicted to alcohol and the group of non-addicted people in terms of mean age at which a person experienced trauma for the first time.
3. Checking the time sequence on the development of addiction and the experience of the first traumatic events among people addicted to alcohol.

Material

The study involved 260 people, 120 of whom were addicted to alcohol (clinical group), including 60 women and 60 men, and 140 people were not addicted to alcohol (control group). Finally, the analysis in the control group involved 120 properly filled sheets – including 60 women and 60 men. The clinical group consisted of people diagnosed with alcohol addiction residing in the Department of Addiction Therapy in the

Psychiatric Hospital. This diagnosis was carried out by a psychiatrist and a specialist in addiction therapy. This group consisted of people who were soon to join the basic cycle of addiction therapy, the so-called initial group in that centre.

The control group participants were carefully selected as a sample from the general population who declared that they had no alcohol problems. The control group consisted of employees of the above-mentioned Psychiatric Hospital (office staff and manual workers) and Polish university students.

The research was conducted in a therapeutic room (regarding the students, the research was carried out in a classroom at the university) in the presence of a psychiatrist (the author of the article) acting as an addiction therapist at the above-mentioned hospital. There were no more than 15 persons in the group. The mean age in the group of people addicted to alcohol was 43.1 years ($SD = 9.16$). The mean age in the control group was 38.9 years ($SD = 10.02$).

In the group of people addicted to alcohol, 11 (9%) had primary education, 28 (23%) – vocational education, 62 (52%) – secondary education, and 19 (16%) – higher education. In the group of people without addictions, 29 (24%) had vocational education, 47 (39%) – secondary education, and 44 (37%) – higher education.

Participation in the study was voluntary. People involved in the study were informed about the purpose and the procedure. The study procedure consisted of filling the TAA-SR, the structured interview verifying the presence of traumatic experience and severity of post-traumatic symptoms, as well as personal survey.

Method

Traumatic Events Assessment Questionnaire (TAA-SR)

Authors: Gray, Elhai, Owen, Monroe (initial Polish adaptation: Chojnacka-Szałowska, 2010). The questionnaire deals with the different types of extremely stressful life experiences to which a person is exposed. The task is to assess which of these traumatic events relate to a respondent. The questionnaire is used for the qualitative analysis of the event, and (non-obligatory) to assess its intensity in the 6-point scale.

The structured interview checking the presence of experience of trauma and the severity of post-traumatic symptoms (PTSD) according to DSM-IV

The survey was prepared on the basis of the definition of PTSD presented in DSM-IV-TR [19], which is used to check for the presence of traumatic experiences and the severity of post-traumatic symptoms. It needs to be emphasized that with regard to the subject matter of this article (the differences in the number of experienced traumas between the persons addicted to alcohol and those who are not addicted to alcohol) the analysis included questions checking the presence of traumatic experiences (A1. Have you ever experienced, witnessed or confronted a situation or situations when someone died, was seriously injured or there was a direct threat to life/health, or you

were injured or was your life/health put in jeopardy?) with the feeling of strong fear, helplessness or terror at the same time (A2. Did you react to this situation with strong fear, helplessness or terror?).

The other questions are related to reactions and feelings which check the presence and severity of post-traumatic symptoms (e.g., PTSD). Thus, apart from the question about the presence of traumatic stressors, the survey includes 17 questions belonging to three groups of symptom categories (the respondents answered: “yes” or “no”), relating to: (reliving traumatic events (B), persistent avoidance of any stimuli that remind the person of their trauma (C) and persisting symptoms of psychophysiological arousal (D).

It needs to be mentioned that experiencing traumatic events does not mean that PTSD will develop. The set of PTSD symptoms is treated as the model of reactions which can occur as a result of the experienced trauma. For this reason not all symptoms of individual criteria must occur with the same intensity in individuals diagnosed with PTSD. For the A symptom group, at least two symptoms must occur, for the B group – at least one, from the C group – at least three, from the D group – at least two [19]. In addition, the sheet containing demographic information and questions about the age of the first alcohol initiation was used.

The study project was approved by the Commission on Ethics of Scientific Studies. The average study time was 20 minutes.

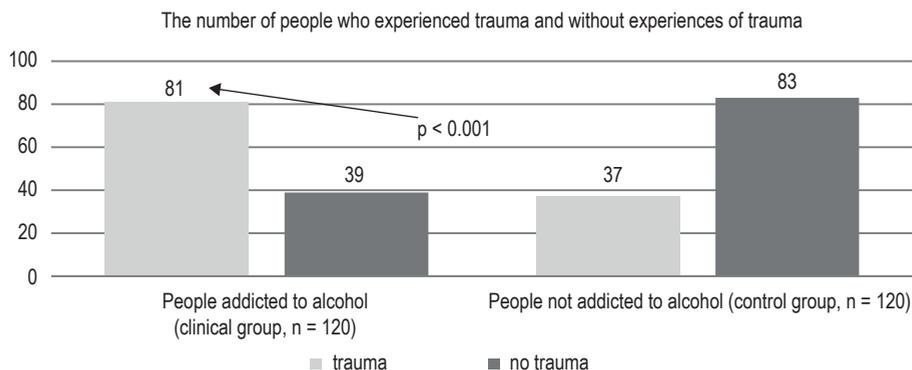
Results

The analysis of independence of two variables – Pearson’s χ^2 showed that the group of people addicted to alcohol included more people who had experienced at least one trauma ($n = 81$), compared with people not addicted to alcohol ($n = 37$). The relationship between the tested variables is statistically significant. The result of Pearson’s χ^2 test is: $\chi^2(1, N = 240) = 32.28; p < 0.001$ (see Graph 1).

81 people from the clinical group experienced at least one traumatic event listed in the TAA-SR questionnaire and the structured interview, which was 67.5% of 120 people addicted to alcohol. In the control group, the experience of at least one traumatic event was reported by 37 people, which was 30.83% of the studied sample.

Physical violence during childhood (22.2%) and a serious or health or life-threatening accident (13.6%) were types of traumatic events most often reported by addicted people. Quite a large number of people (12.3%) reported being a victim of physical violence caused by a known person, the same number of respondents experienced a sudden loss of a loved one.

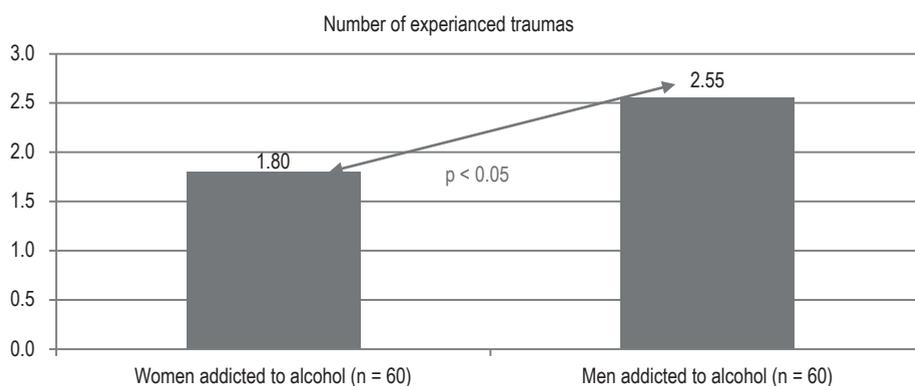
In the control group, most people (21.6%) experienced an accident threatening health or life and 18.9% of people witnessed another situation resulting in great fear and terror. The surveyed individuals in the control group also experienced attacks with physical force caused by a known person (10.8%). They equally often declared experience of serious life-threatening illness or loss of a loved one.



Graph 1. The number of people with experience of trauma and without experience of trauma in the group of people addicted to alcohol (clinical group, $n = 120$) and in the group of non-addicted people (control group, $n = 120$). The analysis of dependencies of two variables with Pearson's χ^2 test

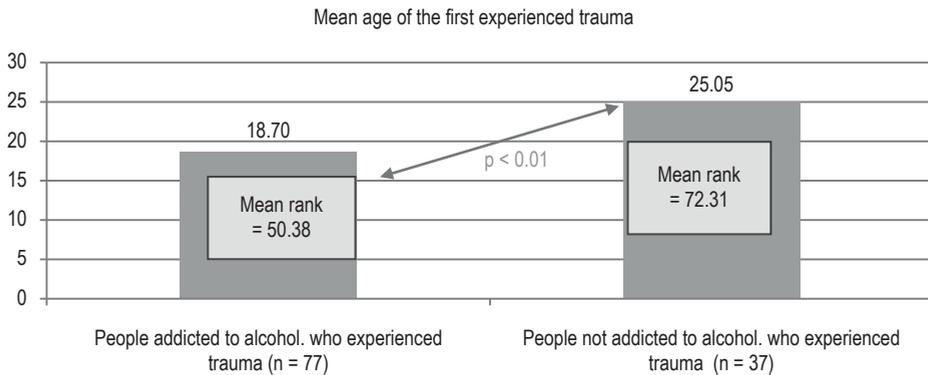
Another analysis was carried out to check whether there were differences in the number of experienced traumas between men and women addicted to alcohol. The analysis with the Student's t -test for independent samples showed that addicted men experienced on average more traumas ($M = 2.55$; $SD = 2.30$) than addicted women ($M = 1.80$; $SD = 1.73$). This difference is statistically significant – the result of the t -test for independent samples was: $t(110) = 2.02$; $p < 0.05$ (see Graph 2).

The subsequent analysis compared the mean age of the first experienced trauma in the group of people addicted to alcohol and in the group of non-addicted people. Due to the unfulfilled conditions necessary to carry out the Student's t -test, the non-parametric test was carried out for independent samples – the Mann-Whitney U test. Based on the



Graph 2. The average number of experienced traumas among women addicted to alcohol ($n = 60$) and among men addicted to alcohol ($n = 60$). The comparison with the Student's t -test for independent samples

analysis (carried out using the TAA-SR questionnaire), it was found that the mean age of the first experienced trauma among people addicted to alcohol was lower ($M = 18.70$ years; $SD = 9.55$; mean rank = 50.38) than among the non-addicted people ($M = 25.05$ years; $SD = 9.68$; mean rank = 72.31). This difference is statistically significant – the result of the Mann-Whitney U test was: $U = 876.50$; $p < 0.01$ (see Graph 3).



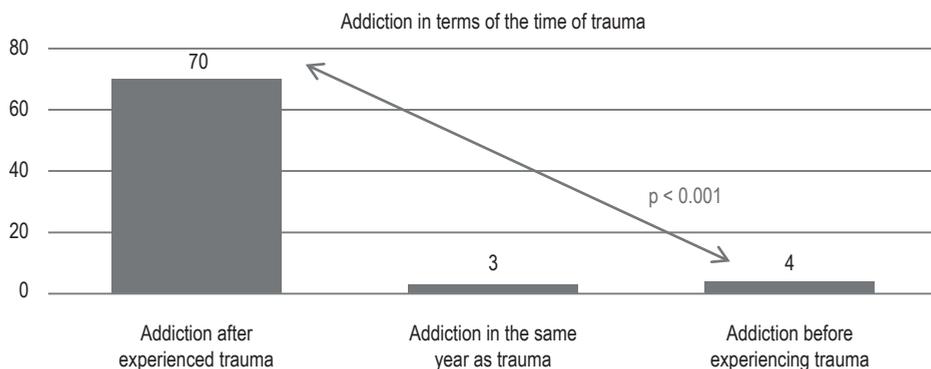
Graph 3. The mean age at which people experienced the first trauma – among people addicted to alcohol who suffered from trauma (n = 77), and among non-addicted people who suffered from trauma (n = 37). The comparison of the mean ranks with the non-parametric Mann-Whitney U test for independent samples.

In order to determine whether the addiction is more common after the first trauma than before experience of trauma, the χ^2 analysis for one variable was carried out. This analysis showed that among 77 people addicted to alcohol and at the same time with experience of at least one trauma (the data from the TAA-SR questionnaire), 70 people declared that trauma occurred earlier than addiction, 3 people declared that addiction and trauma occurred in the same year, and only 4 people declared that they experienced the first trauma when they were already addicted. The variable distribution deviates significantly from the distribution of equal-size groups: the result of the Pearson's χ^2 test for one variable was: $\chi^2(2) = 114.88$; $p < 0.001$ (see Graph 4).

Discussion of the results

It turned out that 81 people from the clinical group experienced at least one traumatic event listed in the TAA-SR questionnaire and the structured interview checking the presence and severity of post-traumatic symptoms (PTSD), which was approximately 70% of 120 people addicted to alcohol.

In the control group, an experience of at least one traumatic event was reported by 37 people, which was approximately 31% of the studied sample. The number of



Graph 4. The number of people whose addiction occurred after trauma, at the same time as trauma, and before experiencing trauma. Comparison with the χ^2 test for one variable

people who experienced at least one trauma is considerably higher in the group of people addicted to alcohol than in the group of non-addicted people.

The results of this work also correspond with other Polish studies on the prevalence of traumatic events among the addicted people [13, 15, 16]. Dragan and Lis-Turlejska [14] showed that 80% of the patients addicted to alcohol reported experience of at least one traumatic event in their lives.

The overall prevalence of interpersonal violence among addicted people was 51%, which means that every second patient addicted to alcohol might have experienced physical and/or sexual violence. The above result is comparable with the results reported by the patients addicted to alcohol [20], among whom the prevalence of interpersonal violence was 59%.

The results of this study showed that people addicted to alcohol were the victims of physical violence during childhood almost three times more often compared to those without addiction. The consequences of such traumas may last a lifetime, especially when they were suffered during childhood or early youth, because they become the “foundation” on which a young person, and then an adult shapes his/her identity and relationships with others. These events leave deep trauma, because a person, due to emotional immaturity, mainly uses unconscious defense mechanisms to cope with strong post-traumatic emotions. Therefore, no conscious control over a traumatic event and low competence in coping with stress may contribute to increased susceptibility to the development of post-traumatic symptoms (including PTSD) for subsequent traumatic events [21]. The consequences of traumatic experience may accumulate and lead to the development of secondary life difficulties and disorders, e.g., depression or other mood disorders, anxiety [21–26], problems with self-regulation, including alcohol addiction [27].

The next step was to check the differences in the number of experienced traumas between addicted women and addicted men. It turned out that the average number of traumas experienced by addicted women compared to addicted men was statistically

significantly lower. These results correspond with other studies on the prevalence of traumatic events in the general population. A number of studies suggest that exposure to traumatic factors is higher among men compared to women, while the opposite trend occurs with the incidence of PTSD, which is higher in women [28]. Kessler et al. [29] showed that the prevalence of traumatic events amounted to 61% for men and 51% for women.

The results of this study may also be referred to the Polish studies on the prevalence of traumatic events among women and men addicted to alcohol. The prevalence of traumatic events listed in the PDS turned out to be higher among men addicted to alcohol compared to addicted women [15].

As a result of the comparative analysis between the group of people addicted to alcohol and the group of non-addicted people in terms of mean age at which a person experienced trauma for the first time, statistically significant difference was reported. The comparison of two groups showed that the addicted people declared their first experience of trauma earlier than those in the control group. The important fact may not involve just the traumatic event itself, but also the age of its occurrence as well as the number and type of experienced traumas, associated with e.g., violence in interpersonal relationships.

The question whether the experience of traumatic events is a factor that forces a victim to drink alcohol, or whether it is one of the effects of drinking alcohol remains open. A trend for a higher number of declared traumas among those addicted to alcohol, observable in many cases, including own studies, provides grounds to believe that the theory of “self-medication” is the most relevant causal explanation. Chilcoat and Breslau [30] showed that people suffering from PTSD abuse psychoactive substances four times more often than individuals not suffering from post-traumatic disorders. These results seem to be supported by the results of own studies, which prove that the symptoms of alcohol addiction occurred in time sequence after experiencing the first trauma.

The vast majority of people from the clinical group (91%) declared that the addiction symptoms occurred after experiencing the first trauma. Therefore, it may be assumed that for some people alcohol consumption was or still is a kind of escape or a way to cope with unpleasant memories of experienced trauma and related post-traumatic symptoms. It needs to be mentioned that experiencing traumatic events does not mean that PTSD will develop. Although traumatic events are quite common, their ability to cause post-traumatic stress is a compound of many other factors. The observed extent and nature of the symptoms displayed by victims of traumatic events are dependent on several factors, often described as the risk factors for post-traumatic stress disorder [28–30]. Treatment focused on such risk factors may contribute to decreasing a post-traumatic response.

Limitations of research are related to the fact that the estimation of the occurrence of traumatic events in different studies depends on the very definition of a traumatic event and the tools used by authors, therefore comparisons should be made with due

care. The persons addicted to alcohol met the strict diagnostic criteria for alcoholism, which was the reason to start therapy. However, they were before or in the middle of a detailed psychiatric diagnostic process and the author did not have access to the results of this process.

The studies have found that among persons who undergo treatment due to one disorder there is a high probability of other disorders [31]. People usually decide to start therapy when they have symptoms of different disorders. Nevertheless, the existence of such a correlation may be treated as a sign of the complexity and importance of the phenomenon of alcohol addiction.

Conclusions

The performed studies point to high, i.e., approx. 70%, prevalence of at least one traumatic event over the life of people addicted to alcohol.

The research results may be involved in a discussion on the risk factors of alcohol addiction. The results of the performed analyses may be an indication for therapeutic work among the patients with a dual diagnosis: alcohol addiction and symptoms of post-traumatic disorders. The diagnosis of co-occurrence of both disorders is very important for the effectiveness of the therapy. The prevalence of various disorders, including post-traumatic symptoms, in the addicted patients involves a higher risk of failure in the treatment, lower effectiveness and increased mortality due to continuous alcohol abuse or recurrence [4, 15, 17].

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