

# ENVIRONMENT AND HUMAN HEALTH

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## STRESS AND MENTAL HEALTH: PROBLEMS OF PREVENTION STRES A ZDROWIE PSYCHICZNE – KIERUNKI PROFILAKTYKI

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### Summary

Objective of the research was to develop directions of prevention of mental health disturbances connected with influence of stress. The research is based on the results of hospitalization structure at the regional hospital department of borderline cases analysis.

394 cases of the hospitalization are studied. It is established, that the leading place in hospitalization structure was occupied with group of the diseases coded ICD-10 as «reaction to serious stress and disorder of adaptation F43», disorder of adaptation F43.2 was the most frequent. It is taped, that women are the basic contingent among hospitalized and absolutely leading contingent for such pathology, as «dyssociative disorders F44». Nevertheless, men are most subject to such pathology, as «reaction to serious stress and disorder of adaptation F43.2». Results of work confirm that the urban population of young and able-bodied age (20-39 years) is especially subject to fatal influence of stress. The critical periods are the summer and winter time (most subject persons of 40-59 years). About 10% patients arrive in hospital during life-time and even within the given year.

The prevention of mental health disorders is a problem of the state importance. Among the basic ways of its decision are activation of the state bodies and working out of complex programs referred on preventive maintenance both chronic influence of stress, and acute consequences (suicidal behavior, crisis conditions). It is necessary to involve specialists of various trades with the leading part of health professionals. Communicative skills, ability to distinguish not only first signs of mental health disturbance, but also to recognize risk factors in time are especially important for health professionals.

### Conclusion

The problem of stress and its influence on mental health of the population is highly actual for Belarus. Besides chronic influence on mental health, stressful factors create a basis for dangerous emergency of medical-social situations connected with crisis conditions and dependence. The role of stressful psychological influence in formation of dependences, among them are the problems connected with alcohol and drugs, is especially actual for Belarus.

Objective of the research was to develop directions of prevention of mental health disturbances connected with influence of stress, on the basis of the analysis of features of hospitalization in branch of borderlines of a regional hospital.

## Materials and methods

394 case-histories of patients from branch of borderlines of one of regional hospitals (continuous sample for 2006) processes by the statistical method.

Hospitalization structure are analyzed according to such signs, as reasons of hospitalization, sex, age, seasonal prevalence. The most frequent reasons of hospitalization are allocated, the analysis of peculiarities of hospitalization of persons with most prevalent diagnosis is carried out.

## Results

The six nosological forms belonging to V class of ICD-10, mainly headings «Neurotic, connected with stress, and somatoformal frustration F4» were reasons of hospitalization in branch of borderlines of the hospital.

The first place (67,0%) in the structure of the hospitalization by reasons was occupied with reaction to severe stress and frustration of adaptation F43. The second place (18,5%) was occupied with other disturbing frustration F41. Dissociative (conversion) frustration F44 (4,82%) and somatoformal frustration (4,57%) have divided among themselves the third place in the structure of hospitalization by the reasons. The least quantity of patients are hospitalized with diagnoses F42 (obsessive-compulsive frustration, 2,28%) and F40 (disturbing-fabical frustration, 2%).

Sex structure of patients was as following: 137 men (34,8%) and 257 women (65,2%) have been hospitalized in branch of borderlines within a year.

The first place in the structure of hospitalization for the reasons from men was occupied with reaction to heavy stress and adaptation frustration (76%), on the second place there were other disturbing frustration (12,4%), on the third place - somatoformal frustration (4,4%). From women the leading place was occupied with reaction to severe stress and adaptation frustration (62,3%), the second place belongs to other disturbing frustration (21,8%), dissociative (conversion) frustration (7,4%) have occupied the third position. Last diagnosis was registered only at women in 2006.

The nosological structure of the hospitalized changed in various age groups. So, the proportion of the persons hospitalized because of other disturbing frustration increased with age increase, having made a maximum in 40-59 years old (56,2%). Whereas the part of persons with the specified diagnosis has appeared equal 27,3% at the age group of 20-39 years old. The opposite picture is noted among patients with reaction to severe stress and with adaptation frustration. If the part of the persons with reaction to severe stress and with adaptation frustration have made 52,3% in age group of 20-39 years old, their share decreases to 29,2% in age group of 40-59 years.

Structure of the hospitalized by the living-place was as follows: part of city dwellers was highest (66,0%).

The peak of hospitalization concerning neurotic frustration has fallen to the spring period (29%). The tendency to decrease in number of hospitalized (19%) is observed in autumn months. Persons with the diagnosis «reaction to severe stress and adaptation frustration» were mainly hospitalized in summertime (31%). The increase of quantity of hospitalized with the diagnosis «other disturbing frustration» (30,1%) was observed in winter and spring months.

Patients with is disturbing-fabical frustration stayed in a hospital for longest period (20 days), average term of hospitalization of persons with reaction to heavy stress and adaptation frustration has made 11 days.

So, the mental frustration classified in ICD-10 in the chapter V as connected with stress (67,0% of hospitalized), such as reaction to sharp stress (F43.0), posttraumatic stressful

frustration (F43.1) and adaptation frustration (F43.2), have occupied the first place in the structure of hospitalization by the reasons.

The analysis of peculiarities of hospitalization of the given group has shown, that among patients with reaction to the stress, hospitalized in the branch of borderlines, a part of persons with the diagnosis «adaptation frustration» has made 89,4% and has occupied the leading place. Reaction to sharp stress (8,4%) follows with a considerable separation on the second place. The least quantity (2, 2%) is hospitalised persons with posttraumatic stressful frustration.

58,3% of women and 41,7% of men with the mental frustration connected with stress have been hospitalized in branch of borderlines of a hospital within 2006.

Features of age structure of the patients hospitalized with given diagnoses have appeared the following. The part of age group of 20-39 years old has appeared the greatest and has made 55,8%. Dominating disease in the given age group was adaptation frustration (86%). The age group of 40-59 years (27%) has settled down on the second place; the primary diagnosis in the given group remained former.

City dwellers (67,7%) prevailed in structure of patients with reaction to the stress.

88,7 % of patients concerning the given frustration for the first time in a life; 8,7% have been hospitalized for the first time in the given year, about 2,6% of patients have arrived repeatedly.

The hospitalization peak has fallen to the summer period (32,3% of hospitalized). The spring period also was characterized by high frequency of hospitalization (25,3 % hospitalized, the second place in hospitalization structure on seasons).

## Discussion

Features of hospitalization in branch of borderlines of a regional hospital have appeared the following:

- leading place in structure of hospitalization by the reasons was occupied with group of the diseases coded ICD-10 as «reaction to severe stress and frustration of adaptation F43»;
- dissociative (conversion) frustration F44 were registered in 2006 only at women;
- greatest part of the hospitalized has fallen to summer and spring months of year, the least - in autumn;
- winter is noted by increase in hospitalization because of other disturbing frustration F41;
- the share of the persons hospitalized because of other disturbing frustration F41 increased with age increase, having made a maximum in 40-59 years;
- the proportion of city dwellers has exceeded almost twice a part of inhabitants of village, and more than twice concerning frustration of adaptation F43.2;
- the proportion of women among hospitalized almost twice has exceeded a share of men;
- patients with disturbing-fabical frustration F40 stayed in a hospital for longest period (20 days).

Features of hospitalization of persons with reaction to severe stress and frustration of adaptation F43 have appeared the following:

- ✓ Frustration of adaptation F43.2 (89,4 %) was most often registered;
- ✓ The share of young persons (20-39 years old) has made 55,8% among persons with reaction to heavy stress and frustration of adaptation F43;
- ✓ The greatest part of patients is hospitalized unitary, however about 10% arrive repeatedly during a life and even within the given year.

Despite absolute prevalence of women among patients of branch and among patients with the diagnosis «reaction to severe stress and adaptation frustration», it is revealed, that

a share of the men hospitalized with the diagnosis «reaction to severe stress and adaptation frustration», exceeds that among women (76% and 62,3% accordingly,  $\chi^2 = 7,54$ ,  $p=0,006$ ).

## Conclusions

It is necessary to ascertain, that the infringements of mental health connected with stress are widespread among young and able-bodied population of Belarus. Reaction to heavy stress and frustration of adaptation F43 is the most frequent reason of hospitalization in branch of borderlines. Women are the basic contingent among hospitalized in branch of borderlines and absolutely prevailing contingent for such pathology, as dissociative (conversion) frustration F44. Nevertheless, it is revealed, that men are most subject to such pathology, as «reaction to heavy stress and frustration of adaptation F43». Results also confirm, that the urban population of young and able-bodied age (20-39 years) is especially subject to fatal influence of stress. The critical period are the summer and spring.

The prevention of frustration of the mental health connected with stress is a problem of the state importance. Among the basic ways of its decision there are activization of the state bodies and working out of the complex government programs directed on preventive maintenance both chronic influence of stress, and the sharp socially-behavioural conditions connected with stress (suicide behaviour, crisis conditions). It is necessary to involve experts of various trades with the leading part of professionals of health protection in the decision of the given problem. The formation of communicative skills, ability to distinguish not only first signs of infringement of mental health, but also to reveal risk factors, to learn the patient to solve psychological problems in time is especially important in work with the patient. Preventive maintenance of stress and the frustration connected with it is a basis of a healthy way of life in modern conditions.