

# MULTIPLE ASSESSMENT OF THE NURSES WORK QUALITY IN MEDICAL ASSISTANCE FOR ELDERLY PATIENTS

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## ABSTRACT

In modern conditions of development of health care with the increasing importance of nursing staff in the situation of expanding treatment methods increases the role of the analysis of the quality of nursing care, because the quality of nurses depends on the economic and effective components of medical care. Particular importance is attached to the development of methods of quantitative assessment of the quality of nurses in hospitals.

**Keywords:** nurses, activity assessment, elderly patients, quality of work

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## INTRODUCTION

Nowadays, health care reform actively develops in Russia, especially its modernization. Nursing is an essential part of the health care system, with significant human resources and real potential to reform a market economy.

Nursing is an independent profession that goes with the medical care, and the nurse functions much broader than simply fulfilling doctor's prescriptions. In order to meet modern requirements, a nurse should know patient characteristics, social and psychological assistance, in addition to the norms of health and the basics of nursing care [1,2,3].

Federal Law No. 323-FZ from November 21, 2011. "On the basis of the protection of public health in the Russian Federation" tell us about the basic concepts in this area. For instance: health, medical care, medical service, medical activity. It presents a comprehensive concept of health care, which is interpreted as a system of a political, economic, legal, social, scientific, medical, including sanitary and anti-epidemic (preventive) character. It is carried out by Russian authorities, local governments, organizations, officials and other citizens in order to prevent diseases, strengthen mental health of every person, maintaining its long and active life, providing him with medical treatment. In this three-dimensional concept, we can trace the role of a nurse involved in the prevention, diagnosis, treatment and rehabilitation of patients, especially since the law mentions the provision of medical care, especially when it comes to patients of older age groups [4,5,6].

The reference document "Standards of a nurse practical activity", adopted by the Association of Nurses in Russia from June 10, 1998, states that nurses play one of the leading roles in solving the tasks of medical and social assistance to the elderly and seniors and improving the quality and effectiveness of medical services nursing staff in a medical organization. The functions of the nurse are varied and her activity concerns not only the diagnostic and therapeutic process, but also the care of patients in order to fully rehabilitate the patient [7,8,9,10].

## RESEARCH OBJECTIVE

Develop a methodology for performance evaluation of nursing activities.

## RESEARCH METHODS

Statistical processing of research results included the usage of the following methods: calculation of average absolute and relative values with the calculation of the average error; determination of the distribution pattern. For this, we used the  $\chi^2$  method, assessing the significance of differences between the two sets. Applied Student-t criteria. In describing the results of the study, we used generalized characteristics of the totality, for example, for quantitatively expressed features — average values ( $M$  — arithmetic average), for attribute — correlation indicators. To assess the reliability of generalized characteristics, we used the average error of the arithmetic mean ( $m$ ) - (for quantitatively expressed features); average error of the relative indicator ( $m$ ) - (for attributes).

The method of continuous sampling was formed statistical aggregate - hospital nurses, in our case, working in State Budgetary Healthcare Institution Konchalovsky city clinical hospital ( $n = 112$ ).

## RESULTS

The activities of hospital nurses are multifaceted. It requires careful analysis and evaluation.

In the course of the study, a method of generalized assessment of the quality of nursing activity was developed. The assessment of the quality of nursing activity is based on four criteria:

1. Evaluation of medical prescriptions quality.
2. Assessment of the care quality of elderly patients and associated age-depended syndromes.
3. Assessment of the care quality for bed rest patients.
4. Willingness to provide emergency care to elderly patients.

In accordance with the clinical and social significance, each criterion is assigned by an expert method by scoring:

- assessment of the quality of performance of medical appointments - 4
  - assessment of the observation quality of elderly patients with concomitant age-depended syndromes - 3.5
  - assessment of the care quality for the disabled patients - 4
  - willingness to provide emergency care to elderly patients – 8,5
- Each of these criteria is evaluated by 4 indicators on the following scale:

1 criterion - assessment of the performance quality of medical prescriptions - has the following indicators:

- T - timely fulfillment of doctor's prescriptions – 1,0;
- F - full compliance of doctor's prescriptions – 1,5;
- E - exact fulfillment of doctor's prescriptions – 1,0;

CI - reasonable claims of patients – 0,5.  
 The optimal score is 4 points.  
 The calculation was carried out according to the formula:  
 $QAMP = T + F + E + CI$ , where  
 QAMP - quality assessment of medical prescriptions.  
 On the example of a nurse N:  
 T - timely fulfillment of doctor's prescriptions – 0,9;  
 F - full compliance of doctor's prescriptions – 1,4;  
 E - exact fulfillment of doctor's prescriptions – 1,0;  
 CI - reasonable claims of patients – 0,4.  
 When counting, it turned out for nurse N (example):  
 $QAMP = 0,9 + 1,4 + 1,0 + 0,4 = 3,7$  points  
 2 criterion - assessment of the monitoring quality of elderly patients with age-depended syndromes - has the following indicators:  
 GC - general care – 1,0;  
 SC - special care – 1,0;  
 PC - psychomatic care – 1,5.  
 Optimal estimate – 3,5 points.  
 The calculation was carried out according to the formula:  
 $MQA = GC + SC + PC$ , where  
 MQA – monitoring quality assessment  
 GC – general care  
 SC – special care  
 PC – psychomatic care  
 On the example of a nurse N:  
 GC – general care - 1,0;  
 SC – special care – 0,8;  
 PC – psychomatic care – 1,3.  
 $MQA = 1,0 + 0,8 + 1,3 = 3,1$  points.  
 3 criterion - assessment of the care quality for elderly patients - includes indicators:  
 H - hygienics – 1,0;  
 C - catering – 1,0;  
 SHA - self-help assistance – 0,5;  
 CI - reasonable claims of patients – 1,5.  
 Optimal estimate – 4 points.  
 The calculation was carried out according to the formula:  
 $CQA = H + C + SHA + CI$ , where  
 CQA – care quality assessment  
 H – hygienics  
 C – catering  
 SHA – self-help assistance  
 CI – reasonable claims of patients  
 On the example of a nurse N:  
 H – hygienics – 0,9;  
 C – catering – 0,9;  
 SHA – self-help assistance – 0,5;  
 CI – reasonable claims of patients – 1,4.  
 $CQA = 0,9 + 0,9 + 0,5 + 1,4 = 3,7$  points.  
 4 criterion - readiness of emergency care for elderly patients has the following indicators:  
 SB - willingness to provide emergency care in case of shortness of breath – 2,0;  
 PA - willingness to provide emergency care for psychomotor agitation – 3,0;  
 PS – willingness to provide emergency care for pain syndrome – 3,5;  
 Optimal estimate – 8,5 points.  
 The calculation was carried out according to the formula:

$WEC = SB + PA + PS$ , where  
 WEC – willingness to provide emergency care  
 SB – willingness to provide emergency care in case of shortness of breath  
 PA – willingness to provide emergency care for psychomotor agitation  
 PS – willingness to provide emergency care for pain syndrome  
 On the example of a nurse N:  
 $WEC = 1,8 + 2,8 + 3,4 = 8,0$  points.  
 Based on the scoring criterion accepted by us, which reflects the main, total nursing activity, it is determined by 20 points and calculated by the formula:  
 $N = QAMP + MQA + CQA + WEC = 4 + 3,5 + 4 + 8,5 = 20$  points, where  
 N – nursing  
 QAMP – quality assessment of medical prescriptions  
 CQA – care quality assessment  
 MQA – monitoring quality assessment  
 WEC – willingness to provide emergency care

### DISCUSSION

In the given example, the assessment of the activities of a nurse (N) the values of these criteria did not coincide with the optimal scoring, resulting in accordance with the formula:  
 $N = QAMP + MQA + CQA + WEC = 3,7 + 3,1 + 3,7 + 8,0 = 18,5$  points.  
 Consequently, nursing cannot be classified as ideal, cited as an example of a nurse (N). However, the missing 1.5 points characterizes it relatively well.  
 The nursing quality assessment of all nurses involved in the provision of medical care to elderly patients in the hospital, allowed us to identify 3 groups depending on the scoring gradation of nursing activities (Table 1).

**TABLE 1: TOTAL ASSESSMENT OF NURSING QUALITY IN STATE BUDGETARY HEALTHCARE INSTITUTION KONCHALOVSKY CITY CLINICAL HOSPITAL**

Nature of scoring	Nursing quality assessment criteria					Number of nurses with indicated points
	quality assessment	monitoring quality	care quality assessment	willingness to provide emergency	Total assessment	
High	3,7	3,1	3,7	8,0	18,5	<b>89</b> (62,3%)
Average	3,6	3,0	3,4	7,6	17,6	<b>42</b> (29,3%)
Low	3,6	3,0	3,3	6,5	16,4	<b>12</b> (8,4%)

Highlighted overall nursing quality assessment: high, average, low. Each of them has different characteristics of nursing activity criteria. As a result of the analysis of the nature of nursing, the high was 18,5, moderate was 17,6, and low was 16,4 points.

Of the total number of nurses, the largest proportion - 89 people (62,3%) were nurses with a high total scoring quality of nursing activities. The second group with a moderate point estimate included 42 of the surveyed nurses (29,3%). With a low total score, 12 (8.4%) nurses were found.

The predominance of nurses with a high total score of nursing activities - 62.3% - indicates a fairly high qualification of the total number of employees in the State Budgetary Healthcare Institution Konchalovsky city clinical hospital, allowing to provide quality care to elderly patients.

## CONCLUSION

A comparative analysis of the criteria for the nursing quality showed that the highest point is criterion of willingness to provide emergency care to elderly patients with age-dependent syndromes, even in the case of a low score, i.e. 8.0 - 7.6 and 6.5 points. This may indicate that nurses are prepared to work in a hospital with such patients. This information allows us to formulate a number of general provisions reflecting measures to improve the quality of work of nurses involved in the treatment and rehabilitation of elderly patients:

- taking into account the specific working conditions of medical staff in the hospital, determined by the peculiarities of the mental state of elderly patients, it is recommended to use the work sheet for middle and junior staff "Features of working with elderly patients with myocardial infarction and related age-related syndromes";

- to improve, coordinate and analyze the work of nurses in order to improve the quality of work of the nursing service, work organization, advanced training of nurses and nurses to update the work of the Nursing Council of the hospital.

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