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Knowledge of Nurses in Prevention of Hospital Infection in Hospital "Sheikh Zayed" Vushtrri

Mexhit Mustafa[1], Afërdita Lahu[1]

[1]College of Medical Sciences "Rezonanca", Str. Glloku te Shelgjet – Veternik 10000 Prishtinë, Kosovo, and, Teaching clinik of Nursing of Hospital "Sheikh Zayed" Vushtrri

Corresponding author:
Afërdita Lahu, Msc. Teaching of Nursing "College of Medical Sciences "Rezonanca", and, Klinical Nursing of Hospital "Sheikh Zayed" Vushtrri. E-mail: mexhitmustafa857@gmail.com. ORCID ID:http://www.orcid.org:0000-0000-0000-0000.

ABSTRACT

Introduction: Hospital infections are the major challenge of modern health care, and they are indicative of the quality of the services provided, a hospital or other health institution. Hospital infections also belong to gastric infections, which are the result of the mistakes of health workers during various diagnostic and therapeutic procedures. **Aim:** This study deals with the research of knowledge, experiences, and the work of nurses and their interventions in the prevention of hospital infections in the Vushtrri regional hospital center. **Material and Methods:** We used dry Sterilization (exposure at 160 ° C for 120 minutes or 170 ° C for 60 minutes) which is considered less safe than the first method especially for some devices with many tubes, pits, etc. Ethylene oxide and formaldehyde are released from use for safety reasons with the emission of gases. **Results:** From the research conducted we found that about 70% of nursing staff have satisfactory knowledge of hospital infections and the role of nursing care in preventing hospital infections, while only 55% have sufficient knowledge about the ways of spreading hospital infections. Over 77% of respondents have sufficient knowledge about the measures and prevention of hospital infections. **Conclusion:** The reason why we have been researching this topic has to do with many interventions, applications, nursing procedures is a series of actions that can contribute both to prevention and to the appearance of hospital infections. For their definition around the world, definitions of hospital infections are used according to the Center for Disease Control (CDC) from Atlanta. **Conclusion:** The reason why we have been researching this topic has to do with many interventions, applications, nursing procedures is a series of actions that can contribute both to prevention and to the appearance of hospital infections.

Keywords: Nurses, patients, illnesses, spatulatory infections, medical care.

1. INTRODUCTION

Hospital Infections are an major problem that greatly reduces the quality of health care, and of life hospitalized patients (1-10). And, because of intensive therapy, and the duration of hospital stay has a very high cost, which is difficult to afford; when meanwhile, evidence suggests that this problem is avoidable or possible minimized (11-20).

Hospital infections or otherwise called nosocomial infections can are defined as: '' An infection that a patient receives while in hospital for other reasons or conditions. '' So, this infection was not present at the time of hospitalization hospital. Hospital infections include hospital-acquired infections that can also appear after the patient leaves the hospital, as (20) well as those affecting the medical staff who works in hospital.

The purpose of infection control is to prevent and minimize infections hospitalized patients and health care workers who suffer from e medical care. In this research, the best methods are described important to achieve two goals:

a] . prevent or minimize the rate of hospital infections, and

b]. protecting health personnel and visitors from the potential risks of Infection (20,21).

Also, this scientific research is needed to serve as a professional-scientific-practical tool for all subjects that provide health care to established infection prevention team's hospital in health institutions. The information in this

scientific research will come to you also assisting administrators, infection control personnel and health workers.

2. AIM

The aim of this study was to explore what are deals with the research of knowledge, experiences, and the work of nurses and their interventions in the prevention of hospital infections in the Vushtrri regional hospital center.

3. MATERIAL AND METHODS

This research presents a prospective study of nursing knowledge on hospital infections and their prevention. The structure of the respondents is comprised of 40 Nurses of different units of the Regional Hospital in Vushtrri (5). In hospital we use several types of sterilitations (Table 1):

Thermal sterilization

Fluff Sterilization: Exposure to humid temp. 121 ° C for 30 min or 134 ° C for 13 minutes in autoclave. Steam Sterilization is the most common and preferred method of sterilizing equipment penetrating the skin and mucosa, provided that heat and humidity do not damage those devices. Steam

Type of Autokllave	Packing	Temperature	Exposure time	Drying time
Gravitacional	I rolled	121 ºC	30 minutes	30 minutes
Gravitacional	I rolled	132 ºC	15 minutes	30-40 minutes
Paravakum	I rolled	132 ºC		
Gravitacional	"Rapidsterilization" (nonferrous)	132 ºC	3-4 minutes	
Gravitacional	Microbiological Waste	121 ºC	45 minutes	

Table 1. Use of autoclaves by gravity

sterilization is a safe, non-toxic, free, sporocidal method, quickly achieves heat and penetrates well into the material.

Dry Sterilization

Exposure at 160 ° C for 120 minutes or 170 ° C for 60 minutes; this sterilization is considered less safe than the first method especially for some devices with many tubes, pits, etc.

Ethylene oxide and formaldehyde are released from use for safety reasons with the emission of gases.

Paracetamol is widely used in the US and some other countries in system processes.

Automatic sterilization.

Care should always be taken to ensure that sterilized devices go out of the department under the curve system: d.m.th. according to the date of sterilization, starting with older equipment.

• Storage conditions are important to maintain sterilization.

• The user must check the integrity of the packaging before use.

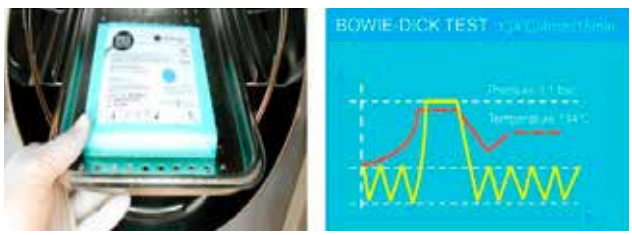

Figure 2. Check Steroid Bowie-Dick Test Method

The Quality Controls for the Sterilization Process (QCSP)should include such data about the process as: Loading, percentage, temperature and duration, Physical and Chemical Testing (at least every day), Biological Testing (at least every week), the evaporation process (sterrothermophilus bacilli), processing with ethylene oxide (Bacillus subtilis v. niger). Regular maintenance should be documented. For all types of sterilization, the following data should be recorded: how, date of service, model and country serial number, description of replacement parts, biological testing ecords, Bowie-Dick test, signing of the controller

4. RESULTS

The research included 40 nurses of different units of the Regional Hospital in Vushtrri: Intensive Care Unit, Surgery Unit, Pediatric Unit, Gynecology Unit and Maternity Unit. Results of our invetsigation are presented at Tables 2-4.

In the research of hospital nurses' knowledge of hospital infections, personal hygiene measures of health personnel (hand washing), implementation of the decontamination cycle and management of infectious waste in preventing hospital infections at Sheikh Zayed Hospital in Vushtrri (1). Of the 40 nurses surveyed dominated female gender (94%), age group 37 to 45 (62%), secondary nursing education (65%) and work experience over 30 years (32%) (2). From the research conducted we found that about 70% of nursing staff have satisfactory knowledge of hospital infections (19-20) and the role of nursing care in preventing hospital infections, while only 55% have sufficient knowledge about the ways of spreading hospital infections (2-4). .

Over 77% of respondents have sufficient knowledge

Nr.	Nursing knowledge in preventing hospital infections	I completely agree		I agree in part		I do not know		I do not agree in part		I completely disagree	
		%	F	%	F	%	F	%	F	%	F
05	Hospital infections are infections that occur at the time of the patient's extension to the hospital environment.	25%	10	0 %	0	7 %	3	20 %	8	48 %	19
06	The presence of the cause of the infection in the hospital environment means a safe occurrence of hospital infections.	40%	16	30 %	12	7%	3	10 %	4	13 %	5
07	The source of hospital infections may also be people who have previously been infected but are now recovering.	35%	14	20 %	8	0%	0	22 %	9	23 %	9
08	Contact with the pus of infected persons means a safe introduction of hospital infections to contact persons.	59%	22	0%	0	2%	1	10 %	4	33 %	13
09	Contact with the spit of the infected person means the safe spread of hospital infections to the contact persons.	58%	23	22 %	9	2%	1	5 %	2	13 %	5
10	Slapping with blood-contaminated needles means safe introduction of hospital infections to the slaughtered person.	90%	36	0%	0	0%	0	0 %	0	10 %	4
11	Placement of the mask is safe protection from intrahospital infections that spread through the air drops.	77%	31	0%	0	0%	0	0 %	0	23 %	9
12	Hospital infections are caused by non-compliance with hospitals' rules and by non-compliance with nursing care.	71%	30	0%	0	6%	1	0 %	0	23 %	9
13	The greatest risk for the occurrence of hospital infections is when the patient is released from the hospital.	6%	1	0%	0	23 %	9	0 %	0	71 %	30
14	I as a nurse can not influence the prevention of internal-infection.	6%	1	0%	0	23 %	9	0 %	0	71 %	30
15	Nursing practice in preventing hospital infections does not need improvement	6%	1	0%	0	0%	0	0 %	0	94 %	39

Table 2. Results of questions from; 05-15 in percent (%) and frequency (F).

Nr.	Nursing knowledge on personal hygiene measures, (hand washing), in preventing hospital infections	Icompletely agree		I agree in part		Idonot know		I do not agree in part		Icompletely disagree	
		%	F	%	F	%	F	%	F	%	F
16	Hand washing by health personnel is not the most effective method for preventing hospital infections.	30%	12	20%	8	5%	2	12%	5	33%	13
17	Washing hands with warm water removes all the microorganisms from the surface of the cleaned hands.	10%	4	15%	6	5%	2	30%	12	40%	16
18	Hand washing is not necessary before any nursing interventions.	10%	4	2%	1	7%	3	18%	7	63%	25
19	To prevent the spread of intra-hospital,infections through hands, I usually clean my hands for at least 10 sec.	43%	17	10%	4	7%	3	10%	4	30%	12

Table 3. Results of questions from; 16-19 percent (%) and frequency (F).

Nr.	Nursing knowledge in the implementation of the decontamination cycle	Icompletely agree		I agree in part		I do not know		I do not agree in part		Icompletely disagree	
		%	F	%	F	%	F	%	F	%	F
21	Disinfection is a process of complete destruction of pathogenic microorganisms from the surface of different objects.	45 %	18	33 %	13	2 %	1	5%	2	15%	6
22	I think that after their disinfection, the equipment is safe for use in all nursing interventions.	25 %	10	15 %	6	0 %	0	22 %	9	38%	15
23	If the temperature in the dry air sterilizer reaches 180 ° C the sterilization of the instruments should last 1 hour (hours).	75 %	30	10 %	4	0 %	0	0%	0	15%	6
24	Sterilization of the counting instruments performed at the moment when the thermometer in the sterilizer reaches the prescribed temperature point of 180 ° C.	83 %	33	5%	2	0 %	0	12 %	5	0%	0
25	Chemical method (with reagent paper) is the safest method for sterilization control.	62 %	25	28 %	11	0 %	0	0%	0	10%	4
26	The chemical sterilization check indicator (litmus paper) should only be placed on the outer surface of the instrument cassette.	43 %	17	8%	3	12 %	5	12 %	5	25%	10

Table 4. Results of questions from 21-24 in percent (%) and frequency (F).

about the measures and prevention of hospital infections. The role of nurses in the prevention of hospital infections is knowledgeable by over 70% of respondents, while 94% think that nursing practice in preventing hospital infections needs improvement (3-5).

The role of nurses in the prevention of hospital infections is knowledgeable by over 70% of respondents, while 94% think that nursing practice in preventing hospital infections needs improvement (9-10).

For the role of hand hygiene as a major measure in preventing the spread of hospital infections (17) only 45% of the nursing staff have knowledge, whereas only 75% of the respondents know the techniques and length of the handwashing (11-12).

About 75% of the research participants have sufficient knowledge of the decontamination cycle with a special emphasis on sterilization and disinfection as a key element in preventing hospital infections (3-15), while 90% of respondents classify and manage in-hospital waste (9-13).

5. DISCUSSION

A topic such as nursing research on preventing hospital infections has not been previously investigated in our hospital, and this prevents us from comparing our findings with preliminary data at the Vushtrri / Vucitrn Hospital but by comparing literature used (2-5). What should be noted is that many nursing practices need to be advanced, so our research was very good in order to see the possible failures that may occur during internships and nursing work (4-6).

Nurses' knowledge of hospital infections and their prevention are consistent, as their preparations and knowledge help reduce hospital infections (3-8). Although the survey shows that respondents are aware of some nursing measures (interventions) in preventing hospital infections (16) also, shows some interventions that need to be improved (13). Nursing knowledge of hospital infections and their prevention. This study shows that respondents are aware of some nursing interventions to prevent hospital infections and also indicate some interventions that need to be improved.

As the best way to prevent hospital infections, it is about a model of assessing the professional development of nursing staff. Therefore, based on the findings of the main work and goals, and the literature review, we can conclude that hospital infections pose a serious threat to modern health, both in industrialized and developing countries, such as Kosovo.

The paper presents a realistic overview of nursing knowledge at Sheikh Zayed Vushtrri Hospital, where nurses' knowledge of hospital infections and their prevention at Sheikh Zayed Hospital in Vushtrri is consistent, as their preparation and knowledge help in reducing hospital infections.

What should be emphasized that the many nursing practices need to be advanced, so our research was very deliberate in order to detect potential omissions that may occur during nursing practices and work.

The role of nursing in preventing hospital infections is unique, as many interventions, applications, or procedures such as: hand hygiene, disinfection, sterilization, waste management, all of which are closely linked to patient care and the hospital environment, constitute the main challenge in preventing infections in general.

Through this research, we can suggest not only the hospital where the research was conducted, but also other hospitals to think more about study or professional research, because, nursing has to do with a wide range of actions, behaviors, applications, education, advice, and many other professional practices. The frequency and types of these infections depend on many factors:

Type of hospital, patients' immunological status, hospital hygiene, staff training, doctrines on antibiotic use for preventive and curative purposes, etc.

The onset of nosocomial infections complicates the course of primary disease (increases morbidity and mortality), prolongs treatment time and increases cost.

Causes of intrahospital infections can be almost all microorganisms (bacteria, viruses, mosquitoes) (20-21).

The types of bacteria causing the infections over time

have changed, depending on the type of antibiotics applied and aggressive diagnostic and therapeutic procedures that cause mucosal and skin lesions (integrity damage). These bacteria develop resistance to antibiotics and disinfectants. The most common causes are: Escherichia coli, Staphylococcus aureus (especially methicillin resistant species), Enterococcus sp., Pseudomonas aeruginosa, Acinetobacter

spp., Klebsiella pneumoniae (18-19). Proteus mirabilis, etc.

This research has been researched to assist hospitals and especially services where infections hospitals appear more frequently to implement preventive measures in their work and better corrections, and based on scientific evidence. It will help that hospitals to meet safety and quality standards requirements of patients and staff designed by the Health Centre Hospital (18-19) and approved by the Ministry of Health, for the purpose of hospital accreditation (20-21). The research of this paper was done with respect essential recommendations of the national strategy of the SSSC of the Republic of Kosovo (18-19).

The most optimal and safe way of nursing knowledge constantly remains a challenging and controversial issue among health professionals. Accumulation of knowledge on various aspects of nursing is a "body of knowledge" that nurses and others can draw on and contribute to it. Exploiting research to support practice is the ultimate goal of nursing research.

The reason why we have been researching this topic has to do with many interventions, applications, nursing procedures is a series of actions that can contribute both to prevention and to the appearance of hospital infections. Such a topic on nursing research on preventing hospital infections has not been previously investigated in our hospital, and this prevents us from comparing our findings with preliminary data at the Vushtrri Hospital but by comparing literature used.

6. CONCLUSION

For the role of hand hygiene as a major measure in preventing the spread of hospital infections, only 45% of the nursing staff have knowledge, whereas only 75% of the respondents know the techniques and length of the handwashing.

About 75% of the research participants have sufficient knowledge of the decontamination cycle with a special emphasis on sterilizacion and disinfection as a key element in preventing hospital infections, while 90% of respondenc classify and manage in-hospital waste.

Key recommendations regarding personal hygiene.

a) Selection of protective equipment shall be based on transmission risk assessment the patient's microorganisms, and the risk of medical personnel being contaminated from blood, body fluids and patient secretions (Grade D).

b) For any invasive procedure and for any procedure thought to be at risk.

Exposed to blood, bodily fluids, secretions or contaminated work tools must be worn gloves (Grade D).

c) Gloves should be disposable, they should be worn immediately before a situation where they will have contact with the patient and be removed immediately after contact with the patient is completed (Grade D).

d) Gloves should be disposed of where medical waste is disposed of and hands should be disposed of cleaned after removing gloves (Grade D).

e) No gloves or polythene-containing gloves should be used (Grade D).

f) Where there is a risk that the clothing may be exposed to blood, bodily fluids or secretions should be worn with disposable plastic protective aprons.

After using them should be disposed of at the medical waste site (Grade D).

g) Where there is a risk that the face may be sprinkled with blood, body fluids or secretions face masks and eye protection should be used (Grade D).

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