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"A STUDY ON INFECTION CONTROL PROCEDURES USED IN INTENSIVE CARE UNIT IN SELECTED HOSPITALS, BENGALURU"

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Abstract:

Background and objectives: The study's goal was to assess ICTC workers' knowledge of early risk factor identification in suicide prevention and management. A descriptive design was used in this study. The convenience sampling technique was used to select 72 ICTC employees. Online data was gathered by using a Google form to administer a checklist. Descriptive statistics were used to analyses the data collected. According to the findings of the study, the majority of ICTC workers had insufficient knowledge about early identification of risk factors in suicide prevention and management. The study concluded that educational programmes should be organized to educate ICTC workers about suicide prevention and management.

Key: Infection, Procedures, Intensive Care, Hospitals,

1. Introduction

"When we think of the hospital, the phrase "hospital is a place for cure" comes to mind. Treating patients under the same roof was thought to be a revolutionary idea that would make healing easier. However, it went wrong in the pre-Listerian era due to a lack of knowledge about sterilisation and antisepsis. For patients with wounds, gangrene and death were almost unavoidable. This resulted in the development of a new discipline known as senics, which dealt

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with nosocomial infections (Hospital– acquired infections).

A study showed that practice of hand hygiene among health care workers is generally low. Furthermore, several studies done to assess the knowledge, attitudes and compliance and reasons for non-adherence to hand hygiene guidelines revealed that compliance with hygiene protocols by health care workers is poor due to several constraints, including heavy work load, high number of clinical procedures and skin conditions of health care worker. It is alarming that compliance with general aseptic guidelines was found to be worse before high risk procedures were done. Thus, the reported low or outright non-compliance of health care workers with the global best practices on the prevention of spread of hospital acquired infections and its associated morbidity and mortality makes this study a necessity.

2. Review of Literature

Ayliffe and Lowbarryet al (1975) in the article 'Control of Hospital Infection' defined hospital infection as an infection found to be active or under active treatment at the time of serving which has not present on admission to hospital.[1]

Berry J Kohn et al (1955) Hospital associated or acquired infections are not present when patient was admitted to health care facility. Infection may occur in postoperative wound or as complication unrelated to surgical site. They state that purpose of infection controls are (1) to minimize infection and eventually to obliterate it (2) Improve wound healing (3) Minimize disability, morbidity and mortality (4) Reduce the cost of healthcare.[2]

Coello, et al (1930) conducted a case control study to determine the excess hospital cost attributable to hospital acquired infection in hospital. Sixty-seven surgical patients were matched with uninfected control on the primary features of first operative procedure and primary diagnosis and on secondary features of sex; age and surgical service cost were calculated from hospital's unit cost for pathology, radiology and for the cost of one day's extra stay. In infected patient there was significant increase in the length of hospital stay of 8.2 days with in the mean extra cost per patient for 10-11 pounds.[3]

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3. Research Methodology:

Research approach and Research design: pre-experimental design with one group pre-test and post-test of quantitative approach was selected for the present study

Setting: This study was conducted in selected hospitals, Bengaluru

Population:health care staffs

Variables:

Independent variable: Self-instructional module regarding predisposing factors and prevention of infection.

Dependent variable: Knowledge of health care staffs regarding prevention of infection

Socio-demographic variables: Socio-demographic variables in this study are age, marital status, educational qualification, family income/month, dietary habit, hours of working-duration, source of information, personal habit, and previous history of infection control

. **Sample and Sample and Sampling Technique:** The sample for the study comprised of 50 health care staffs at Bengaluru**.** Convenient sampling technique was used to draw the samples, which is the type of non-probability sampling technique.

RESULTS

The information was gathered from a multi-specialty hospital. The information is organised numerically in the tables below. In this study, the researcher gathered the following data, which is presented below in the form of a table and figures.

Distribution of samples based on "Gender"

SEX	Nurses	Administrators	Doctors	Housekeeping	CSSD
Male	4(31%)	1(25%)	0(0%)	2(33.33%)	4(80%)
Female	9(69%)	3(75%)	2(100%)	4(66.66%)	1(20%)
Total	13(100%)	4(100%)	2(100%)	6(100%)	5(100%)

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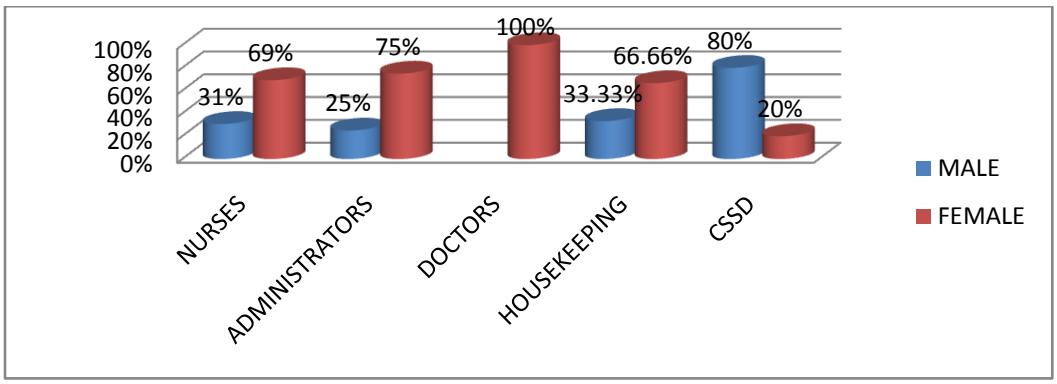
Distribution of samples based on "Gender"

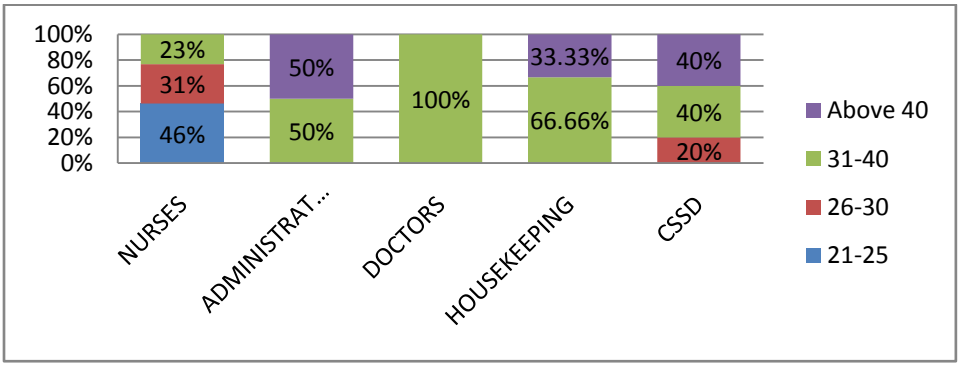


According to the above table, 31% of nurses are males and 69% are females, 25% of administrators are male and 75% are female, 0% of doctors are males and 100% are females, 33.33% of housekeeping staff are males and 66.66% are females, and 80% of CSSD staff are males and 20% are females.

Distribution of samples based on "Age".

Age In Years	Nurses	Administrators	Doctors	Housekeeping	CSSD
21-25	6(46%)	0(0%)	0(0%)	0(0%)	0(0%)
26-30	4(31%)	0(0%)	0(0%)	0(0%)	1(20%)
31-40	3(23%)	2(50%)	2(100%)	4(66.66%)	2(40%)
Above 40	0(0%)	2(50%)	0(0%)	2(33.33%)	2(40%)

Distribution of samples based on "Age".



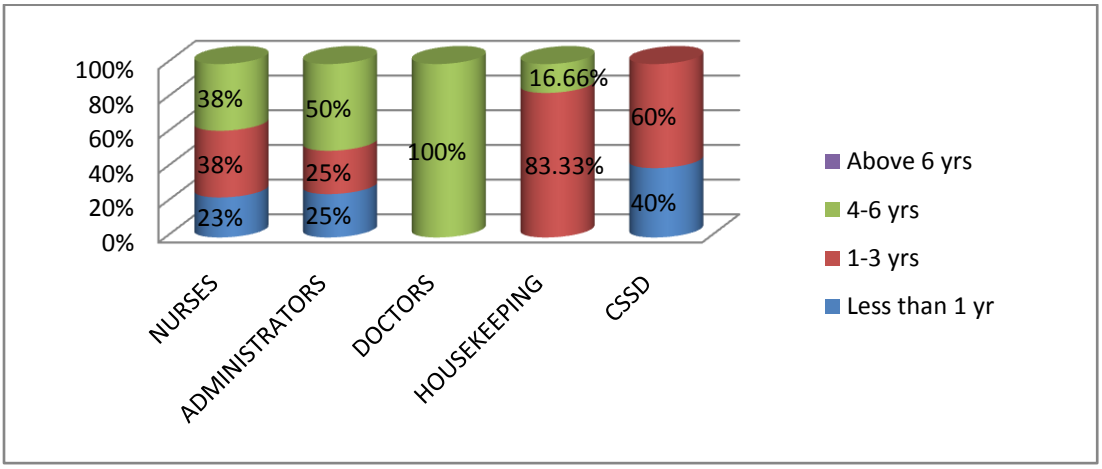
In this group of studies, samples are selected based on their age. 46% of nurses are aged 21 to 25, 31% are aged 26 to 30, and 23% are aged 31 to 40. Among administrators, 0% are

between the ages of 21 and 25, 0% are between the ages of 26 and 30, 50% are between the ages of 31 and 40, and 50% are over the age of 40. Among doctors, 0% are between the ages of 21 and 25, 0% are between the ages of 26 and 30, 100% are between the ages of 31 and 40, and 0% are over 40. 0% of housekeeping staff are between the ages of 21 and 25, 0% are between the ages of 26 and 30, 66.66% are between the ages of 31 and 40, and 33.33% are over 40. Among CSSD employees, 0% are between the ages of 21 and 25, 20% are between the ages of 26 and 30, 40% are between the ages of 31 and 40, and 40% are over 40.

Distribution of samples based on "Experience".

Experience	Nurses	Administrators	Doctors	Housekeeping	CSSD
Less than 1 yr.	3(23%)	1(25%)	0(0%)	0(0%)	2(40%)
1-3 yrs.	5(38%)	1(25%)	0(0%)	5(83.33%)	3(60%)
4-6 yrs.	5(38%)	2(50%)	2(100%)	(16.66%)	0(0%)
Above 6 yrs.	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Total	13(100%)	4(100%)	2(100%)	6(100%)	5(100%)

Distribution of samples based on "Experience".



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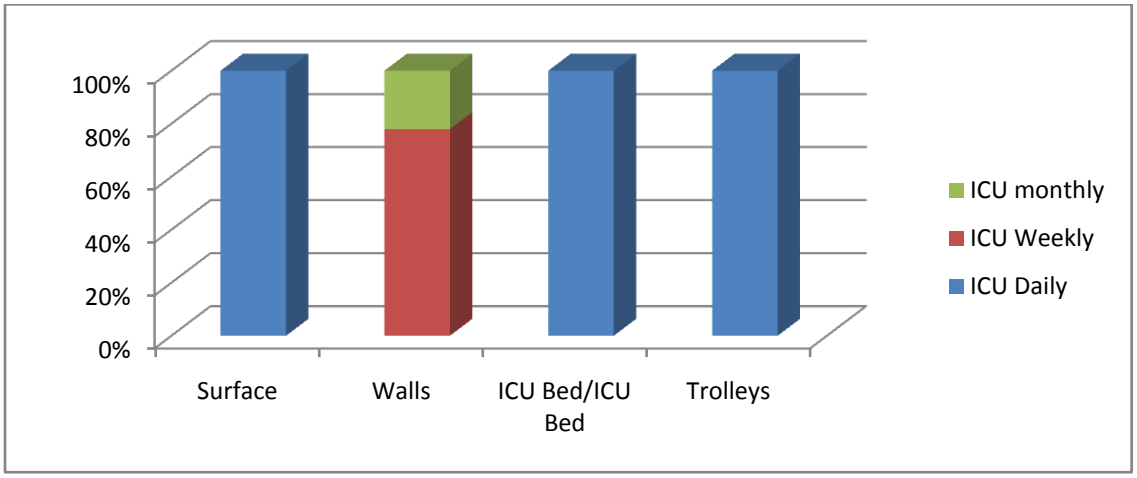
In this group of study, the samples are taken based on the Experience among those samples 23% 0f nurses less than 1year, 38% are 1-3year experience, 38% are 4-6year

experience. Among administrators 25% are Less than 1 yr., 25% are 1-3years, 50% are 4-6years and 0% are above 6years. Among doctors 0% are Less than 1 yr., 0% are 1-3 yrs. and 100% are 4-6 yrs. and 0% are Above 6 yrs. Among housekeeping 0% is Less than 1 yr., 83.33% are 1-3 yrs. and 16.66% are 4-6 yrs. and 0% is Above 6 yrs. Among CSSD staff 40% are Less than 1 yr., 60% are 1-3 yrs. and 0% is 4-6 yrs. and 0% is Above 6 yrs.

Response of the nurses and doctor regarding the frequency of wet cleaning of surface, walls, ICU bed

Wet Cleaning	ICU		
	Daily	Weekly	monthly
Surface	9(100%)	0(0%)	0(0%)
Walls	(0%)	7(78%)	2(22%)
ICU Bed/ICU Bed	9(100%)	0(0%)	0(0%)
Trolleys	9(100%)	0(0%)	0(0%)

Response of the nurses and doctor regarding the frequency of wet cleaning of surface, walls, ICU bed



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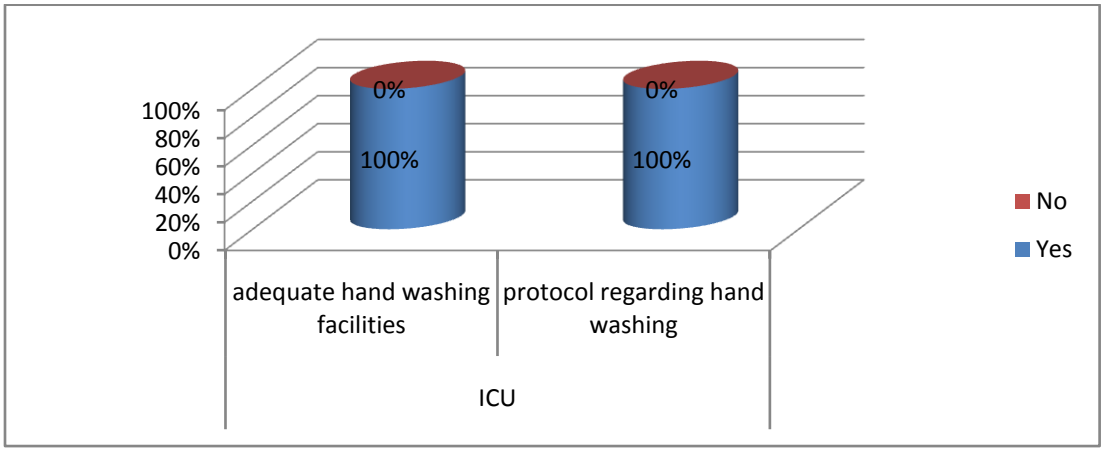
Trolleys require 100% daily cleaning and 0% weekly and monthly cleaning. 100% as daily surface cleaning, 0% as weekly and monthly surface cleaning in the ICU department. 0% for daily wall cleaning, 78% for weekly cleaning, and 22% for monthly cleaning.

Response of the nurses and Doctor regarding the adequate hand washing facilities, protocol regarding hand washing

Response	ICU	
	adequate hand washing facilities	protocol regarding hand washing
Yes	9(100%)	9 (100%)
No	0(0%)	0(0%)
Total	9 (100%)	9 (100%)

Response of the nurses and Doctor regarding the adequate hand washing facilities, protocol regarding hand washing



In the study group, different samples responded differently with different perceptions, with some of them responding as follows in the ICU department, for adequate hand washing facilities 100% as yes and 0% as no, for protocol regarding hand washing facility 100% as yes and 0%.

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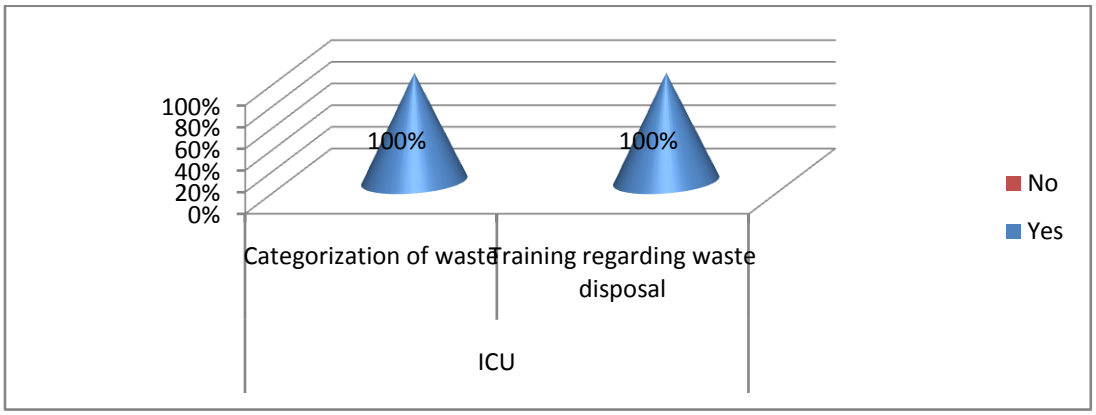
Response of nurses and Doctor regarding categorization of waste and training regarding waste disposal

Response	ICU	
	Categorization of waste	Training regarding waste disposal
Yes	9 (100%)	9 (100%)
No	0(0%)	0(0%)
Total	9 (100%)	9 (100%)

Response of nurses and Doctor regarding categorization of waste and training regarding waste disposal



In the ICU department, for categorization of waste 100% as yes and 0% as no and for training regarding waste disposal 100% as yes and 0%

Response of nurses and doctor regarding thecontainersusedforcollectionofthewaste

CONTAINERS	ICU
Bins with lid	2(22%)
Bins without lid	0(0%0
Plastic bags	7(78%)
Any other	0(0%)
Total	9(100%)

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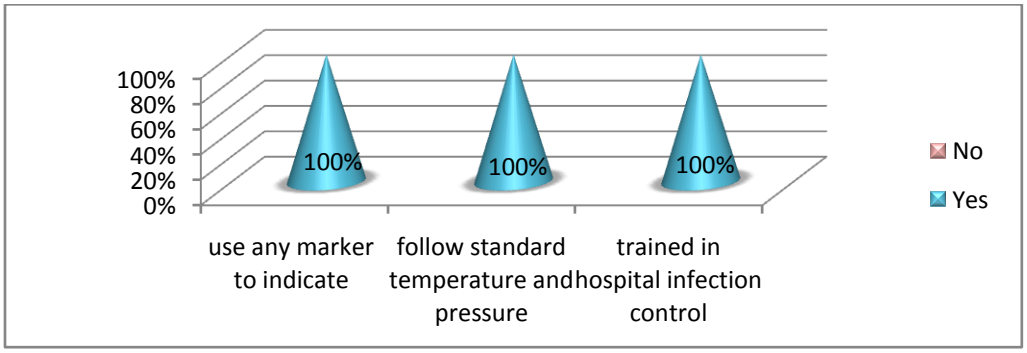
Response of CSSD staffs regarding Use Any Marker to Indicate, Follow Standard temperature And Pressure, Trained in Hospital Infection Control.

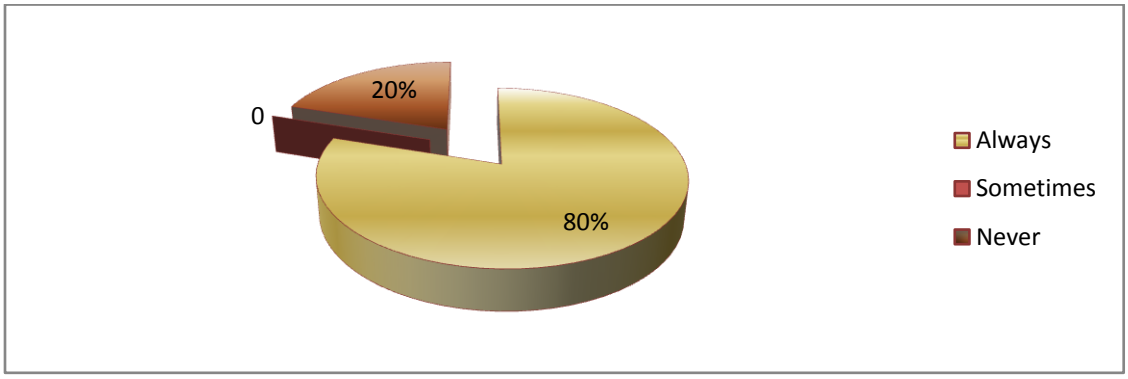


In the study group, different samples responded differently with different perceptions, such as using any marker to indicate sterilisation 100% as yes and 0% as no, following standard temperature and pressure 100% as yes and 0% as no, and being trained in hospital infection control 100% as yes and 0% no. (Table no 5.17)

Response of CSSD staffs regarding frequency of monitoring of sterilization efficiency.

FREQUENCY OF MONITORING OF STERILIZING EFIICIENCY	RESPONSE
Always	4(80%)
Sometimes	0(0%)
Never	1(20%)
Total	5(100%)

Response of CSSD staffs regarding frequency of monitoring of sterilization efficiency.



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In the study group samples are responded differently with different perception some of them are responded as follows for frequency of monitoring sterilizing efficiency, 80% as always, o% as sometimes, and 20% as never (Table no 5.18)

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