Research on the motivation of pharmaceutical workers in pharmacies

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\textsuperscript{A} – research concept and design; \textsuperscript{B} – collection and/or assembly of data; \textsuperscript{C} – data analysis and interpretation; \textsuperscript{D} – writing the article; \textsuperscript{E} – critical revision of the article; \textsuperscript{F} – final approval of the article

The purpose of work was to study the motivating and demotivating factors of the activity of pharmaceutical staff and the conditions of increasing their work activity.

Materials and methods. The material for our research was statistically processed information that was obtained during the survey of pharmaceutical specialists of pharmacies that differ in the degree of market coverage (national-pharmaceutical organization 1 (PhO \# 1), local-pharmaceutical organization 2, 3 (PhO \# 2, \# 3)) and types (ready pharmacy drugs – PhO №1, pharmacy with manufacturing of drugs – PhO \# 2, \# 3). In the course of the study, methods of analysis, synthesis, grouping, questioning and the method of F. Herzberg were used.

Results. The factors of motivation, of activity, of pharmaceutical personnel were investigated as material stimulation, moral stimulation, measures of administrative influence, labor mood of the collective, desire to achieve respect in the collective, fear of losing work. As a result of comparing the estimates of motivation factors in pharmacies of both types, it was found that PhO \# 1 the leading factor of motivation was the working mood of the team (Wij = 1), and in PhO \# 2, \# 3 were the material stimulation (Wij = 1). It was studied the factors of employee demotivation using the F. Herzberg method as direct management and control, working conditions, interpersonal relationships, wages and stability of work, internal organization policy towards the staff.

The results’ calculations were shown that the most significant demotivating factors for the employees of the PhO \# 1 were the system of interpersonal relationships (Wij = 1) and direct control (Wij = 0.97). It has been studied the opinions of pharmaceutical workers on the creation of certain conditions in order to enhance their work. It was determined that the most significant conditions for increasing motivation in the PhO \# 1, in terms of its employees, was to get high wages (Wij = 0.98), stability (Wij = 0.95), rational management requirements (Wij = 0.94), harmonious relationships in the team (Wij = 0.93), bonuses for quality of work (Wij = 0.93), career growth (Wij = 0.92) and comfortable working conditions (Wij = 0.92).

Conclusion. Comparative analysis of motivation factors in pharmacies showed that in pharmacies of the first type the leading factor of motivation was the working mood of the team, and of the second type pharmacies – material stimulation. Also important for employees of pharmacies of general type. The study of demotivating factors showed that in pharmacies of both types, unstable interpersonal relationships had a negative effect on motivation. The analysis of conditions of increase of motivation showed that in PhO № 1 it was important to receive high wages and its stability, and for PhO \# 2, \# 3 – harmonious relationships in the team, bonus system.
Motivation is closely related to the effective work of the staff, their ability to be persistent and to overcome obstacles, to work with full dedication and enthusiasm. Undoubtedly, staff motivation is one of the most important management functions and a paramount task in the daily activities of the head of a pharmaceutical organization. It is known that the direction and nature of the employee’s work behavior are based on certain motives, internal directions and personal values. In turn, the motives and interests of the individual are based on unmet needs. Thus, the better the manager understands the needs of the staff, the greater the likelihood of influencing his behavior and the ability to change it [1–7].

**Aim**

The purpose of the research was to study the motivating and demotivating factors of the activity of pharmaceutical staff and to study the conditions of increasing their work activity.
Materials and methods
The material for research was statistically processed information that was obtained during the survey of pharmaceutical specialists of pharmacies that differ in the degree of market coverage (national-pharmaceutical organization 1 (PhO # 1), local-pharmaceutical organization 2, 3 (PhO # 2, # 3)) and types (ready pharmacy medicines – PhO # 1, pharmacy with manufacturing of medicines – PhO # 2, # 3). In the course of the study, methods of analysis, synthesis, grouping, questioning and the method of F. Herzberg were used.

Results
At the first stage, the motivation factors of pharmaceutical personnel activity were investigated: material stimulation, moral stimulation, measures of administrative influence, labor mood of the collective, desire to achieve respect in the collective, fear of losing work. These motives were proposed for evaluation by the 5-point system for pharmaceutical workers in the tested pharmacies.

The comparative characteristic of PhO is shown in Table 1.

To determine the relevance of individual motives to the work of the staff, the results of the motive assessment questionnaire are recalculated to the corresponding unit weight (Wij). For this purpose, the answers for each motive were summarized. The motive that has the highest rating is accepted as 1. The significance of the remaining motives was calculated as the ratio of the sum of the responses to the parameter that received the maximum score (Tables 2, 3).

Table 1. The comparative characteristic of pharmaceutical organization

| Criteria               | PhO # 1 | PhO # 2 | PhO # 3 |
|------------------------|---------|---------|---------|
| Market coverage        | national| local   | local   |
| Number of pharmacists  | 15      | 12      | 14      |
| and pharmaceutists     |         |         |         |
| Type of service        | Sale of medicines to the population | Sales of medicines to the population and hospital departments | Sales of medicines to the population and hospital departments |

Table 2. Evaluation of motives for work of pharmaceutical staff PhO # 1

| Motives for work                  | Rank | The specific weight of the component (Wij) |
|------------------------------------|------|-------------------------------------------|
| The working mood of the team       | 1    | 1.00                                      |
| Material incentives                | 2    | 0.97                                      |
| Moral stimulation                  | 3    | 0.87                                      |
| The desire to achieve respect in the team | 4    | 0.85                                      |
| Measures of administrative impact  | 5    | 0.77                                      |
| Fear of losing your job            | 6    | 0.68                                      |

Table 3. Evaluation of motives for the work of pharmaceutical staff PhO # 2, PhO # 3

| Motives for work                  | Rank | The specific weight of the component (Wij) |
|------------------------------------|------|-------------------------------------------|
| Material incentives                | 1    | 1.00                                      |
| Moral stimulation                  | 2    | 0.98                                      |
| The working mood of the team       | 2    | 0.98                                      |
| Measures of administrative impact  | 3    | 0.92                                      |
| The desire to achieve respect in the team | 4    | 0.88                                      |
| Fear of losing your job            | 5    | 0.60                                      |

Table 4. Estimation of factors of demotivation PhO # 1

| Demotivation factors             | Rank | The specific weight of the component (Wij) |
|-----------------------------------|------|-------------------------------------------|
| Interpersonal relationships       | 1    | 1.00                                      |
| Direct management / control       | 2    | 0.97                                      |
| Internal policy of the organization towards the staff | 3    | 0.96                                      |
| Working conditions                | 4    | 0.93                                      |
| Salary and reliability            | 4    | 0.93                                      |
Table 5. Assessment of factors demotivation PhO # 2, # 3

| Demotivation factors                                                   | Rank | The specific weight of the component (Wij) |
|-----------------------------------------------------------------------|------|------------------------------------------|
| Interpersonal relationships                                          | 1    | 1.00                                     |
| Salary and reliability                                               | 1    | 1.00                                     |
| Working conditions                                                    | 2    | 0.89                                     |
| Direct management / control                                          | 3    | 0.87                                     |
| Internal policy of the organization towards to the staff             | 4    | 0.77                                     |

Fig. 1. Assessment of conditions for increasing the employment of pharmaceutical staff.
At the next stage, the factors of employee motivation were studied using the F. Herzberg method: direct management and control, working conditions, interpersonal relationships, wages and stability of work, internal organization policy towards the staff (Tables 4, 5).

Important role on the system of personnel motivation is played by conditions of increasing the labor activity of pharmaceutical personnel: high and stable salary, career opportunities, social guarantees, self-realization, possibility of advanced training, optimal bonus system, possibility of displaying independence and initiative, creative activity, conflict-free conflicts in the team, the possibility of self-development and professional improvement, satisfactory working conditions, reasonable administration requirements.

The next step in our work was to study the opinions of pharmaceutical workers on the creation of certain conditions in order to enhance their work. The interview method was used for this purpose.

The results of this study are shown in Fig. 1.

Discussion

As a result of comparing the estimates of motivation factors in pharmacies of both types, it was found that in the first type of pharmacies the leading factor of motivation is the working mood of the team (Wij = 1), and in hospital pharmacies the material stimulation (Wij = 1). At the same time, material incentives are also important for employees of pharmacies of general type (Wij = 0.97). A significant factor for pharmacies of both types is moral incentive (Wij ranges from 0.87 to 0.98).

Administrative impact measures were more important for PhO # 2, # 3 staff (Wij = 0.92) than for pharmacy staff PhO # 1 (Wij = 0.77).

It should be noted that factors such as the desire to achieve respect in the team and the fear of losing work slightly affect the work activity in both types of pharmacies (Wij from 0.85 to 0.87 in the first case and, accordingly, Wij from 0.60 to 0.68 in the second).

The results calculations (Tables 4) showed that the most significant demotivating factors for the employees of the PhO # 1 were the system of interpersonal relationships (Wij = 1) and direct control (Wij = 0.97). That is, if the team had a bad psychological climate and the administration brutally controls the staff, then the motivation to work in the latter was significantly reduced.

Also, the internal staffing policy of the organization was important for pharmaceutical personnel (Wij = 0.96). Employees of the PhO # 1 would like to feel the attention, involvement, understanding and care of the administration.

The least important factors in demotivation were working conditions (Wij = 0.93), wages and stability (Wij = 0.93).

In PhO # 2, # 3 (Table 5), from the perspective of pharmaceutical workers, the most demotivating factors were adverse interpersonal relationships (Wij = 1) and wages and reliability (Wij = 1). Unfavorable working conditions (Wij = 0.89), direct management and control (Wij = 0.87) also reduce the motivation of pharmaceutical workers.

A comparative analysis of the demotivating factors in pharmacies of both types showed that interpersonal relationships were important for their employees. If they were unfavorable, the motivation of pharmaceutical workers is reduced.

It should be noted that in pharmacy pharmacies an important disincentive was the size of wages and its stability, while in general type pharmacies this factor did not play an important role.

The difference in the assessment of disincentives in pharmacies of various types also relates to the internal policy of the organization in relation to staff and working conditions.

In the course of work (Fig. 1), it was determined that the most significant conditions for increasing motivation PhO №1, in terms of its employees, was to get high wages (Wij = 0.98), stability (Wij = 0.95), rational management requirements (Wij = 0.94), harmonious relationships in the team (Wij = 0.93), bonuses for quality of work (Wij = 0.93), career growth (Wij = 0.92) and comfortable working conditions (Wij = 0.92).

Less important are self-realization (Wij = 0.86), the possibility of development and self-improvement (Wij = 0.86), interesting creative activity (Wij = 0.80), the possibility of independence and initiative (Wij = 0.78), social guarantees (Wij = 0.64).

Pharmaceutical employees of pharmacy pharmacies consider the most effective conditions for increasing motivation: harmonious relationships in the team (Wij = 1.0), bonus system (Wij = 1.0), advanced training (Wij = 0.98), rational requirements of administration (Wij = 0.96), receiving high wages (Wij = 0.93), social guarantees (Wij = 0.92), comfortable working conditions (Wij = 0.92), and wage stability (Wij = 0.92).

Less important for these employees were the possibility of independence and initiative (Wij = 0.85), interesting creative activities (Wij = 0.84) and career growth (Wij = 0.82).

It should be noted that the opinions of pharmaceutical workers of these types of pharmacies regarding the conditions of increasing motivation have some differences. So, if in general type pharmacies the most important are employees' salaries and their stability, rational requirements of management, harmonious relationships in the collective, then in pharmacies at the hospital in the first place: harmonious relationships in the collective, bonuses, the possibility of advanced training.

Conclusions

1. Comparative analysis of motivation factors in pharmacies showed that in pharmacies PhO # 1 the leading factor of motivation was the working mood of the team (Wij = 1), and PhO # 2, # 3 – material stimulation (Wij = 1). Also important for employees PhO # 1 (Wij = 0.97).
2. The study of demotivating factors showed that in pharmacies of both types, unstable interpersonal relationships (Wij = 1) have a negative effect on motivation.
3. The analysis of conditions of increase of motivation showed that PhO # 1 it was important to receive high wages.
and it was stability (Wij = 0.95), and PhO # 2, # 3 – harmonious relationships in the team (Wij = 1.0), bonus system (Wij = 1.0).

**Prospects for further research:** analysis of the interaction of factors of motivation and demotivation to improve the microclimate in pharmacies.

**Conflicts of interest:** authors have no conflict of interest to declare.

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