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# THE INFLUENCE OF SOCIAL DETERMINANTS ON HEALTHCARE CONSUMPTION IN WOMEN

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**ABSTRACT** — Noncommunicable diseases provide a significant impact on global health. Information about the factors influencing the noncommunicable morbidity and the need for medical care is important for forecasting need and distribution of healthcare resources. The article presents the results of a study dealing with the relationship between social determinants of health and acute conditions requiring medical care in women. Social determinants including the standard hierarchy of values and the level of education (high school) influence on individual self-assessment of health and are associated with lower need for medical care due to acute non-communicable diseases. The graph method was used for the study and can be proposed for further investigation of the influence of social determinants on the need for medical care.

**KEYWORDS** — social determinants of health, public health, self-assessment of health, life values.

## BACKGROUND

The modern concept of prevention has been developed in relation to infectious pathology is not always adequate in relation to non-infectious pathology [1, 2]. The search for risk factors and determinants of health influencing the development of noncommunicable diseases is currently an urgent task of health and healthcare management [3, 4]. Social determinants of health, including life priorities (hierarchical structure of values) significantly influence on individual lifestyle and are of great importance in the healthcare management system. Social determinants of health influence on individual health indirectly mediating through the risk factors. The most important are the individual lifestyle and the features of lifestyle that are closely related to the hierarchy of life values and priorities. Despite

the importance and significance of life priorities and their indirect influence on the health and morbidity as well as the need for medical care and women's self-assessment and of health has not been studied in detail.

## Objective:

to analyze the influence of life values hierarchy on the self-assessment of health and need for medical care in women of reproductive age.

## MATERIALS AND METHODS

An anonymous survey was completed by 566 women aged 18 to 49 years. In total, seven priority options (values) were proposed to arrange according to individual hierarchy: *Family, Work, Education, Career, Health, Material goods, Spiritual values*. The leading priority (value) was the number one, *significant priorities (values)* occupied the positions from 2 to 4 and the *non-significant vital value* — from 5 to 7.

The standard structure of life priorities was determined by comparing the structure characteristic of the group as a whole and the individual hierarchical structure for each woman. If the ranking places of at least three life priorities coincided, then such a structure was considered as standard or approaching standard (the first subgroup). Otherwise, if the number of matches was less than three, the structure was considered as non-standard for this group and the woman was included in the second subgroup.

For each subgroup, the indicators of self-assessment of health, the weighted average frequency of acute diseases, the level of chronic morbidity, the intensity of consumption of medical care and the level of medical activity were calculated. Self-assessment of health, as a fairly objective indicator of health is a standard method for population health studies [5, 6]. In this study, the assessment was carried out on a five-point scale, where 5 points were the highest level of health, while 1 point was the lowest indicator of health, according to the self-assessment data. Data on morbidity were obtained from medical records.

## RESULTS AND DISCUSSION

The analysis of the influence of the structure of life priorities (values) on the frequency of acute diseases provided the weighted average frequency of acute diseases as 0.64 diseases cases per woman per year. In this subgroup of women (the standard structure of life

priorities), there were no frequently ill women (more than 3 acute diseases cases per year), and more than half of the surveyed women (53.1%) did not get sick at all during the year preceding the study. The study indicated also the influence of education (high school graduates or not) on the morbidity in the group of women with a standard structure of life priorities. The risk of acute conditions was lower in the subgroup with high school graduates (1.13 versus 1.62 acute diseases per year). This fact indicates more significant impact of the level of education on the acute morbidity comparing to the hierarchy of life priorities (values). In the subgroup of women with a non-standard structure of life priorities, the weighted average frequency of acute diseases was twice higher. 5% of woman in this subgroup were ill more often than 3 times a year, and only 35.7% did not get sick at all during the year preceding the study.

There were no significant differences between the subgroups in terms of the incidence of chronic diseases. In both subgroups, the incidence rate was quite low at the level of 31–31.2 per 100 women.

The frequency of requests for outpatient medical care was higher in women with a non-standard structure of life priorities (2.04 vs. 1.55 requests per year). There were no differences in the need for inpatient and emergency medical care in women with a standard and non-standard structure of life priorities, as well as differences in the intensity of use of emergency medical care (1.4 vs. 1.42 calls per year).

Women with a standard structure of life priorities indicated more responsibility and activity regarding preventive examinations procedures (28.1 vs. 9.5 per 100 respondents in each subgroup, respectively). Women with a non-standard structure of life priorities indicated less responsibility in this area (6.25 vs. 26.2 per 100 respondents in each subgroup, respectively). These facts demonstrate that individual prophylactic activities did not depend on the structure of life priorities. Approximately two-thirds of women from both subgroups indicated an early request for medical help when pathological symptoms occurred.

The influence of the structure of life priorities on the indicators of self-assessment of health was quite significant. The level of self-assessment of health was higher among women with a standard structure of life priorities, but the differences between these two groups were not significant ( $p > 0.05$ ). At the same time the level of education provided a significant impact on self-assessment indicators. In the subgroup without higher education, higher self-esteem indicators were found in women whose structure of life priorities was standard ( $3.54 \pm 0.13$  points versus  $3.29 \pm 0.09$  points, the differences are significant,  $p < 0.05$ ). In the group

of women with a high level of education, there were no differences in self-esteem indicators depending on the standard structure of life priorities ( $3.56 \pm 0.09$  vs.  $3.54 \pm 0.09$  points,  $p > 0.05$ ).

## CONCLUSION

The data obtained indicate that life priorities (values) and their hierarchical structure should be considered as a significant social determinant of the health of women of reproductive age due to relationship with acute morbidity, the need for healthcare services and self-assessment of health. There are no differences in the prevalence of chronic diseases in women, depending on the structure of life priorities. However, it is not advisable to consider life priorities and their structure as an isolated and independent determinant of health, which does not depend on other determinants. The structure of life priorities determines, along with other social determinants, a person's behavioral reactions, which, in turn, determine the way of life. According to the data obtained, the dependence of the structure of life priorities and the level of education is obvious, which gives grounds to consider not each determinant separately, but the existing complex of determinants, the severity of which is different in each age and sex group. In this case, an approach based on weighted oriented graphs can be used as a model of the influence of a group of determinants on public health indicators and the intensity of consumption of health services, and the use of scenario analysis methods is also relevant.

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