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Редакція журналу висловлює найщиріші співчуття з приводу загибелі Гана Р.З. Це величезна втрата для наукової та медичної спільноти. Вічна пам'ять Роману Зіновійовичу!

ABSTRACT

Halyna Beketova
https://orcid.org/0000-0002-8400-4580
Department of Pediatrics, Child Neurology and Medical Rehabilitation, Shupyk National Healthcare University of Ukraine, Kyiv, Ukraine

Roman Gan
https://orcid.org/0000-0002-7601-3065
Faculty of Health Sciences, Ivano-Frankivsk National Medical University, Ivano-Frankivsk, Ukraine

Iryna Nedostup
https://orcid.org/0000-0002-8984-3850
Department of Propaedeutics of Pediatrics, Ivano-Frankivsk National Medical University, Ivano-Frankivsk, Ukraine

Taras Gan
Department of Propaedeutics of Pediatrics, Ivano-Frankivsk National Medical University, Ivano-Frankivsk, Ukraine

Iryna Horiacheva
https://orcid.org/0000-0001-6666-5775
Department of Pediatrics, Child

PSYCHOEMOTIONAL CHARACTERISTICS OF INTERNALLY DISPLACED ADOLESCENTS

War stress and anxiety leads to severe depression and psychosomatic disorders in the most vulnerable category of the population – adolescents. It justifies the need for early identification of the problem, effective recovery and maintenance of their mental health.

The purpose of the study is to find out the psycho-emotional characteristics of adolescent internally displaced persons (IDPs), taking into account gender.

Materials and Methods: A screening psychodiagnostics of 282 adolescents in the age of 15 to 17 years old was conducted using the Hospital Anxiety and Depression Scale (HADS), that is validated in Ukraine. The main group consisted of 168 IDP adolescents, the control group consisted of 114 schoolchildren from the city of Ivano-Frankivsk.

Results: subclinical and clinical expressed anxiety and depression were found in 69.6% and 39.3% of the IDP adolescents and 63.2% and 44.7% of the schoolchildren in the Prykarpattia region, respectively. By gender, clinically expressed anxiety and depression were significantly more common in the adolescent girls of groups I and II (71.4% and 42.1% and 17.8% and 42.1%, respectively). It was found that the adolescent boys were more stress-resistant with predominantly subclinical manifestations of anxiety and depression. While adolescent girls were more emotional and significantly more often had manifestations of clinically pronounced anxiety and depression, which gave a reason to consider female gender as an important risk factor for the development of psycho-emotional disorders in the future.

Conclusions: Assessment of the psycho-emotional state of the adolescents who were forced to become IDPs and those who

Neurology and Medical Rehabilitation, Shupyk National Healthcare University of Ukraine, Kyiv, Ukraine

permanently resided in the city of Ivano-Frankivsk (Prykarpattia) during the full-scale war in Ukraine revealed unidirectional trend – 2/3 of the examined persons in both groups had manifestations of subclinical and clinically pronounced anxiety and about 40% had depression: subclinical depression was 1.9 times more often in group I, and clinically significant depression was 2.2 times more often in group II, mainly in girls.

Keywords: internally displaced adolescents, students, schoolchildren, full-scale war, psycho-emotional features, anxiety, depression.

Corresponding author: *Halyna Beketova, Department of Pediatrics, Pediatric Neurology and Medical Rehabilitation, Shupyk National Healthcare University of Ukraine, Kyiv, Ukraine. e-mail: docbeketova59@gmail.com*

РЕЗЮМЕ

Галина Бекетова
https://orcid.org/0000-0002-8400-4580
Кафедра педіатрії, дитячої неврології та медичної реабілітації, Національний університет охорони здоров'я України імені П.Л. Шупика, Київ, Україна

Роман Ган
https://orcid.org/0000-0002-7601-3065
Факультет наук про здоров'я, Івано-Франківський національний медичний університет, м. Івано-Франківськ, Україна

Ірина Недоступ
https://orcid.org/0000-0002-8984-3850
Кафедра пропедевтики педіатрії, Івано-Франківський національний медичний університет, м. Івано-Франківськ, Україна

Тарас Ган
Кафедра пропедевтики педіатрії, Івано-Франківський національний медичний університет, м. Івано-Франківськ, Україна

Ірина Горячева
https://orcid.org/0000-0001-6666-5775
Кафедра педіатрії, дитячої неврології та медичної реабілітації, Національний університет охорони здоров'я України імені П.Л. Шупика, Київ, Україна

ПСИХОЕМОЦІЙНІ ОСОБЛИВОСТІ ПІДЛІТКІВ-ВНУТРІШНЬО ПЕРЕМІЩЕНИХ ОСІБ

Перенесений військовий стрес і тривога можуть спричинити в подальшому важку депресію та психосоматичні розлади у найуразливішої категорії населення – підлітків, що обґрунтовує необхідність раннього виявлення проблеми й ефективного відновлення та збереження їх ментального здоров'я.

Мета дослідження: з'ясувати психоемоційні особливості підлітків-внутрішньо переселених осіб (ВПО) з урахуванням гендерності.

Матеріали та методи. Проведена скринінгова психодіагностика 282 підлітків у віці від 15 до 17 років за допомогою валідизованої в Україні Госпітальної шкали тривоги та депресії HADS. Основну групу склали 168 підлітків-ВПО, групу контролю – 114 школярів з м. Івано-Франківськ.

Результати. Субклінічну й клінічно виражену тривогу та депресію виявлено у 69,6% і 39,3% підлітків-ВПО та 63,2% і 44,7% школярів Прикарпаття відповідно. За гендерною ознакою клінічно виражену тривогу і депресію достовірно частіше мали дівчата-підлітки обох груп, як ВПО, так і школярки Прикарпаття (71,4% і 42,1% та 17,8% і 42,1% відповідно). Виявлено, що хлопці-підлітки були більш стресостійкими з переважанням у них субклінічних проявів тривоги і депресії. Тоді як дівчата-підлітки виявились більш емоційними та достовірно частіше мали клінічно виражені прояви тривоги і депресії, що дає підстави вважати жіночу стать важливим фактором ризику розвитку психоемоційних порушень в подальшому.

Висновок. Оцінка психоемоційного стану підлітків, які вимушено стали ВПО та тих, що постійно проживають в м. Івано-Франківськ (Прикарпаття) у період повномасштабної війни в Україні виявила однонаправлені тенденції в обох групах – 2/3 обстежених в обох групах мали прояви субклінічно та клінічно вираженої тривоги і близько 40% мали депресію – субклінічну у 1,9 разів частіше в І групі, клінічно значущу – в 2,2 рази частіше у ІІ групі, переважно у дівчат.

Ключові слова: підлітки–внутрішньо переміщені особи, школярі, повномасштабна війна, психоемоційні особливості, тривожність, депресія.

Автор, відповідальний за листування: *Галина Бекетова, кафедра педіатрії, дитячої неврології та медичної реабілітації, Національний університет охорони здоров'я України імені П.Л. Шупика, Київ, Україна, e-mail: docbeketova59@gmail.com*

INTRODUCTION

The unprovoked full-scale war in Ukraine disrupted the usual rhythm and quality of life of all population groups, destroyed dreams about the future, and caused physical and mental health disorders. Preserving and restoring health in adults and, especially, in children and adolescents has become a priority medical, psychological, and social problem for the government. According to the updated Mental Health Gap Action Programme of the World Health Organization (WHO) [1], the provision of primary health care for health recovery is entrusted to non-specialized health care facilities. To date, a number of studies have proven that among the most frequent manifestations of mental disorders associated with military aggression, there are a high level of psycho-emotional discomfort/state of pronounced neuropsychiatric stress (63.8%); maladaptation (25%); post-traumatic stress disorder (PTSD) (20.67%); organic mental disorders (18%); schizophrenia (13%); mental disorders due to brain dysfunction (6%); organic personality disorders (3%), etc. [2, 3, 4].

According to domestic psychiatric scientists [5], the full-scale war that our society is experiencing, combined with the post-COVID situation, is an "ideal incubator" for the increased frequency of mental disorders, primarily among internally displaced persons (IDPs). At the same time, the prevalence of PTSD and depression among Ukrainian IDPs almost reached 30%. However, to date, there is no data on the specifics of the psycho-emotional status of children from different age groups, in particular, adolescents who have been forcibly displaced, and modern approaches aimed at restoring and preserving their mental health have not been developed.

An analysis conducted by SOS Children's Villages charity organization and the National Institute for Strategic Studies showed that 77% of Ukrainian children and adolescents witnessed shelling and bombing; 73% spent a long time in bomb shelters; almost 30% survived the occupation; about 8% experienced hunger and lack of access to drinking water; 4% went through Russian filtration camps. These reasons have led to a deterioration in the psychological and mental health of children and adolescents, negatively affected the quality of their education and life, and led to an increase in the prevalence of anxiety, depression, and even PTSD [6, 7].

The results of modern research indicate that anxiety in children and adolescents is characterized by increased worry, low stress resistance, emotional disturbances, and mental disorders. The emotional response to stimuli in children is much longer than in adults, and their internal resources are depleted much faster. Prolonged physical and mental stress exceeding age norms, especially in adolescents, led to disruption of organs and systems functioning and manifested as psychosomatic disorders such as arterial hypertension, tachycardia, cephalgia, migraine, respiratory and digestive disorders (constipation, diarrhea, flatulence), etc. against the background of a high level of anxiety [8].

It should be noted that anxiety is an emotion characterized by an unpleasant state of internal agitation, fear of future events, and an overreaction to situations which are subjectively perceived as threatening [9, 10]. Today, the true prevalence of anxiety in Ukraine is unknown because patients usually do not seek help, and doctors overlook this aspect of health, which causes late detection of the problem and the formation of negative consequences in the future. If anxiety, as a normal human reaction to a particular situation, persists for 6 months or more, it can transform into an anxiety disorder, which is rather a mental, not a psychological problem, and requires psychiatric correction [11]. Anxiety disorder can persist for a long time, cause depression, and lead to serious consequences in the future: addictive forms of behavior, self-harm, and even suicide [12, 13].

The study of the neurobiological basis of anxiety and depression has shown that the central nervous system (CNS) functioning depends on the balance between excitatory and inhibitory neurotransmitter systems. It is their imbalance that contributes to the development of anxiety, depression, and other psycho-emotional disorders. Given the close relationship of genetic factors and the activity of the hormonal, immune, and neurotransmitter systems, the important role of psychogenic, exogenous, and endogenous factors in the formation of anxiety and depression becomes clear [14].

It is known that high levels of anxiety are usually a genetically inherited neurochemical dysfunction, which may include autonomic imbalance, hypercortisolemia, and decreased GABAergic tone in the presence of allelic polymorphisms of the catechol-O-methyltransferase (C-O-MT) gene, and increased expression of adenosine and serotonin 5-HT2A receptors. In the CNS, serotonin 5-HT2A receptors are present mainly in the cortex, claustrum, and basal ganglia and are involved in thermoregulation; the formation of various types of addiction; the regulation of sleep, memory, sexual behavior, mood, studying; and

the development of headaches, appetite disorders, and anxiety [15, 16, 17]. Their activation leads to hypersecretion of adrenocorticotropic hormone, cortisol, oxytocin, prolactin, and renin, with molecular mechanism deciphering. It has been proven that the polymorphism in the 5-HTR2A gene in the first exon at position 102 (rs6313) is associated with the expression level of the corresponding receptor. A single-nucleotide substitution of thymine for cytosine in a nucleotide, which is a structural unit of DNA, may be indirectly involved in impaired stress resistance and the formation of abnormal human behavior. At the same time, the T allele for the C102T (rs6313) polymorphism of 5-HTR2A serotonin receptor gene can influence serotonin expression and be a marker of a person's high susceptibility to the development of both affective states and somatoform disorders [18, 19].

As for external factors, high levels of anxiety can be supported by a history of trauma (e.g., physical, sexual, or emotional abuse or assault), bullying, early negative life experiences, and certain upbringing factors (e.g., lack of emotional warmth and strict discipline in the family, aggressive parents), emotional suppression, poor socialization, and poverty [20]. But the most common causes of anxiety and depression in children are post-traumatic stress, including military-related experience: air-raid alerts, death of a loved one, violence, abuse, loss of one's own home and familiar living conditions, and forced displacement to other regions. In such situations, adolescents, who are the most vulnerable category of the population, may begin to use alcohol, psychoactive substances, etc. to reduce anxiety. Therefore, currently in Ukraine, the clarification of the psychoemotional characteristics of adolescent IDPs and the timely detection and correction of their anxiety and depression [21] requires modern approaches to effective medical and psychological assistance and multidisciplinary support to restore and preserve the mental health of the younger generation and prevent the formation of psychosomatic disorders.

The objective of the study: to study the psychoemotional characteristics of adolescents who are internally displaced persons, taking into account their gender.

MATERIALS AND METHODS.

The study involved children aged 15–17, who are considered adolescents according to the official and generally accepted medical age periodization in Ukraine. According to the definition of the United Nations International Children's Fund/UNICEF, the age of 15–17 is the most vulnerable to psychological disorders, since this period corresponds to the “age crisis of 15-17 years”, which is characterized by a high level of anxiety and significant stress due to the hormonal restructuring of the child's body and rapid neuro-physiological, psychological, and social changes [23].

Through a gender-specific targeted sampling, a screening psychodiagnostics was conducted on 282 adolescents aged 15–17, who were divided into two groups matched in age and gender. Group I (main group) included 168 adolescent IDPs from the city of Chernihiv and Chernihiv region and the city of Kramatorsk (84 boys and 84 girls), with comparable rates and levels of anxiety and depression. Group II (comparison group) consisted of 114 adolescents from the city of Ivano-Frankivsk (57 boys and 57 girls). To assess the psycho-emotional state of the subjects, the Hospital Anxiety and Depression Scale (HADS) validated in Ukraine was used [22].

The survey of participants in groups I and II was conducted by off-line filling out a paper HADS questionnaire, which included 7 questions to identify anxiety (anxiety subscale – A) and 7 questions regarding signs of depression (depression subscale – D). Each statement had 4 response options, coded as follows: maximum severity – absence of manifestations; or absence – maximum severity of manifestations, which indicated the gradation of the symptom. Response options were scored from 0 to 3 (increase in the symptom), or from 3 to 0 (decrease in the symptom). The T-subscale and the D-subscale scores were summed separately. The criteria for evaluating the results were as following: 0–7 – mental health within normal limits (absence of pronounced symptoms of anxiety/depression); 8–10 points – subclinical anxiety/depression; 11 or more points – clinically significant anxiety/depression. For questions 1, 3, 5, 7, 9, 11, 13 in the T-subscale, the answer options were: all the time/very much – 3 points; often/probably yes – 2 points; sometimes/from time to time – 1 point; not at all/never happens – 0 points. At the same time, question 7 indicated the absence of anxiety (*I can sit at ease and feel relaxed).* Therefore, the maximum score (3) was awarded for the answer “not at all/never happens.” For questions 2, 4, 6, 8, 10, 12, 14, the answer options on the D-subscale were: definitely yes – 0; sometimes yes – 1; to a small extent yes – 2; not at all – 3. It is important to note that questions 8 *(I feel as if I am slowed down*) and 10 (*I have lost interest in my appearance*) were clinical manifestations of depression. At the same time, the maximum score (3) was awarded for the answer “definitely yes.”

Statistical processing of the obtained research results was carried out using the Statistica 7 software package (StatSoft, USA). When comparing mean

values, the Student's t-test and the two-proportion comparison test were used. Results were considered statistically significant at $p < 0.05$. Differences between groups were assessed using the Mann-Whitney (U) test; differences between distributions were assessed using the Pearson $\chi 2$ test.

RESULTS

The results of the survey of IDP adolescents and schoolchildren permanently residing in the Precarpathian region (Ivano-Frankivsk) according to the HADS T-subscale are presented in Table 1.

Table 1 – **Prevalence of different levels of anxiety in IDP adolescents and schoolchildren of the Precarpathian region according to the HADS T-subscale and their gender-specific characteristics (n = 282)**

Anxiety assessment criteria / Groups	IDP adolescents (the main group)			Schoolchildren of the Precarpathian region (the comparison group)		
	Group I			Group II		
	Boys (n=84) % abs.	Girls (n=84) % abs.	Total (n=168) % abs.	Boys (n=57) % abs.	Girls (n=57) % abs.	Total (n=114) % abs.
No clinical anxiety (score 0–7)	50.0% (42) p*<0.001	10.7% (9)	30.4% (51) p>0.05	31.6% (18) p**>0.05	36.8% (21)	34.2% (39)
Subclinical anxiety (score 8-10)	35.7% (30) p*<0.001	17.9% (15)	26.8% (45) p<0.05	31.6% (18) p**>0.05	21.1% (12)	26.3% (30)
Clinical anxiety (score ≥ 11)	14.3% (12) p*<0.001	71.4% (60)	42.8% (72) p>0.05	36.8% (21) p**>0.05	42.1% (24)	39.5% (45)

Note: p – a statistically significant difference between groups I and II; p – a statistically significant difference between boys and girls in group I; p ** – a statistically significant difference between boys and girls in group II*

The data in Table 1 on the frequency of anxiety of various degrees in IDP adolescents and schoolchildren of the Precarpathian region are illustrated in Fig. 1.

The assessment of the survey results regarding the frequency of depression of varying degrees in IDP adolescents and schoolchildren living in the city of Ivano-Frankivsk according to the HADS D-subscale is provided in Table 2. The data in Table 2 are illustrated in Fig. 2.

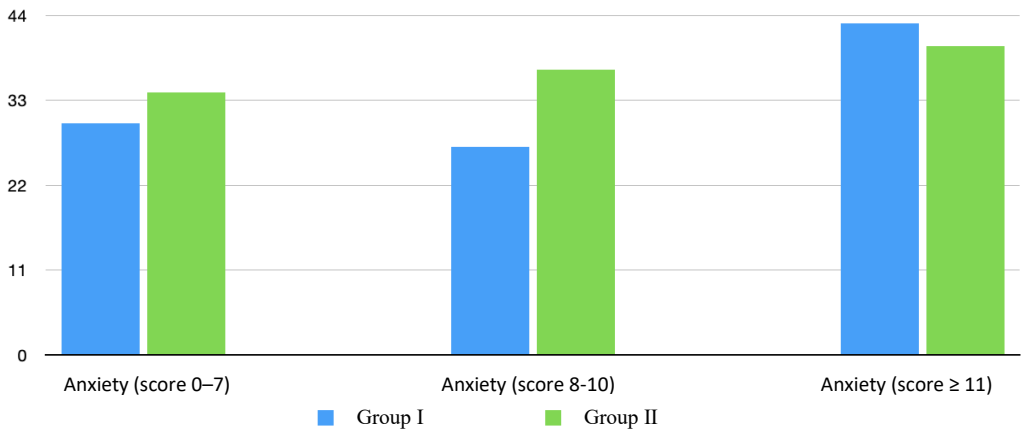

Figure 1 – Prevalence of anxiety of various degrees among IDP adolescents and schoolchildren of the Precarpathian region

Table 2 – **Prevalence of different levels of depression in IDP adolescents and schoolchildren of the Precarpathian region according to the HADS D-subscale and their gender-specific characteristics (n = 282)**

Depression assessment criteria / Groups	IDP adolescents (the main group)			Schoolchildren of the Precarpathian region (the comparison group)		
	Boys (n=84) % abs.	Girls (n=84) % abs.	Total (n=168) % abs.	Boys (n=57) % abs.	Girls (n=57) % abs.	Total (n=114) % abs.
No clinical depression (score 0–7)	53.5% (45) p*>0.05	67.9% (57)	60.7% (102) p^1>0.05	57.9% (33) p**>0.05	52.6% (30)	55.3% (63)
Subclinical depression (score 8-10)	35.7% (30) p*<0.001	14.3% (12)	25.0% (42) p^1<0.001	21.1% (12) p**>0.05	5.3% (3)	13.1% (15)
Clinical depression (score ≥ 11)	10.7% (9) p*<0.001	17.8% (15)	14.3% (24) p^1<0.001	21.1% (12) p**<0.001	42.1% (24)	31.6% (36)

Note: p^1 – a statistically significant difference between groups I and II; p – a statistically significant difference between boys and girls in group I; p ** – a statistically significant difference between boys and girls in group II*

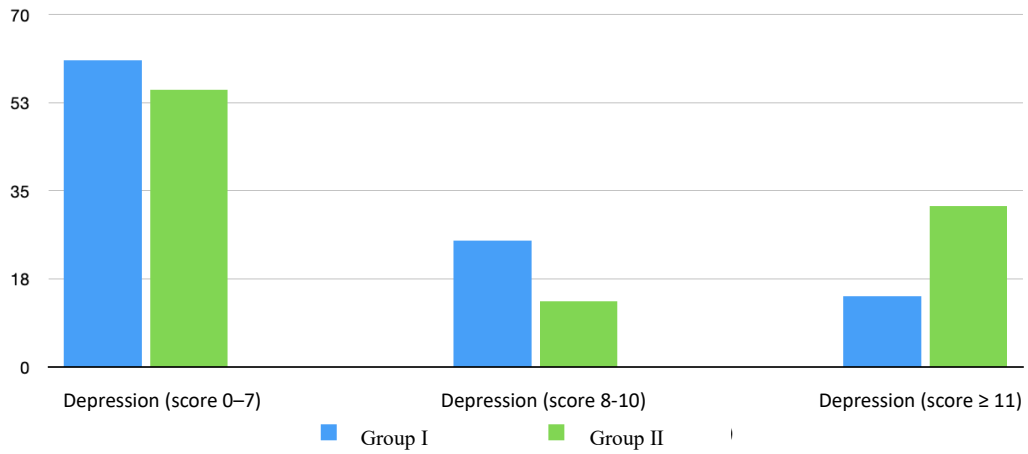

Figure 2 – Prevalence of depression of various degrees among IDP adolescents and schoolchildren of the Precarpathian region

Gender characteristics of the surveyed adolescents of both groups according to the T-subscale are illustrated in Fig. 3. Gender characteristics of the surveyed adolescents of both groups according to the D-subscale are illustrated in Fig. 4.

DISCUSSION

According to the results of the survey of IDP adolescents and schoolchildren of the Precarpathian region using the HADS T-subscale, almost every third respondent in groups I and II (30.4% and 34.2%, respectively; p>0.05) had an anxiety level ranging from 0 to 7 points, which indicated the absence of clinical anxiety. There was also no significant difference in the frequency of subclinical (26.8% and 26.3%, respectively, group distribution; p>0.05) and clinical anxiety (42.1% and 39.5%; p>0.05). However, in both groups, the frequency of clinical anxiety was significantly higher than of subclinical anxiety (p<0.05). Overall, the frequency of subclinical and clinical anxiety was equally high in adolescents of groups I and II (69.6% and 65.8%, respectively). The survey results indicate that 2/3 of adolescents, both IDPs and those permanently living in a relatively safe region and in stable and comfortable family conditions, have elevated levels of anxiety (a score of ≥8), which may be accompanied by the risk of developing maladjustment. This fact is most likely related to the peculiarities of a child's body functioning in adolescence, which is characterized by dramatic morpho-functional, structural, metabolic, psychological, and neuroendocrine

restructuring, as well as psycho-emotional and mental overloads [23] against the background of increased negative stressogenic influence of wartime. Our data are consistent with the results of other studies [2-4].

When analyzing the results of the D-subscale survey, a score of 0 to 7 points was found in 60.7% of subjects in group I and 55.3% subjects in group II ($p>0.05$), which indicated the absence of clinical depression in this portion of adolescents in both groups. Subclinical depression was 1.9 times more common in IDP adolescents (25.0% vs. 13.1% in group II) ($p<0.001$). However, clinical depression was 2.2 times more common in schoolchildren from the Precarpathian region (31.6% vs. 14.3% in IDP adolescents; $p<0.001$). At the same time, a similar anxiety level trend was maintained when comparing the frequency of subclinical and clinical depression in groups I and II (39.3% and 44.7%, respectively, $p>0.05$), although the

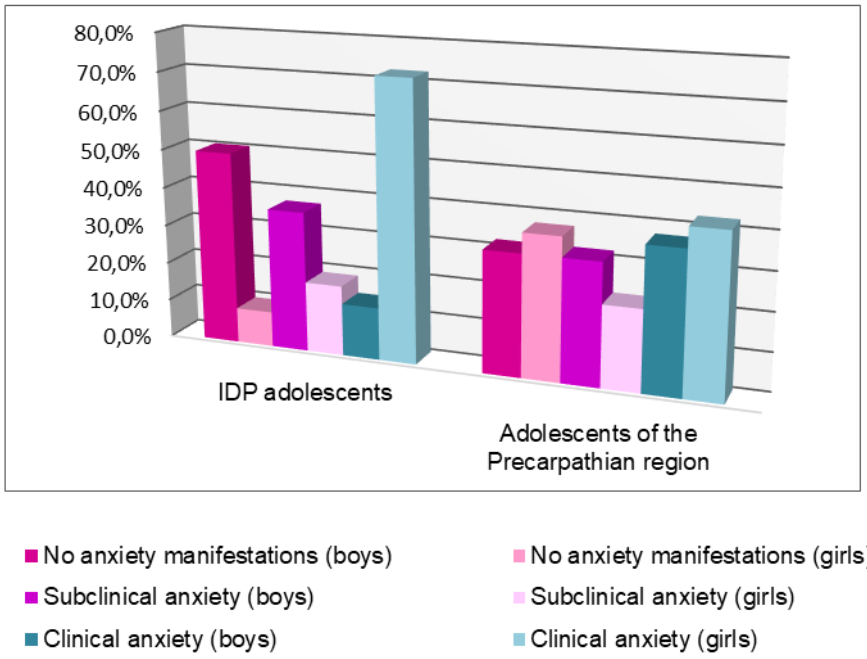

Figure 3 – Gender-specific characteristics of anxiety in the surveyed adolescents of both groups

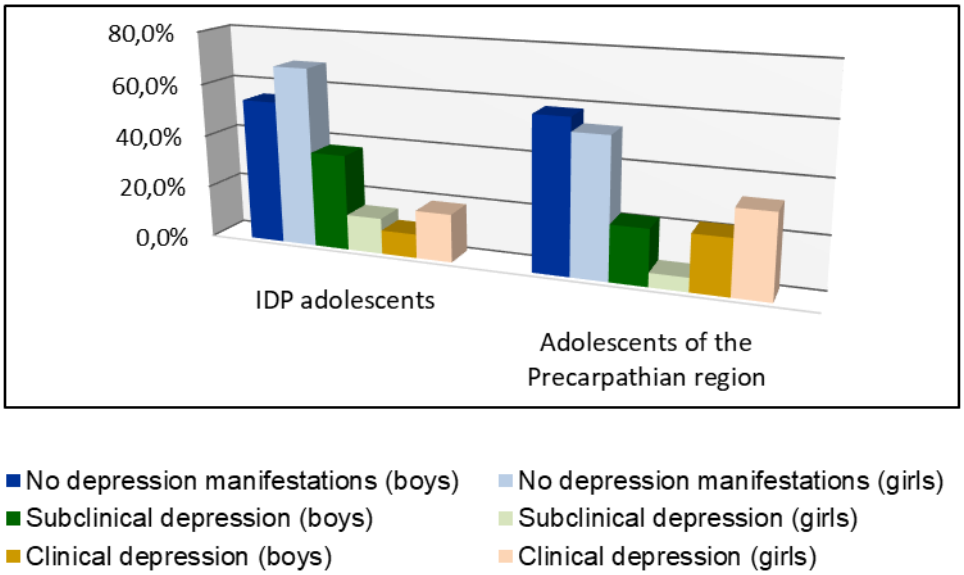

Figure 4 – Gender-specific characteristics of depression in the surveyed adolescents of both groups

number of subjects with high levels of anxiety (a score of ≥ 11 points) was significantly higher – 69.6% and 65.8% ($p<0.001$). The obtained results, which indicated a significantly more frequent detection of clinical depression in adolescents of the Precarpathian region, could be related to certain individual psychological characteristics. Therefore, from our point of view, it is advisable for them to have a psychologist consultation and, after a screening survey using the HADS scale, carry out a comprehensive psychodiagnostics to determine the levels of state and trait anxiety, as well as neuroticism indicators.

Another aspect of our research was to clarify the gender characteristics of the psycho-emotional status of adolescents in both groups. The absence of significantly expressed anxiety (score on the T-subscale from 0 to 7) was observed 4.6 times more often among adolescent IDP boys compared to adolescent IDP girls (50.0% vs. 10.7%, respectively, $p<0.001$), and 1.3 and 1.4 times more often compared to boys and girls from Group II (36.1% and 36.8%; $p<0.05$), whereas gender differences were not found among adolescents permanently residing in the city of Ivano-Frankivsk ($p>0.05$). As for subclinical (hidden) anxiety, it was detected almost 2 times more often in adolescent IDP boys and 1.5 times more often in boys from the Precarpathian region compared to girls in groups I and II (35.7% vs. 17.9%, $p<0.001$ and 31.6% vs. 21.1%, $p<0.05$, respectively). Clinical anxiety was observed almost 5 times more often in IDP girls compared to boys from Group I (14.3% vs. 71.4%, $p<0.001$), and 1.9 and 1.7 times more often compared to boys and girls from Group II ($p<0.05$), whereas no gender difference was observed in adolescents from the Precarpathian region (36.8% and 42.1%, $p>0.05$). In general, 89.3% of adolescent IDP girls had subclinical and clinical anxiety, which was almost 1.8 times more common than in boys of Group I and 1.3 and 1.4 times more common than in boys and girls of Group II, respectively ($p<0.05$).

Therefore, an analysis of the gender-specific frequency of subclinical and clinical anxiety indicated that IDP girls were the most vulnerable group of adolescents in war conditions and needed timely detection and appropriate correction of psycho-emotional disorders.

When assessing the gender characteristics of indicators on the D-subscale, the majority of adolescent IDP girls and boys (67.9% and 53.5%, respectively) had low scores (from 0 to 7), with a predominance of girls ($p<0.05$). These scores indicated the absence of clinical depression. In group II, the same trend was observed without a significant gender-specific difference (57.9% and 52.6%; $p>0.05$). The assessment of depression level (a score of 8 to 10) by the D-subscale revealed a 2.5-fold predominance of adolescent boys–IDPs in both groups (35.7% vs. 14.3%, $p<0.05$), while among schoolchildren in the Precarpathian region, the number of boys was 3.9 times higher (21.0% vs. 5.3%, $p<0.001$). At the same time, clinical depression was detected 1.7 times more often in girls of group I (17.8% vs. 10.7% in boys, $p<0.001$) and 2 times more often in group II (42.1% vs. 21.1% in boys, $p<0.05$). This indicates the same trends in the prevalence of both subclinical and clinical depression in both groups taking into account gender, with subclinical depression prevailing in boys and clinical depression prevailing in girls, which is most likely associated with the greater emotionality and vulnerability of the latter. The results of the study substantiate the need for a more careful attitude towards teenage girls, teaching them effective methods of managing their emotions and the ability to correctly and optimistically perceive any life situations, including stressful ones.

Thus, our screening study of the psycho-emotional sphere of adolescents who were forcibly displaced and schoolchildren of the same age living in the Precarpathian region (Ivano-Frankivsk) confirmed a number of psycho-emotional problems in 2/3 of those surveyed in both groups.

It is obvious that manifestations of anxiety and depression were more pronounced in IDP adolescents, which was most likely related to the psychological trauma experienced as a result of being under shelling, loss of familiar living conditions, forced internal displacement from the combat zone (Kramatorsk city) and dangerous environment in the border region (Chernihiv region and Chernihiv city). In adolescents from the Precarpathian region, anxiety and depression are related to the introduction of martial law, frequent air raids, the need to be in shelters, worrying and increased responsibility for themselves and their family members, etc.

Gender differences among adolescents indicate the need and importance of further study of the psycho-emotional characteristics of children and adolescents taking into account gender in conditions of full-scale war with the mandatory involvement of narrow specialists (psychologists/ neurologists/ psychotherapists/ psychiatrists) in multidisciplinary teams. It should also be taken into account that these disorders may be associated with somatoform disorders, which will complicate their course in the future and will require both additional clinical and paraclinical examinations and timely basic psychological support, effective formation of stress management skills and increased stress resistance, which will contribute to the restoration and preservation of the mental health of the younger generation.

CONCLUSIONS

Assessment of the psycho-emotional state of adolescents who were forcibly displaced and those who permanently resided in the city of Ivano-Frankivsk (the Precarpathian region) during the full-scale war in Ukraine revealed unidirectional trends in both groups: 2/3 of the surveyed schoolchildren had subclinical and clinical anxiety and about 40% of them had depression, with a 1.9-fold prevalence of subclinical manifestations in group I and a 2.2-fold prevalence of clinically significant depression in group II.

Analysis of gender-specific psychoemotional manifestations among adolescents of both groups showed:

1) absence of clinically significant anxiety in every second IDP boy, which was 4.6 times more common than in IDP girls (10.7%) and 1.6 and 1.4 times more common than in boys and girls from the Precarpathian region without gender differences in group II;

2) anxiety manifestations in 50.0% of IDP boys (mostly subclinical – 35.7%) and in 89.3% of IDP girls (mostly clinical – 71.4%), which was almost 5 times more common than in IDP boys and 1.9 and 1.7 times more common than in boys and girls from the Precarpathian region);

3) subclinical and clinical anxiety in 2/3 of boys from the Precarpathian region, which was reported almost 2.6 times more often than in IDP boys, while subclinical anxiety was reported 1.5 times more often than in girls from the Precarpathian region;

4) 67.9% of IDP girls and half of IDP boys as well as half of boys and girls from the Precarpathian region had no signs of depression;

5) 1/3 of IDP boys had manifestations of subclinical depression, which was 2.5 times more common than in IDP girls and 1.7 and 6.7 times more common than in boys and girls from the Precarpathian region;

6) IDP girls were 1.7 times more likely to have signs of clinically significant depression than IDP boys and 2.4 times less likely vs. girls from the Precarpathian region.

The results of the study proved that adolescent boys were more stress-resistant with a predominance of subclinical manifestations of anxiety and depression. Adolescent girls were more emotional and significantly more likely to have clinical manifestations of anxiety and depression, which gives reason to consider female gender as an important risk factor for the development of psycho-emotional disorders in the future.

The HADS questionnaire is a valid, easy-to-use practical screening tool for the timely detection of anxiety and depression. It can be recommended for routine use (including during martial law) in the practice of first-line doctors (pediatricians/family doctors), as well as child psychologists, which will contribute to the effective provision of medical and psychological support/guidance and the restoration and preservation of the mental health of children and adolescents.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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