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# Zaburzenia psychiczne populacji wieku rozwojowego

#### Streszczenie

Wstęp. Definicja Światowej Organizacji Zdrowia, zgodnie z którą zdrowie to stan całkowitego fizycznego, psychicznego i społecznego dobrostanu, a nie tylko brak choroby czy kalectwa wskazuje na szeroką perspektywę, w jakiej powinno się postrzegać i analizować zjawiska zdrowotne. Diagnozowanie zaburzeń psychicznych u pacjentów w wieku rozwojowym wiąże się zarówno z trudnościami wynikającymi z dynamiki zmian rozwojowych jak i z dziedzictwa genetycznego, urazów ośrodkowego układu nerwowego, zaburzeń organicznych czy też patologii środowiska.

**Cel.** Celem pracy była analiza przypadków pacjentów leczonych z powodu zaburzeń psychicznych w okresie dwóch ostatnich lat w Oddziale Psychiatrii Dziecięcej Szpitala Neuro-psychiatrycznego SPZOZ w Lublinie.

**Materiał i metody.** Analizy dokonano w oparciu o dokumentację medyczną dzieci leczonych w oddziale w okresie od stycznia 2010 do grudnia 2011.

**Wyniki.** W badanym okresie przyjęto do oddziału 497 pacjentów. W grupie tej odnotowano znaczną przewagę chłopców (352) nad dziewczynkami (145). Wiek dzieci wahał się od 6 do 16 roku życia. Pacjenci w wieku przedszkolnym (3-6 lat) stanowili 4% ogółu, w wieku dorastania (13-18 lat) – 47%. Najliczniejszą grupę 49% stanowiły dzieci w wieku szkolnym (7-12 lat). Największą liczbę przyjęć odnotowywano w marcu (50), najmniejszą w lipcu (26). Największą grupę 336 przyjętych osób w tym okresie stanowili pacjenci z rozpoznaniem końcowym hospitalizacji F90-98 "zaburzenia zachowania i emocji rozpoczynające się zwykle w dzieciństwie i wieku młodzieńczym". Najkrótszy czas hospitalizacji wyniósł 1 a najdłuższy 101 dni.

Wnioski. Zaburzenia psychiczne badanej grupy wieku rozwojowego w większym stopniu dotyczą chłopców, niż dziewcząt. Widoczna jest korelacja pomiędzy porą roku a liczbą rozpoczętych hospitalizacji. W okresie wakacyjnym letnim liczba ta była zauważalnie mniejsza w porównaniu z okresem zimowym, co może sugerować wpływ środowiska szkolnego jako stresogennego czynnika wyzwalającego zaburzenie. Analiza danych potwierdza, iż zaburzenia zachowania i emocji stanowią największy odsetek patologii w zakresie zaburzeń psychicznych dzieci i młodzieży.

**Słowa kluczowe:** zaburzenia psychiczne, dzieci, młodzież, wiek rozwojowy.

# Mental disorders in children and adolescents population

#### Abstract

**Introduction.** The definition of World Health Organization, according to which health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, indicates a broad perspective at which the phenomenon of health should be regarded and analysed. Diagnosing mental disorders in patients of developmental age is associated both with the difficulties arising from the dynamics of development and with the genetic heritage, injuries of central nervous system, organic disorders or the pathology of the environment.

Aim. The paper aimed at analysing the cases of patients treated due to mental disorders during the last two years at the Department of Paediatric Psychiatry of the Neuropsychiatric Hospital in Lublin.

**Material and Methods.** The analysis based on the medical documents of children hospitalized at the Department of Paediatric Psychiatry covering the period from January 2010 - December 2011.

**Results.** During the study period 497 patients were admitted to the department. In this group there were significantly more boys (352) than girls (145). The age of children ranged from 6 years to 16 years of age. Patients at preschool age (3-6 years) accounted for 4% of the total, in adolescence (13-18 years) 47%. The largest group(49%) were children of school age (7-12 years). The largest number of admissions to the department was reported in March (50), the smallest in July (26). The largest group of 336 persons admitted to the department during this period consisted of patients hospitalized with a diagnosis of F90-98 "behavioural and emotional disorders with onset usually occurring in childhood and adolescence". The shortest hospital stay was 1 day, the longest – 101 days.

**Conclusions.** Mental disorders of the studied group of children and adolescents concern to a greater extent boys than girls. There is a clear correlation between the season of the year and the number of hospital admissions. During the summer holiday season this figure was clearly lower as compared to the winter season. This may suggest the influence of school environment being a stress-generating factor triggering the disorder. The data analysis confirms that the behavioural and emotional disorders account for the highest proportion of pathology as far as mental disorders of children and adolescents are concerned.

**Keywords:** mental disorders, children, adolescents, developmental age.

### **INTRODUCTION**

The definition of World Health Organisation, according to which health is a state of complete physical, mental and social well-being and not merely absence of disease or infirmity [1], shows a broad perspective at which the phenomenon of health should be regarded and analysed. Man as a human being living in the community is shaped by the environment as well as by other individuals. The development of medical knowledge and issues of neurophysiology and psychopathology progressing with time and intensified in recent years help to reveal the divergence of mental changes in children and adolescents group, compared with adults.

Included in the classification of the International Statistical Classification of Diseases and Related Health Problems (currently ICD-10) and the Diagnostic and Statistical Manual of Mental Disorders (currently DSM-IV-TR) the rules for recognition of mental disorders and accompanying clear criteria for diagnosis, greatly facilitated the identification of abnormalities of developmental age on the basis of the criteria for diagnosing of adults because of similar manifestation of many symptoms, regardless of age [2,3].

The scope of psychiatry of developmental age covers the following psychopathological syndromes, often similar in the clinical picture to physiological conditions in different developmental stages, requiring appropriate diagnosis and knowledge of the subject:

- 1. Simple emotional responses in infants and children under 5 years, usually of short duration and associated with a particular stress situation.
- 2. Adaptive responses in young children, usually in response to separation from important people.
- 3. Specific developmental disorders, often conditioned by many factors which disappear with the growing child.
- Neurotic disorders, often resulting from the neurotic personality development, due to difficult situations, especially in a family environment.
- 5. Psychosomatic syndromes in which disorders of individual organs dominate, caused by recurring mental traumas.
- 6. Eating disorders often caused by many factors.
- Behavioural disorders and abnormal personality development of varying clinical picture and complex etiopathogenesis, both on organic grounds and inadequate socialization of the child in family and beyond.
- 8. Psychotic syndromes and psychoses in children and adolescents of unknown so far aetiology [4].

## AIM

The paper aimed at analysing the cases of patients treated due to mental disorders during the last two years at the Department of Paediatric Psychiatry of the Neuropsychiatric Hospital in Lublin.

## MATERIAL AND METHODS

The object of this study was to analyse medical records of 497 patients aged 6 to 16 years treated at the Department of Child Psychiatry of Neuropsychiatric Hospital in Lublin from 01.01.2010 to 12.31.2011. The analysis included gender,

age, month of onset, duration and length of hospitalization as well as the final diagnosis.

### RESULTS

During the study period 497 patients were admitted to the department. The group included significantly more boys (71%) than girls (29%) (Figure 1).

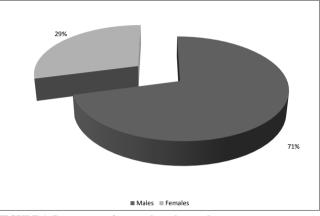


FIGURE 1. Percentage of respondents by gender.

The age of children ranged from 6 to 16 years. Preschool children (3-6 years) accounted for 4% of the total. The largest group represented 49% of hospitalized patients of school age (7-12 years). Between them a group of children in adolescence (13-18 years) representing 47%, was placed (Figure 2).

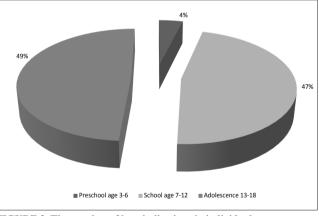


FIGURE 2. The number of hospitalisations in individual age groups.

The largest number of admissions to the department was recorded in March (50), February (48) and December (47). Definitely a smaller number of patients was admitted in July (26), June (35), September (38) and August (39) (Figure 3).

The analysis of results shows that the largest group of 336 persons admitted to the Department during this period consisted of patients with diagnosed F90-98 "Behavioural and emotional disorders with onset usually occurring in childhood and adolescence". Among them, 214 were the subjects with diagnosis of F90.1"Attention-deficit hyperactivity disorder, predominantly hyperactive type". The second largest group of hospitalized patients were those with a diagnosis of F70-79 "Intellectual disabilities" (74). Among them there were 38 cases with a diagnosis of F70.1 "Mild mental retardation, significant changes in behaviour resulting in the need of care or treatment". The third largest group

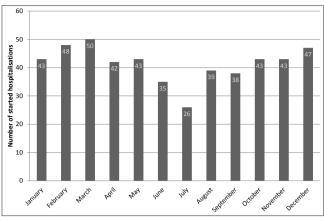


FIGURE 3. Number of admissions to the department in individual months

of patients were those with a diagnosis of F40-48 "Anxiety, dissociative, stress-related, somatoform and other nonpsychotic mental disorders" (39). Among them, most were subjects with F41.2 "Mixed anxiety and depression" (11).

Other diagnosis of mental disorder group were much less numerous and were respectively: F20-29 "Schizophrenia, schizotypal, delusional, and other non-mood psychotic disorders" (13), F80-89 "Pervasive and specific developmental disorders" (11), F50-59 "Behavioural syndromes associated with physiological disturbances and physical factors"(7), F30-39 "Mood affective disorders" (6). There was one hospitalization Z03- "Encounter for medical observation for suspected diseases and conditions ruled out" (Table 1).

TABLE 1. Number of patients with regard to ICD-10 diagnosis.

Hospital diagnosis	Number of patients
F90-98 Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	336
F70-79 Intellectual disabilities	84
F40-48 Anxiety, dissociative, stress-related, somatoform and other nonpsychotic mental disorders	39
F20-29 Schizophrenia, schizotypal, delusional, and other non-mood psychotic disorders	13
F80-89 Pervasive and specific developmental disorders	11
F50-59 Behavioural syndromes associated with physiological disturbances and physical factors	7
F30-39Mood [affective] disorders	6
Z03Encounter for medical observation for suspected diseases and conditions ruled out	1

#### DISCUSSION

Efficient existence in society is inseparably connected with the smooth functioning of the four core areas, which include emotions, behaviour, development and social relations. Most children with mental disorders present symptoms of at least two areas of functioning [5].

On the one hand, changes in thinking, mood and behaviour can be natural features of age, human development and psychological or social conditions. On the other hand, they can be serious pathological conditions that threaten life and may affect the development and physical, mental or social state of a person [6].

A child alone is often unable to judge its actions that are negative; hence the most common source of information on the irregularities of its development in these areas are the people who spend the most time in its environment, i.e. parents, teachers or caregivers. Sixty-eight per cent of all hospitalizations involved dysfunction within the sphere of behaviour and emotion. Often information about disturbances in the emotional sphere is accompanied by a significant discrepancy between the relation of people providing care and the child's subjective feeling that often leads to the difficulty in deciding which party is trustful. In such situations, the truth never lies in between, hence the slight discrepancy is allowed in the assessment of the situation. A fundamental element of the behavioural disorders is unchanging patternof rebellious, antisocial or aggressive behaviour that occurs in the place of residence, education or within a peer group. The common element for such behaviour is the deviation of behaviour from the typical age-specific social expectations.

Mental retardation according to WHO is essential reduction of the overall level of intellectual functioning and difficulties in adaptive behaviour, occurring before age 18 [7]. This group constituted 17% of the patients, and was the second largest in this analysis. The assessment of the regularity or disorders such as retardation in development of the child is particularly difficult for people who haven't their own children because they haven't experience in basic child development issues. Among the important child development areas seen from the psychiatric perspective special attention is drawn to activity, attention, speech, playing skills, motor skills, and academic achievement. Much of the activity generated by the child during its development is the result of both learning and maturation. The development of specific skills depends on the maturity of the nervous system. The child masters each skill, to which the central nervous system has sufficient maturity. Child's relationships with the environment change by evolving during the development, hence the difficulty in their assessment. There is a question on which side is the problem; whether on the child's side or of the environment. Often abnormal family situation makes the disorder a method which a child uses to cope with difficult relationships with their parents or with the disturbed relationship between the parents [8].

The obvious assessment of the extent to which the symptoms can affect the functioning is the degree of social dysfunction advancement, especially in the realization by the child of functions in everyday life set out by the environment, which consist of key areas such as family life, education, friendships, free time activities. Often a change in behaviour can result from pathology of the family, mental illness and abnormal personality traits of parents, which the physician must diagnose and treat to help the child effectively [4].

# CONCLUSIONS

- 1. Mental disorders of the studied group of children and adolescents affect more boys than girls.
- 2. There is a vivid correlation between the season of the year and the number of started hospitalisations (hospital admissions). During summer holidays this figure was clearly smaller than during winter season. This may suggest the influence of school as a stress-generating factor that triggers the disorder. It can be also concluded that during that season there is practically no contact of child with the teacher and thus it results in the lower frequency of noticing any abnormalities in child's behaviour and general health by the group of tutors.
- 3. Data analysis confirms that the behavioural and emotional disorders account for the highest proportion of pathology within mental disorders of children and adolescents.
- 4. Preventive measures should be directed to children from the first grades of primary schools.

#### REFERENCES

- 1. http://www.who.int/topics/mental\_health/en/Access from 23.01.2012 r.
- Pużyński S, Wciórka J. Klasyfikacja zaburzeń psychicznych i zaburzeń zachowania w ICD-10. Badawcze kryteria diagnostyczne. Warszawa: Uniwersyteckie Wydawnictwo Medyczne VESALIUS; 2000.
- 3. Wciórka J. Kryteria diagnostyczne według DSM-IV-TR. Wrocław: Elsevier Urban & Partner; 2008.
- Popielarska A, Popielarska M. Psychiatria wieku rozwojowego. Warszawa: Wydawnictwo Lekarskie PZWL; 2000. p. 14.
- Goodman R, Scott S. Psychiatria dzieci i młodzieży. Wrocław: Wydawnictwo Medyczne Urban & Partner; 2000.
- Craddock N, Kerr M, Thapar A. Jakie są najważniejsze umiejętności psychiatry? The Psychiatrist. 2010;34:457-60.
- 7. International Classification of Impairments, Disabilities and Handicaps.
- Zastosowanie psychoterapii poznawczo-behawioralnej zespołu obsesyjno-kompulsyjnego u dzieci i młodzieży. Prowadzenie psychoterapii poza gabinetem. Psychiatr Psychol Klin. 2011;11(2):92-9.

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