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## АНАЛИЗ ЗАТРАТ РАБОЧЕГО ВРЕМЕНИ МЕДИЦИНСКИХ СЕСТЕР ОНКОЛОГИЧЕСКОЙ СЛУЖБЫ

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### РЕЗЮМЕ

**Введение:** в настоящее время в республике проводится огромная работа по реформированию системы здравоохранения. В статье приводятся данные, полученные в ходе хронометража рабочего времени сестринского персонала, работающего в отделениях лечебных учреждений.

Целью исследования было устранение потерь и непроизводительных затрат рабочего времени за счет применения новых технологий и методов лечения, лучшей организации труда на рабочем месте.

**Методы исследования:** Мы использовали хронометраж для изучения затрат рабочего времени среднего медицинского персонала. Объектом исследования является сестринский персонал. Исследование проводилось в течение октября-ноября 2019 года. Общее время наблюдения пятнадцати медсестер составило 9395 минут рабочего времени.

**Результаты:** в результате анализа затрат рабочего времени выявлено, что основная часть рабо-

чего времени медсестер тратится на их основную работу, то есть на оперативное время-6875 минут, что составляет 73,2% от общего времени наблюдения. В целом на подготовительное и заключительное время уходит 880 минут (9,4%). Это время, затраченное на подготовку или выполнение задания, или его выполнение (получение задания, медикаментов, инструментов, медикаментов, уборка рабочего места в начале и в конце смены, перевод смены и т. д.). Время обслуживания рабочего места составляет 995 минут (10,6%). 645 минут – это перерывы в работе, то есть время на отдых и личные нужды (6,8%).

**Вывод:** Таким образом, при оптимальной организации работы медицинских сестер могут быть выделены значительные временные резервы: до 5% за счет разгруженного времени, до 5% за счет других и хозяйственных видов деятельности, до 2-3% за счет работы с документацией и 5-8% - вспомогательных видов деятельности.

**Ключевые слова:** хронометраж, сестринский персонал, медицинская помощь, онкологическая служба.

## ANALYSIS OF THE COST OF WORKING TIME OF NURSES OF THE ONCOLOGY SERVICE

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### ABSTRACT

**Introduction:** at present there is a lot to reform the health care system. There is a wide network of public health institutions. They provide polyclinic, outpatient, inpatient, emergency, high-tech specialized medical care. The article presents data obtained during the timekeeping of nursing staff working in the departments of medical institutions.

The purpose of the study was to eliminate losses and unproductive labor time costs by applying

new technologies and methods of treatment, better organization of work in the workplace.

**Research methods:** We used timekeeping to study the costs of working hours of paramedical personnel. The object of the study is the nursing staff. The study conducted during October-November 2019. The total time of observation of fifteen nurses was 9395 minutes of working time.

**Results:** As a result of the analysis of the cost of working time, it was revealed that the bulk of the

nurses' working time is spent on their main work, i.e. on operational time-6875 minutes, which is 73.2% of the total observation time. In general, 880 minutes (9.4%) are spent on the preparatory and final time. This is the time spent on preparing or completing the task or completing it (receiving the task, medicines, tools, medicines, cleaning the workplace at the beginning and at the end of the shift, transferring the shift, etc.). The time of servicing the workplace is 995 minutes (10.6%). This is the time spent on maintaining the workplace in a state that ensures productive work. 645 minutes are breaks in work, i.e. time for rest and personal needs (6.8%).

**Conclusion:** Thus, with the optimal organization of the work of nurses, significant time reserves can be allocated: up to 5% due to unloaded time, up to 5% due to other and economic activities, up to 2-3% due to work with documentation and 5-8% - auxiliary activities.

**Keywords:** *timekeeping, nursing staff, medical care, oncology service*

**Introduction:** For the effective work of medical personnel of medical institutions, based on the use of sophisticated diagnostic equipment, new methods of treating diseases, characterized by a large number of intra-production and information flows in the field of management [1, 2, 3, 7, 8, 10]. There is a need for a clear organization of the labor process of medical and other personnel, progressive time standards, number standards, effective systems of material incentives for high-performance personnel work. This is the basis for the organization of work in the health care facility, its planning, organization and management of the treatment and prevention process as a whole in the institution [4, 5, 6, 9, 11].

The purpose of the study: to eliminate waste and unproductive costs of working time by applying new technologies and methods of treatment, better organization of work in the workplace.

**Materials and methods of research.** To study the cost of working time of secondary medical personnel, the timekeeping of working time was used. The object of the study is the nursing staff. The study was conducted during October-November 2019. In general, individual photos of the working hours of fifteen nurses of the oncology department were analyzed:

1. Nurses of the operating unit – 5,
2. Nurses of the treatment room – 5,
3. Nurses of the dressing room-5,

The entire observation time was divided into 4 main positions:

4. Preparatory and final time, operational (main and auxiliary) time of maintenance of the workplace (technological and organizational) and time of breaks (for rest and personal needs).

Preparatory and final (PF) – the time spent on preparing your workplace for the execution and completion of a production task.

Operative time (OT) - lead time manufacturing jobs: including: main (process) (OT main) – time direct impact on the subject of work; minor (OT minor) – the time it takes an employee to perform actions aimed at implementing the main work.

Workplace maintenance time (MT) – time spent on maintaining the workplace in working order: including: technical (MT tech) – time spent on equipment maintenance and tool maintenance; organizational (MT org) – time spent on workplace maintenance Break time (BT) – time during which the performer is not engaged in work. It can be regulated and unregulated (this is the loss of working time, depending and not depending on the employee, i.e. organizational).

**Results and discussion:** The total observation time of fifteen nurses was 9395 minutes of working time. Because of the analysis of the cost of working time, it was revealed that the bulk of the nurses' working time is spent on their main work, i.e. on the operational time – OP) - 6875 minutes-it is 73.2% of the total observation time, of which:

- The main (OT main) is-5515 min-58.7% this time is directly related to the impact on the patient
- Auxiliary (OT minor) – 1360 min-14.5%, which is not directly spent on the patient, but is associated with him.

In addition, we identified the main problems in the care of cancer patients: the difficulty of combining basic employment and patient care – 67%, significant financial costs – 48%, lack of special skills and information about the specifics of patient care – 43%, delays in obtaining preferential medicines – 23% and the inability to relieve the suffering of the patient – 69%.

In operational time, the share of the main one is 80%, the auxiliary one is 20%

In general, 880 minutes (9.4%) are spent on the preparatory and final time (PF). It's the time spent training or the job or the end (getting a job, medicines, tools, medicines, cleaning the work surfaces at the beginning and at the end of the shift, transmission shift, etc.).

The service time of the workplace (MT) – 995 min (10.6 per cent). Spent on maintaining the workplace in a state that ensures productive work:

Technological (MT tech) – 690 min-7.3% - time spent on the care of equipment, tools (69% of the OM as a whole)

Organizational (MT org) – 305 minutes-3.3% - the time spent on maintaining the workplace during the shift in proper condition. (31% of OM as a whole).

136,645 minutes are breaks in work (VP), i.e. time for rest and personal needs – (6, 8%). It should be noted that nurses in their spare time from work are engaged in self-education. Moreover, the question "How do nurses improve their skills and experience independently in providing palliative care to cancer

patients?” received the following answers: read magazines «Nurse» (Hamshira) – 59% and medical books – 35%; newspapers – 7%; attend training seminars – 33%; get acquainted with medical manuals – 11%; exchange experience with employees – 11% and watch TV shows based on improving the level of medical knowledge – 4%.

With an average follow-up time of 626 minutes, which is spent by all nurses: PF – 58 minutes, OP – 459 minutes, OT – 66 minutes, BT – 43 minutes.

Conclusions: From the study of the cost of working time of nurses in an oncological hospital, the following conclusions can be drawn:

Works hard: operational time, i.e. the time of performing their direct functional duties, ranges from 81-78% to 62-53% of the total observation time and averages 73% (6875 minutes of observation). This

is due to the large flow of patients, as well as the imperfect organization of work and recreation.

The time for servicing the workplace is higher (31-32%) in the treatment room, dressing room and operating unit and the minimum forward nurses (2%), which is explained by the technology of the treatment process and the specifics of this type of activity.

Ward and procedural nurses spend the maximum preparatory and final time, but in general, the share of this time is small: from 11-12% to 2-4% of working time.

The minimal time is spent on rest and personal needs: 2-4% of almost all nurses, except for ward nurses, who have the opportunity to restore their working capacity during working hours (9%), due to a small share of time for servicing the workplace.

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