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System of work with young specialist of nursing in the medical organization (on the example of State-financed health institution of the Samara region «Samara city clinical hospital № 1 named after N. I. Pirogov»)

Abstract: Features of work with young specialists of nurse business in a versatile hospital are considered. The special attention is paid to the mechanism of the mentoring playing huge role in adaptation and education of young specialists on a workplace.

Keywords: young specialist, mentoring, adaptation of the personnel.

The question of work in hospitals and other medical organizations of Samara and the Samara region of young specialists is raised at various levels. And meanwhile, still there is a problem how to involve certified specialists of nursing to work in structural subdivisions of the health care organizations and that is even more essential how to hold them at the workplaces. Especially during the adaptation period in the institutions of inpatient and outpatient type beginners are afraid not to cope with the functional duties, find lack of the knowledge, practical skills.

According to the Territorial body of Federal Service of State Statistics in the Samara region after the graduation from the medical schools and colleges about 90 % of the graduates

obtain employment at health institutions. But, in a year of work more than 80% of young employees leave the medical organizations. Despite a big number of graduates of nursing secondary professional educational institutions to keep most of them in the profession is a very complex challenge.

In State-financed health institution of the Samara region "Samara city clinical hospital № 1 named after N. I. Pirogov", work with young specialists is put as follows. Involvement of future nurses in the multidisciplinary medical organization, which provides round the clock medical care to the population of the city and of the region, begins with a student's bench. "Samara city clinical hospital № 1 named after N. I. Pirogov" is the main clinical base for educational and work practice

for students of "Samara medical college named after N. Lyapina". During the interning students are introduced to the medical departments of the hospital, with the duties of the medical attendants, a ward nurse and a treatment nurse. The chief nurse takes part in events such as "Open Day" which is annually organized for graduates in order to meet with future employers — representatives of health care organizations of the Samara region.

The school of "Mentoring" is organized in the hospital to get necessary professional skills and experience for young specialists and also to develop self-discipline and interest in results of work, to increase professional skills and competence level, to master standards of medical ethics and deontology. Work of this school is regulated by the order of the Chief Doctor № 329 from 11.07.2014 year «About the approval of Regulation on mentoring in "Samara city clinical hospital № 1 named after N. I. Pirogov"».

Mentoring is defined as work by training of a young specialist. The mentors who are appointed from the staff of "Samara city clinical hospital № 1 named after N. I. Pirogov" have high professional qualities (have the first or highest qualification grade), ability and readiness to share the skills with inexperienced colleagues, follow the standards and the rules of delivery of health care to the population, have communicative skills and are flexible in communication.

On the basis of the official report of the head of the structural subdivision, the agreement for working relationship between the mentor and the young specialist also the order on appointment of the mentor are prepared. Mentoring is provided for the period from 6 to 12 months and is realized by the method of individual training.

At the initial stage the mentor has to acquaint the beginner with working environment in the department, prepare a thematic study plan, assist in developing an individual plan of work for a young professional, and study his professional and moral qualities, the relation to work and staff and his personal characteristics.

Throughout the duration of the contract the mentor helps the young specialist with learning the profession and mastering in full knowledge and practical skills necessary for high-quality execution of functions by means of studying modern methods and working practices, transferring of the personal experience; also the mentor provides integration of a new employee in the workforce, involves him in public life of the organization; engages a mentee in performance of research and practice work. After the completion of the curriculum the mentor fills the character reference of a young specialist. Following the results of the activity the mentor carries out an assessment of overall performance of the beginner and prepares the report about mentoring.

In turn a young specialist is obliged to obtain necessary professional skills, to study and use in work the documents which regulate activity of the medical organization and structural subdivision and also by the chosen profession, monthly and after the term of mentoring to present a report to the mentor about the realization of the individual work plan. 22 contracts of mentoring with young specialists have been made, that is 60% of the number of newly employed in "Samara city clinical hospital № 1 named after N. I. Pirogov" from 01.01.2014 till 01.01.2015.

Development of mentoring in hospital promotes increase of theoretical training of nurses, improvement of practical skills and of the quality of nursing treatment and the status of profession, growth of corporate spirit in collective. This fact is confirmed in reducing the outflow of young specialists with secondary medical education from health care organizations: 2011 year — 4 people, 2012 year — 9 people, 2013 year — 3 people, 2014 year — 1 person.

For the purpose of improvement and maintenance of professional skill of the average medical personnel, adaptation of young specialists on workplaces, improvement of quality of medical care and care of patients in "Samara city clinical hospital № 1 named after N.I. Pirogov" by the order of the Chief Doctor № 288 from 11.11.2013 was organized the Educational and Methodical office. Educational and Methodical office has developed the folder of "Young specialist" containing necessary documentation for adaptation of the personnel on a workplace for the best acquaintance to the structure of health care organizations, its requirements and rules [1, 221].

In the folder of "Young specialist" the following documents are submitted: welcome speech of the Chief Doctor; historic reference about the hospital; the plan of work with young specialists; information about work of the labor union organization, about the financial support and the stimulating payments to experts; the order on mentoring; Ethical code of the nurse; data about work and cooperation with the Samara regional public organization of nurses; advice to beginners; a questionnaire of a young specialist and test tasks for the primary assessment of the knowledge.

From the moment of its formation the number of the young specialists, who were trained in Educational and Methodical office, was 85 % of the total number of newly employed in "Samara city clinical hospital № 1 named after N.I. Pirogov" in 2013–2014.

The work of the administration with young professionals can be mentioned as one of the most important management cycle which allows implementing a system approach as a principle of activity and contributes to the creation of an effective management system. In the process of employment the hospital management sets a monthly allowance to the salary of beginners and also uses other forms of material incentives, for example, due to marriage, birth of a child, enrollment a child in the first form, the acquisition of expensive drugs for treatment and other. There are also other forms of incentives for medical staff in "Samara city clinical hospital № 1 named after N. I. Pirogov" and they depend on motivational type of the employee.

Participation of young specialists in various public and cultural events plays an important role in adaptation of medical staff on workplaces. Inaugural ceremonies of new employees with the presentation of souvenirs are organized on the International day of nurse. Annually, there are competitions of professional skill where a special nomination is allocated for this employee group.

In recent years the number of young specialists with secondary medical education in health care organizations significantly increased: 2011year — 8 people, 2012 year —

19 people, 2013 year — 25 people, 2014 year – 39 people. The total number of employed nursing staff for these years was 91 workers.

Thus, the existing system of work with young specialists of nursing in health care organizations provides a positive trend of increasing the number of nursing staff in "Samara city clinical hospital N^0 1 named after N. I. Pirogov".

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Evaluation of sperm DNA fragmentation in men with infertility in Kazakhstan

Abstract: As a result of the study the patients with male infertility had the DNA fragmentation index at the level of 40.0 % in average regardless of the cause.

Keywords: male infertility, DNA fragmentation.

Background/Aim

DNA fragmentation level evaluation of spermatozoids of males with idiopathtic infertility.

Timeliness

Semen analysis is the main type of study to assess male infertility [1; 2]. When male infertility is treated the parameters of routine semen analysis can not always predict male fertility. Currently the specialists dealing with infertility are interested in genetic studies very much. On the one hand, this is due to a progressive increase in the proportion of male factor. Over the past 20 years it has changed from 30 to 50 % and continues to grow. On the other hand, so-called idiopathic infertility [3] has a fairly large proportion (up to 30%) among the causes of male infertility. We need to carry out more detailed studies, such as DNA fragmentation of sperm nuclei and chromatin, impairment condensation, aneuploidy in sperm nuclei [4; 5] to diagnose and predict male fertility more effectively. The above methods are more important to evaluate sperm quality resulting in an increase of prognostic and diagnostic approaches than standard semen characteristics (concentration, motility and morphology) [6].

Sperm DNA fragmentation is increasingly recognized as an important cause of infertility and widely studied. Relationship between DNA damage and reduction of reproductive functions contributed to the study of the sperm DNA integrity within the male fertility evaluation [7]. Sperm DNA integrity is necessary to transfer genetic information. Anomalies and damage in sperm nuclei chromatin can result in infertility. Such methods as SCD (sperm chromatin dispersion, TUNEL (Terminal deoxynucleotidyl transferase dUTP nick end labeling) are most commonly used to study sperm DNA integrity. Numerous studies using these methods to assess the integrity of sperm DNA revealed the presence of significant relationship between sperm DNA damage and pregnancy outcomes [8]. In addition, there are several scientific papers that investigated the correlation between clinical factors and sperm DNA damage. Among other modifiable lifestyle factors, smoking can result in deterioration in sperm quality and cause genetic damage [9; 10]. Some associations between the influence of alcohol to reduce male fertility are also shown in various studies [11]. Alcohol causes changes in the endocrine system regulating the hypothalamic-pituitary-testicular function and has direct toxic effect on the male reproductive gland [12-14].

TUNEL and SCD-test are used most of all among other tests to detect sperm DNA damage. The method is based on the principle of chromatin dispersion (SCD-test). Undamaged (fresh, frozen, thawed) sperm is immersed into an inert agarose gel on a prepared slide. Acid treatment denatures the DNA and