

THE ANALYSIS  
OF DISABILITY INDICATORS  
IN PEOPLE WITH MENTAL  
AND BEHAVIORAL DISORDERS UNDER  
EVOLUTIONARY ASPECT DURING 2001-2006

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**Adnotare**

**Analiza indicatorilor de dizabilitate la persoanele cu tulburări mintale și de comportament sub aspect evolutiv (anii 2001-2006)**

**Actualitatea temei** este determinată de schimbarea condițiilor sociale și economice în Republica Moldova, ce au avut un impact profund și asupra persoanelor cu dizabilități. Pentru a răspunde acestei provocări, este necesară o direcționare eficientă a politicii sociale, capabilă să sprijine persoanele cu dizabilități pentru ca ele să poată beneficia de oportunitățile care apar ca urmare a acestor schimbări. Tulburările mintale și de comportament au devenit o problemă medico-socială majoră în Republica Moldova, constituind o sursă importantă de dizabilități și ocupând primele 5 poziții din cele 10 ale ierarhiei bolilor. Circa 50% din cei peste 60 mii de bolnavi psihici aflați la evidență dispensară beneficiază de grupă de invaliditate, constituind pătura cea mai vulnerabilă a societății.

**Metodologie.** Pentru realizarea scopului și a sarcinilor trasate în studiul nostru, au fost aplicate mai multe metode de cercetare a datelor: observația, anchetarea, transferul informației din documentația medicală (raport statistic F-27) și metode de prelucrare statistică a informației.

**Rezultate.** Studiul a inclus 3120 de persoane primar încadrate în grad de invaliditate, care suferă de o maladie psihică, din trei zone economico-geografice ale țării: ZEG Nord, municipiul Bălți; ZEG Centru, municipiul Chișinău; ZEG Sud, UTA Găgăuzia.

**Concluzii.** În urma studiului efectuat, am demonstrat necesitatea dezvăluirii mai detaliate a indicatorilor de invaliditate primară și, îndeosebi, a structurii interne a acestora, pentru a obține un tablou real al situației la moment și sub aspect evolutiv. Implementarea bonului statistic pentru fiecare pacient primar și repetat încadrat în grad de invaliditate și completarea avizului instituției medicale privind decizia CEMV (parte a F-088/e) reprezintă măsuri obligatorii pentru a evita neconcordanța indicatorilor statistici în diferite rapoarte.

**Cuvinte-cheie:** persoană cu dezabilitate, bolnav psihic, evidență de dispensar, grad de invaliditate, invaliditate primară.

**Summary**

**The analysis of disability indicators in people with mental and behavioral disorders under evolutionary aspect during 2001-2006**

**The topicality of the subject** is due to the changes in the social and economic conditions in Republic of Moldova, which have had a profound impact on people with disabilities. To answer this challenge, an effective supervision of the social policy is needed, which would be able to support people with disabilities, so that they can benefit from the opportunities that appear as a result of these changes. The mental and behavioral disorders have become a major social problem in Republic of Moldova, constituting an important source of disability and occupying the first 5 positions of the 10 in the disease hierarchy. Nearly 50% of those more than 60 000 psychic patients who are under dispensary observation have an invalidity group, constituting the most vulnerable part of the society.

**Methodology.** For the achievement of the goal and tasks outlined in our study, several methods for data research have been applied: observation, investigation, the transfer of information from medical documentation (statistical report F-27) and methods of statistical processing of information.

**Results.** Our study included 3120 people primarily framed in the invalidity group who suffer from a psychic disease from three economic-geographic zones of the country: the Northern EGZ, Balti city; the Central EGZ, Chisinau city; the Southern EGZ, TAU Gagauzia.

**Conclusions.** As a result of the performed study, it was proved the necessity of a more detailed disclosure of the primary invalidity indicators and, especially, of their internal structure, in order to obtain a real picture of the present situation under evolutionary aspect as well. Implementing the statistic tax for each primarily and repeatedly framed in an invalidity degree patient and filling in the medical institution's notification regarding the decision of the CMEV (part of F-088/e) are compulsory measures in order to avoid the inconsistency of the statistical indicators in different reports.

**Key words:** person with disability, mentally ill person, dispensary evidence, degree of invalidity, primary invalidity.

## Introduction

Mental disorders are usually accompanied by psychic and behavioral modifications, which are diverse in their clinical structure and, at the same time, specific. According to the data provided by the World Health Organization, nowadays there are approximately 450 million people on the globe who suffer from psychic diseases. In each fourth family there is at least one member who suffers from mental disorders such as: depression, schizophrenia, bipolar affective disorder, mental and behavioral disorders that are due to the use of psychoactive substances, Alzheimer's disease, etc., all of which are recognized as part of those 13 basic causes of invalidity.

The state's economy has much to suffer as a result of these diseases which, in the majority of the cases, affect working-age people who permanently have to undergo a very expensive treatment so that its positive effects become visible. It happens frequently that the psychological climate in the family is disturbed. The state's allowances for medical pensions are also big. Invalidity due to mental and behavioral disorders occupies the sixth place in the primary invalidity structure (new case) in Republic of Moldova at the moment.

**Table 1**

*Primary invalidity (new case) due to mental and behavioral disorders in Republic of Moldova during 2001-2006, according to the Scientific-Practical Center of Public Health and Sanitary Management*

	2001		2002		2003		2004		2005		2006	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
Invalids (new case) by mental and behavior disorders	1385	9,8	1287	10,7	1057	9,8	1019	8,8	1079	8,1	1049	7,7

The analysis of the data obtained (Table 1) showed that primary invalids with mental disorders represent a relatively high percentage of the total number of patients primarily framed in a degree of invalidity. At the same time, it was determined that this report doesn't reveal the internal structure of this form of disability. If the internal structure was known, it would be possible to develop more concretely the methods and the recommendations for medical recovery and also for socio-professional integration. The things mentioned above allow us to conclude that the aim of the study is to evaluate the primary invalidity indicators and the peculiarities of expertise (re-expertise) in people with mental and behavioral disorders. The structure of primary invalidity due to mental disorders according to the residence area in 2006 (%) was the following: Republic of Moldova – 7,7; urban area – 7,5; rural area – 7,8.

## Materials and Methods

For the achievement of the goal and tasks outlined in our study, several methods for data research have been applied: observation, investigation, the transfer of information from medical documentation and methods of statistical processing of information.

The performed study contains a large variety of medical, socio-economic, demographic and geographic subjects that would ease the analysis of primary invalidity degree for the population of the country.

The patients with mental and behavioral disorders primarily framed in a degree of invalidity represent the focus of the study.

The study has been conducted in several stages and included the period between 2001 and 2006.

### **Stage 1. The strategy for carrying out the study**

- Defining the problem, the goal and the objectives of the study;
- Determining the volume of the sample and the selection methods;

### **Stage 2. Material gathering**

- Designing the socio-statistic questionnaire for the primarily framed in invalidity degree patients;
- Collecting information from official documents about invalids' situation (the CMEV register, the invalids' personal pension files from the Territorial Social Insurance Houses);

### **Stage 3. Processing the information obtained**

- Counting the qualitative and quantitative indicators and determining their precision;
- Grouping and systematizing the material in statistic tables;
- Graphical presentation of the results of the study;

### **Stage 4. Analyzing and evaluating the results obtained from the study**

- Analyzing primary invalidity due to mental and behavioral disorders in three economic-geographic zones of the country;
  - Evaluating the internal structure according to the nosological primary invalidity forms due to mental and behavioral disorders.
- The selected localities have been chosen from the whole CMEV of the Republic – 21 (each

...serving a certain number of population) with the aim of counting "The Euclidean Distance".

Three cities from three different zones of the country were chosen for the study: 1) The Northern economic-geographic zone – CMEV Balti (the total number of the served population – 127561, the total number of people with mental disorders primarily framed in a degree of invalidity – 445); 2) The Central economic-geographic zone – CMEV Chisinau (the total number of the served population – 712218, the total number of people with mental disorders primarily framed in a degree of invalidity – 2316); 3) The Southern economic-geographic zone (TAU Gagauzia) – CMEV Ceadir-Lunga (the total number of the served population – 155646, the total number of people with mental disorders primarily framed in a degree of invalidity – 433).

**Results and discussions**

**Table 2**

Population's primary invalidity due to mental and behavioral disorders in three EGZ in the period 2001-2006 (abs. 10 000)

	Northern EGZ (Balti)	Southern EGZ (TAU Gagauzia)	Central EGZ (Chisinau)
Invalids (new case)	445	433	2316
M±m	74,2 ± 6,31	72,2 ± 6,75	386,0 ± 29,47
M±m per 10 000 people	5,8 ± 0,49	5,4 ± 0,44	5,4 ± 0,41

The analysis of the data from Table 2 showed that the primary invalidity rate between 2001 and 2006 per 10 000 people was relatively constant, with a non-significant growth for Balti city (5,8 ± 0,49).

Evaluating the spectrum of the diseases that have modulated the primary invalidity level in the period between 2001 and 2006 in the Northern EGZ (Balti), it was determined that *personality and behavioral disorders due to diseases, harms and cerebral dysfunctions* are at the top of the list – 37,8% of the people primarily framed in degrees of invalidity. The second place is occupied by *schizophrenia and schizotypal disorders* – 23,8% of the people. On the third place are found people with *epilepsy, personality and intellectual disorders* – 16,0%. The estimation of the nosological forms' weight in the Southern EGZ (TAU Gagauzia) emphasizes a higher rate of people with *schizophrenia and schizotypal disorders*, which constitute 29,3% and occupy the first place (Figure 1). The other 26.1% represent people with *mental retardation* and occupy the second place. On the third place are people who suffer from *epilepsy* and they constitute 21,7% of the total number.

Thus, the nosological structure of primary invalidity due to mental and behavioral disorders in the Southern EGZ is somehow different from the one identified in the Northern EGZ (Figure 1). In this region the weight of people with primary invalidity determined by *personality and behavioral disorders due to diseases, harms and cerebral dysfunctions* constitutes only 13,2% (a 2,9 times lower level than the one identified in Balti). At the same time, the percentage of those with *mental retardation* in TAU Gagauzia is twice the one established in Balti. Among the basic nosological forms that have seriously modified the primary invalidity indicators as a consequence of mental and behavioral disorders in the Central EGZ (Chisinau) can be mentioned *schizophrenia and schizotypal disorders* and *mental retardation*. The former diagnosis was established in 40,7% of the cases in people primarily framed in a degree of invalidity and the latter in 27,0% of the cases (Figure 1). The next two places are occupied by people with *personality and behavioral disorders due to diseases, harms and cerebral dysfunctions* – 14,5% of the cases and with *epilepsy, personality and intellectual disorders* – 12,6% of the total number of those with primary invalidity. Therefore, these four nosological forms enumerated above represent the causes of the framing in degrees of invalidity in the case of 94,8% of the people with primary invalidity in the Central EGZ.

The comparative assessment of the estimated situation in the three evaluated zones reflects a distribution of people with primary invalidity according to the nosological forms, which is almost similar to the one established between Chisinau and TAU Gagauzia (Figure 1), but the diagrams are not absolutely identical. The deviations registered in the Central EGZ and the Northern EGZ are more substantial.

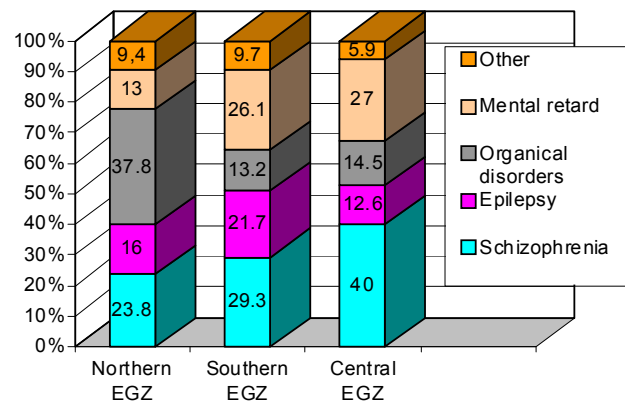


Figure 1. The primary invalidity structure according to the nosological form during 2001-2006, in those three economic-geographic zones of the country (%)

The distribution of people primarily framed in invalidity according to the degrees assessed doesn't differ much from one locality to another. Similar to the Northern and Southern zones, the majority of people from the Central EGZ (74,3%) have been framed in the second degree of invalidity (Figure 2). This rate is almost similar to the one established in TAU Gagauzia, but is at the same time 8,6% lower the percentage of people in Balti who have the same degree of invalidity. One difference that can be observed between the Northern and the Southern zone is the fact that the percentage of people with the first degree of invalidity is substantially lower in comparison with those with the third degree of invalidity. In the Central EGZ, the rates of these two groups were comparable and constituted 11,3% for those framed in the first degree of invalidity and 14,4% for those who were primarily attributed the third degree of invalidity.

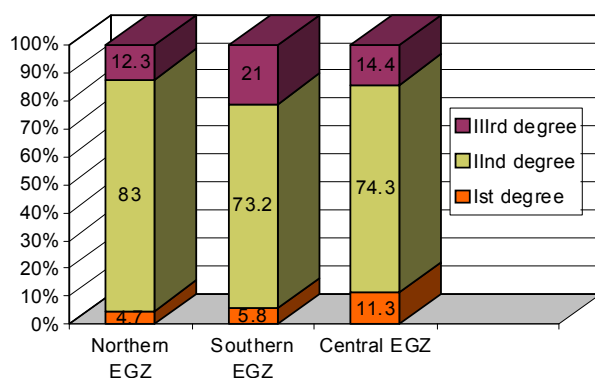


Figure 2. The distribution of primary invalids by the degree of invalidity attributed to them, 2001-2006 (%)

The distribution of people with degrees of invalidity primarily attributed in the evaluated period of time according to sex is represented in Figure 3. The percentage of women with primary invalidity as a consequence of mental and behavioral disorders is a little higher for all the three EGZ (52%) in comparison with men (48%).

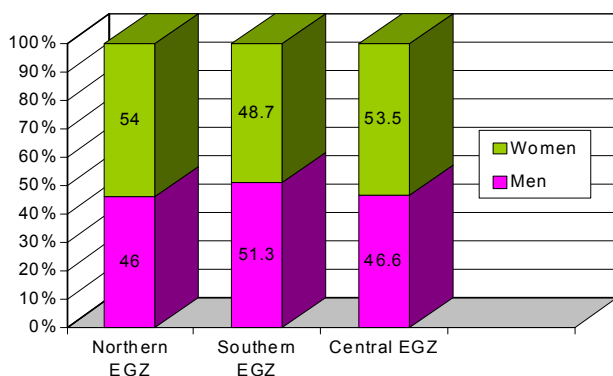


Figure 3. The percentage of people with primary invalidity, 2001-2006 (%)

## Conclusions

1. The analysis performed showed that primary invalidity rate by mental and behavioral disorders for the segment of study 2001-2006 per 10 000 people was relatively constant with a non-significant growth for Balti city ( $5,8 \pm 0,49$ ).

2. Speaking about the internal structure of primary invalidity in the **Northern EGZ (Balti city)**, the situation is as follows: the first place is occupied by personality and behavioral disorders due to diseases, harms and cerebral dysfunctions –  $28,0 \pm 6,76$  (38%); on the second place are schizophrenia and schizotypal disorders –  $17,7 \pm 2,77$  (24%); on the third place come epilepsy, personality and intellectual disorders –  $11,8 \pm 1,48$  (16%). The picture is a little bit different in the **Southern EGZ (TAU Gagauzia)**: the first place is taken by schizophrenia and schizotypal disorders –  $21,2 \pm 2,48$  (29%); on the second place is mental retardation –  $18,8 \pm 5,57$  (26%); the third place is occupied by epilepsy –  $15,7 \pm 2,00$  (22%). In the **Central EGZ (Chisinau city)**, we have the following situation: on the first place are schizophrenia and schizotypal disorders –  $157,3 \pm 11,66$  (41%); the second place is occupied by mental retardation –  $104,2 \pm 27,85$  (27%); on the third place come personality and behavioral disorders due to diseases, harms and cerebral dysfunctions –  $57,5 \pm 7,80$  (15%).

3. It is necessary to mention that the internal structure of primary invalidity by mental and behavioral disorders according to sex did not show important deviations: 52% of the people in the studied segment were women and 48% were men.

4. As a result of the performed study, it was proved the necessity of a more detailed disclosure of the primary invalidity indicators and, especially, of their internal structure, in order to obtain a real picture of the present situation under evolutionary aspect as well. Implementing the statistic tax for each primarily and repeatedly framed in an invalidity degree patient and filling in the medical institution's notification regarding the decision of the CMEV (part of F-088/e) are compulsory measures in order to avoid the inconsistency of the statistical indicators in different reports.

## Bibliography

1. The WHO (World Health Organization), European Conference Material at the Level of Ministers *The protection of psychic health. Problems and solutions*. Helsinki, Finland, 12/15 January 2005.

2. The International Conference Material *Social protection of people with disabilities: national and international dimensions*. Event organized at the initiative of the President of Republic of Moldova, V. Voronin. Chisinau, 2008, 52 p.
3. *The Statistical Report of the Republican Council for Medical Expertise of Vitality (RCMEV) (form 27)*.
4. *Public Health in Moldova. The Statistical Annuary, 2000-2006*. The Scienific-Practical Center of Public Health and Sanitary Management of the Ministry of Health, Chisinau.
5. Spinei L., *The characteristics of population's invalidity in Republic of Moldova*, In *Public Health, Economics and Management in Medicine*, no. 6, Chisinau, 2007, p. 109-111.
6. Zabieta A., *The analysis of the social protection of invalids in Republic of Moldova*, The Report of the World Bank, Chisinau, 2007, 134 p.