

# Studying the Quality and Efficiency of Work of Surgical Nurses in the Conditions of Emergency Medical Care

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## Abstract

**The purpose of the study** is to study the professional skills of nurses in the surgical department.

**Materials and research methods.** The study studied the quality of work of nurses (532 respondents) of the surgical departments of the Republican Scientific Center for Emergency Medical Care and its branches in Fergana, Syrdarya and Khorezm. To evaluate the activities of nurses, an expert assessment was carried out by heads of departments, doctors of departments and senior nurses with more than 10 years of experience, for a transparent, reliable and conscientious assessment of the quality and effectiveness of the work of nurses.

**Research results.** No global health problem can be solved without raising the status, role, and potential of nurses in various health care institutions through systematic, coordinated efforts. In addition, the study and analysis of factors affecting working conditions, professional satisfaction, health, professional skills of nurses in the surgical department is important in improving the quality.

**Keywords:** Nurses of the Surgical Department, Working Conditions, Professional Skills, Health of Nurses, Emotional Stress Factors.

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## RELEVANCE

According to the World Health Organization, the “quality of medical care” is based on the qualifications of medical personnel between the doctor, nurse and patient and is, first, the content of the interaction of the process, reducing the risk of developing diseases and new pathological processes, optimal use of medical resources, ensuring satisfaction [16].

The problem of assessing the quality of medical care has become the most important task associated with the policy and strategy of healthcare institutions [1].

The development and implementation of a quality management system for nursing makes it possible to evaluate the effectiveness of the professional activities of specialists with a secondary medical education in order to increase the satisfaction of the population with medical services [4, 7].

“The quality of an employee’s work activity is a set of indicative characteristics of parameters that characterize the working conditions provided by the working conditions of

employees, relationships in the workforce, the system of organizing and stimulating work, and the achieved level of development of the employee, internal corporate social policy”[3].

The study identified several major challenges confronting nurses working in the emergency unit which are linked with managerial processes and inadequate managerial support. These challenges need to be addressed to promote quality emergency nursing care. To foster a positive working environment, hospital management should validate and address the aforementioned concerns of the Emergency Department nurses[11].

Improving nursing work environment and supporting nurses to engage in professional and direct patient care as opposed to non-professional work may be beneficial to nurse job outcomes and promote quality of care[14].

The development and phased implementation of organizational and functional models for monitoring and evaluating nurses will solve a number of important tasks:

improving the qualifications and professionalism of nurses, optimizing nursing care, and increasing patient satisfaction with medical care [2].

Currently, there is no single opinion on the parameters of the assessment of nurses and their services in health institutions, and some studies have studied the problems of the quality of medical care, two areas of risk factors and the importance of standards in their elimination [7,9,10].

A higher number of missed activities and poorer staffing were associated with poorer patient safety, quality of nursing care and job satisfaction, and a higher intent to leave. Adequate staffing is required to reduce missed care and to improve quality of care and nurse outcomes[13].

The level of nurses' education appears to play an important role in developing both an awareness and an integration of professional values into practice[15].

Patients' perceptions of hospital care are strongly associated with missed nursing care, which in turn is related to poor professional nurse (RN) staffing and poor hospital work environments. Improving RN staffing in NHS hospitals holds promise for enhancing patient satisfaction[12].

The use of performance cards for monitoring and evaluating nursing quality assurance provides criteria for assessing the level and quality of nursing performance monitoring. As a result, monitoring serves primarily as a way to collect operational information about work plans, job descriptions, etc., secondly, it should help the employee pay attention to the quality of his work, look for ways to help him, and thirdly, increase labor activity leaders [6].

According to the results of surveys of heads of medical institutions and paramedical personnel, paramedical personnel and patients, the most important factors in assessing the work of paramedical personnel should be: the quality of fulfillment of doctor's instructions, the quality of patient care, compliance with the sanitary and epidemiological regime, compliance with the rules for medicines [2].

The purpose of the study is to study the professional skills of nurses in the surgical department.

## MATERIALS AND RESEARCH METHODS

The study studied the quality of work of nurses (532 respondents) of the surgical departments of the Republican Scientific Center for Emergency Medical Care (RSC EMC) and its branches in Fergana, Syrdarya and Khorezm. To evaluate the activities of nurses, an expert assessment was carried out by heads of departments, doctors of departments and senior nurses with more than 10 years of experience, for a transparent, reliable and conscientious assessment of the quality and effectiveness of the work of nurses.

## RESEARCH RESULTS

The effectiveness of the work of nurses of surgical

departments (NSD) of emergency medical care largely depends on the rational organization of the workplace. The results of the expert assessment of the quality of the work of the NSD are presented in Table 1.

Table 1. Quality of work of nurses of the surgical department (in %)

№	Elements of labor	Branches p±m	RSC EMC p±m
1.	Workplace organization:		
	good	67 ± 0.12	60.7 ± 0.3
	satisfactory	22.8 ± 0.10	38.7 ± 0.3
	unsatisfactory	10.2 ± 0.07	0.6 ± 0.05
2.	The quality of certification of agreed medical documents:		
	good	67.5 ± 0.12	36 ± 0.3
	satisfactory	28.3 ± 0.11	62.7 ± 0.3
	unsatisfactory	4.2 ± 0.02	1.3 ± 0.07
3.	Timely implementation of the doctor's instructions:		
	good	69.4 ± 0.12	29.3 ± 0.3
	satisfactory	25.1 ± 0.11	60 ± 0.3
	unsatisfactory	5.5 ± 0.05	10.7 ± 0.2
4.	Compliance with the rules of infection control:		
	good	63.3 ± 0.12	38.7 ± 0.3
	satisfactory	34.3 ± 0.12	59.3 ± 0.3
	unsatisfactory	2.4 ± 0.04	2.0 ± 0.09
5.	Accounting for medicines:		
	good	70.7 ± 0.11	49.3 ± 0.3
	satisfactory	22.8 ± 0.10	49.3 ± 0.3
	unsatisfactory	6.5 ± 0.06	1.4 ± 0.07
6.	Compliance with the principles of medical ethics:		
	good	69.9 ± 0.12	48.5 ± 0.3
	satisfactory	18.6 ± 0.10	46.7 ± 0.3
	unsatisfactory	11.5 ± 0.08	4.8 ± 0.14

It was found that the workplace in the surgical departments of branches of RSC EMC is organized 10.2%-unsatisfactorily than RSC EMC.

According to experts, the main reason for the poor organization of work is the unsatisfactory level of supply of medical equipment, dressings, necessary drugs in the surgical departments of the branches, which is 3 times less than in the RSC EMC.

Maintaining medical records is an important part of the activities of the NSD. The study of the quality of certified medical records revealed that 36.0% of the RSC EMC medical records are of high quality and 62.7% are satisfactory and in the branches of the RSC EMC 67.5% are good and 28.3% are satisfactory.

The reasons for the incorrect maintenance of medical records are a large number of medical records related to work, in this regard, experts note the need for digitalization, and however, the assessment revealed that only 47.3% are able to work on a computer. According to experts, 73% of nurses are fully aware of medical procedures and standards of care.

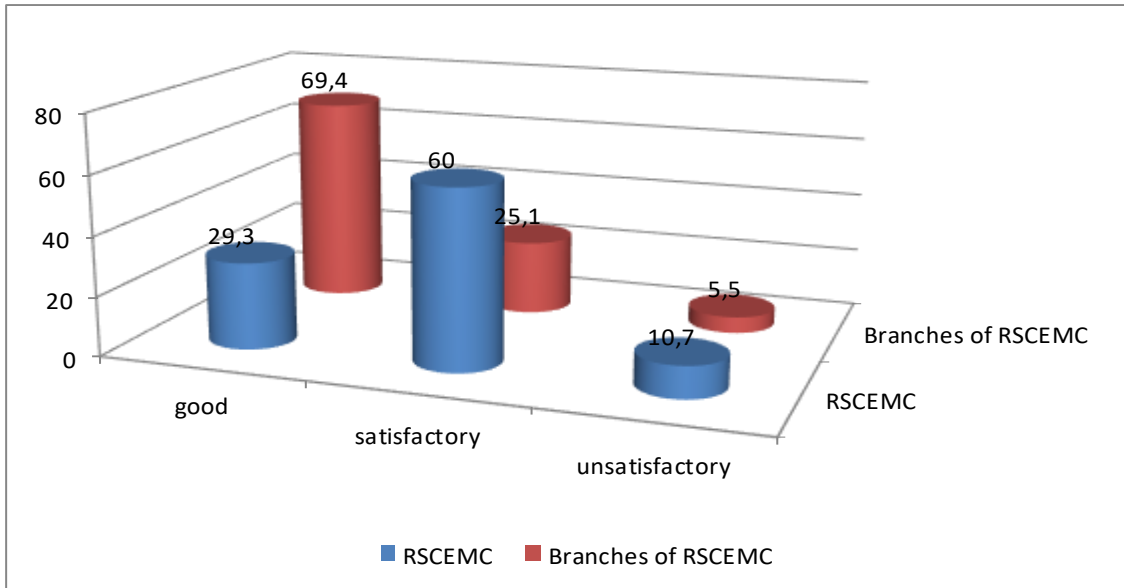


Figure 1. Timely fulfillment of medical appointments by nurses in surgical departments

Nursing care plays a leading role in surgery, as it is a valuable component of a successful approach to effective treatment, improvement of quality of life, support for patients with surgical pathology and their relatives [6].

One of the main factors that determine the quality of work of the nursing service is the timely fulfillment of the doctor's instructions. According to experts' conclusions, 29.3% good and 60% satisfactory fulfillment of doctor's instructions by NSD of RSC EMC, the same indicator is 69.4% good and 25.1% satisfactory fulfillment in branches of RSC EMC (Fig. 1).

As can be seen from the picture above, unsatisfactory performance of the doctor's instructions is 2 times higher (10.7% and 5.5%) than the NSD of branches in RSC EMC.

One of the main functions of nurses is the performance of medical manipulations (injections, dressings, desmurgy, preparation of patients for surgery, etc.) is performed well by 68.7%, in 31.3% it is performed satisfactorily. According to experts, this is largely the low qualification of nurses, irregular training and inability to perform their duties under the guidance of a doctor.

An analysis of the level of compliance by nurses with the rules of infectious safety revealed that in the RSC EMC - 38.7%, satisfactorily - 59.3%, in the branches of the RSC EMC - 63.3%, satisfactorily - 34.3%. Dissatisfaction with the level of compliance with the rules of infectious safety was revealed in the ratio of 2:1 (10.7% and 5.5%) among the nurses of RSC EMC and its branches (Fig. 2).

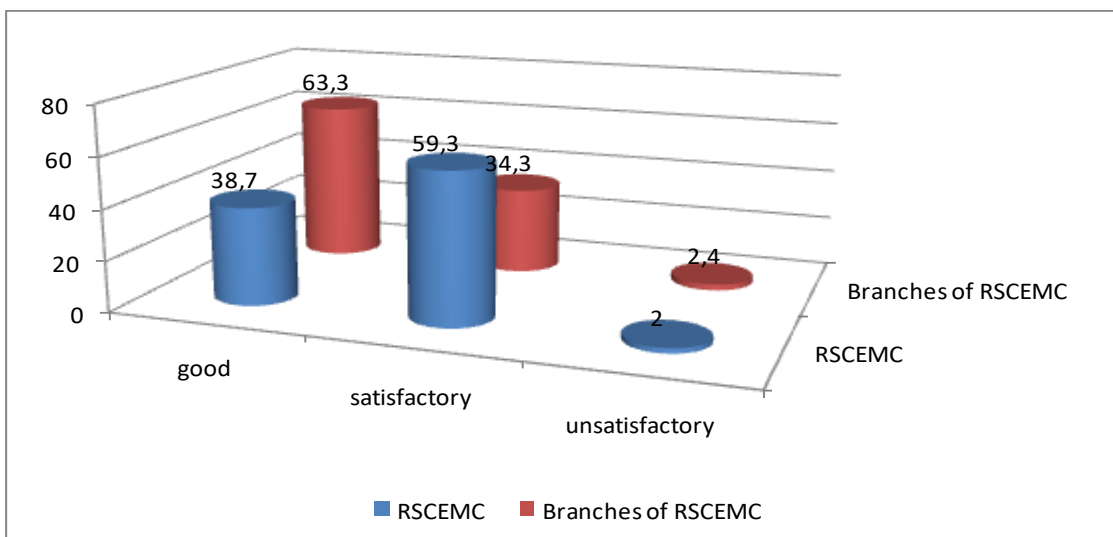


Figure 2. Compliance with infection safety rules in surgical emergency departments

The reasons for the unsatisfactory compliance with the rules of infectious safety are the ignorance of the nurses of the surgical departments of the main regulatory documents on infectious safety and the sanitary and epidemiological regime. The study found that 66.2% of the nurses of the surgical departments of the RSC EMC and 33.3% of the branches are well acquainted with the main provisions, and 7.1% and 14.7%, respectively, do not know at all. According to the data, 28.6% of nurses in intensive care and surgical departments 87.9% consider it necessary to undergo

additional training in infectious safety.

According to the study, a good record of medicines in the RSC EMC is 1.3 times less than in the branches (70.7% and 52.9%), and a satisfactory record is 1:2.1 (22.8% and 44.9%). When the specialists analyzed the accounting of medicines by the nurses of the surgical department, they found that poor accounting of medicines in the departments of the surgical department was almost 3 times more common (fig. 3).

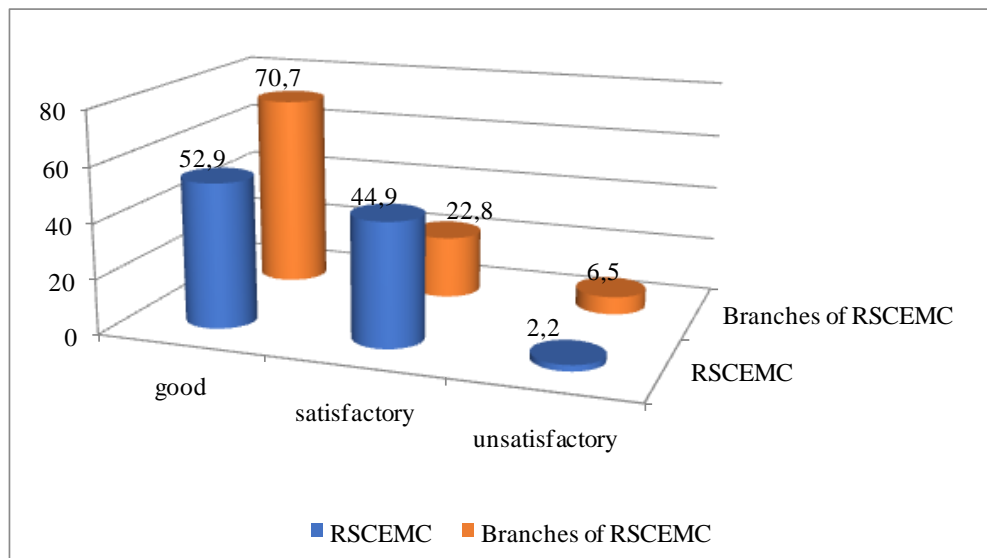


Figure 3. The provision of medicines in the surgical departments of emergency medical institutions

The reasons for the unsatisfactory maintenance of the condition of medicines were the high workload (in branches - 9.4%) and the fact that the surgical department felt the need for additional training of nurses in the correct use, storage and

maintenance of medicines (15% and 40%, respectively), the department was not satisfied with the provision of medicines, binding materials (19.0% and 16.0%).

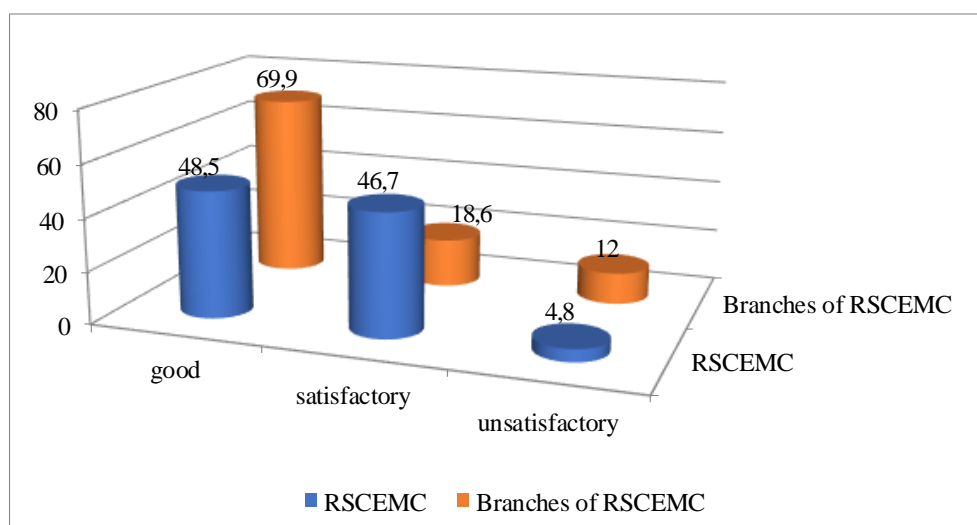


Figure 4. Compliance with the principles of medical ethics in surgical departments of emergency medical institutions

When the observance of the principles of medical ethics by SHTYOM JBHS was studied, it was found that satisfactory compliance in RSC EMC is 3 times higher than in branches, and, on the contrary, at an unsatisfactory level, compliance with ethics is 2,3 times less than in branches (fig. 4).

Studies have shown that only 25.0% of cases in the branches did not have conflict situations with patients. It has also been observed that 15% and 56% of NSD of RSC EMC and its affiliates are fully satisfied with the environment in the community.

**Thus**, the assessment and study of the quality of work by the NSD specialists is based on the fact that the workplace of the NSD is relatively poorly organized, medical records are not kept in full, nursing standards are not fully observed, medical prescriptions are not fulfilled on time, medicines are calculated incorrectly. The main reasons for these shortcomings are dissatisfaction with logistics, congestion, poor microclimate, and insufficient knowledge of regulatory documents.

Monitoring and evaluation of the activities of nurses will solve a number of important tasks: improving the qualifications and professionalism of nurses, optimizing nursing care and increasing patient satisfaction with medical care.

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