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# Quality of Life of Medical University Teachers Raushangul Magzumova<sup>1</sup>, Indira Bozheveva<sup>2</sup>, Zaur Mustafayev<sup>3</sup>, Dinara Utepova<sup>4</sup>, Dinara Turzhanova<sup>5</sup>

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ABSTRACT

The paper presents the results of assessing the quality of life (QOL) of the faculty (faculty) of a medical university and some aspects of lifestyle (smoking, nutrition, exercise, marital status, body mass index).

Purpose of the study: To study the quality of life of medical university teachers.

Materials and Methods: The QOL of the teaching staff (n = 104) was studied using a questionnaire (SF-36). Representativeness of the sample: stratification by age, gender, marital status.

Results of the study: It was revealed that there were no differences in QOL in age and gender groups, and the overall indicator of QOL in the teaching staff of the medical university was 72.3.

Conclusions: The mental component is lower than the physical. At the same time, by stratifying respondents by marital status and gender, we found that the mental component is lower in non-family women under 40 years of age.

## **INTRODUCTION**

Subjective assessment of quality of life can be measured by opinion polls. [1] According to a number of foreign researchers, the quality of life - it is a multidimensional construct that involves human perception of their condition [2]. The concept of "quality of life" was introduced gradually into the field of medical sciences [3-4].

To obtain comparable data, and their further use in clinical practice often used short form SF-36, Nottingham Health Profile, SIP-profile. The processes affecting the quality of life also change in response to a great many factors [5]. Shaluk considers the quality of life as a mental perception of the state of life [6].

Shumeiker (1998) described quality of life as a multidimensional concept that includes total health: emotional, mental, social, and physical [7].

This definition emphasizes that in the concept of quality of life there is also a psychic nature (a mentally born experience based on individuality and the expected state of life). Therefore, QOL is an assessment of multiple and multifactorial aspects of life [8-10]. In this connection it is interesting to study the quality of life in a healthy contingent of social groups - teachers of the medical school, which is a "model" of a healthy lifestyle for students.

Keywords: quality of life, professional questionnaire SF - 36, lifestyle

Purpose of the study: To study the subjective assessment of satisfaction with the quality of life of a social group teachers of a medical university.

Materials and methods: The study of QOL of teaching staff (n = 104) was conducted using the SF-36 questionnaire, which is widely used in QOL studies in the countries of near and far abroad.

Selection criteria: teachers of a medical university, questionnaire voluntary, anonymous. The average age of the respondents was  $41.3 \pm 9.3$  years, ranged from 23 to 60 years. The volume of withdrawal was calculated according to the calculations of the formula  $n = Nxt2x\sigma 2 / (Nx\Delta 2 + t2x\sigma 2)$ .

In addition to the standardized questionnaire SF-36, we compiled additional questions in the questionnaire: smoking, height, weight, marital status, age, physical activity per week in

minutes (subject to increased heart rate, at least 150 minutes per week - WHO recommendations).

The eight scales of the questionnaire form 2 indicators: the psychological component of health and the physical component of health. The results are presented in the form of grades in points on 8 scales. Statistical processing was performed using Excel 2007. To compare the characteristics, Student t-test was used. The difference in values was considered significant at p < 0.05. Student's criterion was calculated by the formula  $t = (M1-M2) / (\sqrt{m12 + m22})$ .

PF - a scale that assesses physical activity, including selfcare, walking, climbing stairs, carrying heavy loads, and also performing significant physical exertion; RP - characterizes the degree of limitation of the performance of work or daily duties by those problems that are related to health; BP assesses the intensity of the pain syndrome and its effect on the ability to engage in normal activities, including housework and outside it for the last month; GH - assesses the current state of health; VT- implies an assessment of the sensation by the respondent or patient as being full of strength and energy; SF - assesses satisfaction with the level of social activity (communication, spending time with friends, family, neighbors, in a team); RE - involves assessing the degree to which the emotional state interferes with the performance of work or other normal daily activities; MN characterizes mood, the presence of depression, anxiety, evaluates the overall indicator of positive emotions.

#### **RESULTS OF THE STUDY**

The overall QOL of respondents  $75.7 \pm 8.7$ , m 0.85. The total indicator of the physical component of health is  $72.3 \pm 6.7$ , m 0.66; the general indicator of the mental component of health is  $68.9 \pm 5.2$ , m 0.51. There are no differences in the physical and mental components, df = 207, p $\leq$ 0.05. (fig. 1).



Figure 1 - General indicators QOL, MUA teaching staff (n = 104), PPS (n = 124)

The proportion of smokers of teaching staff was 9.6%. Family accounts for 36.5%. The health index of the studied sample was - 0.86, BMI 27.4  $\pm$  2.7.

Physical activity of teaching staff per week was 48 minutes  $\pm$  10 minutes (with the recommended WHO norm of 150 minutes).

In the daily menu at the recommended WHO should be present at least 15-17 product names, and in the weekly - 32-34, and in our study group this indicator was  $8.4 \pm 10.7$  per day. At the same time, there were no differences between family and non-family, under the age of 40 years and a group of 41 years and older (p $\leq 0.05$ ).

Further, we studied the general indicators of QOL on the scales. The results, which showed: the lowest indicator of MH (psychological health) - 45.7, GH (general health) - 58.8, VT (vital activity) - 57.7 (Fig. 2).



Figure 2 - Performance scales of quality of life of MUA teaching staff

To improve the homogeneity of groups and contact representative sample age strata have been formed.

In the group under 40 years of age (n = 54), as well as 41 (n = 50) and older, the general indicators of health components were  $74.9 \pm 1.5$ , m 2.81 and  $73.9 \pm 2.7$ , m 3.02, respectively. Indicators of the physical component of health in the group under 40 82.6 ± 4.0, m 2.79; mental component  $67.1 \pm 7.1$ , m 0.98. In this group, the proportion of smokers was 14.8%. BMI 26.7 ± 2.2.

In group 41 and older, indicators of the physical component of health are  $75.8 \pm 6.8$ , m 0.96; mental component  $72.0 \pm$ 14.0, m 1.97. Family teaching staff made up 84%. The proportion of smokers was 4.0%. BMI 29.0  $\pm$  2.5. There were no differences in the indicators of mental components in groups under 40 and 41 and older, df = 207, p = 0.05, and physical components of health between these groups were also not detected, df = 207, p $\leq$ 0.05 (Fig. 3)



Figure 3 - QOL indicators in groups under 40 years old and 41 and older

The division into strata by family status allowed us to identify the effect of marital status on QOL. The general indicators of health components in the groups are family (n = 66) and non-family (n = 38) 57.0  $\pm$  10.5, m 1.4 and 59.7  $\pm$  12.8, m 1.82, respectively. The physical component of health in the family group is 56.3  $\pm$  10.8, m 1.54; mental component 57.7  $\pm$  11.8, m 1.68. In the group, non-family indicators of the physical component of health 57.9  $\pm$  11.0, m 3.66; mental component 61.6  $\pm$  15.1, m 2.16. The mental component in family ones is higher than in non-family ones t = 2.74, p≤0.05. There were no differences

between these groups in terms of the physical components of health, df = 207,  $p \le 0.05$  (Fig. 4).



Figure 4 - QOL indicators in the family and non-family group

Thus, based on the purpose of our study, the QOL satisfaction rate at the teaching staff of the MUA was 72.3, while the mental component of QOL is lower than the physical. Studying additional factors: BMI, the degree of physical activity according to WHO recommendations (150 minutes a week), every second teaching staff from our respondents' group does not exercise enough, an insufficient number of consumed food items per day (at least 15-17 according to WHO recommendations) was found in every second faculty of our sample. More than half of the faculty members over 40 years are overweight. Based on the objective and subjective data that we have received; we recommend intensifying the promotion of a healthy lifestyle among of MUA teaching staff in accordance with WHO recommendations.

#### FINDINGS

Family teaching staff has a higher quality of life than non-family teaching staff (p < 0.05).

The low indicators of the mental component of QOL in the teaching staff show the need to search for external (psychological training) or internal (self-management, healthy lifestyle) stress resistance mechanisms.

There is insufficient physical activity for every second teaching staff and insufficiently balanced daily nutrition for every second teaching staff according to WHO recommendations.

4. BMI under the age of 40 years was 26, in the group of 41 years and older - 29, median 28; the proportion of smokers of teaching staff is 9.6%.

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