Psychiatr. Pol. 2026; 60(4): 655–668
PL ISSN 0033-2674 (PRINT), ISSN 2391-5854 (ONLINE)
www.psychiatriapolska.pl
DOI: https://doi.org/10.12740/PP/OnlineFirst/207301

Psychiatric disorders among adolescents residing at Youth Educational Centers in Silesia in Poland

Karolina Zofia Kamińska[1], Michał Ciołek[1], Izabela Rosół[1], Magdalena Matlakiewicz[1], Maria Potaczek[1], Lena Cichoń[2,3], Krzysztof Maria Wilczyński[2,3], Małgorzata Janas-Kozik[2,3]

[1] Students' Scientific Association at the Clinical Department of Psychiatry and Psychotherapy of Developmental Age, Medical University of Silesia in Katowice

[2] Clinical Department of Psychiatry and Psychotherapy of Developmental Age, Chair of Psychiatry and Psychotherapy, Medical University of Silesia in Katowice

[3] John Paul II Child and Family Health Centre in Sosnowiec Sp z.o.o.

Summary

Aim. In Polish Youth Educational Centres underage individuals exhibiting signs of delinquency are accommodated. A significant concern is the presence of mental health disorders among these institutions' residents, which may influence their rehabilitation process. The aim of this study was to evaluate the prevalence of mental health disorders among residents of Youth Educational Centres in the Silesian Voivodeship.

Material and methods. The study was conducted between February and November 2022 in two Youth Educational Centres located in the Silesian Voivodeship. 80 individuals participated in the study (60% boys, 40% girls). Participation was voluntary and anonymous. A semi-structured psychiatric interview K-SADS-PL was employed, incorporating questionnaires covering mania, depression, conduct disorders, and substance use disorders.

Results. Among the study participants, 12.5% (n = 10) had been diagnosed with mental disorders prior to the start of the study. Criteria for Major Depressive Disorder were met by 26.25% of participants, including 20.8% of boys and 34.37% of girls, with irritability reported in 19 of the 21 individuals diagnosed with depression. Conduct disorders were observed in 52.5% of participants. Furthermore, 39% of respondents consumed alcohol at least three times per week, and 70% used cannabis at least once a week.

Conclusions. Research on the mental health of adolescents in Youth Educational Centres in Poland highlights a high prevalence of depressive disorders and problematic patterns of psychoactive substance use among residents, which may negatively impact their functioning and prognosis. Interventions are essential to facilitate beneficial behavioural changes in these minors and to counteract their demoralisation.

Key words: youth educational centre, resocialization, affective disorders

Introduction

The issue of the demoralisation of young people is currently becoming one of the occurrences causing increasing concern among European societies [1]. According to Poland's Act dated on 9th of June 2022, on Supporting and Resocialising Minors, signs of demoralisation include committing a prohibited act, violating the principles of social coexistence, evading the obligation of school attendance or learning, using alcohol, intoxicants, psychotropic substances, their precursors, substitutes, or new psychoactive substances, or engaging in prostitution. Proceedings concerning demoralisation are conducted for individuals who are at least 10 years old but not yet adults, while proceedings regarding punishable acts involve those who committed such acts reaching the age of 13 but before turning 17. For minors, educational, therapeutic and corrective measures can be applied, aimed at preventing demoralisation and their involvement in punishable acts [2].

Youth Educational Centres (in Polish: MOWs) are considered part of the educational measures and host the largest group of socially maladjusted youth [1]. The primary tasks of MOWs include eliminating the causes and manifestations of social maladjustment and preparing residents for life in accordance with prevailing social and legal norms. As of 31st of October 2023, Poland had 89 MOWs for minors with normative intellectual functioning, including [3]:

- facilities for boys: 52,
- facilities for girls: 27,
- coeducational facilities: 10.

Additionally, there were 24 facilities for minors with mild intellectual disabilities, including:

- facilities for boys: 14,
- facilities for girls: 9,
- coeducational facilities: 1.

A significant issue concerning MOW operations is the occurrence of mental disorders among their residents, although there is limited literature on the subject. Internationally, a meta-analysis conducted by Beaudry et al. [4] assessed the prevalence of mental disorders among youth in juvenile detention and correctional facilities. The authors analysed 47 studies published between 1966 and 2019 from 19 countries (mostly the USA), involving 28,033 boys and 4,754 girls. Compared to the general population of the same age, residents of these facilities exhibited higher rates of mental disorders, beyond behavioural disorders. Among male adolescents, 2.7% had psychotic disorders, 10.1% had depression, 17.3% had ADHD, 61.7% had behavioural disorders, and 8.6% had PTSD. Among female adolescents, 2.9% had psychotic disorders, 25.8% had depression, 17.5% had ADHD, 59.0% had behavioural disorders, and 18.2% had PTSD. A study by Ruchkin et al. [5] found that boys with depression reported higher

levels of aggression than girls and suggested that interventions aimed at reducing aggressive behaviour in adolescents should account for the presence of depression. Moreover, ADHD and substance abuse in young people may correlate with a tendency toward violent crimes and risky behaviour [6]. A 2018 meta-analysis also indicated that the prevalence of ADHD among adults in prisons is higher than in the general population [7]. Ginsberg et al. [8] found that ADHD in adult prisoners often co-occurs with substance abuse (commonly amphetamine), autism spectrum disorder, anxiety disorders, and mood disorders. However, a study by Stoddard-Dare et al. [9] revealed that the likelihood of committing crimes and subsequent detention was significantly lower in adolescents diagnosed with ADHD and behavioural disorders but higher in those with bipolar disorder (BD). Aggression, impulsivity and irritability are common symptoms of BD among adolescents and may lead to illegal behaviour [10]. One study (included in a meta-analysis by Beaudry et al. [4]) involving 50 juvenile detention centre residents, found that 22% met the DSM-III criteria for mania, including one individual who met the criteria for BD, with irritability being the most frequently reported symptom [11].

In Poland, there is limited research on the issue of mental disorders among demoralised youth. Only a survey among MOW directors on the mental health of residents has been conducted [12]. However, an important limitation was that the respondents were not the residents themselves but the facility directors. As a result, the findings only confirmed the presence of mental health issues in facilities in 2020 without assessing their scale or prevalence among residents. 92 out of 94 MOW directors responded that there are mental health problems in their facilities [12]. Statistics on substance use by youth in resocialisation facilities were also concerning. Thirty-three percent of MOW residents in Poland required specialised psychiatric care due to diagnosed disorders such as behavioural, mood, anxiety disorders, and schizophrenia, while 40% were diagnosed with substance addiction [13]. In one Polish MOW, 100% of residents reported experimenting with psychoactive substances, 95% smoked or had smoked cigarettes, and 88% declared consuming alcohol. Additionally, an analysis of medical documentation from Psychological-Pedagogical Counselling Centres and Court-Ordered Specialist Teams revealed that 15% of MOW residents were diagnosed with addiction and recommended addiction therapy [1].

Reports from Poland's Supreme Audit Office (NIK) also provide insights into the mental health of MOW residents, documenting numerous instances of self-harm, suicide attempts and acts of aggression. Between 2012 and 2016, there were 50 cases of self-harm, 16 suicide attempts and 361 incidents of physical violence (fights, assaults, aggressive behaviour). From 2018 to 2021, these numbers increased to 111 cases of self-harm, 16 suicide attempts and 297 incidents of violence [14, 15].

The survey among MOW directors in Poland revealed that almost all facilities offered psychiatric consultations (98% of facilities) and individual psychological-pedagogical support (94% of facilities) in 2020. However, the frequency of these consultations was not disclosed. Moreover, 83% of directors described access to

specialised psychiatric care as difficult or very difficult, which is a significant issue, especially since psychiatric evaluations are not mandatory before placing a young person in a MOW, meaning they do not always occur [3, 12].

The study aimed to assess the prevalence of symptoms of mental disorders among residents of MOWs in Poland in the Silesian Voivodeship.

Material

The study was conducted between February 2022 and November 2022 at two MOWs – one for boys and one for girls. A total of 80 individuals participated, including 48 boys (60%) and 32 girls (40%). In the girls' group, 33 refused to take part in the study and in the boys' group, 12 refused. Participation in the study was voluntary and anonymous, no personal data of the participants was recorded. The study was approved by the management of each MOW. Before initiating the study procedures, each participant and their parents were informed about the purpose of the study, its methodology, and had the opportunity to ask questions. They were also informed about their right to withdraw from participation at any time. Informed consent for participation and data processing, limited to the scope necessary for the study, was obtained from all participants. Parental consent was acquired via telephone. The study did not require approval from a bioethics committee.

Methods

Elements of a semi-structured child and adolescent psychiatric interview for the diagnosis of affective disorders and schizophrenia – the *Kiddie Schedule for Affective Disorders and Schizophrenia-Present and Lifetime Version* (K-SADS-PL) were conducted. The procedure consisted of an initial interview, a screening questionnaire and detailed questionnaires on mania, depression, conduct disorder, oppositional defiant disorder, and substance abuse. The K-SADS-PL questionnaire allows most symptoms to be rated on a four-point scale from 0 to 3 in two categories: current episode and most severe past episode. Points on the scale mean: 0 – no data, 1 – no occurrence of the symptom, 2 – presence of symptom characteristics at an intensity that does not meet diagnostic criteria, 3 – presence of the symptom. Some questionnaire items are scored on a three-point scale from 0 to 2, where 0 means no data, 1 means no presence and 2 means presence of the symptom [16]. Interviews were conducted individually with each participant by trained members of the research team.

Due to the specific nature of the study group and organisational constraints, parents or carers were not interviewed. The assessment of individual symptoms was based solely on information obtained directly from the subject. The K-SADS-PL was used as a screening tool and no clinical diagnoses were formulated on the basis of the obtained

results. On the basis of symptom severity scores on the K-SADS-PL, exceedance of the established cut-off points for each disorder was determined.

The Mann-Whitney *U* test was performed to determine the statistical significance of the age difference between groups. The results are presented in the form of percentages of the prevalence of individual symptoms and MOW alumni meeting DSM-5 diagnostic criteria [17].

Results

The study groups differed significantly in terms of age, as demonstrated by the non-parametric Mann-Whitney *U* test. The use of the non-parametric test was due to the non-normal distribution of the data, confirmed by the results of the Shapiro-Wilk test. The analysis of the age distribution in both groups is shown in the histograms (Figure 1 and 2), and the values of the Shapiro-Wilk statistic (p <0.05) indicated the non-normality of the distributions in both cases. The detailed results of the Mann-Whitney *U* test are shown in Table 1.

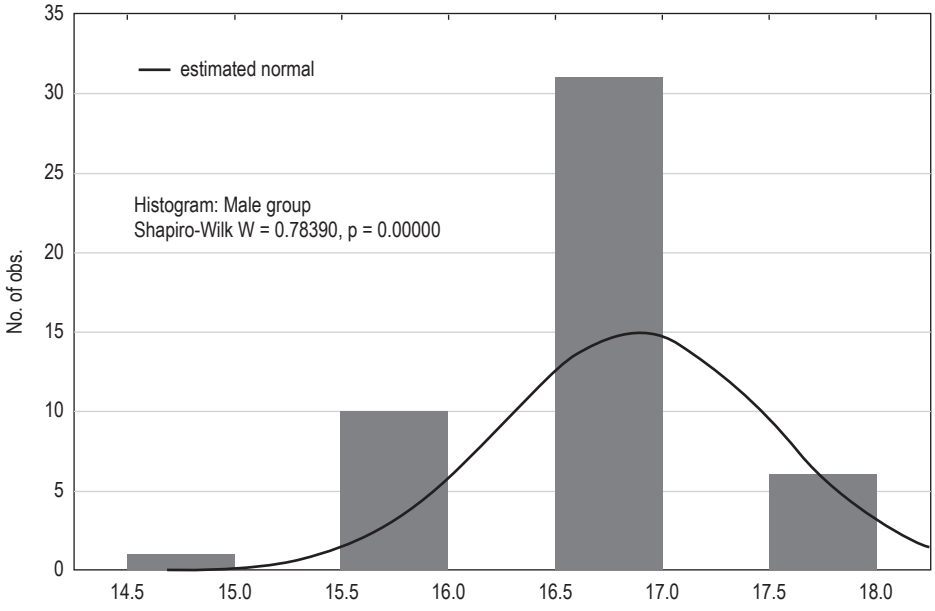


Figure 1. **Histogram of the boys' ages together with the result of the Shapiro-Wilk test, which indicates a significant deviation from the normal distribution (p <0.05)**

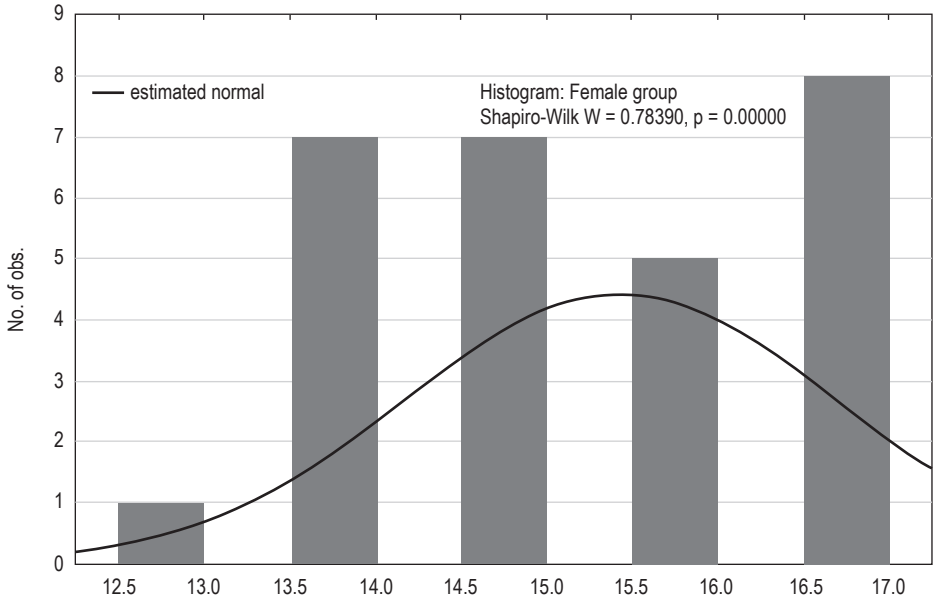


Figure 2. **Histogram of the girls' ages and the result of the Shapiro-Wilk test, also showing the non-normality of the data distribution (p <0.05)**

Table 1. **Results of the Mann-Whitney U test for the variable "age" grouped by sex. Statistical significance set at p <0.05**

Variable	Mann-Whitney U Test grouped by gender Marked tests are significant at p <0.05									
	Rank Sum Males	Rank Sum Females	U	Z	p-value	Z – corrected	p-value	Valid N males	Valid N females	2*1sided
Age	2274.500	651.5000	245.5000	4.587280	0.000004	4.961361	0.000001	48	32	0.000001

Among the participants, 12.5% ($n = 10$) had previously been diagnosed with mental disorders. This group included 7 boys (1 with BD, 1 with schizoaffective disorder and 5 with depressive disorders) and 3 girls (2 with BD and 1 with depressive disorders). The median age was 15 years (range: 13–17) for girls and 17 years (range: 15–18) for boys, with this difference being statistically significant ($p = 0.000001$; $U = 245.5$; $Z = 4.587$).

Criteria for major depressive disorder (MDD) were met by 26.25% of participants, including 20.8% ($n = 10$) of boys and 34.37% ($n = 11$) of girls. Irritability was reported in 19 out of the 21 individuals meeting the criteria for MDD. Additionally, 20% of individuals with depressive symptoms reported using cannabinoids three times a week.

The criteria for BD were met by 5% of participants, ADHD by 3.75% (including 2 boys and 1 girl), and conduct disorder (CD) by 52.5% of individuals, with 52% ($n = 25$) of boys and 53% ($n = 17$) of girls affected. Furthermore, 13.75% of individuals with CD also exhibited symptoms of MDD. The prevalence of oppositional defiant disorder (ODD) in the studied group was 28.75%, with a higher percentage among girls (37.5%; $n = 12$) compared to boys (22.9%; $n = 11$). Among the 23 individuals meeting ODD criteria, 73.91% ($n = 17$) reported an irritable mood, and 52.17% ($n = 12$) also had MDD symptoms.

39% of participants admitted to drinking alcohol at least three times a week, and 45% reported consuming large amounts of alcohol during drinking episodes. Marijuana was used at least once a week by 70% of participants, while 56% used stimulants. Problematic use thresholds (three times a week or more) were exceeded by 16% of cannabinoid users, 24% of stimulant users and 12% of cocaine users. Figure 3 illustrates the most frequently reported symptoms among the residents of both sexes.

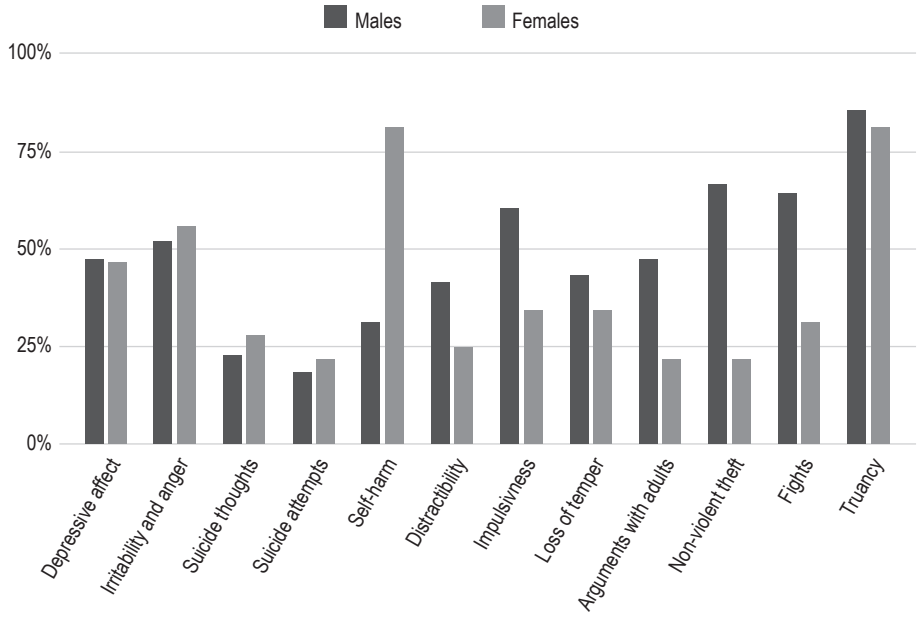


Figure 3. **The most frequently occurring symptoms among girls and boys residing in MOWs**

Discussion of results

Among MOW subjects, the prevalence of MDD symptoms was 26.25% and appears to be higher than in the general adolescent population, since the prevalence of MDD in population under 18 years of age in the 2021 meta-analysis was estimated at 8% (95% CI: 0.02–0.13), whereas the lifetime prevalence of MDD was assessed at 19% (95% CI: 0.12–0.26), with the occurrence of various self-reported depressive symptoms in adolescents between 2001 and 2020 at 34% (95% CI: 0.30–0.38) [18]. Further meta-analysis (n = 68,382) revealed that the global prevalence of MDD in people under 18 was 1.3% (95% CI 0.7–2.3) [19]. In the EZOP II survey of mental health and its determinants, depressive disorders in the Polish population aged 12–17 years had a prevalence of 3.96%. This frequency refers to the prevalence of these disorders ever in life [20]. Acts of self-harm and suicide attempts reported in our study seems to be equally alarming. 81% of female and 31% of male MOW residents admitted to performing acts of self-harm currently or in the past, while 7 girls and 4 boys attempted to commit a suicide. Furthermore, irritability, which is a common symptom of affective disorders, was frequently observed among MOW wards. Irritability occurring at least 3 times a week for a minimum of 3 hours was declared by 52% of male and 78% of female adolescents in MOWs. This may be significant, considering the results of a study by Stringaris et al. [21] which concluded that, although signs of irritability not accompanied by depressed mood are less common in MDD patients between the ages of 9 and 16 than irritability in combination with depressed mood, children and adolescents who suffer not only from depression, but also show signs of irritability are more likely to manifest oppositional defiant disorders with additional conduct disorders in female population. However, it should be mentioned that irritability is a nonspecific symptom and may also occur in other paediatric psychiatric disorders [21].

Among surveyed subjects, the prevalence of bipolar affective disorder (BD) symptoms was 5%, which is comparable to the frequency of BD in the 14–18 year-old population, where it is estimated at approximately 2.9%–6.7% [22]. It should be emphasised that there is a lack of separate diagnostic criteria for BD in children and adolescents, despite the different clinical picture. Therefore, in our study, adolescents were subjected to the same criteria as adults, which may be the reason for "underdiagnosis" of BD among MOW residents. Further observation reveals that depression (frequent in the study group – a total of 21 subjects) is usually the first manifestation of BD, whereas manic/hypomanic or mixed episodes might appear much later or go unnoticed by the patients experiencing them. Differentiating mania/hypomania symptoms from ADHD in paediatric population is particularly difficult, although the KSADS interview contains questions that allow to distinguish one from another – about duration or symptoms present for mania only, including racing thoughts, enhanced self-esteem and decreased need for sleep [23].

3.75% of MOW residents presented ADHD symptoms, which is lower than the prevalence in adolescent population aged 12–18 years according to meta-analysis in-

volving 53 studies by Salari et al. [24], where this figure was 5.6%. In the previously mentioned EZOP II study, the prevalence of ADHD in adolescents aged 12–17 years was 2%. These symptoms were assessed based on questions about the last 6 months [20]. In another research involving more than 30,000 participants aged 6 to 18 years, the incidence rate of ADHD was 4%, similar to results obtained in our study, with a greater prevalence among male adolescents (5.2% vs. 2.7%), younger participants, urban residents, and offspring of mothers with a history of psychiatric hospitalisation. Anxiety disorders (37.9%), CD (31%) and ODD (26.1%) were proven to be the most common group of disorders comorbid with ADHD. Mood disorders and anxiety disorders were more frequent in female patients with ADHD, however, CD was more common in male patients with ADHD [25]. Our research revealed also one boy with ADHD who met DSM-5 criteria for BD, ODD and CD, another for MDD and ODD, and a girl for CD and ODD.

A 2021 meta-analysis compared the prevalence of CD in children and adolescents aged up to 18 years old depending on the questionnaire used to make a diagnosis. 6 studies, with a sample of 46,899 individuals, who were diagnosed with CD using KSADS interview, revealed that the aforementioned disorder occurred with a frequency of 0.4% (0.2% in females and 0.5% in males) and was diagnosed less frequently than on the basis of other diagnostic tools, e.g. DAWBA (*Development and Well-Being Assessment*). Diagnoses of CD made by using a self-completed SDQ *self-report* questionnaire (*Strengths and Difficulties Questionnaire*) were much more common – 16%. Further research based on 17 different studies showed that the prevalence of CD in European population, regardless of the questionnaire used, was found to be 7% [26]. In the EZOP II study, which used the MINI Kid questionnaire, the prevalence of CD was 1.6% and ODD was 1.1% [20]. Conduct disorders are more frequent (52.5%) in adolescents residing at MOWs, as may be expected by the profile of subjects referred do these institutions by the court of law. During the developmental period, these disorders are often preceded by ODD. Even though not all individuals with ODD will develop CD, depressive or anxiety disorders may be developed concurrently. Both ODD and CD lead to problems with patients exposing more conflictual behaviour. The occurrence of ODD is also linked to maladaptive regulation of emotions, which is not present in CD. Overall, the data on the prevalence of ODD are inconclusive – it is most often diagnosed in approximately 5% of children – 2–10% in boys and half that amount in girls [27]. The occurrence of oppositional defiant disorder in European population of 5–18 year olds, calculated based on the REPPR was 1.9% (95% CI: 1.0–3.7%; I2 = 98.0.4%) [28]. The frequency of ODD is significantly higher in boys than in girls aged 5–17 years (RR = 1.59; 95% CI: 1.36–1.86; p <0.001), and the male-to-female prevalence ratio was 1.59:1 [29]. Our research showed higher general prevalence, but lower in male than in female population.

Our study may evoke questions, concerning the issue of subjects sent to MOWs who did not meet the criteria for CD or ODD while interviewed. Youngsters referred to these facilities in Poland are usually “socially maladjusted” and demoralised. Nev-

ertheless, it is worth mentioning that there is no such diagnosis in DSM-5 and ICD-11 classifications, and thus no diagnostic criteria for demoralisation [1]. Therefore, the functioning of these minors is similar to those with ODD or CD diagnoses, without necessarily meeting their diagnostic criteria.

Among 42 children meeting CD criteria in our research, 11 subjects (13.75%) also complied with MDD criteria and all 4 subjects who met diagnostic criteria for mania, also fulfilled the criteria for CD. Children and adolescents with ODD often have an irritable mood and present argumentative and rebellious behaviour, which may also represent symptoms of BD in the paediatric population [22].

The problem with psychoactive substances, such as alcohol and drugs, is much greater in MOW residents than in the general population. This is considered as manifestation of demoralisation and thus a reason to refer young people to those facilities [13]. In our study, 39% of respondents admitted to alcohol consumption three times a week or more while 45% declared drinking significant amounts during the episode of insobriety. In comparison, the study by Sierosławski et al. [30] revealed that only 23% of middle school students admitted to alcohol consumption with 73% doing so less than once a week. Whereas, in the 2020 *State of Drug Addiction Report*, 63% of third-graders in lower secondary school and 36% of second-year upper secondary school students have never crossed the threshold of intoxication during their lifetime [31]. The same report shows that the problem with substance abuse (cannabis, psychostimulants) is definitely greater among MOW residents than in the general population. 25% of third-graders in lower secondary school and 43% of students in the second grade of upper secondary school in Poland have smoked cannabis, 5% and 7% respectively have tried amphetamine.

Study limitations

A limitation of our study is undoubtedly a small number of participants (residents of only two MOWs). Therefore, it seems essential to extend the research to other MOWs in Poland, as well as juvenile detention centres. It was also not possible to interview parents with K-SADS questionnaire, which is also used as a tool for conducting separate interviews with caregivers about possible psychopathology of their offspring, especially at pre-school age [32]. An important fact should be taken into consideration – K-SADS-PL is a semi-structured questionnaire which can be used to make a preliminary diagnosis of psychiatric disorders according to DSM-IV criteria, and therefore needs to be updated considering the new DSM-5 standards. As a screening questionnaire, K-SADS-PL is sensitive and thus has a false-negative rate close to zero, whereas the false-positive rate is estimated to be around 26.2% [33].

This survey could be more accurate if it were based on a full psychiatric assessment by physicians specialised in child and adolescent psychiatry. Then it would also be possible to make diagnoses. To ensure maximum objectivity, the interviews could be recorded and the recordings could be exchanged between the researchers as was

performed in a study evaluating the effectiveness of the K-SADS questionnaire [34]. Questionnaires on mania, depression, CD, ODD, and substance abuse were considered in the study, and the study could be expanded in the future to include questionnaires on anxiety and psychotic disorders.

Moreover, a large number of questions included in the questionnaire caused fatigue in certain respondents, which could have also affected the results. While designing the study, use of the *Mood Disorder Questionnaire* (MDQ) was considered too – however, there is no Polish version of this tool. Nevertheless, further research can possibly include the MDQ or the CBCL scale. This population also require insight into better differentiation of BD and ADHD, as characteristics contained in K-SADS-PL such as hyperactivity, impulsivity and problems with concentration and/or studying do not differentiate between these groups [35].

People with intellectual disabilities did not participate in our study. The K-SADS is conducted under the assumption that the child has an adequate level of cognitive development to understand the questions and give reliable answers. This is worth taking into account, especially in light of information that the presence of intellectual disabilities, most often mild, is common in juvenile psychiatric court wards.

Conclusions

Research on the mental health of adolescents in MOWs in Poland reveals an alarmingly high proportion of pupils with depressive disorders, which requires special attention and preventive measures. The high prevalence of these disorders can negatively affect their functioning and prognosis. In addition, there is significant comorbidity between depressive disorders and conduct disorders. Depressed adolescents often display greater tendencies towards aggression and impulsivity, so it is necessary to take into account the presence of mental disorders and their treatment among those receiving educational and correctional measures.

In addition, the problem of psychoactive substance use among adolescents in MOWs is a major challenge. It is often a reaction to emotional difficulties, crisis situations faced by the pupils, as well as a form of 'self-medication' for various mental disorders. In therapeutic programmes, it is important to address the problem of addiction or harmful use of psychoactive substances, and MOW residents require psychological support and interventions aimed at reducing substance use. It is therefore necessary to implement therapeutic programmes that integrate psychological assistance, mental health support and education on psychoactive substances.

It is also important that MOW personnel are adequately trained in recognising and responding to symptoms of mental disorders in order to provide adequate support and assistance to youth in the resocialisation process.

In conclusion, further research on the mental health of MOW residents is needed in order to develop better and more comprehensive interventions aimed at achieving beneficial changes in juvenile behaviour and preventing their demoralisation.

References

1. Dobijański MJ, Kamiński A. *Niedostosowanie społeczne nieletnich profilaktyka i resocjalizacja*. University of Siedlce; 2020. https://bazawiedzy.uph.edu.pl/info/book/UPHf14efde8b6714e0b8e8d38ec74c6d216?r=publication&ps=100&tab=&title=Publikacja%2B%25E2%2580%2593%2BNiedostosowanie%2Bspo%25C5%2582eczne%2Bnieletnich%2Bprofilaktyka%2Bi%2Bresocjalizacja%2B%25E2%2580%2593%2BUniwersytet%2Bw%2BSiedlcach&lang=pl (retrieved: 29.04.2024).
2. Act of 9 June 2022 on Supporting and Resocialising Minors.
3. *System Kierowania – Młodzieżowe Ośrodki Wychowawcze – Ośrodek Rozwoju Edukacji*. https://www.ore.edu.pl/2017/10/system-kierowania-mlodziezowe-osrodki-wychowawcze/ (retrieved: 29.04.2024).
4. Beaudry G, Yu R, Långström N, Fazel S. *An updated systematic review and meta-regression analysis: Mental disorders among adolescents in juvenile detention and correctional facilities*. J. Am. Acad. Child Adolesc. Psychiatry 2021; 60(1): 46–60.
5. Ruchkin V, Stickley A, Koposov R, Sukhodolsky DG, Isaksson J. *Depressive symptoms and anger and aggression in Russian adolescents*. Child Adolesc. Psychiatry Ment. Health 2023; 17: 130.
6. Hawkins JD, Herrenkohl T, Farrington DP, Brewer D, Catalano RF, Harachi TW. *A review of predictors of youth violence*. In: Loeber R, Farrington DP, editors. *Serious & violent juvenile offenders: Risk factors and successful interventions*. Thousand Oaks, CA: Sage Publications, Inc.; 1998. Pp. 106–146.
7. Baggio S, Fructuoso A, Guimaraes M, Fois E, Golay D, Heller P et al. *Prevalence of attention deficit hyperactivity disorder in detention settings: A Systematic review and meta-analysis*. Front. Psychiatry 2018; 9: 331. https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsyt.2018.00331/full.
8. Ginsberg Y, Hirvikoski T, Lindefors N. *Attention Deficit Hyperactivity Disorder (ADHD) among longer-term prison inmates is a prevalent, persistent and disabling disorder*. BMC Psychiatry 2010; 10: 112.
9. Stoddard-Dare P, Mallett CA, Boitel C. *Association between mental health disorders and juveniles' detention for a personal crime*. Child Adolesc. Ment. Health 2011; 16(4): 208–213.
10. Lewinsohn PM, Klein DN, Seeley JR. *Bipolar disorders in a community sample of older adolescents: Prevalence, phenomenology, comorbidity, and course*. J. Am. Acad. Child Adolesc. Psychiatry 1995; 34(4): 454–463.
11. Pliszka SR, Sherman JO, Barrow MV, Irick S. *Affective disorder in juvenile offenders: A preliminary study*. Am. J. Psychiatry 2000; 157(1): 130–132.
12. Paluch M. *Profilaktyka problemów zdrowia psychicznego w młodzieżowych ośrodkach wychowawczych w 2020 roku. Wyniki badania ankietowego*. 2021.
13. Kamiński A. S*tosowanie substancji psychoaktywnych przez podopiecznych młodzieżowych ośrodków wychowawczych*. In: Kamiński A, Dobijański M, editors. *Uzależnienia jako wyzwanie dla współczesnego pedagoga resocjalizacyjnego*. Warsaw: Ośrodek Wydawniczo-Poligraficzny SIM; 2018. Pp. 35–46.
14. *Funkcjonowanie młodzieżowych ośrodków wychowawczych – Najwyższa Izba Kontroli*. https://www.nik.gov.pl/kontrole/P/21/093/LWA/ (retrieved: 29.04.2024).
15. *Działalność resocjalizacyjna młodzieżowych ośrodków wychowawczych – Najwyższa Izba Kontroli*. https://www.nik.gov.pl/kontrole/P/17/099/LPO/ (retrieved: 29.04.2024).

16. Kaufman J, Birmaher B, Brent DA, Ryan ND, Rao U. *K-SADS-PL*. J. Am. Acad. Child Adolesc. Psychiatry. 2000; 39(10): 1208.
17. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders, 5th ed.* American Psychiatric Association Publishing; 2022.
18. Shorey S, Ng ED, Wong CHJ. *Global prevalence of depression and elevated depressive symptoms among adolescents: A systematic review and meta-analysis*. Br. J. Clin. Psychol. 2022; 61(2): 287–305.
19. Polanczyk GV, Salum GA, Sugaya LS, Caye A, Rohde LA. *Annual research review: A meta-analysis of the worldwide prevalence of mental disorders in children and adolescents*. J. Child Psychol. Psychiatry 2015; 56(3): 345–365.
20. Moskalewicz J, Wciórka J. *Kondycja psychiczna mieszkańców Polski: raport z badań „Kompleksowe badanie stanu zdrowia psychicznego społeczeństwa i jego uwarunkowań –EZOP II"*. Warsaw: Institute of Psychiatry and Neurology; 2021.
21. Stringaris A, Maughan B, Copeland WS, Costello EJ, Angold A. *Irritable mood as a symptom of depression in youth: Prevalence, developmental, and clinical correlates in the Great Smoky Mountains Study*. J. Am. Acad. Child Adolesc. Psychiatry 2013; 52(8): 831–840.
22. Cichoń L, Janas-Kozik M, Siwiec A, Rybakowski JK. *Obraz kliniczny i leczenie choroby afektywnej dwubiegunowej u dzieci i młodzieży*. Psychiatr. Pol. 2020; 54(1): 35–50.
23. Bień MP, Adamczewska KA, Wilczyński KM, Cichoń L, Jelonek I, Janas-Kozik M. *Correlation between attention deficit hyperactivity disorder and bipolar disorder in children and adolescents: Systematic review*. Psychiatr. Pol. 2023; 57(2): 375–394.
24. Salari N, Rasoulpoor S, Rasoulpoor S, Shohaimi S, Jafarpour S, Abdoli N et al. *The global prevalence of autism spectrum disorder: A comprehensive systematic review and meta-analysis*. Ital. J. Pediatr. 2022; 48(1): 112.
25. Mohammadi M-R, Zarafshan H, Khaleghi A, Ahmadi N, Hooshyari Z, Mostafavi S-A et al. *Prevalence of ADHD and its comorbidities in a population-based sample*. J. Atten. Disord. 2021; 25(8): 1058–1067.
26. Mohammadi M-R, Salmanian M, Keshavarzi Z. *The global prevalence of conduct disorder: A systematic review and meta-analysis*. Iran J. Psychiatry 2021; 16(2): 205–225.
27. Janas-Kozik M, Wolańczyk T. *Psychiatria dzieci i młodzieży*, 1st ed. Warsaw: Wydawnictwo Lekarskie PZWL; 2021.
28. Sacco R, Camilleri N, Eberhardt J, Umla-Runge K, Newbury-Birch D. *A systematic review and meta-analysis on the prevalence of mental disorders among children and adolescents in Europe*. Eur. Child Adolesc. Psychiatry 2024; 33(9): 2877–2894.
29. Demmer DH, Hooley M, Sheen J, McGillivray JA, Lum JAG. *Sex differences in the prevalence of oppositional defiant disorder during middle childhood: A meta-analysis*. J. Abnorm. Child Psychol. 2017; 45(2): 313–325.
30. Sierosławski J, Sierosławski M. *Używanie alkoholu i narkotyków przez młodzież szkolną*. Krakow: Pracownia Badań i Inicjatyw Społecznych; 2019.
31. Malczewski A, Jabłoński P. *Raport o stanie narkomanii w Polsce opublikowany przez Krajowe Biuro do Spraw Przeciwdziałania Narkomanii*. National Bureau for Counteracting Drug Addiction; 2020. https://www.kbpn.gov.pl/.
32. Birmaher B, Ehmann M, Axelson DA, Goldstein BI, Monk K, Kalas C et al. *Schedule for affective disorders and schizophrenia for school-age children (K-SADS-PL) for the assessment of preschool children – A preliminary psychometric study*. J. Psychiatr. Res. 2009; 43(7): 680–686.

33. Rucklidge J. *How good are the ADHD screening items of the K-SADS-PL at identifying adolescents with and without ADHD?* J. Atten. Disord. 2008; 11(4): 423–424.
34. Peña de la FR, Villavicencio LR, Palacio JD, Félix FJ, Larraguibel M, Viola L et al. *Validity and reliability of the kiddie schedule for affective disorders and schizophrenia present and lifetime version DSM-5 (K-SADS-PL-5) Spanish version*. BMC Psychiatry 2018; 18(1): 193.
35. Marangoni C, De Chiara L, Faedda GL. *Bipolar disorder and ADHD: Comorbidity and diagnostic distinctions*. Curr. Psychiatry Rep. 2015; 17(8): 604.

Corresponding author: Karolina Zofia Kamińska
e-mail: karolina.kaminska311@gmail.com