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Personnel Work Motivation as Medical Care Quality Factor

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Abstract

A role of motivation system of medical staff work in a management system of medical care quality is justified in the article. It has been demonstrated that a process of ongoing development of work motivation system for the medical personnel especially primary care forms the basis of continuous quality improvement of medical aid. Basic areas of current motivation system and attitudes of physicians and nursing personnel to a work motivation system have been investigated. An analysis of differences in responses of physicians and nursing personnel has shown a similarity of reasons for dissatisfaction of working conditions in out-patient clinics and causes of conflicts and also ways of their prevention and resolving. A data analysis has revealed that hygiene and motivating factors of labour activity stimulation have the medium degree of intensity which is evidence of equal importance of the factors both to physicians and nursing personnel. Findings have permitted to identify peculiar features of work motivation for primary care medical staff, reveal main issues and propose lines of development of present motivation system in an institution work as a means of medical aid quality increase. Elaboration and implementation of section on a work motivation in the medical care management system has been offered as one of the development lines for quality improvement continuous system on the basis of a system of personnel work motivation management.

Keywords: work motivation, medical care quality, public health service, healthcare organization, personnel.

Introduction

These days demand from heads of organizations to create such a work environment as would have motivated workers for their professional growth and achievement of results of their activity [1]. A motivation policy has been recognized as one of effective management tools [2]. A problem of skilful building of a personnel motivation system now takes an increasing place in theory and practice of personnel management in the health care sphere [3].

It has been recognized that a system of work motivation management is one of elements of medical care quality management [4]. Relevance and necessity of assessment of motivation in the primary care medical personnel work are conditioned by a priority of preventive treatment in the health protection sphere. Manpower resources have direct impact on an efficiency of principal activities of health care institutions: elaboration and implementation of measures for prevention and control of spread of diseases, medical aid delivery organization. In this regard one of high-priority tasks for an executive staff of organizations is activities on a professional competence development of clinical staff [5].

A system of work motivation management is one of resources for improvement of medical care quality [6].

The foundation for increasing the quality of both medical aid and human life in the whole is the work motivation of medical staff. A research of work motivation of primary care medical personnel on which early detection and treatment of diseases depend is of particular interest.

Research objective

An objective of the research is a generation of proposals to improve a motivation management system for the primary care medical personnel.

To achieve the research objective the following tasks have been assigned and solved:

- attitude of medical staff to an acting motivation system;
- to define prime factors of satisfaction by labour conditions and compensation;
- investigation of psychosocial climate in team and organization in the whole;
 - study of mutual relations of leadership and team.

MATERIALS AND METHODS

The research object was autonomous municipal medical institution "City Polyclinic \mathbb{N} 2". The primary activity of health care organization is aimed at an implementation of program of government-funded affordable free health care of good quality for contractual population patients in number of 101.3 thousand persons, of which a one fourth – child population. A number of polyclinic staff was at the time of research 648 persons, of which 179 – physicians (27.6%), nursing personnel – 337 workers (52%), others – 132 employees (20.4%). Qualified doctors were represented by therapists – 53 respondents (29.6%), pediatricians – 32 workers (17.9%), and doctors of particular specialities – 94 employees (52.5%).

The research was carried out in 2016-2017 by questionnaire-based survey method. The survey was anonymous. Observation units were health care workers: doctors and nursing personnel. A total of 74 persons were questioned that accounted for 14.3% of medical personnel overall number. In conformity with research tasks the sampling population was represented predominantly by doctors – 44 persons (59.5%) that was 25% of their total number. A number of surveyed paramedical and caretaking personnel accounted for 30 workers (8.9% of their overall number). The sampling population was represented by 6.7% male respondents (5 persons) и 93.3% female respondents (69 persons) that corresponded to the statistical universe structure.

A study of attitude of medical staff to a personnel motivation system in effect in the organization was conducted on the ground of six questionnaires intended to:

- assessment of working conditions;
- determination of causes of conflicts arising in a team;
- search of ways for prevention of probable conflict situations;
- identification of causes of dissatisfaction with working conditions;
- revealing of reasons for dissatisfaction with labour compensation;
 - definition of mutual relations of leadership and team.

The questionnaires contained a various number of questions with five answer variants: yes, rather yes, rather no, no, don't know.

With a view to determine prime factors contributing to work motivation enhancement, a concept of F. Herzberg based on a division of motivation factors into the following groups: hygiene factors and motivators, was used. For these purposes F. Herzberg questionnaire permitting to identify primary parameters that have influence on worker motivation sphere was applied [7; 8; 9].

An analysis of survey findings was carried out with the use of software «Statistica». A statistical analysis of differences in answers was conducted on the basis of Mann-Whitney test, while developed hypotheses for differences in answers among physicians and nursing personnel were tested on the ground of Fisher's exact test.

RESULTS AND DISCUSSION

A study of motivational mechanism must take into account nature and conditions of work of medical personnel [3; 10].

The dominating factor that determines and improves an efficiency of labour and hence a medical care quality are working conditions (Table 1).

Table 1. Description of working conditions of doctors and primary care nursing personnel in the polyclinic.

Variants of answers	in %
Even rate of work	40.5
Workplaces are well equipped	52.8
Health risks exist in the workplace	64.8
Are satisfied with conditions, in which they work	68.9
Work is difficult and heavy	71.6
Experience stress at their work	74.3
High extent of responsibility	86.5
Perform their work independently	89.3

In the course of statistical manipulation of questionnaire survey findings permitting to assess working conditions in the establishment on the basis of Mann-Whitney test and Fisher's exact test, an analysis of differences in the assessment of working conditions by various categories of personnel (medical and nursing staff) was carried out. This made it possible to define areas for improvement of working conditions as applied to a concrete category of medical institution personnel.

The analysis results made it possible to draw a conclusion that according to the most of questionnaire points the hypothesis for differences in working conditions of doctors and nursing personnel was not verified. At the same time, there are discrepancies presented in Table 2 by specific elements of working conditions.

Table 2. Discrepancies in description of working conditions for medical personnel categories (in %).

Variants of answers	Doctors	Nursing personnel
Attention of management to requests	86.4	16.6
Even rate of work	30.0	60.0
Experience stress at their work	84.0	60.0
Creative nature of work	79.5	43.3
Interesting job	30.9	79.3
Ambition for administrative work in their establishment	31.8	73.3

So differences in description of working conditions have been indicated by the following entries:

- attentive attitude of senior management to proposals and requests is more typical to doctors;
- nursing personnel is characterized by more even rate of work in comparison with doctors. A stressful nature of work is more obvious also for doctors;
- creative nature of job as well as interest for it have more typical expression in doctor's specialities. At the same time it is conditioned by objective distinctions in the job content of doctors and nursing personnel;

- nursing staff shows more ambitions for participation in the administrative work in the medical institution under study.

The following factors were indicated by respondents among factors of dissatisfaction with working conditions: work schedule (48.6%), deficiency of job careful scheduling (40.6%) and poor equipping of workplaces (35.2%). A lack of attention on the part of management is wounding for every fifth respondent (21.6%) (Table 3).

On the ground of Fisher's test, the following hypothesis that doctors and nursing personnel find different causes of dissatisfaction with working conditions in the polyclinic was tested. The statistical analysis showed that the hypothesis was not verified and medical staff as opposed to nursing personnel laid emphasis on a deficiency of careful scheduling of work as a job organization fault in the polyclinic. The following factors were more important to doctors too: poor equipping of the workplaces, lack of attention on the part of management and also frequent work stoppages. To the nursing personnel the most sensitive factor of dissatisfaction with working conditions was the work schedule.

Table 3. Causes of dissatisfaction by working conditions of doctors and nursing personnel (in %).

Variants of answers	Doctors	Nursing personnel
Work schedule	45.0	60.0
Frequent work stoppages	27.5	13.3
Lack of attention on the part of management	27.5	43.3
Poor equipping of the workplaces	45.0	26.6
Deficiency of careful scheduling of work	54.5	20.0

Having analyzed the data of answers to the questions that make it possible to reveal causes of conflicts in a team, a conclusion may be drawn on existing problems in the system of personnel financial incentives. The primary reason for arising of conflicts in the judgement of respondents was the unfair distribution of incentive payments. Three fourths of inquired persons consider that a compensation of their job is directly related to work performance and disagree with the allocation of fund of incentive payments (Table 4).

Table 4. Main causes of conflicts arising in a team.

Variants of answers	In %
Unfair distribution of incentive payments	75.7
Unjust assignment of work responsibilities	43.2
Insufficiency of financial and logistical support	41.9
Frequent change of job duties	29.7

A considerable part of surveyed persons rates unjust assignment of work responsibilities (43.2%) and insufficiency of financial and logistical support (41.9%) to causes of conflicts occurring in a team. Almost 30% of respondents indicate a frequent change of job duties as the factor of arising of conflict situation in a collective. The distribution of answers to this question in the context of personnel categories showed that doctors found reasons for conflict situations in the first instance in the unjust assignment of work responsibilities (45.5%), while the nursing personnel - in the insufficiency of financial and logistical support (46.6%). In the meantime, the nursing personnel as compared to doctors considered incapacity of management (26.6%), disregard of ideas and proposals (30.0%) and unfair scheduling of vacations (16.7%) as more important causes of conflicts (Table 5).

Table 5. Differences in reasons for conflict situations between doctors and nursing personnel (in %).

Variants of answers	Doctors	Nursing personnel
Inefficient managerial style	25.0	16.6
Incapacity of management	20.4	26.6
Frequent change of job duties	29.5	30.0
Frequent replacement of department staff	27.3	23.3
Unjust assignment of responsibilities	45.5	40.0
Insufficiency of financial and logistical support	38.6	46.6
Unfair distribution of incentive payments	34.1	33.3
Disregard of ideas and proposals	18.1	30.0
Unfair scheduling of vacations	11.4	16.7

During the survey respondents had an opportunity to choose ways from proposed options to prevent probable conflict situations which could occur in a team. Variants of answers on the whole sampling population are presented in order of importance in Table 6. A statistical manipulation of data on the matter has shown that various categories of medical personnel see similar ways to prevent probable conflicts. In the first place in the whole and in context of personnel categories primary ways to prevent conflict situations are the clearness of strategy and tactics.

Table 6. Ways for prevention of probable conflict situations (in %).

		Among them		
Variants of answers	Total	Doctors	Nursing personnel	
Clearness of strategy and tactics	81.1	79.5	83.3	
Pursuit of common goal	77.1	75.0	80.0	
Attention to needs of subordinates	75.7	72.2	80.0	
Payment by job performance	73.0	70.5	76.6	
Retraining and learning	70.3	65.9	76.6	
Skill improvement	66.2	70.5	60.0	
Personnel replacements	36.5	45.5	23.3	
Management performance appraisal	33.7	43.2	20.0	

Many problems arising in organizations depend to one extent or another on their staff qualification. A resolution of occurring problems is possible in opinion of 66.2% of inquired persons by means of improvement of personnel professional competence, but in context of personnel categories this way is of higher value for doctors than for nursing personnel. The most of respondents considered personnel replacements and management performance appraisal as a not so currently important way to prevent conflict situations.

A payment by job performance as a method of prevention of conflict situations was in the fourth place of eight proposed references. Dissatisfaction with labour compensation in the aggregate with intensive and hard working conditions is a reason for outflow of personnel from an organization and, as a consequence, can result in economic losses and reduction of performance indicators of organization activity and also increase the transaction costs associated with recruitment, training of staff, malperformance of institution work.

When asked the question aimed at revealing of reasons of dissatisfaction with the compensation of labour, respondents had the opportunity to assess proposed answer variants and also offer their own ones. Thus, the distribution of answers to standardized variants demonstrated that for more than three fourths of polled persons wage rate and interdependence of labour and their remuneration were unacceptable, while more than one half of polled persons were dissatisfied with the incentive system

(56,8%), thereat one fourth of polled persons were undecided with the last criterion (Table 7).

Table 7. Satisfaction with labour compensation (in %).

Criteria of satisfaction with labour compensation	Yes	Rather yes	Rather not	Not	Don't know
Salary rate	9,5	2,7	16,2	60,8	10,8
Interdependence of labour and their remuneration	12,2	6,7	17,6	47,3	16,2
Incentive system	13,5	5,4	9,5	47,3	24,3

Respondents indicated retention of large volume of incentive payments in most cases in free answers as a cause of dissatisfaction with labour compensation conditions. These managerial decisions have no motivating impact on workers that appears in a loss of initiative and responsibility, view of stay at their work by workers as the usual pastime that results in reduction of job performance and degradation of medical care quality. According to questionnaire survey findings, the majority of surveyed medical personnel of polyclinic were dissatisfied with the labour compensation system and made no direct connection of job performance with its remuneration. This leads to decrease in work activity and, as a consequence, to an impairment of quality of health care delivery [6].

Questions that permit to give an assessment of relation on the part of polyclinic management and collective were presented in the last part of questionnaire. The analysis results make it possible to draw a conclusion that the attitude of senior management is the same both to nursing personnel and doctors. Along with that the hypothesis was not either verified or rejected with regard to attitude of their own team. It should be noted that the nursing personnel experience more strain in mutual relations with the collective.

Table 8. Assessment of kindness in a team.

Variants of answers	
Division staff	73.0
Immediate supervisor	75.6
Organization management team	51.4
Organization collective in the whole	55.4
Noninvolvement of superiors	17.6

Work activity leads to a specific result in specified conditions that depend on managerial approach and development of work behaviour motivation of polyclinic personnel.

In the whole the analysis of questionnaire survey data permitted to draw conclusion that both positive aspects and negative ones were noted in the organization motivation policy. Thus, as positive aspects three fourths of respondents note kind relations in the division where they work and in their team and relationship on the part of immediate supervisors, and also draw attention to an absence of conflicts in their division.

A little over one half of respondents indicate kindness in their collective in the whole and the relationship on the part of organization management. The positive aspect for 83.8% of surveyed persons is the interesting work itself (Table 8).

Negative aspects of institution motivation policy are expressed in such criteria as: low salaries (77.0%), stressful situations (74.3%), health risks due to overstrain and raised rhythm of work (about 65%).

The findings of study of work activity satisfaction factors and causes of labour efficiency and quality that was carried out according to the method of F. Herzberg are presented

in Table 9. The averaging of results was carried out by arithmetical mean formula.

According to the testing results, all the factors have the medium level of intensity for personnel of medical institution under study – average score falls within the limits from 12 to 23. However, the most important factors can be emphasized among them, to which it is worth paying attention when developing a work motivation system: financial reasons with the average score 20.9 and job content motives (average score 19.6).

It is interesting to note that first three of the most important factors fall in the group of hygiene factors and just a factor of achievement of personal success fits into the group of motivators. A motive of lower value to the personnel is the relationship with management (16,4).

Table 9. Testing results according to F. Herzberg.

Motivators		Hygiene factors	
Career, job advancement	15.1	Relationship with management	16.4
Responsibility of work	15.4	Cooperation in a team	18.5
Social esteem	15.3	Content of job	19.6
Achievement of personal success	18.3	Financial reasons	20.9

At the next stage factors of work activity stimulation were divided into two groups: hygiene factors and motivators. So, motivators in the aggregate amounted to 64.3%, and hygiene factors – to 75.7%.

Both hygiene factors and motivators of work activity stimulation in the polyclinic have a medium degree of intensity (average score falls within the limits from 57 to 85). This is indicative of equal importance of hygiene factors and motivators to primary care doctors and nursing personnel. Nevertheless, higher importance of hygiene motives coupled with dissatisfaction with specific hygiene factors based on the results of anonymous questionnaire survey (lack of direct connection of job performance and its remuneration) may lead to the dissatisfaction with job in the whole.

CONCLUSIONS

The results obtained in the course of conducted survey of medical personnel have allowed to make a number of inferences:

- a disproportion of methods of material incentives and moral encouragement is observed in the work motivation system;
- analysis of differences in answers of doctors and nursing personnel has shown the similarity of reasons for dissatisfaction with working conditions in the polyclinic and causes of conflicts, as well as ways of their prevention and resolution;
- hygiene factors and motivators of work activity stimulation have the medium degree of intensity, that bears evidence of equal importance of factors both to doctors and to nursing personnel.

The improvement of management of motivation system in the work of primary care medical personnel should be an integral part of system for continuous improvement of medical care quality to the general public. Basically, this is a new motivation method of medical aid quality management that requires a comprehensive coordinated approach. An implementation of system for the continuous quality improvement on the basis of steady development of system of motivation management in the staff work provides for an establishment of new partnership relations between institution administration and workers, personnel and patients, and also for creation of favourable environment on the ground of team involvement into

an achievement of institution activity performance targets. When managing the organization motivation policy, it is necessary to put a focus on the establishment of favourable environment by means of transparent work remuneration and stimulation system, creation of healthful working conditions [7]. The improvement of incentive management process may comprise elaboration and implementation of section on a work motivation in the quality management system, optimal combination of material incentives and moral encouragement, raising a level of personnel awareness about incentive programs in the institution. Finally the work motivation system should aim the staff at an achievement of results essential the organization.

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