STUDY OF THE QUALITY OF LIFE WITH REGARD TO THE HEALTH OF PATIENTS WITH CHRONIC ISCHEMIC HEART DISEASE

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Abstract: The study of the quality of life through the patient's point of view provides important information about the reflection of the disease on his life and social adaptation. The objective of the development is to establish the influence of the chronic ischemic heart disease on the daily routine and the social life of the patients.
Methods: The study is of cross-sectional type. It covers 146 patients with chronic ischemic heart disease. A questionnaire has been developed, which includes questions related to the demographic specification of the patients and their social life. Standardized questionnaire EQ-5D for self-assessment of the health-related quality of life has been applied.
Results: A significant part of the patients have difficulties in carrying out professional activities or family duties. A low level of coping is found in 32 men (43.8%) and 29 women (39.7%). More than half of the persons aged over 60 have difficulties in the 5 studied areas of quality of life: mobility, self-care, regular activities, pain/discomfort, anxiety. Problems in the field of physical activity were found in 43 men (43.9%) and 55 women (56.1%). A dependency was found between the area of self-service and age (χ^2=10.85, p=0.004).
Conclusion: The questioned patients give lower assessments of the social life and coping with the daily routine. The screening of the health-related quality of life is important for improvement of the clinical practice and management of the disease. In the sphere of public health, the health-related quality of life data are applied for analysis of the impact of the socially significant diseases on different groups of population. Differentiation of the impacts of such diseases on the patients is the basis of creation of efficient interventions for prophylactics and rehabilitation. The medical specialists may use the results of measurement of quality of life in the clinical practice for improvement of the patients' healthcare.
Keywords: health-related quality of life, social adaptation, chronic disease, health care.

INTRODUCTION
In the past few years there has been significant increase in the number of health-related quality of life (HRQL) publications with respect to the chronic, non-contagious diseases. In Bulgaria the studies on the quality of life carried out among healthy people with various diseases also increase. The largest number of publications are dedicated to oncology, endocrinology, neurology, rehabilitation, palliative care, etc. On an individual level HRQL is interpreted as a subjective assessment of the individual in terms of mental and physical health, the need of social support and ability for normal life [4,9]. The perception of the quality of life is subjective and is not only influenced by the health status but also by the psycho-emotional condition, the degree of dependency on the relatives, the social interactions, personal convictions and the relationship with the environment [2,5,8]. The objective of the development is to establish the influence of the chronic ischemic heart disease (CIHD) on the daily routine and the social life of the patients.

MATERIAL AND METHODS
The study is of cross-sectional type. It covers 146 patients with CIHD who have given their informed consent for participation. A questionnaire has been developed, which includes questions related to the demographic specification of the patients and their social life. Standardized questionnaire EQ-5D (adapted Bulgarian version) for self-assessment of HRQL has been applied. The test establishes problems related to the physical activity; pain and discomfort related to the disease; self-care; daily routine and psycho-emotional condition. The assessment is carried out on three levels: no difficulties – 1 point; moderate difficulties – 2 points and serious difficulties – 3 points [3]. The following statistical methods of data processing have been applied: variation analysis for summary of measurable data in terms of quantity; alternative analysis; non-parametric and correlation analysis, linear correlation coefficient. P=0.05 has been accepted as a level of significance of the zero hypothesis, with a confidence interval of 95%.

RESULTS OF THE STUDY OF SOCIAL ADAPTIVITY AND HRQL

The participants in the study were asked to answer questions related to the social life and coping with the personal and professional duties. Assessment is performed under a 4-point Likert scale. Lower mean values have been provided to the questions related to the assessment of the daily routine in the last month (2.26, SD-0.85); organization of the activities (2.52, SD-0.75); leisure time activities (2.56, SD-0.93) and establishment of new social contacts (2.60, SD-0.73).

A significant part of the patients has difficulties in carrying out professional activities or family duties. A low level of coping is found in 32 men (43.8%) and 29 women (39.7%). The frequency of communication with family, friends and colleagues is a factor of copying with the negative consequences of the chronic disease. Half of the studied patients 79 (54.1%) do not sufficiently communicate with the members of their family. An association has been found out between the frequency of communication with friends and colleagues and the educational level of the patients (χ^2=13.31, p=0.001), as well as the sex (χ^2=17.07, p=0.001). The results of the answer to the question: *"Do you try to establish new social contacts?"* show that the respondents experience serious difficulties in this sphere. Half of the patients rarely establish new contacts. From them, 42 are men (57.5%) and 35 women (47.9%).

An important aspect for the adaptation to the disease is the organization of the daily routine, according to the individual's abilities. The relative share of the persons who cope "very well" with the organization of their life according to their health condition is low – 13 (8.9%). A "good" value is communicated by 54 (37%) of the patients. A satisfactory value is given by 38 men (52.1%) and 31 women (42.5%). The subjective perception of the quality of life as well as the health condition is related to the personal satisfaction with life. A "very good" assessment is given by 31 patients (21.2%). A "good" assessment of the quality of life is given by 54 respondents (37%). "Satisfactory" is the assessment given by 53 patients (36.3%).

More than half of the persons aged over 60 have difficulties in the 5 studied areas of HRQL (Fig. 1). Problems in the field of physical activity were found in 43 men (43.9%) and 55 women (56.1%). A dependency was found between the *mobility* area and age (χ^2=9.11, p=0.01); education (χ^2=7.47, p=0.02); and employment (χ^2=14.29, p=0.001).
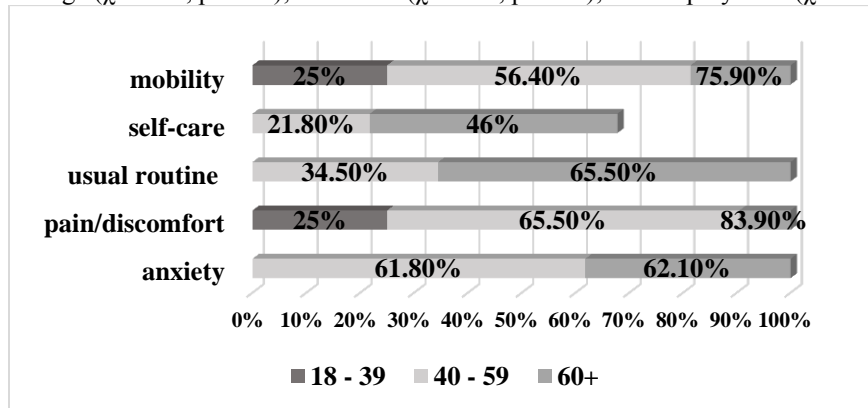

Figure 1. Allocation of patients with HRQL problems by age groups

A dependency was found between the area of *self-care* and age (χ^2=10.85, p=0.004). Patients with lower education (χ^2=14.64, p=0.001) and unemployed (χ^2=21.27, p=0.001) have more difficulties in coping with this sphere. More than half of the patients have difficulties in carrying out *everyday activities*. The biggest problems have been found in patients aged over 60 (χ^2=17.41, p=0.001); with primary education (χ^2=11.28, p=0.004); and unemployed persons (χ^2=35.48, p<0.001). There is a dependency between the area of *pain/discomfort* and the respondents' age (χ^2=11.78, p=0.003), education (χ^2=6.20, df=2, p=0.04) and employment (χ^2=13.61, df=2, p=0.001). *Psycho-emotional* problems are reported by respondents aged over 60 (62.1%) and without a partner 26 (70.3%).

A statistically significant difference between the health assessment and the age of the respondents was found out (Kruskal-Wallis =22.72. df=5, p=0.001). The health assessment lowers with aging. Pearson's correlation principle (r=-0.369) was calculated. The rating of the correlation coefficient shows a reverse moderate connection. The relation between the *physical activity* and *health assessment* is reverse significant (r=-0.520). The same relation was found between *daily routine* and *health* (r=-600). With the increase in the problems in the spheres of *mobility*, *self-care* and *daily routine*, the health assessment decreases. Correlation was found out between the *mobility* area and *self-care* (r=0.568), *daily routine* (r=0.610), *pain/discomfort* (r=0.480). The problems in the physical activity have a negative influence on the abilities for self-service and daily routine.

DISCUSSION

One of the most frequently used indexes for assessment of the quality of life in Europe and other countries of the world is EQ-5D index. A comparison of the mean values of health through VAS between regional studies of the population in Bulgaria and groups of patients with different diseases, lower values of health assessment are found in patients [7, 8, 9]. Rencz F et. al. (2016) have identified 143 articles summarizing the HRQL assessments for countries from Eastern Europe. Two of them describe results of international studies of the quality of life obtained using the EQ-5D test. 14 articles present data from representative studies [12]. For Bulgaria data from 6 studies have been analyzed. The mean values for EQ-5D index are 0.63 and for EQ-VAS are 58 [13]. The data on Bulgaria are compared with results from other East European countries. The results can be used as a basis for comparison of the profiles of patients with different diseases with the mean value of the profile of the general population.

The analysis of the publications on the topic shows the negative impact of CIHD on the psycho-social sphere of life. Anxiety and limitations in the physical functioning are connected with deteriorated quality of life [11,15]. It was found better social adaptation of patients with ICD who are employed and below 60 years of age. A dependency was reported between the patients by age groups and their adaptation to life. The individuals over 60 and the retired show low social adaptation. The following problems have been reported: sense of isolation from the social environment and reduction of the circle of friends [14].

The subjective assessment of the quality of life in terms of health is individual and does not always correspond to the actual one. The process of treatment may have a positive or a negative influence on life. The assessment depends on the way in which the disease changes the normal daily life, the professional and family life [1, 6]. In this connection, the HRQL concept extends the traditional idea of health for the purpose of satisfying the specific needs of the patients.

CONCLUSION

The questioned patients give lower assessments of the social life and coping with the daily routine. Difficulties have been found with regard to communication within the family and professional circles and establishment of new social contacts. These problems are typical of patients living alone, in small urban areas and at retirement age.

The results show deteriorated quality of life in all studied areas. There is a dependency between HRQL and the patients' demographic specifications. The reduced physical activity has a negative influence on the abilities for self-service, daily activities as well as the general health assessment. The problems increase with aging. The chronic diseases lead to different changes in the patients' style of life, and the abilities for adaptation to the disease are either a challenge or a problem.

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