"A study to assess the knowledge regarding the nosocomial infection and its prevention among the staff nurses of Krishna hospital karad."

- 1. Ms. Shweta Shitole,
- 2. Mr Mahesh Chendake, Associate Professor, Krishna institute of nursing sciences, karad
 - 3. Ms Shruti Sam,
 - 4. Mr. Ranjeet Yadav,
 - 5. Mr.Sangram Yedage
- 6. Dr. Mrs Lekshmi Nair, Assistant Professor, Krishna institute of nursing sciences

ABSTRACT

BACKGROUND :- Nosocomial infections (NIs), also known as a hospitalacquiredinfection, are defined as infections which areacquired after 48 h of patient admission. Such infections are neither present nor incubating prior to a patient's admission to a given hospital. NIs represent a universally serious health problem and a major concern for the safety of both patients and the health care providers [1–4]. Although the incidence rate for nosocomial infection vary from country to country, at any given time, almost seven patients from developed countries to ten patients from developing countries out of each 100 patients admitted to hospitals gain at least one kind of nosocomial infections

METHODOLOGY;-

A descriptive study was objective To assess the knowledge regarding the nosocomial infection among the staff nurses. In this study among 30 healthcare staff. A structured self-administered questionnaire was used to collect data. The questionnaire included two parts: The target population who fulfills the inclusion criteria are selected for this study , convenient sampling technique was used to select 30 samples. A 30 self – structured questionnaire were formulated to assess the level of knowledge. Score of 1 and wrong answer was given 0 . The score less than 15 was poor , score between 15-18 was average , score between 19-21 was good , and score above 22 was excellent

RESULT:-

The highest percentage of nurses were female (76.66%) and aging between 24-34 and above (93%) and had 3 years nursing diploma (63.33%), Most of the nurses (86.66%) had a excellent level of knowledge and while only 10% of them had a good level of knowledge and 3.33% had average level of knowledge of preventive measures of nosocomial infections after video assisted health education. The chi - square implies that there is no significant association between knowledge level and the selected socio demographic variables as the chi - square value is lower than the table value at 0.05 level of significance.

Conclusion:

After the detailed analysis this study leads to the conclusion that the overall knowledge of the staff nurse after video assisted health education were increase. Thus the study findings clearly reveal that the knowledge of the staff nurses regarding the nosocomial infection is excellent. need to create the awareness and instill a positive approach regarding nosocomial infection

Keywords: - Nosocomial infection, , knowledge level, questionnaire, Nursing staff

Introduction:-

Nosocomial diseases (NIs), otherwise called a hospitalacquired contamination, are characterized as diseases which are gained after 48 h of patient confirmation. Such diseases are neither present nor hatching preceding a patient's admission to a given emergency clinic. NIs are a widespread health issue that poses a major threat to the safety of both patients and medical professionals[1–4]. Even though the prevalence of nosocomial infections varies from country to country, approximately seven to ten out of every 100 patients admitted to hospitals in developed countries and developing countries contract at least one type [5]. Although there are few data on Nis in Yemen, the prevalence rate of NIs, particularly surgical site infections, is occasionally high, accounting for 8% in 2002 [6] and 34% in 2013 [7]. Patients, their families, and the community as a whole suffer greatly from NIs. Increased morbidity, mortality, and length of hospitalization are the most common NI-related outcomes [4, 8]. These consequences significantly raise the direct and indirect costs of health care services, which in turn raise treatment costs for infected patients. As a result, this problem wastes resources that aren't enough, especially in developing nations [9]. The administration of medications, dressing, sterilization, and disinfection are all

responsibilities of nurses. They interact with patients more frequently than other healthcare professionals (HCWs). As a result, they are more susceptible to a variety of NIs [10]. As a result, nurses play a crucial role in the transmission of NIs, and it appears that their adherence to infection control measures is necessary for the prevention and control of NIs [11]. Accordingly, they should be aware of how to prevent transmission of NIs and be knowledgeable of its potential risk to patients, other staff, and as visitors. Although there are many previous cross-sectional studies which revealed that the levels of nurses' knowledge and practices are relatively poor and insufficient [12–15], to the researcher's best of knowledge, so far, no study has been conducted in Yemen which is the context of the current study. Therefore, this study aimed to identify gaps in nurses' knowledge and practices regarding NI control measures in order to improve the current training courses and enhance future good practice.

1. Title of the study:

"A study to assess the knowledge regarding the nosocomial infection and its prevention among the staff nurses of Krishna hospital karad."

2.. Objectives:-

> To assess the knowledge regarding the nosocomial infection among the staff

3. Material and methods:-

Descriptive research was used to assess the level of the knowledge regarding the nosocomial infection among the staff nurses in the selected hospital of Karad city. The target population who fulfills the inclusion criteria are selected for this study, convenient sampling technique was used to select 30 samples. A 30 self – structured questionnaire were formulated to assess the level of knowledge. Each correct answer was given score of 1 and wrong answer was given 0. The score less than 15 was poor , score between 15-18 was average , score between 19-21 was good , and score above 22 was excellent .

4.Result :- TABLE NO- 1:-

Description the samples according to demographic characteristics by the frequency and percentage.

Socio demographic Variable			
variable	frequency	9/0	
Age			
Below 24 years	0	0	
24 to 34 years	28	93	
Above 34 years	2	6.66	
Gender			
Male	7	23.33	
Female	23	76.66	
Education			
ANM	1	3.33	
GNM	19	63.33	
BSC			
PBBSC	0	0	
Religion			
Hindu	22	73.33	
Muslim	4	13.33	
Christian	4	13.33	
Residence			
Urban	16	53.33	
Rural	14	46.66	
Maritial status Married Unmarried	22 8	73.33 26.66	
Type of family			

Nuclear	21	70	
Joint family	9	30	
Expeience			
ICU	12	40	
Ward	15	50	
OPD	1	3.33	
X-ray	2	6.66	
Year of experience			
0- 10 years	11	36.66	
11 - 20 years	17	56.66	
21- 30 years	2	6.66	
Above 30 years	0	0	

TABLE NO-2. Association of pre-test and post-test knowledge score assessed of staff nurses in the research study.

Knowledge	Pre- test		Post – test	
score	Frequency	Percentage	Frequency	Percentage
Poor	18	60 %	0	0 %
Average	11	36.66%	1	3.33 %
Good	1	3.33 %	3	10 %
Excellent	0	0 %	26	86.66 %

Above table no.2 represents the association between the pre- test and post – test knowledge score of staff nurses. In pre- test 0 (0%) staff nurse had excellent knowledge about nosocomial infection which has been increased to 26 (86.66%) in the post – test. In pre – test 1 staff nurse (3.33%) had good knowledge about nosocomial infection which decreased to 3(10%) in the post – test. In pre- test 11 staff nurse (36.66%) had average knowledge about nosocomial infection

which has decreased to 1 (33.33%) in the post test of the research study. In the pre- test 18 staff nurse (60%) had poor knowledge of the nosocomial infection which has been decreased to 0 staff nurse (0%) in the post test of the research study.

5. Discussion:-

A) Findings related to pretest knowledge about general information about nosocomial infection.

Area wise frequency and percentage distribution of knowledge score of staff nurses regarding knowledge of nosocomial infection. Revealed in pretest that

- (18%) staff nurses were poor.
- (11%)) staff nurses were average.
- (1%)) staff were good in pre- test
- (0%)) staff were excellent in the research study

Here staff nurses had poor knowledge of nosocomial infection.

B) Findings related to post test knowledge about general information about nosocomial infection.

Area wise frequency and percentage distribution of knowledge score of staff nurses regarding knowledge of nosocomial infection revealed in post test that

- (0%) staff nurse had poor knowledge
- (1%) staff nurses had average Knowledge.
- (3%) staff nurses had good. Knowledge
- (26%) staff nurse has excellent knowledge about nosocomial infection.

A findings similar to the study conducted by **Saad Jissir at el in 2007** Most of the nurses 63.3% was females at age 20-29, in relation to marital status most samples was married, and graduated of nursing institute as educational level, 53.3% of nurses have (1-9) years of experience and majority of nurses included with training course in Iraq but not related to nosocomial infection, and the findings of present study revealed that there were statistical differences in nosocomial infection knowledge of nurses between pre and post program and between post study and post control group also there are statistical differences between level of education of nurses and nosocomial infection knowledge at $P \ge 0.05$. Conclusion: the present study concluded that the educational program was effective on nurse's knowledge about nosocomial infection.¹⁶

A findings similar to conducted study by **Behroozynia M 2022** The results of the study presents that the high percent (57.0%) of the study sample are female, (66.7%) of them at age group (20-29) years, (45,0%) of them nursing diploma, (50.0%) their years of work experience were arranged between (1-5 year), most of them (84.0%) have previous training about nosocomial infection. There is a significant correlation between total nurses knowledge about prevention of nosocomial infection and gender, and there is no significant correlation between total nurses knowledge about prevention of nosocomial infection and demographic variable at P value < 0.05. 17

6. Conclusion:-

After the detailed analysis this study leads to the conclusion that the overall knowledge of the staff nurse after video assisted health education were increase. Thus the study findings clearly reveal that the knowledge of the staff nurses regarding the nosocomial infection is excellent, need to create the awareness and instill a positive approach regarding nosocomial infection.

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