

Multi-factor Quality Assessment of the Nursing Care for the Elderly Patients

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Abstract--- *The role of analysis of the performance quality of nursing care in hospitals and in-patient facilities in the provision of medical care to elderly citizens is quite increasing, given the modern conditions of health care development with the growth of the volume of patients of elderly and senile age, as well as the overall significance of nursing personnel with the expansion of treatment methods. The presented study aimed to develop a method of generalized assessment of the performance quality of the nursing personnel in the provision of medical care to elderly patients. Statistical processing of the results of the study included the use of the following methods: calculation of the average absolute and relative values with the calculation of the average error on the statistical aggregate of 112 nurses surveyed. The study developed a method of generalized assessment of the performance quality of nurses and included four criteria:*

- 1. Assessment of the quality of medical prescriptions.*
- 2. Assessment of quality of supervision of elderly patients with age-associated concomitant diseases.*
- 3. Care quality assessment.*
- 4. Readiness to provide emergency care to elderly patients.*

As a part of the comparative analysis of the quality criteria of nursing, the highest score was obtained by the criterion of commitment to provide emergency care to elderly patients with age-associated concomitant diseases; the latter fact may indicate the readiness of nurses to provide care to such patients in the in-patient facilities.

Keywords--- *Nurses, Performance Evaluation, Elderly Patients, Quality of Work.*

I. INTRODUCTION

Currently, the country is actively undergoing healthcare reform and modernization. Nursing care is an essential component of the healthcare system, endowed with significant human resources and true potential for reform under market relations.

Nursing is an independent occupation, which is on a par with medical business; the functions of a nurse are much broader than the simple implementation of doctor's prescriptions. To meet modern requirements, in addition to health standards and the basics of nursing care, a nurse must know the patient's clinical features and be able to organize social and psychological assistance [1, 2, 3].

The Federal Law No. 323-FZ of 21 November 2011 on Basics of Health Protection of the Citizens in the Russian Federation formulates the basic concepts in this area such as health, medical care, medical services, and medical activities. This law also presents a comprehensive concept of health protection, which is interpreted as a system of measures of a political, economic, legal, social, scientific, medical (including hygienic) and anti-epidemic (preventive) nature, implemented by government bodies of the Russian Federation, local government bodies,

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institutions, and their officials, and other citizens in order to prevent diseases, maintain and strengthen physical and mental health of every person, as well as providing all the medical treatment necessary to maintain long and active life. The role of a nurse involved in the prevention, diagnosis, treatment, and rehabilitation of patients can be traced in this voluminous concept, especially since the law refers to the nursing attendance in the provision of medical care.

The normative Standards of Clinical Nursing Practices adopted by the Russian Nurses Association (RNA) on June 10, 1998, states that nurses are assigned one of the leading roles in solving the problems of medical and social assistance to the members of the public and improving the quality and effectiveness of personnel in medical organizations. The functions of a medical nurse are quite diverse; nursing activities are related not only to the diagnostic and medical process but also to the patient care aimed at complete rehabilitation [4, 5, 6, 7].

Nursing care has a long history as a specialty that reflects the activities in the implementation of medical and social assistance, including care itself, health protection, and support of patients' active lifestyle based on the principles of medical ethics and deontology; its emergence and development date back centuries. Nursing care is based on mercy, humanism, compassion for the weak and in need of assistance; the matter of nursing the ill and suffering, having gone through different stages of development and selfless devotion, has become a profession.

Regarding the objectives of the study, the issues of ethics and deontology are of paramount importance in the work of a nurse.

The mercy as a component represents a significant constituent of domestic medical practice [8, 9, 10, 11].

Empathy, the ability to empathize, the ability not to rational, but an emotional understanding of an ill person, is especially distinguished when communicating with a patient of elderly or senile age (Marlies van Bemmen, 2003). The nurses' empathic reaction allows the patient to notice that their understanding and awareness; for that to happen, the nurse must actively and sympathetically listen to the patient and prove this with the help of non-verbal signals (body position, facial expressions, voice intonation, etc.). It was established that the attitude to another person, to the interlocutor, is transmitted verbally only by 7%; it is transmitted most of all through facial expressions (55%) and the tone of voice (38%).

Following the Ethics Code of Nursing, the manifestation of mercy in the work of a nurse is one of the basic norms. Such manifestation involves the ability to be sensitive and provide support in a proper time; negative attitude to disgust and indifference; respect for the feelings of believers; modest appearance and the ability to respond to patients requests; professionalism at work; and a high level of culture of medical care, rather than formal fulfillment of one's duties.

The adoption of the Ethics Code of Russian Nurses developed by the RNA has become a logical link in the reform of nursing in our country. The Code is composed in the spirit of the ideas of bioethics, which largely determined the content of professional ethics in medicine over the past two to three decades. At the forefront of the content of the Code is a detailed idea of the rights of the patient and guarantees of the protection of these rights in modern society [10, 11].

A study of the work of caregivers to elderly has shown that complex intensive individually adapted interventions can affect both care professionals and the well-being and functioning of the people under wardship, as well as their paired relationships (Yan R., 2005). This refers to the partnership between the caregiver and the patient receiving care. Working in partnership with caregivers requires health care professionals to adjust their thought pattern on care through biomedical approaches [12, 13, 14, 15].

The following are the gradations of requirements in patient care:

- Significant need: patient requires assistance with food intake, hygienic care, and assistance with movement with the need for at least two of the named services during the day and repeatedly during the week. The time spent on the provision of assistance is not less than 90 minutes per day.
- Very significant need: assistance required with food intake, hygienic care, and movement with the need for all three services during the day and repeatedly during the week. The time spent on the provision of assistance is at least three hours a day.
- Absolute necessity: assistance with food intake, hygienic care, and movement is carried out at least five times through the day and repeatedly during the week. The time spent on assistance services is at least five hours a day.

It is clear that the degree of need for care depends on the physical and mental condition of the patient; such need determines the psychological and physical efforts of the caregiver and, therefore, the standards for the time for care.

According to the Code, the responsibility of nurses has four main aspects: promoting healthy living, preventing disease, facilitating health resumption, and alleviating suffering.

The state of medical ethics and deontology is influenced by the level of formation of psychological commitment to carry out professional activities. This commitment is expressed by the presence of a value attitude to medical activity and by the conformity of motives, professional goals, and tasks to the actual practices, as well as by the presence of the desired professionally significant personal qualities that determine the professional maturity of a nurse [16, 17, 18].

The goal function for the nursing activities is the quality of care. International standard ISO 8402-86 defines a quality as a set of properties and characteristics of a product (service) that give it the ability to satisfy existing or anticipated needs. Under the quality of nursing care is understood the correspondence between the expectations of the patient (family, community) and the patient's (family, community) perception of the process and result of the care.

It was proposed to introduce the following main indicators into the assessment of the quality of nursing services (L.F. Soloninkina, 2008): the quality of medical prescriptions, the handling means, the readiness to provide emergency care, and the quality of care itself. A point estimate was used for each indicator, which made it possible to compose its integrative.

From this perspective, the problem of assessing the quality of medical care is becoming the most important task related to the policy and strategy of a healthcare organization. At the same time, the assessment of the quality of

medical care is based on the evaluation of doctors' performance; the assessment of the quality of nursing is usually not reflected in the relevant documents [19, 20, 21, 22].

When studying the quality of medical services of rehabilitation treatment, the commitment of the participating personnel for effective activity is determined based on an integrated assessment of the personal and professional potential of the personnel. Such commitment includes 7 components: biomedical potential, lifestyle, social potential, innovative potential, labor potential, personal qualities, and work culture [23, 24, 25].

The purpose of the study was to develop a methodology of generalized assessment of nurses' performance.

The method of research employed the statistical processing of the study results with the use of the following techniques: calculation of the mean absolute and relative values including the mean's error; and determination of the distribution pattern. The authors used the χ^2 method and the significance of the differences between the two sets. The Student's t-criterion was applied. To describe the study results the authors used generalized characteristics of the set, for example, for quantitative characteristics – mean values (M - arithmetic mean), for attributive – indicators of the ratio. To assess the reliability of the generalized characteristics, we used the mean's error of the arithmetic mean (m) - (for quantitative characteristics); the mean's error of the relative indicator (m) - (for attributive characteristics).

The method of continuous sampling was used to form a statistical array – in the present instance - nurses, working in the Moscow city hospital named after M.P. Konchalovsky (n=112).

II. RESULTS

The area of expertise of nursing care is quite versatile; it requires careful analysis and evaluation.

The main functional responsibilities of a nurse in a multidisciplinary hospital is to perform not only the medical diagnostic process, but also the rehabilitation of elderly patients, which includes *standard drug treatment* (performing medical prescriptions and procedures: injections, dressings, etc. including emergency pre-doctor care), *non-drug therapies* (health-improving and rehabilitation measures: physiotherapeutic treatment, hydrotherapy, massage, therapeutic exercises), as well as *preventive activities* (measures for the prevention of infectious and socially significant diseases).

Consideration of the participation of nurses in the rehabilitation of elderly patients in a hospital or in-patient facility requires highlighting the basic functions of nurses related to care. The latter was thought of as a combination of measures providing comprehensive care for the patient, creating optimal conditions for a favorable course of the disease, faster recovery, alleviating suffering and preventing complications. In this formulation of care, the creation of optimal conditions for a favorable course of the disease and a quick recovery becomes especially significant. The meaning of this definition of care allows considering its proximity to social and environmental rehabilitation and, thus, makes it possible to bring care and rehabilitation closer within the overall nursing activities.

As part of the nursing process, care also involves ensuring favorable conditions by creating an optimal social environment, which is a component of the rehabilitation impact. The concept of an optimal social environment includes ruling out physical irritants (noises, loud conversations, rude shouts, and loud music, etc.), eliminating

negative information flow, the provision of attentive attitude towards disabled, and the willingness to respond to requests related to health conditions.

The optimal social environment in the implementation of care implies the need to include a psychological aspect with a verbal accompaniment of respectful and sympathetic content.

According to the new model of nursing, nurses should act as a full-fledged subject of the healthcare system, performing specific functions, providing care and solving most of the issues related to the organization of the medical-diagnostic process, as well as preventive and rehabilitation work. The participation of nurses in the rehabilitation of elderly and senile patients made it possible to use the concepts of 'nursing rehabilitation care' and 'nursing rehabilitation process' (Makarova, 2007; Kalinina, 2008). All patients undergoing in-patient rehabilitation are divided into three groups, depending on the high, medium or low level of social functioning.

For each elderly patient, individual rehabilitation programs are drawn up; such programs include various types of rehabilitation activities of medical, social-labor, aftercare-social, pedagogical, socio-psychological, socio-domestic, and socio-cultural nature.

Medical and social rehabilitation is closely connected with its other types and is aimed at solving the following problems:

- Remission maintenance in elderly patients, especially with age-associated concomitant diseases;
- Psychopharmacotherapy and application of social impact methods;
- Psycho-educational counseling for patients and their relatives;
- Involving patients in the process of psychosocial rehabilitation;
- Overcoming stigma, developing motivation for supportive treatment (if necessary), training in social skills;
- Interpersonal and other types of conflict resolution;
- Observance of therapeutic and social settings;
- Assistance to social workers in organizing leisure activities for elderly patients;
- Individual work with patients to establish a constructive dialogue with a doctor;
- Forming an adequate attitude to treatment and medical and social rehabilitation in elderly patients;
- Forming the sense of responsibility for their health in elderly patients.

The program is represented by drug treatment, non-drug therapy (massage, physical therapy) and psychosocial training.

The staff of the in-patient facility, along with the basic nursing duties, performs work related to medical and social rehabilitation; and teams up with other specialists in the field of socio-domestic, socio-pedagogical, and socio-cultural rehabilitation.

The task of the medical staff of the described department is to reduce the use of psychotropic drugs on elderly patients (especially on those sustained critical conditions) by an increase in sessions and counseling. To this end, 'Independent Living' psychosocial training on the topics of 'Personal Hygiene' and 'Formation of a Healthy Lifestyle' is being held with people with disabilities.

It was proved as well that the more department personnel was engaged in conducting conversations, training and patients counseling, the less the patients needed psychotropic drugs and less violated the prescribed regime. As a result of rehabilitation measures, patients took a more active part in working processes.

Nurses also work with patients' relatives, explaining the reasons for the violation of the behavior of their elderly family members after an emergency, and the ways to overcome such violations. Using understandable and accessible information received by elderly patients in training sessions during individual counseling, staffers try to overcome the prejudices and fear of communication with relatives and even with medical personnel from the elderly. Communicating with relatives, it is necessary to reveal and show the existing potential of their loved ones, their interests, and hobbies, thus allowing seeing an elderly from another side, might be even previously unknown. 9 people have been successfully returned to the society for the time of the described department existence; the rehabilitation part of the treatment included:

- Leisure activities in the evenings and weekends;
- Training, sessions, and open discussions;
- Extensive cooperation with relatives;
- Assisting in overcoming the stigma of mental illness;
- Conflict resolution between the older patients.

A specially conducted study of the working conditions of nurses of multidisciplinary in-patient facilities demonstrated that these conditions pose a direct threat to the safety of patients and staff.

The most unfavorable (harmful by the classification of working conditions) are emotional stress and nurses scheduling. The systematization of indicators made it possible to identify the class of working conditions of psychiatry nurses as harmful intense labor of the second degree (O.A. Guzenko, 2012).

An analysis of the data on the activities of nurses involved in the rehabilitation of elderly patients in a multidisciplinary in-patient facility was conducted; needless to say that such employment presupposes the need to be guided by ethical standards and principles. The regional values of the variational series according to the length of experience of surveyed nurses were selected for the study.

Revealed most preferential moral principles among nurses are shown in Fig. 1:

- 95.8% of respondents were guided by medical ethics and deontology (in nurses with 5 or less years of experience– up to 100%);
- Humanist attitude towards the patient (87.4%);
- Non-disclosure of protected patient information as an essential principle in medical care was established in 81.8% of cases (72.7% in nurses with 5 or less years of experience);
- 79.2% of respondents were guided by proper conduct to the relatives of people with disabilities (81.8% in nurses with 5 or less years of experience).

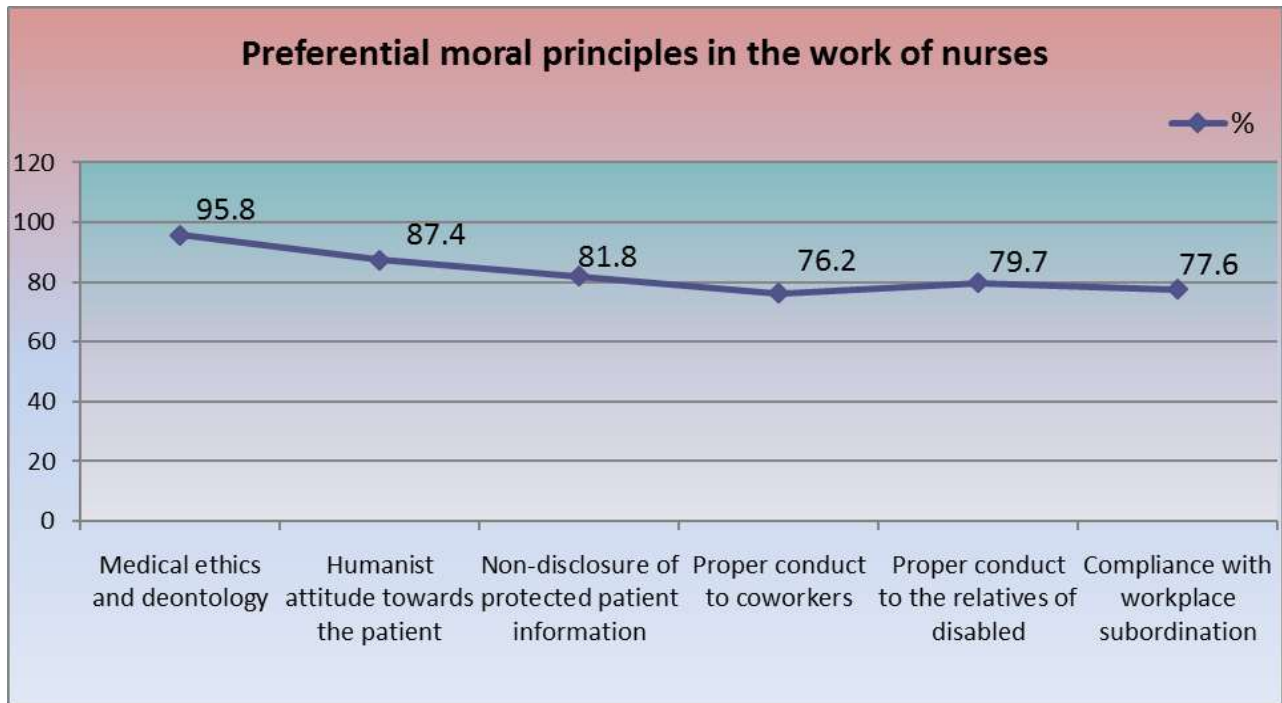


Figure 1: Preferential Moral Principles in the Work of Nurses of a Multidisciplinary In-patient Facility (%%)

The responses also reflected other principles related to the professional activities of nurses, among them were the compliance with workplace subordination (77.6%) and the proper conduct to coworkers (76.2%).

An analysis of the dependence of the moral principles used on medical experience has shown a decrease in the number of respondents who were guided by the principle of medical ethics and deontology: from up to 100.0% among personnel with a 5-year experience to 94.2% among medical professionals with 20 or more years of experience. The same decrease was also noted when analyzing data regarding the principles of non-disclosure of protected patient information and workplace subordination. The participation of nurses in the rehabilitation process presupposes their knowledge of the essence of comprehensive rehabilitation and understanding of their role in the rehabilitation of elderly patients.

As a part of sociological study, nurses were also asked questions reflecting the content of the comprehensive rehabilitation of elderly patients on the topics of health resumption, restoration of social and labor skills, ability to communicate, and leisure activities.

The highest share of all nurses - 95.8% prioritized the restoration of social skills in the content of rehabilitation; 90.9% gave prominence to the restoration of labor skills; 85.3% considered important restoring communication skills; 80.4% assigned the role of rehabilitation to resuming proper health condition; and 79.0% considered it imperative to restore the ability for leisure activities.

Understanding the priority of rehabilitative impact on elderly patients with age-related disorders depended on the length of service of the caregiver. It was revealed that 72.7% of nurses with 5-year experience prioritized the health

resumption; among the nurses with 20 or more years of experience this proportion raised to 79.7%. The proportion of respondents giving prominence to the restoration of labor skills have also increased: 72.7%, among the personnel with 5 years of experience, and 88.4% - with 20 or more years of experience. The same ratios were found in the analysis of the preferences for restoring the ability to communicate: while among the respondents with 5 years of experience, their share was 72.7%, then among nurses with 20 or more years of experience it was already 85.5%; even greater differences were revealed in nurses comprehension of the role of restoring the ability for leisure activities: 54.5% in the group with 5-year experience, and 82.6% in the group with 20 or more.

The data obtained suggest that, with an increase in the length of service, the nurses' comprehension of the role of the rehabilitation impact on various life areas of elderly patients with an age-associated pathology increases as well.

The nursing activities involved in the rehabilitation process in a multidisciplinary in-patient facility were associated with the need to possess psychological techniques for treating elderly patients: rational emotive behavior therapy, psychocorrection of emotions and behavior.

Of the total number of surveyed nurses, 62.2% possessed the skills in psychocorrection of behavior, 49.6% - in rational therapy, and 46.8% - in psycho-correction of emotions.

The study also examined the ways in which nurses can participate in rehabilitation activities in the in-patient facility such as drug treatment and non-drug therapy, maintaining the physical activity of patients (especially those who have sustained a critical condition), facilitating the organization of social, domestic and environmental events, facilitating the organization of sports and leisure activities, and promoting eventual employment or providing spiritual support.

The list of methods for the participation of nurses in activities that go beyond medical (and their functional responsibilities as well) reflects the specifics of the rehabilitation process, which is carried out in a multidisciplinary in-patient facility and appears almost impossible without the participation of nurses. An analysis of the ways nurses participate in the rehabilitation process is shown in Figure 2.

The conducted analysis demonstrated that their priority activities (drug treatment and non-drug therapy) were confirmed by 100.0% of sociological study participants. A significant proportion of respondents (81.1%) also carried out the maintenance of motor activity for people with disabilities. Slightly fewer of surveyed nurses participated in the promotion of socio-domestic (85.3%) and socio-environmental (78.3%) activities.

A significantly smaller proportion of respondents (74.1%) took part in facilitating the organization of leisure activities and spiritual support (57.3%). Also, there turned out very few nurses assisting with employment (41.9%).

Further, the following pattern was discovered in a comparative analysis of the dependence of the methods of participation of the surveyed nurses on their medical experience. The number of respondents participating in non-drug therapy, maintaining the physical activity of patients, as well as in facilitating the organization of social events has considerably enlarged with an increase in medical experience.

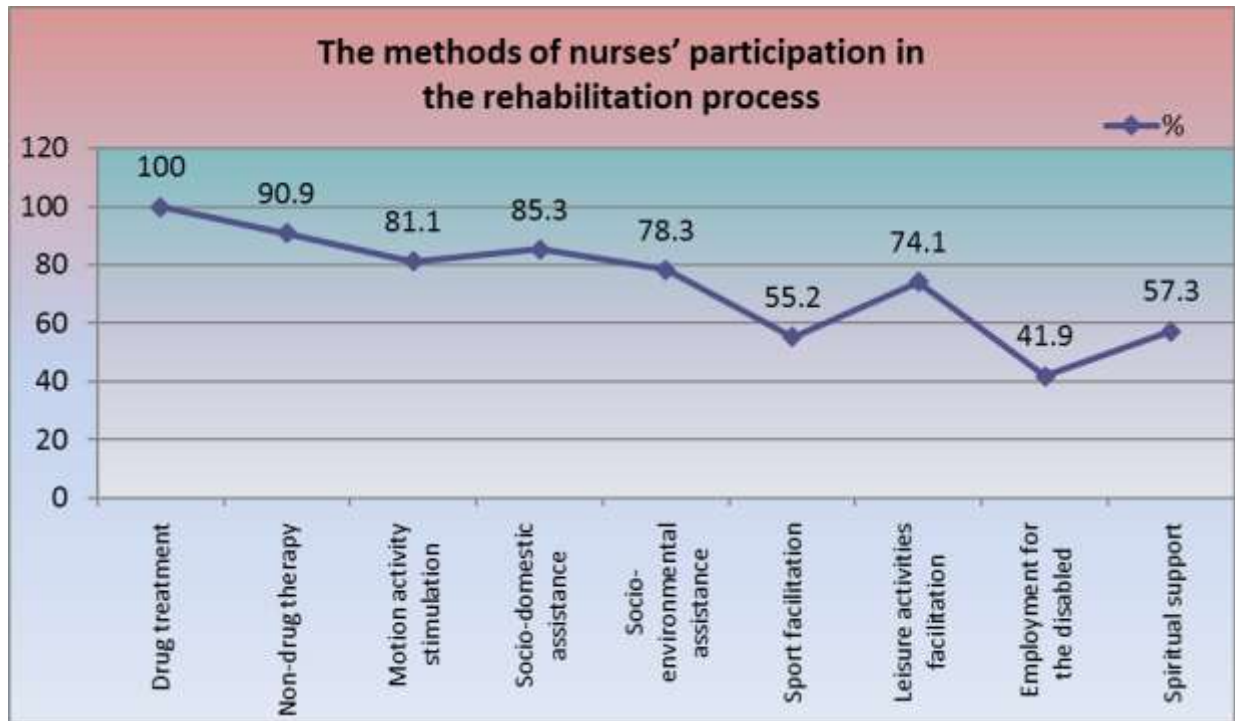


Figure 2: The Methods of Nurses' Participation in the Rehabilitation Process of Elderly Patients Sustained the Critical Condition (With Consideration of the Length of Nurses' Medical Experience).

Below described methodology for a generalized assessment of the quality of activities of nurses was developed in the course of the study. Four criteria are used as a basis for assessing the quality of nursing activities:

1. Assessment of the quality of medical prescriptions.
2. Assessment of the quality of monitoring of elderly patients with age-associated concomitant diseases.
3. Assessment of the quality of care for the bed-confined elderly patients.
4. Readiness to provide emergency care (emergency preparedness).

Under the clinical and social significance, each criterion was assigned a numerical score:

- Assessment of the quality of medical prescriptions – 4
- Assessment of the quality of monitoring of elderly patients with age-associated concomitant diseases – 3.5
- Assessment of the quality of care for the disabled – 4
- Readiness to provide emergency care – 8.5

Each of these criteria was evaluated by 4 indicators on the following scale:

Criterion 1 is the assessment of the quality of medical prescriptions. It has the following indicators:

- T – timely execution of doctor's orders – 1.0;
- F – full compliance with doctor's prescriptions – 1.5;
- E – exact execution of doctor's orders – 1.0;
- Pc – patients' reasonable complaints – 0.5.

The optimal score is 4 points. The calculation was carried out according to the following formula:

$$QADOE = T + F + E + Pc, \text{ where}$$

QADOE – quality assessment of doctors' orders execution.

Nurse (N) sample:

T – timely execution of doctor's orders – 0.9;

F – full compliance with doctor's prescriptions – 1.4;

E – exact execution of doctor's orders – 1.0;

Pc –patients' reasonable complaints – 0.4.

Nurse (N) sample calculations:

$$QADOE = 0.9 + 1.4 + 1.0 + 0.4 = 3.7 \text{ points}$$

Criterion 2 is the assessment of the quality of monitoring of elderly patients with age-associated concomitant diseases. It has the following indicators:

SM – supervisory monitoring – 1.0;

SpM – special monitoring – 1.0;

PM – psychosomatic monitoring – 1.5.

The optimal score is 3.5 points. The calculation was carried out according to the following formula:

$$MQA = SM + SpM + PM, \text{ where}$$

MQA – monitoring quality assessment

SM – supervisory monitoring

SpM – special monitoring

PM – psychosomatic monitoring

Nurse (N) sample:

SM – supervisory monitoring – 1.0;

SpM – special monitoring – 0.8;

PM – psychosomatic monitoring – 1.3.

$$OKH = 1.0 + 0.8 + 1.3 = 3.1 \text{ points.}$$

Criterion 3 is the assessment of the quality of care for the elderly. It has the following indicators:

HC – hygienic care – 1.0;

C – catering – 1.0;

SA – self-care assistance – 0.5;

Pc –patients' reasonable complaints – 1.5.

The optimal score is 4 points. The calculation was carried out according to the following formula:

$$CQA = HC + C + SA + Pc, \text{ where}$$

CQA – care quality assessment

HC – hygienic care

C – catering

SA – self-care assistance

Pc –patients’ reasonable complaints

Nurse (N) sample:

HC – hygienic care – 0.9;

C – catering – 0.9;

SA – self-care assistance – 0.5;

Pc –patients’ reasonable complaints – 1.4.

CQA = 0.9 + 0.9 + 0.5 + 1.4 = 3.7 points.

Criterion 4 is the readiness to provide emergency care for elderly patients. It has the following indicators:

RD – readiness to provide emergency care in case of dyspnea – 2.0;

RPA – readiness to provide emergency care in case of psychomotor agitation – 3.0;

RPC – readiness to provide emergency care in case of the painful condition – 3.5;

The optimal score is 8.5 points. The calculation was carried out according to the following formula:

$EP = RD + RPA + RPC$, where

EP – emergency preparedness

RD – readiness to provide emergency care in case of dyspnea

RPA – readiness to provide emergency care in case of psychomotor agitation

RPC – readiness to provide emergency care in case of the painful condition

Nurse (N) sample:

EP = 1.8 + 2.8 + 3.4 = 8.0 points.

Based on the accepted score of criteria that reflect totaled main nursing activity, it is determined at 20 points and is calculated by the following formula:

$NA = QADOE + MQA + CQA + EP = 4 + 3.5 + 4 + 8.5 = 20$ points, where

NA – nurse’s activity

QADOE – quality assessment of doctors’ orders execution

MQA – monitoring quality assessment

CQA – care quality assessment

EP – emergency preparedness

III. DISCUSSION

Within the framework of the presented study, the nursing activities were also evaluated by the specialists of a multidisciplinary in-patient facility.

The facility staff included 42 specialists, of which 37 (88.0%) were women; the remaining 12.0% were men. In age terms, the cohort of experts was represented in equal shares; 28.6% of specialists were aged 31 to 40 and 51 to 60. These two age categories included doctors and other medical specialists.

According to the period of service in speciality (from 10 to 20 years), the predominant group was represented by doctors. However, the overall assessment of the nursing care quality by facility specialists appeared somewhat ambiguous. Within the framework of a sociological survey, the respondents were asked to overall assess the quality

of nursing activities, while at the same time the participating specialists were also suggested to give a differentiated assessment of the work of nurses with detailed consideration of the nature of their activities. The rating was made by simple high, moderate, and low categories.

An analysis of a generalized assessment of the nursing care quality (Table 1) demonstrated that the higher marks for nursing care (71.5%) were awarded by doctors, and somewhat lower (21.4%) by psychologists. 84.6% of the 'moderate' grades belonged to doctors, and 7.7% to psychologists and physical therapists.

Table 1: Assessment of the Nursing Activities by the Specialists of GKB of M.P. Konchalovsky City Clinical Hospital

Specialists	Nursing care quality assessment					
	High		Moderate		Low	
	total	%	total	%	total	%
Doctor	10	71.5	11	84.6	0	0
Psychologist	3	21.4	1	7.7	0	0
Physical therapist	1	7.1	1	7.7	0	0
Total surveyed	14	100.0	13	100.0	0	0

The structure of differentiated assessments of nursing activities included the following:

- Quality of care for people with disabilities;
- Consistency of medical records;
- Performance quality in special assignments;
- Skill level in operating the rehabilitation equipment;
- Level of professional expertise;
- Time management in comprehensive rehabilitation;
- Interaction with other medical specialists;
- Assessment of nursing expertise in rehabilitation issues;
- Attitude to specialists;
- Attitude to elderly patients;
- Quality of provided health education;
- Knowledge of the principles of medical ethics and deontology;
- Place and role of a nurse in the rehabilitation process.

Table 2: Assessment of the Quality of Nursing Care for Elderly Patients Sustained the Critical Condition

Specialists	Level of professional expertise (nurses)					
	High		Moderate		Low	
	total	%	total	%	total	%
Doctor	16	72.8	3	50.2	2	100.0
Case worker	3	13.6	2	33.2	0	0
Psychologist	3	13.6	1	16.6	0	0
Total surveyed	22	100.0	6	100.0	2	100.0

An analysis of a differentiated assessment of nursing activities, i.e. the performance of specific types of work, has revealed the following. Doctors gave a high appraisal of nurses for the quality of care for elderly patients (Table 2) due to their competence, but 50.2% of 'moderate' grades were also given by the doctors.

Also, the consistency of medical records was highly appreciated by doctors - 31.8% of all who gave a similar assessment (Table 3). However, the moderate level of performance of this part of nurses' duty was also denoted by a large number of doctors - 72.2%. This indicates the need for improvements in medical records maintenance by nurses.

Table 3: Assessment of Nurses' Quality of Medical Records Maintenance by Specialists of GKB of M.P. Konchalovsky City Clinical Hospital

Specialists	Assessment of medical records maintenance					
	High		Moderate		Low	
	total	%	total	%	total	%
Doctor	7	58.3	10	79.6	1	100.0
Psychologist	3	25	1	20.4	0	0
Physical therapist	2	16.6	0	0	0	0
Total surveyed	12	100.0	13	100.0	1	100.0

An assessment of the quality of special prescriptions execution (this doesn't refer strictly to doctor's orders) revealed that the prevailing share (Table 3) of grades made by doctors consists of moderate but not high marks (79.6%). This fact reflects the insufficient quality of medical prescriptions execution by nurses and requires the intervention by the facility management.

In the above example of the evaluation of the activities of a nurse (N), the values of specified criteria did not coincide with the optimal point score; the calculation according to the following formula resulted in:

$$NA = QADOE + MQA + CQA + EP = 3.7 + 3.1 + 3.7 + 8.0 = 18.5 \text{ points.}$$

Consequently, the nursing activities cited as an example of a nurse (N) cannot be classified as ideal; however, even the missing 1.5 points characterize it relatively well.

The scoring of the quality of nursing activities of all nurses involved in the provision of medical care to elderly patients in the given hospital made it possible to distinguish 3 groups depending on the scoring gradation of nursing activities (Table 4).

Table 4: GKB of M.P. Konchalovsky City Clinical Hospital Total Nursing Performance Score

Score	Criteria for assessing the quality of nursing activities					Number of surveyed nurses with score distribution
	QADOE – quality assessment of doctors' orders execution	MQA – monitoring quality assessment	CQA - care quality assessment	EP – emergency preparedness	Total performance score	
High	3.7	3.1	3.7	8.0	18.5	89 (62.3%)
Moderate	3.6	3.0	3.4	7.6	17.6	42 (29.3%)
Low	3.6	3.0	3.3	6.5	16.4	12 (8.4%)

The total quality assessment of the nurses' performance was divided into the following three levels: high, moderate, and low with different characteristics of the performance criteria each. Analysis of the performance nature showed the following: high level of performance - 18.5 scores, moderate – 17.6 and low – 16.4 scores.

The highest share of all nurses – 89 people (62.3%) was represented by nurses with the high total score of the quality performance. The second group with the moderate score comprised 42 of the surveyed nurses (29.3%). And 12 (8.4%) nurses had the low total score. The predominance of nurses with a high total performance score (62.3%) indicates a fairly high qualification of the total number of employees of GKB Konchalovsky City Clinical Hospital; the latter fact serves as additional assurance for providing quality care to elderly patients.

IV. CONCLUSIONS

1. A comparative analysis of the quality criteria of nurses' performance showed that the highest score was given to the criterion of readiness to provide emergency care to the elderly patients with age-associated concomitant diseases, even in the case of a low score, i.e. 8.0 – 7.6 and 6.5 scores. This may indicate the readiness of nurses to work in a hospital with such patients.
2. The data obtained allow formulating several general provisions reflecting measures to improve the quality of work of nurses involved in the treatment and rehabilitation of elderly patients such as:
 - With respect to the specific working conditions of medical staff in a hospital or in-patient facility (determined by the characteristics of the mental state of elderly patients), it is recommended to use a handbook for middle-level and junior medical staff 'Features of working with elderly patients with the history of myocardial infarction and age-associated concomitant diseases';
 - To mainstream the function of the Council of Hospital Nursing to improve, coordinate, and analyze the nursing activities and to consecutively improve the quality of work of the nursing service, workplace management, and development of competence of nurses and junior medical staff.

REFERENCES

- [1] Burtsev A.K., Uyba V.V., Stasevich N.Yu. Rationale for the use of health and educational programs for the elderly patients with non-cancer pathology. *Sotsial'nye aspekty zdorov'ya naseleniya* [serial online] 2018 [cited 2019 Apr 30]; 59 (1). Available from: <http://vestnik.mednet.ru/content/view/955/30/lang/ru/> (In Russian).
- [2] Denisov V.I. Life quality: essence, assessment, and formation strategy. *Moscow: ID «VNII tekhnicheskoy estetiki»*; 2000. 124 p. (In Russian).
- [3] Kaprin A.D., Kostin A.A., Ponomarenko B.T., Gridnev O.V., Samsonov Yu.V. Sovershenstvovanie. Improvement of personnel processes as a condition for modernization of staff policy in healthcare. *Issledovaniya i praktika v meditsine* 2015;(2):92-96. (In Russian).
- [4] Korostelev S.A., Belostotskiy A.V., Pesennikova E.V., Marchenko S.D., Bol'shakova E.V. Improvement of motivation of medical workers. *Dnevnik kazanskoy meditsinskoy shkoly* 2018;(3):47-51. (In Russian).
- [5] Kuchits S.S., Gridnev O.V., Pesennikova E.V., Gadaborshev M.I., Vartanyan E.A. Features of labor motivation of employees of public health facilities. *Problemy sotsial'noy gigieny, zdravookhraneniya i istorii meditsiny* 2018;(6):452-456. (In Russian).
- [6] Korostelev S.A., Pesennikova E.V., Gridnev O.V., Andreeva D.M. The concept and assessment of medical care quality. *Dnevnik kazanskoy meditsinskoy shkoly* 2018;(3):194-197 (In Russian).
- [7] Korostelev S.A., Belostotskiy A.V., Pesennikova E.V., Marchenko S.D., Bol'shakova E.V. Improvement of motivation of medical workers. *Dnevnik kazanskoy meditsinskoy shkoly* 2018;(3):47-51. (In Russian).
- [8] Korostelev S.A., Pesennikova E.V., Gridnev, O.V., Marchenko S.D. MOTIVATIONAL MECHANISM OF MANAGEMENT STATE MEDICAL INSTITUTION. *Journal of new medical technologies* [serial online] 2018;(5):85-89 (In Russian).
- [9] Martynov A.A., Vlasova A.V. Efficiency of solving the problems of providing the population of the Russian Federation with high-tech medical care. *Problemy standartizatsii v zdravookhraneni* 2014; (3):3–11. (In Russian).

- [10] Pavlova Yu.I., Lapik S.V. The current state of nursing and the role of nurse manager in optimization of nursing management system. *Glavnaya meditsinskaya sestra* 2009; (10):20-36. (In Russian).
- [11] Pesennikova E.V., Gridnev O.V., Kuchits S.S. MEDICAL SERVICES OR MEDICAL CARE – AN URGENT ISSUE FOR PUBLIC HEALTH INSTITUTIONS. *Issledovaniya i praktika v meditsine* 2017;(4):156-164.
- [12] Stasevich N.Yu., Smyslov I.N., Organizational basis for improving the geriatric care in health facilities of various ownership. *Sotsial'nye aspekty zdorov'ya naseleniya* [serial online] 2015 [cited 2019 Apr 30]; 42 (2). Available from: <http://vestnik.mednet.ru/content/view/671/30/lang,ru/>. (In Russian).
- [13] Shurupova R. V. A word about methodology. *Vrach skoroy pomoshchi* 2011;(5):36-39. (In Russian).
- [14] Shurupova R. V. Ethical ideals and innovations in training. *Medsestra* 2009;(1):54-57. (In Russian).
- [15] Marlies van Bommel, Rob Kenkens, Andre Pen. *A concise Handbook of mental health nursing. – Neimeden.* 2003. – 153p.
- [16] Mierlo F van. *Vroegevoortekenen veneer psychoses in de praktijk. – Utrecht, 1999.*
- [17] Nug M. (red.) *Reabilite. – Utrecht, 2000.*
- [18] *Nursing Diagnoses: Definitions and Classification. 2001-2002/ 4-th edit. – Ng: NANDA, 2000. – 68p.*
- [19] O'Brien L. Nurse client relationships: the experience of community psychiatric nurses. *Australian and New Zealand Journal of Mental Health Nursing.* 2000.№9. – p. 184-194.
- [20] Rydon SE. The attitudes, knowledge and skills needed in mental health nurses: the perspective of users of mental health services. *International Journal of Mental Health Nursing.* 2005. – p. 78-87.
- [21] Singh D. Which staff care for people with Long-term Conditions? // *A Rapid Review of the Literature Birmingham University of Birmingham and Modernization Agency.* – 2005.– 70p.
- [22] Scanlon A. Psychiatric nurses perceptions of the constituents of the therapeutic relationship: a grounded theory study. *Journal of Psychiatric & Mental Health Nursing.* 2006. – p. 319-329.
- [23] Stromberg A., Martensson J., Fridiung B. Nurse led heart failure in Sweden // *Fur J. Heart Fall.* 2001. – P. 139-144.
- [24] Wilkin P., Hollander P. *Psychosocially rehabilitates. – Utrecht, 1999.*