OWNERSHIP OF MEDICAL INSTITUTIONS IN BULGARIA - IMPACT ON THE QUALITY OF WORKING LIFE OF WORKERS

Abstract: The aim of this study is to investigate the influence of the healthcare institutions' ownership on the quality of working life of workers. QWL was determined by an adapted quality of life questionnaire. The questionnaire contains statements about different aspects of working life. In the comparisons of two independent groups t-test was applied, while in more than two independent groups – ANOVA and ANCOVA (to control the influence of age). In private hospitals there is a significantly lower quality of working life compared to municipal. This is most pronounced in the weak Social Guarantees and Social Benefits. Among the components of QWL, in private hospitals, Remuneration is also low.

Keywords: Quality of working life (QWL), work satisfaction, health organizations, health workers

1. Introduction

Differences in the principles and interests between the public and private sectors undoubtedly exist. The private definitively includes the requirement for profit, and the public - for social. Healthcare, as a public service, primarily seeks to satisfy the interests of society (Almarshad, 2015). Health care is based on the principle of social justice, ie the extent to which the public interest is protected, to what extent the resource is allocated and the patient's needs are met.

Regardless of the ownership of hospitals, their managers have many common problems - the aging workforce, the migration of medical professionals, the lack of career prospects, the lack of funding and low wages amid worsened public health indicators, the permanently and inefficiently reforming healthcare system, are just some of the problems they face.

They are required not only to create a favorable and satisfying working environment for workers at all levels of the organization but also to provide qualified staff and good remuneration. Policies are needed to address these issues. In order to achieve positive results from the point of view of users (buyers, buyers and suppliers) (including healthcare staff), health managers in our country are faced with the need to improve QWL.

2. Quality of working life

The term quality of working life has different meanings for researchers. Walton (1975) defines QWL as a process by which an organization responds to employees' needs to develop a mechanism that allows them to fully share the decisions that shape their lives at work.

Hackman and Suttle (1977) describe the quality of working life from several points of

---

1 Corresponding author: Todor Kundurzhiev
Email: tgk_70@abv.bg
view. From the perspective of workers it relates to industrial democracy - increasing employee participation in corporate decision making. In terms of management, QWL refers to a variety of efforts to increase productivity through more investment in human capital than in capital or technological production resources.

Nadler and Lawler (1983) provide a brief definition of the quality of working life - a way of thinking about people, work and organizations. The distinctive elements of QWL are two: concern about the impact of work on people and on organizational effectiveness; the idea of participating in solving organizational problems and making decisions. QWL is also seen as a process in the organization of work that enables workers at all levels to actively participate in the definition of the environment, working methods and its outcomes.

Davis (1983) defines the quality of working life as "the quality of the relationship between employees and the general working environment". This relationship seeks to create such conditions in the organization that promote individual learning and development. It provides people with influence and control over what they do, and the way they do it; gives employees an interesting and meaningful work, which, in turn, is a source of personal satisfaction and valuable tool for personal reward.

Efraty and Sirgy (1990) define QWL as the satisfaction of employees from different needs through resources, activities and outcomes arising from workplace participation.

According to J. Lloyd Suttle, "Quality of work is the extent to which members of the labor organization are able to satisfy important personal needs through their experience in it" (Murugan, 2012).

Rethinam and Ismail (2008) define QWL as a work environment that gives meaning to organization and personal needs by: shaping employee values, supporting and promoting better health and well-being, workplace security, job satisfaction, competence development and a balance between work and private life.

Summarizing data on the subject, stand two basic approaches to the definition of the quality of working life. Within the first QWL is understood as a set of properties that characterize the conditions and organization of labor. According to the second, this is a degree of satisfaction of the worker's needs through work activity within a specific organization.

For the first time, questions about the quality of working life as a stand-alone problem were raised in the 20s of the 20th century in Arthur Cecil Pigu's book "Economic Welfare Theory" (Petropavlova, 2011).

The first theoretical and applied approaches to the formation of what was called "the concept of the quality of working life" in the 70s of the twentieth century are outlined in the works of F. Taylor, G. Ford, E. Mayo, McGregor, A.G. Gasteva, P.M. Karmenseva, NAWetke (Zakharov and Kuznetsov, 2010).

The quality of working life is a concept developed in the early 1930s. One of the earliest uses of the concept is by George Elton Mayo, known for the 1933 "Human Problems of Industrial Civilization" and "Social Problems of Industrial Civilization" of 1949. P. Dracker also works in this direction and develops the theory for "social partnership" (Drucker, 2010).

In 50-60s of last century appear different theories that show the relationship between morale of workers and productivity.

The term quality of working life was used for the first time in the late 1960s by General Motors and United Auto Workers who used it to describe the level of work satisfaction of their workers (Kiernan and Marrone, 1997).

It is supposed that the term quality of working life was created by Irving Bluestone in 1960 when developing programs to increase labor productivity (Goode, 1989).

Researchers conclude that QWL is being considered in the mid-1970s in the light of
specific changes and methods introduced to improve productivity, enhance the sense of pride and belonging of employees to companies and their identification with them (Davis and Cherns, 1975; Sashkin and Burke, 1987; Kiernan and Marrone, 1997).

Many studies and the great interest in the concept of quality of working life have introduced in the scientific revolution of S. Robison in 1972. International conference on problems of labor relations. In an attempt to unite radically different strands of research on this topic, the "International Council on the Quality of Labor Life" is formed. In the 1980s, the work of Western economists began to develop the concept of quality of working life (Maclakova, 2014).

With the problems of QWL, scientists from all over the world are now actively involved (Lutten, 1999; O'Brien, et al., 1991). Actuality is determined by the need for humanisation of labor with increasing demands for increasing its efficiency and quality imposed by employers of workers in the market economy (Rybov, 2013).

Authors who have written on this topic analyze many factors in a variety of studies, responsible for the quality of working life.

Herzberg et al. (1959) uses two sets of "hygienic" and "motivating" factors that influence people's attitudes towards work, and can thus distinguish the reasons for job satisfaction and dissatisfaction. Hackman and Oldham (1976) identify several factors that describe as satisfying the need for psychological growth: diversity of skills, identity of tasks, importance of tasks, autonomy and feedback. In their view, these factors bring people closer to work and are relevant when considering the quality of working life.

Taylor shares the main components of the quality of working life of external factors (wages, hours and working conditions) and work-related factors (employee involvement, social support, use of current skills, self-improvement, social importance of work or product, etc.). (Garg et al., 2012).

Mirvis and Lawler (1984) describe the "core elements of good quality working life" as: safe work environment and fair pay.

According to Sirgy et al. (2001), the key factors for quality of working life are: working environment, job requirements, supervisory behavior, supplementary programs in an organization, and organizational engagement.

Walton (1975) offers eight basic conceptual categories: adequate and fair pay; safe and healthy working environment; an immediate opportunity to use and develop human capacity; opportunity for growth and security; social integration; constitutionalism; work and life; social significance of working life.

The quality of working life is labeled on the basis of different points of view in the literature and offers three different approaches to classifying this concept. One approach shows that it is based on external features such as salaries, safety and other benefits in the work environment. The approach of human relations emphasizes the importance of factors such as autonomy of work and scope of the task. The latter approach asserts that QWL depends on the organizational climate, the quality of the relationships between employees, managers, and trust between them (Moghimi et al., 2013).

The concept of quality of working life is recognized by the International Labor Organization (ILO) and UNESCO (Hlebush, 2012) as an important tool for socio-economic policy.

The essence of the concept is to identify a set of indicators that characterize good organizational, social and psychological working conditions and to assess their impact on output. The quality of working life can be enhanced by changing to better some of the parameters that affect people's lives. This includes, for example, worker participation in management, their training, management training, the implementation of promotion programs, staff training methods
for more effective communication and teamwork, better organization of work, and others. As a result, the employment potential workers receive maximum development and organization - a high level of productivity and higher profits. This concept is one of the most significant in the field of personnel management in recent years (Encyclopedia staff management, n.d.).

Numerous sociological studies testify to the great impact of quality of working life on quality of life (QOL) as a whole. The link between human life at work and human life outside it is one of the elements of the quality of working life (Phillips, 1981), but the latter is more fully described in the quality of life theory (Butkalyuk, 2010).

Elizur and Shye in his 1990 study "Quality of work life and its relationship to quality of life" show that the overall structure of the two indicators is conical. The quality of life is the basis of the cone, and the quality of working life - its top (Elizur and Shye, 1990).

3. Medical care in Bulgaria

The data for economic activity "Human health" for 2010 show that it represents 2.11% of the gross value added, it accepts 0.52% of the foreign direct investments and 0.93% of the expenditures for tangible fixed assets. Enterprises in the sector are 3.32% of enterprises in the whole country. Within the period 2006 - 2010, the number of employees increased by representing 3.52% of all employed in the country. It is important to note the high average age of the employed compared to the country, with a very high female employment - over 77%. The educational status of the employees is very high and the unfavorable tendency of the age structure to the economy as a whole is taken into account (General Labor Inspectorate, 2013).

According to the preliminary data of the National Statistical Institute, the average annual salary of the employed persons under employment and service relationship in economic activity “Human health and social work” in 2017 total for the country is 13 045.00 BGN. In the private sector it is 16 447.00 BGN higher than in the public sector - BGN 11 916.00 (National Statistical Institute in Bulgaria, 2018)

Medical care in the Republic of Bulgaria is provided by medical establishments regulated (Law on Medical Establishments in Bulgaria, 2017). The medical institutions provide outpatient and hospital care. They are created by the state, the municipalities and other legal and natural persons (Article 4, paragraph 1, of the Law on Medical Establishments). The medical establishments in which the state or municipality share in their capital is over 50 per cent are treated as state or municipal. Private medical establishments are wholly private capital or private capital over fifty per cent (other individuals or legal entities own more than 50 per cent). Emergency Medical Centers are created and funded by the state.

The research is part of a larger study aimed at analyzing the subjective perception of the quality of working life of healthcare workers. Other parts of the study will be published elsewhere.

4. Aim

To investigate the influence of the healthcare institutions ownership on the quality of working life of workers.

5. Methodology

5.1. Questionnaire

A survey was conducted. QWL was determined by an adapted quality of life questionnaire for A. P. Egorashin (Egorshin, 2003). The quality of working life was examined by using a QWL scale with seven subscales. Individual subscales are: Workforce, Remuneration, Workplace,
Organization management, Professional careers, Social guarantees, Social benefits.

The questionnaire contains statements about different aspects of working life.

The questionnaire consists of three sections. The first attempts to give a socio-demographic characteristic to the surveyed group (age, gender, marital status, place of residence, education, length of service, and seven more) because the diversity of employees in an organization implies that demographic variables are also potential predictors. The questions in this section are both structured and unstructured. They are easy to answer. The second section is related to the characteristics of QWL. How members of the healthcare organization perceive their satisfaction with the quality of their working lives will be measured by a scale. Questions are structured and include ordinal scale (to evaluate QWL criteria). To study the content and priorities of respondents’ own basic needs (what people most want and how they prefer their needs), add the third section - to highlight those criteria from each group that are most important to respondents and ranking their importance.

Respondents are required to assess the degree of coverage for each aspect in terms of their satisfaction at the moment. The assessment of the actual condition of each listed criterion is a five-digit scale where: the minimum score on the scale is "1 - very bad" and the maximum score is "5 - excellent". Each subscale contains 10 questions, the maximum score is 50 and the minimum 10. The calculation is made for each subheading presented in the questionnaire, then the total QWL is calculated. The maximum score is 350 and minimum is 70.

5.2. Estimate of the sample size

According to data from the National Statistical Institute, the number of persons employed by economic activity "Human health and social work" for 2016 is 161300.

The sample size is calculated using the formula (Charan and Biswas 2013; Cochran, 1977):

\[ n = \frac{z^2 \times p \times (1 - p) \times N}{\Delta^2 \times N + (z^2 \times p \times (1 - p))} \]

N - population size; n - sample size; z - standard normal variate (at 5% type I error (P<0,05) it is 1,96); p - expected proportion in population (50%); Δ - absolute error or precision (5%).

Under these conditions, the sample size is n = 480.

The study involved 510 employees from the health sector.

5.3. Data collection

From June to September 2017, 510 workers were surveyed. The study was conducted in eight medical establishments - different types of activity (Multi-profile hospitals for active treatment, Medical Centers, Emergency Medical Centers), property (state, municipal, private) and number. All of them are located on the territory of Southern Bulgaria.

5.4. Missing data

The problem with the missing data is solved by applying the “imputation” method of missing data. Used a procedure on a weighted average. This procedure is applied when the missing values are up to 30% in each subset. Respondents with more than 30% missing data in one of the subscale dropped out of the study.

5.5. Validity and reliability of the questionnaire

Cronbach’s Alpha coefficient

The reliability of the adapted questionnaire was evaluated using the Cronbach’s Alpha coefficient. For the entire scale it was 0.966.
The individual subscales are: Workforce – 0.886, Remuneration – 0.918, Workplace – 0.918, Organization management – 0.941, Professional careers – 0.946, Social guarantees - 0.831 and Social benefits – 0.884. These results show a good reliability of the questionnaire.

Factor analysis

In order to assess the validity and, more precisely, the constructive validity of the individual subclasses that form the overall assessment of the quality of working life, a confirmatory factor analysis is applied.

The data were analyzed by the main components method with Varimax rotation with Kaiser normalization. Conditions for sphericity and adequacy are tested by Bartlett's test of sphericity and measure the adequacy of Kaiser-Meyer-Olkin.

In each of the subscale test for sphericity indicates significance (p<0.05), i.e. there is at least one common factor that can be derived and the measure of adequacy of the sample is above 0.8. This gives us reason to believe that the factor analysis is correctly performed.

The results show that between 50% and 67% of the total dispersion can be explained by only one factor. For two factors, the dispersion explained in the different substrates varies between 60% and 75%.

The results of the analysis of reliability and validity show that the scale used and the individual subscales are sufficiently reliable and constructive valid for a given sample. This determines correctness when analyzing the results of the study.

Respondents are grouped according to the ownership of the medical establishment: Group 1 - municipal property; Group 2 - state property; Group 3 - private ownership. A comparative analysis of the quality of working life was conducted between these groups of respondents.

5.6. Hypothesis

The main hypothesis of this study is that there is a difference between the different types of property health establishments in terms of indicators of the quality of working life (Workforce, Remuneration, Workplace, Organization management, Professional careers, Social guarantees, Social benefits).

5.7. Statistical methods

To present the data statistical characteristics for central tendency (mean) and dispersion (SD) were used. Frequency distributions were checked by the Kolmogorov-Smirnov test, in the comparisons of two independent groups (male/female) t-test was applied while in more than two independent groups - ANOVA. Multiple comparisons after ANOVA were performed with the Tukey HSD test. By the analysis of covariates (ANCOVA) the influence of age was estimated. Linear correlation was investigated by Pearson's correlation coefficient. The relationship between two categorical variables was evaluated by chi-square test.

Results with a level of significance p<0.05 were considered statistically reliable. For statistical processing of the data SPSS version 16 was used.

6. Results

Almost half of the survey participants have graduated bachelors and professional bachelors (44.6%). Nearly two-thirds of the study participants (62.4%) are married. The residents in the city predominate (65.69%).

On average, respondents have 22.03±12.47 years of total work experience and 11.82±11.65 years of work experience of the current job.

The majority of the participants (40.4%) are the health care professionals (nurse and midwife) who together with the group of associated medical specialists account for almost half (48.8%) of the persons in the study. Non-medical staff accounted for 29.8% of the respondents.
The majority of respondents (94.7%) work on a main contract of employment, over one third (39.5%) are in units with a therapeutic profile and 14.7% participate in the management of the health organization. (Prodanova et al., 2018).

In the groups, the majority of respondents were women. The largest percentage of women was observed in Group 3 (87.0% - women vs. 13.0% - men), followed by Group 1 (81.8% - women, 18.2% - men) and Group 2 (60.9% - women; 39.1% - men).

However, the difference in the male/female ratio in the three groups was statistically significant $[X^2(2)=30.60, \ p<0.001]$.

The average age of respondents is 45.63 years (SD=12.05), the youngest being 20 years old and the oldest 75 years. In private hospitals, the average age of respondents was significantly younger (Group 3) than in the other two groups $[F (2;507)=22.44, \ p<0.001]$. Similar significant differences are also found for work experience (general and special) (Table 1).

**Table 1.** Summary statistical characteristics of QWL (total and subscales) and results of ANOVA

<table>
<thead>
<tr>
<th>Scale</th>
<th>Group 1 (n=236)</th>
<th>Group 2 (n=128)</th>
<th>Group 3 (n=146)</th>
<th>F</th>
<th>dfs</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total scale</strong></td>
<td>241.72</td>
<td>46.77</td>
<td>233.69</td>
<td>48.27</td>
<td>224.92</td>
<td>46.61</td>
</tr>
<tr>
<td><strong>Subscale:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workforce</td>
<td>38.57</td>
<td>6.93</td>
<td>36.15</td>
<td>8.03</td>
<td>38.46</td>
<td>6.78</td>
</tr>
<tr>
<td>Remuneration</td>
<td>31.22</td>
<td>9.83</td>
<td>33.66</td>
<td>9.24</td>
<td>29.62</td>
<td>10.18</td>
</tr>
<tr>
<td>Workplace</td>
<td>39.55</td>
<td>7.59</td>
<td>33.48</td>
<td>8.86</td>
<td>37.55</td>
<td>7.64</td>
</tr>
<tr>
<td>Organization management</td>
<td>39.56</td>
<td>8.19</td>
<td>37.49</td>
<td>9.11</td>
<td>40.13</td>
<td>6.89</td>
</tr>
<tr>
<td>Professional careers</td>
<td>35.07</td>
<td>9.44</td>
<td>30.66</td>
<td>10.06</td>
<td>32.40</td>
<td>9.61</td>
</tr>
<tr>
<td>Social guarantees</td>
<td>34.40</td>
<td>6.08</td>
<td>35.58</td>
<td>5.77</td>
<td>28.60</td>
<td>7.44</td>
</tr>
<tr>
<td>Social benefits</td>
<td>23.36</td>
<td>12.05</td>
<td>26.66</td>
<td>11.64</td>
<td>18.15</td>
<td>12.08</td>
</tr>
<tr>
<td>Age</td>
<td>47.84</td>
<td>11.85</td>
<td>47.73</td>
<td>10.00</td>
<td>40.21</td>
<td>12.38</td>
</tr>
<tr>
<td>Total work experience</td>
<td>24.54</td>
<td>12.30</td>
<td>24.59</td>
<td>10.62</td>
<td>15.73</td>
<td>12.06</td>
</tr>
<tr>
<td>Work experience of the current job</td>
<td>17.61</td>
<td>12.32</td>
<td>12.13</td>
<td>9.86</td>
<td>2.64</td>
<td>2.56</td>
</tr>
</tbody>
</table>

The influence of QWL's property on the healthcare facility was investigated by ANOVA test (Table 1).

On a total score, the highest average was observed in Group 1 (241.72), followed by Group 2 (233.69) and Group 3 (224.92). Significant differences in overall scores are found between Group 1 vs Group 3 and Group 2 vs Group 3 (Tukey HSD test). In subscales - dominate higher mean-values in Group 1, exception is observed in subscale Organization management, where the highest average value is in Group 3 (Figure 1).

Statistically significant differences between the three groups are observed in the workplace and social benefits. Between Group 1 and Group 2, the differences are in the subscale Professional careers, and the differences between Group 1 and Group 3 were in Professional careers and Social guarantees.
Correlation analysis revealed a weak but significant positive linear correlation between age and QWL ($R = 0.125$, $p = 0.005$) (Figure 2).
An age-based analysis (ANCOVA) was performed because significant differences in the age between the groups and significant QWL correlation were found. Age was included as a covariate in the dispersion analysis, dependent variable was QWL score, and the factor was the ownership of the medical establishments.

After analyzing ANCOVA with age control, the differences between the different groups of medical establishments were maintained both for the total score and for the individual subsets. (Table 2).

### Table 2. Estimated Marginal Means and results of ANCOVA

<table>
<thead>
<tr>
<th>Scale</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>F</th>
<th>dfs</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean 95% CI</td>
<td>Mean 95% CI</td>
<td>Mean 95% CI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total scale</strong></td>
<td>240.91 234.85</td>
<td>246.96 222.73</td>
<td>241.11 226.90</td>
<td>3.92</td>
<td>2;506</td>
<td>0.020</td>
</tr>
<tr>
<td>Subscale:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workforce</td>
<td>38.41 37.49</td>
<td>39.33 34.75</td>
<td>37.24 38.85</td>
<td>6.30</td>
<td>2;506</td>
<td>0.002</td>
</tr>
<tr>
<td>Remuneration</td>
<td>31.09 29.83</td>
<td>32.35 31.84</td>
<td>35.25 29.94</td>
<td>4.66</td>
<td>2;506</td>
<td>0.010</td>
</tr>
<tr>
<td>Workplace</td>
<td>39.30 38.29</td>
<td>40.31 33.25</td>
<td>34.61 38.17</td>
<td>25.50</td>
<td>2;506</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Organization management</td>
<td>39.35 38.31</td>
<td>40.38 37.29</td>
<td>35.89 38.69</td>
<td>41.99</td>
<td>2;506</td>
<td>0.003</td>
</tr>
<tr>
<td>Professional careers</td>
<td>34.98 33.73</td>
<td>36.22 30.58</td>
<td>28.89 32.26</td>
<td>8.95</td>
<td>2;506</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Social guarantees</td>
<td>34.30 33.47</td>
<td>35.12 35.48</td>
<td>34.36 36.60</td>
<td>29.93</td>
<td>2;506</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Social benefits</td>
<td>23.49 21.95</td>
<td>25.03 26.78</td>
<td>24.70 28.87</td>
<td>19.83</td>
<td>2;506</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

### 7. Discussion

Data of the National Health Insurance Fund for the funds paid to the hospitals for the period 2013-2016 demonstrate that the private hospitals in the country show the biggest growth in their revenues and the regional ones the smallest (National Health
The municipal hospitals are the penultimate place of revenue growth. Overall, all municipal hospitals in Bulgaria have very serious financial deficits and some of them are facing bankruptcy. In emergency care centers specialized medical transport and equipment are morally and physically obsolete, the number of doctors is steadily decreasing in constant with high turnover and increased vacancies. Regardless of the constant increase in the amount of public funds spent on emergency medical care, wages are inadequate to those in other health care establishments and are insufficiently motivating for high-risk working conditions and high tensions.

Data and results from other studies (Hoque, & Rahman, 1999) suggest that there is a significant relationship between property ownership and QWL. The study aimed to investigate the impact of the ownership of healthcare establishments on the quality of working life of people engaged in healthcare establishments in Bulgaria.

In private hospitals there is a significantly lower quality of working life (224.92±46.61) compared to municipal (241.72±46.77). This is most pronounced in the weak Social guarantees and Social benefits. Among the components of QWL, Remuneration is also low.

Remuneration is not high enough and additional sources of income need to be looked for. The Health and Safety at Work profile published in 2013 (General Labor Inspectorate, 2013) says that in the economic activity "Human health" almost 1/5 of the employees work constantly additional work, 8.2% are employed on temporary additional work and 3.3% - seasonal.

For professions related to medicine, it is believed that much of the behavior of the staff in the health care facility is precisely internally motivated. It is believed that for these professions often the system of internal motives is stronger than that of the external ones (Surcheva, 2003).

Notwithstanding these findings, studies have shown that remuneration is an important motivating factor for medical staff and the results obtained are not surprising. Two reports for Bulgaria say that healthcare professionals are looking for better prospects for better pay. (General Labor Inspectorate, 2012; OECD/European Observatory on Health Systems and Policies, 2017).

Dissatisfaction with the Social guarantees and Social benefits probably can be explained by the fact that medical workers as responsible for the lives of their patients expect society adequate safeguards for their work (Prodanova, 2018).

In private hospitals, the significantly lower quality of working life compared to municipal health care institutions, at the expense of social security and social benefits, is most likely due to the unwillingness of private managers to spend additional funds on Social guarantees and Social benefits.

For the management of medical institutions operating in a crisis and operating with limited resources, Social guarantees and Social benefits are often overlooked and underprivileged. For the modern employer is important to understand that the inclusion of additional benefits required as a guarantee to reduce losses from social risks, an excellent motivational tool for staff management and last but not least - enhances the reputation of the company and its management and helps build of a socially responsible business environment (Prodanova, 2014).

For existing large differences in the working lives of public and private health workers, Nayak (2016) reported in favor of the public. Such findings have been reported in Suresh (2013) and Patil and Choudhari (2011) governmental and private sector nurses surveys - most nurses in the government sector are more satisfied with the quality of nursing work life than nurses from private sector.
Smith and Nock (1980) report a difference in perception and evaluation of the work of the essence of public and private sector workers. Manual workers (blue collars) in the public sector are much more satisfied than the same in the private sector. Conversely, government officials who do not take physical labor (white collars) are less positive in terms of social relations and internal aspects of their work than white collars in the private sector. The authors suggest that these differences are due to misunderstanding by management in public organizations of workers' satisfaction, alienation and productivity.

Our study is also in line with the reports that employees in small hospitals (in our survey such are municipal health establishments) have a higher quality of working life than employees in large hospitals (in our survey such are private hospitals) (Saraji, Dargahi, 2006).

8. Limitations

Several limitations have been identified in this study. The sample includes only those personnel who wish to participate in the survey. Although the sample has a sufficient number of respondents (510 persons with a predetermined minimum sample size of 480 persons), the voluntary sampling methodology may limit the summarized of the findings. Using the self-assessment tool may have diminished the reliability of responses by letting the participant himself interpret the elements, which also increases the likelihood of misinterpreting some of them. The questionnaires were handed out to the staff by their managers. This strategy could allow the latter to put pressure on staff to respond in a certain way. Notwithstanding these limitations, the survey results make a significant contribution to existing QWL.

9. Conclusions

This study attempts to establish the influence of the healthcare institutions' ownership on the quality of working life of the workers in them. The main contribution of this study is to highlight the issue of perception of the quality of working life between the different groups of healthcare institutions - private, municipal, state.

The results of the survey showed that in private hospitals there is a significantly lower quality of working life. This is most pronounced in the social benefits Social benefits and Remuneration.

The main hypothesis of this study is confirmed.

Each organization wants to achieve its organizational goals, and it is necessary for it to have a satisfied and motivated workforce. Therefore, maintaining a high quality of working life in health organizations is important in order to achieve positive results. Although QWL is considered important, there are very few such surveys in Bulgarian hospitals. Therefore, this study is a pioneer for our country in QWL research and the impact of ownership of healthcare facilities on it. The findings should be used by health care managers to improve the quality of employees' working lives.

Our findings suggest that further studies are needed to clarify the reasons for these results. Future studies should include a larger sample and other significant variables, as well as explore more complex interactions.

Acknowledgements: Funding/Support: The research is on a project "Study of subjective perception of the quality of working life of health workers" financed by the Council of Medical Sciences of the Medical University of Sofia, GRANT 2017, Contract №D-104/02.05.2017 and Project №8366/07.12.2016.

Competing interests: The authors declare that they have no competing interests.
References:


Hlebush, V. N. (2012). To the question of the content of the concept "quality of working life". Science and the present, (15-4), 118-122.


Todor Kundurzhiev
Medical University,
Faculty of Public Health
8 Belo more st, Sofia 1527
Bulgaria
tgk_70@abv.bg

Yanka Prodanova
Medical University,
Faculty of Public Health
8 Belo more st, Sofia 1527
Bulgaria
drypetkova@gmail.com

Milena Yancheva-Stoicheva
Medical University,
Faculty of Public Health
8 Belo more st, Sofia 1527
Bulgaria
milena_stoy@yahoo.com

Nevena Tsacheva
Medical University,
Faculty of Public Health
8 Belo more st, Sofia 1527
Bulgaria
ntzacheva@yahoo.com

Iva Miteva
Medical University,
Faculty of Public Health
8 Belo more st, Sofia 1527
Bulgaria
mitevai@gmail.com

Lidia Hristova
Medical University,
Faculty of Public Health
8 Belo more st, Sofia 1527
Bulgaria
lidia_stm@abv.bg