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THE ROLE OF NURSES IN THE PREVENTION OF NOSOCOMIAL INFECTIONS IN HOSPITALS

Khusanova Mamura Sheralievna
MA - President of VSD Samarkand State Medical Institute, Uzbekistan

Outline

As a result of purposeful implementation of a set of preventive and anti-epidemic measures in the Republic of Uzbekistan significant success has been achieved in combating infectious diseases. Since 1991 a consistent decrease of morbidity rates for a number of infectious diseases including viral hepatitis "A" - 4,5 times, acute intestinal infections - 4,6 times, and acute respiratory diseases - 7,9 times is observed. As a result of improvement of the National calendar of preventive vaccinations, as well as taking into account international experience, immunization against 13 infectious diseases is currently carried out. The level of immunization coverage among the population is 95-99%. At the same time, the issues related to increasing the level of prevention of infectious diseases and the quality of medical care provided in medical and preventive treatment facilities remain unresolved. In this regard, the Decree of the Cabinet of Ministers of the Republic of Uzbekistan dated July 24, 2017, under No. 537 "On additional measures to prevent the spread of infectious diseases in the Republic of Uzbekistan" was adopted. Also, a set of measures for further improvement of diagnostic methods, measures for prevention and treatment of infectious diseases, including viral hepatitis in the Republic of Uzbekistan for 2017 - 2021 was adopted. Also, Decree No. pp-3800 "On additional measures to combat the spread of the disease caused by human immunodeficiency virus and the prevention of nosocomial infections" was adopted by the President of the Republic of Uzbekistan. This decree was adopted on June 22, 2018[16].

Keywords: nursing staff, infection, patients, STDs

Research Methods

The nursing staff is a very important link in the structure of health care delivery. Unfortunately, for many years the basics of nursing, its prestige, and social status have not been reviewed. In accordance with the new tasks set, her role, function, and forms of activity are beginning to change. Due to the ongoing changes in the country, the role and role of nursing professionals is changing. In connection with this, the responsibility for the results of the work of the nursing staff is significantly increasing. The development of the healthcare system to a great extent depends on the quality of

professional training, rational placement, and use of paramedical staff. A special place in the activity of nursing staff is occupied by therapeutic and diagnostic assistance, preventive work with patients, support to patients with severe and incurable diseases, and education of the population on a healthy lifestyle. The nursing staff plays an important role in the treatment process. The quality of medical care is closely related to the work of physicians and nurses. Sanitary-epidemiological norms and rules are assets, which establish certain standards and requirements. It is very important for every healthcare worker to observe safety measures and rules, stipulated by normative legal acts. With the growth of information technology, qualification requirements for all medical personnel are increasing, which leads to necessary changes and transition to a new model of the organization of medical care. The peculiarity of our country's population is low involvement in the preservation of their health. The problem of economic nature is the insufficiency of resources. Improvement of qualification of medical personnel, the introduction of new organizational technologies of medical care, document flow in medical institutions, optimization of information exchange, improvement of drug supply mechanisms, evaluation of the activities of medical institutions. Comfortable registration, convenient appointment with a doctor via the Internet, convenient routing, friendly and qualified personnel, accessibility of preventive measures, timely and quality medical care, elimination of queues, and information are the main aspects for providing quality medical care to the patient.

Nursing is the science of nursing activities and the interconnectedness of these activities and the patterns of their development. A system of minimally necessary and interrelated, but sufficiently scientifically substantiated actions of the nursing staff. The implementation of which allows the most rational diagnostic and therapeutic measures and ensures the achievement of the maximum compliance of scientific results with the real ones is the technology of the nursing staff. In recent years, the problem of nosocomial infections has become extremely important for all countries of the world. Rapid growth rate of medical institutions, the emergence of new therapeutic-diagnostic equipment, the use of new medications with immunosuppressive properties, artificial suppression of immunity during organ and tissue transplantation, and many other factors increase the risk of spread of infections among patients and workers of medical institutions.

The nurse - is the main link in the prevention of hospital-acquired infections according to the World Health Organization (WHO) in developed countries between 5% and 10% of hospitalized patients acquire one or more infections during their stay in a modern hospital. In developing countries, the risk of nosocomial infections is 20 times higher. In addition to ensuring the quality of care, the safety of patients and

nursing staff is now also a strategic goal of health care. The paradox is that with the development of high technology, the possibility of infecting the patient increases, especially if his body is weakened. We have learned how to save patients in the most severe cases, it is necessary to think about their safety in the medical institution. Currently, we are changing the concept of prevention of STIs, as well as, according to the WHO recommendations, the self-definition: of "nosocomial infections" to "infections associated with the provision of medical care", which more accurately reflects the content of the issue. For several years in the Republic of Uzbekistan, the system of sanitary-epidemiological supervision has been developed and improved and the expansion of personnel retraining for nosocomial infections has been revised as well[15]. As a result of the work of foreign and domestic researchers, it is possible to assert, that intrahospital infection occurs in 5-12 % of patients arriving in treatment establishments. So, as in Germany annually is registered to 600000-700000 diseases in hospitals, in connection states of America 2100 000 that makes 1 % of this population. It is estimated to be the leading cause of death among 122,000 persons infected with STDs in the U.S. states. According to the latest data, STIs significantly prolong the period of hospitalization, and the damage caused by them is from $5.5 to $11 billion in the United States each year. There are three types of hospital-acquired infections:

Patients who become infected while receiving outpatient care.

Health care workers provide care to patients in hospitals and clinics.

Patients infected in hospitals.

All three types of infection share a commonplace of infection: the health care facility. Hospital-acquired infection (hereinafter referred to as HAI) (syn. - hospital, nosocomial infection) is any clinically pronounced disease of microbial origin that affects a patient as a result of his/her admission to a hospital or seeking treatment in a medical institution regardless of the appearance of symptoms in the patient during the hospital stay or after discharge, and also an infection of an employee of a medical organization due to his/her infection while working in that organization. STDs are characterized by the fact that this category of infections has its own specific epidemiology, which differs from the so-called classical infections.

They differ in the mechanism and factor of disease transmission, peculiarities of the course of epidemiological and infectious processes, as well as medical personnel of LPU, which plays an important role in the emergence, maintenance, and spread of STI foci. It is advisable to briefly characterize the structure of STIs, in order to understand the main directions of STI prevention. The analyses show that purulent-septic infections take a leading place in the structure of STIs, making up 74-79% of their total

number in large multi-profile ICUs. Purulent septic infections (PSI) are most frequently registered in surgical patients, especially in the departments of emergency and abdominal surgery, urology, and traumatology. Risk of septicaemic infection: hospital strains. Carriers of resident strains among staff are increased contamination of the air, fumes from staff and surrounding objects, failure to care for patients and their placement, therapeutic and diagnostic manipulations. One of the largest groups of STDs is intestinal infections. Intestinal infections account for up to 7-12% of the total number of infections in some cases. They occur mostly (up to 80%) in surgical and intensive care patients who have had extensive intestinal surgery with severe systemic disease. The role of hemocontact viral hepatitis B,C.D. in VBI plays a special role and makes up 6-7% of the total structure. There is a high risk for patients who undergo extensive surgical interventions followed by hemodialysis, blood replacement therapy, infusion therapy program. The tests of patients with various pathologies show 10-20% markers of these infections. Medical personnel who perform surgical manipulations are in a special risk category. According to indications of examination medical workers in the surgical, hematological, laboratory, and hemodialysis departments are carriers of markers of hemocontact viral hepatitis, amounting to 14-60%. In LPU are registered patients for other infections, such as tuberculosis, diphtheria5-6% of the total disease, influenza, and other respiratory diseases in 5-6% of the total incidence.

Regardless of the profile, health care facilities must comply with three major requirements:

-Exclusion of intrahospital infections.

-Minimization of possibility introducing infection.

- Exclusion of infection outside the hospital.

Junior and mid-level medical personnel have a major role in the prevention of STDs. The fulfillment of sanitary and hygienic and anti-infective regimes is the basis of the list of measures. The problem of infections is an important and multifaceted one, and the directions of infection prevention consist of the most important sanitary, hygienic and anti-epidemic measures. Disinfection is one of the most important measures to prevent STDs. Disinfection is multicomponent disinfection, which means the destruction of pathogenic and conditionally pathogenic microorganisms on the external environment and premises of the hospital, medical instruments, and equipment. Disinfection is practically the only way to reduce morbidity in hospitals. It is also necessary to note that all hospital strains of STD pathogens along with practically complete antibiotic resistance possess significant resistance to external factors, including disinfectants. Salmonellosis pathogen Salm. tinximurium is

insensitive to concentrations of chlorine-containing disinfectant solutions traditionally recommended for current disinfection (0.5-1%) and dies on exposure to at least 3% chloramine and 5% hydrogen peroxide solution for at least 30 minutes. The use of solutions of lower concentration, not knowing these facts leads to the emergence of more resistant hospital strains in LPU. In the tactics of preventive and focal disinfection in LPU, there are rules in the tactics of disinfection in LPU. Disinfection should be performed taking into account the epidemic danger, the degree of importance of certain items and equipment. Sanitary rooms, urinals, dishes, white and personal belongings of patients with infectious diseases are treated with a high content of the disinfectant solution. This rule applies to all categories of medical personnel, especially those working in operating rooms, dressing rooms, laboratories, and manipulation rooms. It is especially important for the personnel to comply with the regime, such as disinfection of disinfectants and waste material, personal protection of safety rules, disposable instruments and white goods before their disposal, regularity, and thoroughness of general cleaning. With the appearance on the market of new models of equipment and disinfectants, the outdated set of routine disinfection with chlorine-containing agents was revised. Instead of chlorine powder disinfectants, which are toxic and lose their activity when chilling, the alternative - liquid concentrated disinfectants based on quaternary ammonium compounds appeared. These preparations are non-toxic and have a washing effect in addition to their disinfecting properties. In order to prevent HIV infection and viral hepatitis B and C and other infections, all medical products must be pre-sterilized after each use. This consists of several steps. After disinfection, the instruments must be rinsed under running water for 30 seconds. Disinfecting solutions must be used only once. The risk of infiltration is determined by external and internal factors internal risk factors: severe underlying disease, polyhypovitaminosis, hypothyroidism, immunosuppressive chemotherapy, surgery, loss of skin tessellation, etc.

Devices that increase the susceptibility of the patient to infections, as microorganisms enter the body from the surrounding environment. It is inadmissible to treat without determining antibiotic resistance or to use the cheapest old antibiotics or to discharge an under-treated patient from a medical facility. According to statistics, the incidence of septic diseases is quite high. Leading pneumonia, lesions of the genitourinary system, as well as complications of diagnostic and therapeutic manipulations. About 30% of them can be treated as VBI. There is also a growing trend in the incidence of sepsis and soft tissue phlegmon. At the same time, the lethality rate of sepsis is 37-40%. It can be argued that there is a threat of a pandemic of antibiotic resistance of

microorganisms, Prevention of nosocomial infections. Directions for prevention of STIs:

Antibiotics will only be prescribed once antibiotic resistance has been determined. Antibiotics are mostly foreign-made. Disinfection and straining activities with the use of modern disinfectants.

-Application of tissue and polymeric sterile dressings, total implantable catheters, and pumps to reduce the incidence of catheterassociated infections;

-Mandatory hand washing.

- Aseptic wards and gnobiologic camera. Control of intravenous catheters, checking for vascular infection;

- Quality improvement of reagents for microbiological research;

- Free visiting regime for visitors, etc.

- Reducing the time of nailing in LPU;

- Health care programs for hospital staff.

- Mechanize and automate manual labor in pre-sterilization cleaning and sterilization operations, i.e.

- Simplify the training conditions of the attendants.

- Create conditions for thorough postoperative quality control of the instruments processed.

- To simplify the ensuring of the relevant sanitary conditions at the technological operations and in the relevant areas.

- Reduce the amount of disinfection and sterilization equipment used and increase the efficiency of its use;

- Reducing the staff of operating personnel;

- Improving the quality and conditions for the maintenance of disinfection and sterilization equipment and reducing the need for spare parts;

- Reduction of special engineering communications in health care facilities.

We wanted to find out whether nurses in the therapeutic departments of the Hospital are familiar with standardization processes in health care and whether they use approved and current standards of nursing manipulation. The following results were obtained: only 8.7% of nurses are aware of the existence of standards for performing simple medical services. Only 5.8% of respondents were familiar with the concept of "simple medical service," but none of them could give an example from their practice. None of the respondents are familiar with the approved and current standards for the technology of simple medical services. All use instructions in their work. It is interesting to note that 82.4% of the respondents, when asked if nurses should participate in the development of nursing standards, gave a positive answer. All

nurses, with the exception of those who did not answer the question, believed that standards of nursing manipulation are very important in preventing STDs. The nursing staff plays a major role in the prevention of STDs in hospitals. The basis of measures to prevent STIs is the daily, careful and rigorous implementation of sanitary and anti-epidemic regimes. Active participation of the nursing service in the prevention of STIs is one of the main conditions for the success of this activity[14].

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