проект зі значною невизначеністю результатів, високими ризиками, потребує ефективного управління, прогнозування індикаторів якості й ефективності ЛЗ, спрямованості одержання необхідних економічних показників проекту. За матеріалами досліджень розробляються методичні рекомендації.

## STUDY OF THE DIRECTIONS OF THE CALCULATION THE COST OF THE INDIVIDUAL EMPLOYEE BENEFITS OPTIONS

Zarichkova M.V., Dolgnikova O.M., Chesheva M.V.
Institute of Pharmacy Professionals Qualification Improvement
National University of Pharmacy, Kharkiv, Ukraine
uef-ipksf@nuph.edu.ua

Introduction. Today, the problem of regulation and financial support of the social and economic problems in Ukraine becomes relevant. The pharmaceutical sector of the health industry is not an exception. It is characterized by lack of significant range of unsolved social and economic problems. Thus, one of the areas of improvement of the system of social protection of pharmacy professionals (SPPhP) is the introduction of employee benefits that is quite common in foreign pharmaceutical companies and consists of a rather wide range of options. However, for Ukrainian pharmacy institutions, such component as SPPhP is not widespread and the social needs of the most vulnerable categories of PhP are not satisfied sufficiently

**The purpose** – to study the directions the calculation of the value of the pharmacy professional's individual options in a pharmacy institution.

**Methods**. The methodological basis of this study consists of general scientific and applied scientific research methods, including: methods of correlation relationships studying, methods of multivariate analysis (Data Mining algorithms, Association Rules, and Link Analysis), Friedman ANOVA for dependent samples. The abovementioned analysis was conducted by means of StatSoft Statistica software package.

Results and discussion. Problems of social security and social protection of pharmacy professionals were studied in the scientific works of the following scientists: Gromovyk B.P., Gudzenko O.P., Kabachna A.V., Kotvitska A.A., Mnushko Z.M., Nemchenko A.S., Parnovsky B.L., Ponomarenko M.S., Posylkina O.V., Slobodianiuk M.M., Tolochko V.M., Bratishko Yu.S., Kubarieva I.V. and others, but the issue of formation and implementation of the conception of SPPhP and particular directions of improvement of the system of social protection of pharmacy professionals in the current context have not been studied in their works. However, despite the growing interest of scientists and practitioners to this subject, the nature of SPPhP, its impact on the staff motivation and efficiency of their activities are still studied poorly.

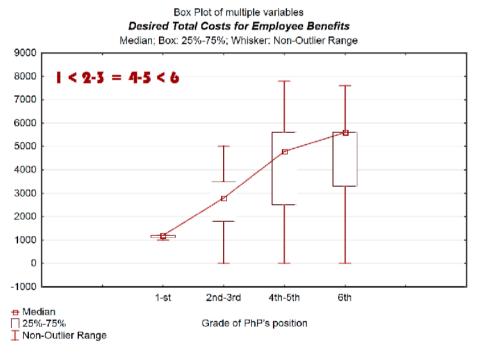
The phase of the study consists in the costs planning for the employee benefits, taking into account the regularities and the importance of each component, which were identified in the previous phases. At this phase, according to the respondents an analysis of desirable costs for individual options of the employee benefits, depending on PhP's position, has been conducted. According to these data, the estimated total cost of the employee benefits for the considered positions has been calculated separately.

Descriptive statistical analysis of the desirable expenses has been conducted previously. Due to the fact that none of the indicators were not characterized by the standard statistical law, along with the mean values their central tendencies were characterized by the median.

Friedman dependent samples ANOVA showed a high statistical significance of the differences in the total cost of the employee benefits for PhP's positions of different grades ( $\chi 2(N=84, df=3)=41,4483$ , p=0,00000 << 0,05). The pairwise intergroup comparisons of the costs of the employee benefits, conducted to elaborate the revealed differences applying the Wilcoxon criterion under Bonferroni correction for the comparative multiplicity, showed the significance of the differences between all groups except for the positions of  $2^{nd}$ - $3^{rd}$  and  $4^{th}$ - $5^{th}$  grades (Z=2,2014, p=0,027709>0,0083333=0,05/6), enabling to write down the following number of

advantages for the desired total cost of the employee benefits, depending on the position of PhP: the cost of the  $1^{st}$  grade < the cost of the  $2^{n\acute{a}}$ - $3^{r\acute{a}}$  grade = the cost of the  $4^{th}$ - $5^{th}$  grade < the cost of the  $6^{th}$  grade.

Thus, we can conclude that the total desirable cost of the employee benefits according to the respondent PhP's opinion shall increase, depending on the grade of their work position. At the same time, the indicated growth is statistically significant between the professionals, who work at the positions of the  $1^{st}$  -  $2^{nd}$  grade, between the professionals, who occupy positions of the  $4^{th}$  -  $5^{th}$  grade, in comparison with the heads of pharmacy institutions and directors ( $6^{th}$  grade). The difference in the cost of the employee benefits for professionals of the  $2^{nd}$  –  $3^{rd}$  grade in comparison with the  $4^{th}$  –  $5^{th}$  grade is not statistically significant (Figure 1).



**Fig. 1.** Graph of the total cost of the employee benefits depending on the grade of PhP's position

Conclusion. According to the obtained data regarding the desired total cost of the employee benefits and according to the developed at the previous phase scheme of optimal distribution of total costs for individual options, which provide the greatest satisfaction with the employee benefits, we can propose the calculation of the cost of the employee benefits for PhP depending on the grade of the occupied position.

On the basis of the proposed scheme of optimal filling of the employee

benefits, a cost calculation has been made for their options, which provide the desired total cost of the employee benefits, estimated on the basis of the data from the survey questionnaires of PhP of the pharmacy institutions of different forms of ownership. Four types of expenses are offered, depending on the grade of PhP's position.