

Knowledge, Attitude and Practice Study of Infection
Preventions Among Staff of Private SHCOs in Churu District
of Rajasthan

By

Silva Joshi

*Dissertation submitted in partial fulfillment of the requirements of the degree
MBA Hospital and Health Management*

Academic year, 2018-2020



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TO WHOMSOEVER MAY CONCERN

This is to certify that **Silva Joshi**, student of MBA Hospital and Health Management from The IIHMR University, Jaipur has undergone internship training at **Hindustan Latex Family Planning Promotional Trust** from **3rd Feb 2020** to **31st May 2020**.

The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfilment of the course requirements.

I wish her all success in all her future endeavours

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The IIHMR University, Jaipur
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Associate Professor and
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CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **Knowledge, attitude and practice study of Infection preventions among staff of Private SHCOs in Churu District of Rajasthan** and submitted by **Silva Joshi** Enrollment No **0837** under the supervision of **Dr. Susmit Jain (Associate Professor)** for award of MBA in Hospital and Health Management in Health and Hospitals of the University carried out during the period from **4th Feb 2020** to **31st May 2020** embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institution of higher learning

Signature

Silva Joshi

Abstract

Knowledge, Attitude and Practice study of Infection preventions among staff of Private SHCOs in Churu District of Rajasthan

Submitted By: Silva Joshi
MBA HM 23, ROLL NO: 0837
Guided By: Dr. Susmit Jain

Introduction:

Health-care workers (HCWs) regularly come in contact with blood-borne pathogens and other microorganisms. These exposures commonly occur during major or minor surgical procedures, during routine clinical and nursing services like simple physical examination, while handling laboratory specimen, and during disposal of hospital wastes as well as during accident and life-saving emergency procedures. Occupational exposure to HAI is of great concern in developing countries where there are higher risks of exposure to blood-borne pathogens, frequent contacts with patients' body fluids and little or no protection against airborne infections. On exposure, HCWs can equally transmit healthcare-associated infections (HAI) to their patients and may be the source of infection for their families and communities. The current study is being carried out in small healthcare organisations (SCHOs) having bed strength upto 50 beds.

Research Problem:

As in Small Healthcare organisations the hygiene practice are not up to the mark which may be result in the infection transfer between healthcare staff and patients. The knowledge of infection prevention measures is important in healthcare workers in small healthcare organisations, as with this it can be seen that what is being practiced in these organisation. So, it becomes necessary to study the knowledge, attitude and practice of infection control precautions in these organisations.

Methodologies:

- **Study Design:** - descriptive cross-sectional.
- **Setting:** 6 SCHO of Churu District.
- **Study Tools:** Scheduled Interview and Questionnaire
- **Study duration:** 3 Months(3rd feb 2020-30th May 2020)

- **Sample Size:** 75 Healthcare Workers (doctors, nurses, laboratory scientists, and hospital attendants/orderlies.).
- **Sampling Techniques:** Multistage Sampling.
- **Data Analysis Plan:** All the staff analysed separately and can be compared on the basis of their knowledge and perception towards the infection control precautions. Discrete variables has being presented as frequencies. The mean and standard error of the mean would be calculated for the age and years of service. The knowledge score obtained will be considered as follows: Each correct answer scored 1 while wrong answer or nonresponse is scored zero. Total knowledge score = total correct answers divided by total correct answers multiplied by 100%. A score of <50% is considered poor, 50 %–<70% is fair while 70% and above is considered good.

Key Results:

The knowledge of the staff was found out to be good which was in the range of 65- 75%. Attitude of the staff was also found out to be positive for the infection control prevention. The practice of disposing of waste material was a less which was observed to be 67% and 87% staff was hepatitis B immunised. Regular training and practise of the Infection Prevention can increase the knowledge of the infection Prevention.

Conclusion

The finding of the study shows that, in most of the parameters staff needto work. A standardised measures should be followed by each and every healthcare workers and staff present in the hospital

Acknowledgements

“No one who achieves success does so without acknowledging the help of others. The wise and confident acknowledge this help with gratitude.”-*Alfred North Whitehead*

Acknowledgement is a pleasant duty and while doing so, one cannot ignore the factors which ostensibly or invisibly contribute to the successful completion of any work.

I sincerely want to express my gratitude to **Dr. Ritu Jain** (Technical Head, HLPPT DIB-project), **Mr. Avinash Daga** (operations Manager, HLPPT DIB-project), **Dr. Nidhi Saraswat** (M&E Officer, HLPPT, DIB-project) for support, guidance and opportunity to learn and perform in dissertation and project.

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Silva Joshi

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List of Abbreviations

Knowledge: Refers to familiarity, awareness or understanding gained through experience or study.

Attitude: Refers to a learned tendency to evaluate certain behaviours, it can either be positive or negative judgment towards a given behaviour.

Practices: Something that is done regularly or habitually.

Infection control: addresses factors related to the spread of **infections** within the healthcare setting, whether among patients, from patients to staff, from staff to patients, or among staff.

SHCO: Those healthcare organizations having bed strength upto 50 beds and are in possession of supportive and utility facilities that are appropriate and relevant to the services being provided by organization.

HCW's: Healthcare workers

IP : Infection preventions

Chapter 1: Introduction to topic

Infection Control can be defined as measures practiced by healthcare personnel in healthcare facilities to decrease transmission and acquisition of infectious agents. These measures are generally based on how an infectious agent is transmitted and these measures include standard, contact, droplet, and airborne precautions.

Infection control refers to all policies, procedures and activities which aim to prevent or minimize the risk of transmission of infectious disease in healthcare workers, patients, patients attendant and others at health care facilities. The emerging of life threatening infections such as acute respiratory syndrome and emerging of other infectious diseases have highlighted the need for efficient infection control programs in all health care setting and capacity building for HCW to prevent the transmission of pathogens within health care setting.

Healthcare workers are prone to many infectious diseases during their professional life. As consequently they are at the risk of getting infected by the many diseases due to work place hazard. There are many measures which healthcare workers should know for their protection against these infections. The infection control precautions are mainly based on the principle that all blood, body fluids, secretions, excretions (except sweat), non-intact skin, and mucous membranes may contain transmissible infectious agents. This kind of exposure mainly occurs during major or minor surgical procedures, during regular services given to the patient by clinicians and nursing staff like physical examination, sample collection for laboratory test, during disposal of hospital waste and during any accident or lifesaving emergency procedure.

The cases of occupational exposure can be seen more in small set up of hospital due to lack of knowledge and practice of infection control precautions in these set ups. In these cases the healthcare workers handle bio medical sample, bio medical wastes and infections at critical areas. There may be differences in the knowledge of healthcare workers regarding the infection control precautions which may be varying due to various trainings provided to them. Sometimes in these type of setups, shortage of certain personal protective equipment's can be observed which may affect the infection control environment in hospital and poor compliance of the Infection control precautions.

According to the World Health Organisation, the exact scale of occupational risk in the health sector is unclear, due in part to the stigma and blame attached to the reporting of

sharps injuries and the lack of available post-exposure prophylaxis. HBV is a well-recognised occupational risk for HCWs.

Knowledge, attitude and practice act as three pillars, which make up the dynamic system of life itself. Knowledge is some information that is acquired or gained. It results in congeniality and advertence about an eclectic thing or a situation. There could be many ways of procuring knowledge namely reading, sagacity etc. Knowledge, being the basic criterion that allows one to earmark between the right and the wrong, is a mixture of comprehension, experience, discernment and skill. Attitude accredits to thinking towards a proper situation. There could be a number of furtherance to empathize a situation but it depends on how an individual reacts towards the situation. Practice means contemplation of rules and knowledge that lead to action. Thus, a right knowledge, a positive attitude and a good practice are imperative to guide and serve the patients.

Healthcare workers, especially who comes directly in contact with these patient are more vulnerable towards the infections. The study was conducted to measure the knowledge, attitude and the practice of infection control precautions in the small set up of hospitals. This study is conducted in various hospitals of Churu, District.

1.1 Aim: To measure the knowledge, attitude and practice of Infection control precautions among the healthcare workers in Churu, District

1.2 Objective: The Objective of this study are as follows:

- To assess the knowledge of infection prevention measures among healthcare workers.
- To measure the attitude of healthcare workers towards infection control protocols.
- To observe the infection control protocols practised by the healthcare workers.

Chapter 2: Literature Review:

a. **Knowledge, Attitude and Practice towards Infection Control Measures among Mizan-Aman General Hospital Workers, South West Ethiopia:**

Compliance on the part of healthcare workers with standard precautions has been recognized as being an efficient means to prevent and control healthcare-associated infections. Such measures not only protect the patient, but also the HCWs and environment. This study was conducted at Mizan-Aman General Hospital, Southwest Ethiopia. Cross-sectional study design was employed. All HCWs (135) were included in the study. Self-administered questionnaire was used to collect data. Data was entered in to Epidata 3.1 and transported to SPSS version 17 for analysis. The results of this study was Out of 135 respondents, 57(42.2%) of HCWs think that they apply standard precaution always. About two-third (65.6%) of them had ever participated in training program. All of the respondents know that dirty needle and sharp materials could transmit disease causing agents. More than three fourth (76.3%) of health care workers think that they were at risk of acquiring HIV in their work place. Among HCWs 59(43.7%) of them disposed sharp materials in open pails, 91(67.4%) in sharp and liquid proof container without removing syringe. Ninety five (70.4%) HCWs know that gloves and gowns were required for any contact with patients. Among respondent 63(46.8%) of HCWs practice standard blood and body fluid precautions always. One hundred three (76.5%) of HCWs wear gloves last time while they took blood sample. Ninety two (68.7%) of HCWs wash their hands before examining the patients and 84(62.5%) of HCWs recap needle immediately after using them. Majority of health care workers' knowledge, attitude and practice toward standard precaution were not sufficient, favorable and safe enough to the expected standard. Strengthening and integrating universal precaution with routine services through provision of training and introducing health care workers infection prevention standard of practice, protocol, rules, and regulation were recommended

- b. **Infection Control and Practice of Standard Precautions Among Healthcare Workers in Northern Nigeria:** Healthcare-associated infections (HAIs) have been reported to be a serious problem in the healthcare services as they are common causes of illness and mortality among hospitalized patients including healthcare workers (HCWs). Compliance with these standard precautions has been shown to reduce the risk of exposure to blood and body fluids. This study is an analytical, cross-sectional study. Proportional sampling technique was used to obtain a representative sample and a structured self-administered questionnaire was used to collect relevant information from the healthcare providers working in Nasarawa State from January to February 2009. A total of 421 HCWs were interviewed, Majority (77.9%) correctly describe universal precaution and infection control with 19.2, 19.2, and 28.0%, respectively unable to recognize vaccination, postexposure prophylaxis, and surveillance for emerging diseases as standard precaution for infection control. About 70.1% usually wear gloves before handling patients or patients' care products, 12.6% reported wash their hand before wearing the gloves, 10.7% washed hands after removal of gloves, and 72.4% changed gloves after each patient. Only 3.3% had a sharp disposal system in their various workplaces. Majority (98.6%) of the respondents reported that the major reason for noncompliance to universal precautions is the nonavailability of the equipments. There was a statistically significant difference in the practice of standard precaution among those that were exposed to blood products and body fluid compared to those that had not been exposed in the last 6 months ($\chi^2 = 3.96$, $P = 0.03$), public healthcare providers when compared to private health workers ($\chi^2 = 22.32$, $P = 0.001$), among those working in secondary and tertiary facilities compared to primary healthcare centers ($\chi^2 = 14.64$, $P = 0.001$) and urban areas when compared to rural areas ($\chi^2 = 4.06$, $P = 0.02$). The only predictor of practice of standard precaution was exposure to blood and body fluid in the last 6 months odds ratio (OR) = 4.56 (confidence interval (CI) = 1.00-21.28). This study implies that inadequate workers' knowledge and environment related problems, including the lack of protective materials and other equipments and utilities required to ensure safety of HCWs is a crucial issue that need urgent attention. Institution of a surveillance system for hospital acquired infection to improve consistent use of standard precautions among health workers is recommended in Nigeria and other low income countries in Africa.

- c. **Knowledge attitude and practice towards infection control measures amongst healthcare workers in a medical teaching hospital of Calicut District, Kerala, India:** Healthcare workers must know the various measures for their own protection. They should improve organization of work, implement standard precautions and dispose biomedical waste properly to prevent occupational exposure. This study aimed at assessing the Knowledge and attitude towards Infection control measures amongst the healthcare workers in a medical teaching hospital of Calicut district, Kerala, India. The objective of the study was to assess the Knowledge and attitude towards Infection control measures amongst the healthcare workers in a medical teaching hospital of Calicut district, Kerala, India. Of the 120 participants, the majority (85.8%) was aware of disposing used needles and syringes in puncture-resistant containers but only 55.7% were actually practicing it. Three-fourths (75.8%) of the participants were aware about not recapping the needles after use but on observation, only 35.4% were practicing this. All healthcare workers were aware about the indication for using masks and gloves while handling patients, while only 77.1% were using them. We also found that only 61.8% washed their hands after attending every patient, 94.3% cleaned the area with a sterile swab before giving injections and only 35.7% of the labs/wards/operation theatres had three colored bags. Few (11.7%) of the workers have already been exposed to infectious blood samples and some (19.2%) are still not immunized against Hepatitis B. There is a need for improvement in the Knowledge, attitude and practice of infection control measures among healthcare workers for both self and patient's protection. They should also get themselves immunized against Hepatitis B and report accidental exposure to infectious samples to the infection control committee.
- d. **Knowledge, attitude, and practice toward contact isolation precautions among medical students in Shiraz, Iran:** Proper behavior regarding infection control may be learned during clinical training for medical students. Different groups of medical students at the Shiraz Medical School were asked to complete a questionnaire. The survey had 2 components: demographic inquiries and questions designed to assess the knowledge, attitude, and practices regarding contact isolation precautions used in Iranian hospitals. A total of 468 (of 622)

useable surveys were analyzed. Responses to knowledge and attitude questions concerning isolation precautions in general were acceptable as being in accordance with the CDC guidelines (Mean scores approximate 66.3% and 63.4% of the total possible scores, respectively). However, self-reporting behaviors indicated an overall lack of compliance with expected practices (approximately 19.1% of a total possible perfect score). This study suggests that knowledge of transmission routes and a positive attitude toward infection control measures alone are not sufficient to induce acceptable compliance (behavior) with current recommendations.

- e. **Knowledge, attitude, and practice of dengue disease among healthcare professionals in southern Taiwan:** Primary physicians and nurses serve as the first-line health care providers of dengue virus infection diagnosis, notification, and treatment. Knowledge, attitude, and practice (KAP) among primary healthcare professionals (HCPs) regarding dengue diseases may pace alarm and improve the outcome of dengue control. A cross-sectional survey using a structured quiz in 264 HCPs (response rate, 76%) was conducted in Tainan City in southern Taiwan. The quiz consisted of 10 questions regarding the control measures, notification, and clinical practices of dengue diseases. Scores of KAP and demographic characteristics of HCPs were analyzed. One hundred thirty-four physicians and 130 nurses comprise the 264 HCP responders. Forty-three physicians (32%) and 80 nurses (61.5%) were practicing in medical centers, and they scored higher than nonmedical center peers on quizzes on notification (1.18 vs. 0.93 points, $p < 0.01$) but lower on control measures (3.52 vs. 3.22 points, $p < 0.01$). Fifty-seven physicians (42.5%) were experienced in reporting suspected dengue cases, and 13.1% of nurses had reported dengue cases. Three-fourths of HCPs failed to respond to the timing of dengue case notification, whereas nurses scored higher than physicians (0.34 vs. 0.16, $p < 0.01$). In addition, 57.2% of the HCPs failed to respond correctly to the timing of typical skin rashes occurring in the patients with dengue. More than half of the HCPs considered Taiwan an endemic area of dengue diseases. This pilot study showed a lack of acquaintance with notification timing and important clinical features of dengue among HCPs in southern Taiwan. Future continued medical/nursing education should place more emphasis on these factors to improve dengue control in this demographic area.

Chapter 3: Methodology

3.1 Research Question:

- How Knowledgeable is the staff of the small healthcare set ups about Infection Preventions practices?
- What is the attitude of the staff towards Infection control measures?
- What are the practices amongst the healthcare workers of small healthcare organisations?

3.2 Study Design: The study is descriptive cross-sectional.

3.3 Setting: This study is conducted in 6 small healthcare organisation in Churu, District.

3.4 Study Tool: Interview and questionnaire

3.5 Study Duration: 3 Months(3rd Feb 2020- 30th may 2020)

3.6 Sample Size: 75 Healthcare workers (Including all doctors, nurses, paramedics, and housekeeping staff)

3.7 Sampling Techniques: Multistage Sampling

3.8 Data collection procedure: Multistage sampling technique is used. First stage is selection of departments and units which is done by simple random sampling. Then, for those departments that are more than one in number like the wards, theatre and outpatient departments, these are selected by simple random sampling. The next stage selection of the respondents will be cluster sampling. Thus, the entire staff (it will includes Doctors, Nurses, paramedical staff and Housekeeping staff) including various departments will be included in this study. Contents of the questionnaire include demographical variables, knowledge, attitude, and practice of infection prevention measures.

3.9 Data Analysis Plan: All the staff was analysed separately and can be compared on the basis of their knowledge and perception towards the infection control precautions. Discrete variables has been presented as frequencies. The mean and standard error of the mean has been calculated for the age and years of service. The knowledge score obtained will be considered as follows: Each correct answer scored 1 while wrong answer or nonresponse is scored zero. Total knowledge score = total correct answers divided by

total possible correct answers multiplied by 100%. A score of <50% is considered poor, 50%–<70% is fair while 70% and above is considered good.

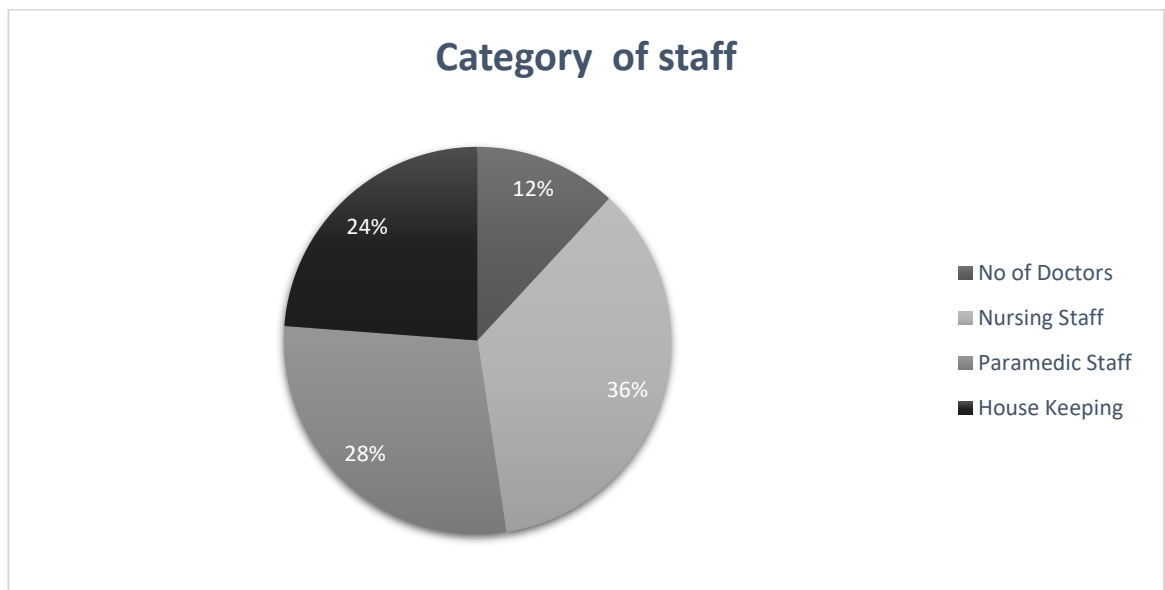
Ethical Consideration: Permission was taken from the organisation to continue the project. Anonymity will maintained for each and every responses. There will be no manipulation of the responses for the desired results

Chapter 4: Results

4.1 Socio-Demographic Status of respondents: The respondent's socio demographic status Like age, category of staff and experience, has being analysed in the graph below:

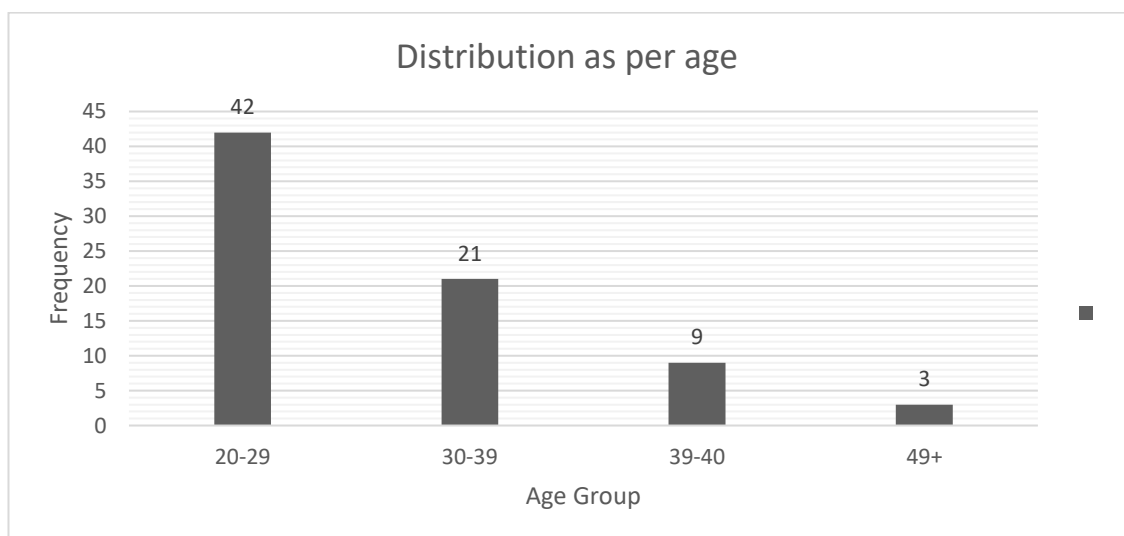
4.1.1 Category Of Staff: The analysis is done on the basis department of staff and category of staff. That included in this form were doctors, Nursing Staff, Paramedic Staff and House Keeping staff of various staff in various department in different hospitals in Churu district.

Figure 1:Category of Staff



4.1.2Age Of Staff: The age of the staff is distributed as shown in the given graph.

Figure 2:Age of staff



4.1.3 Experience of the Staff:



Figure 3: Experience of staff

4.2 Knowledge of staff about the Infection Precautions: The knowledge of staff is judged on the basis of following criteria, in these cases several questions were asked to the various staff of hospital and combined results were obtained from all the hospital of staff. The data was calculated by giving 1 mark to the right answer and 0 to the wrong answer and the percentage of the right answers were calculated by calculating the mean percentage of each answer.

The results were as follows:

4.2.1 Knowledge about Infection Control Precautions: The graph given below represents whether the staff have heard about the Infection Control Precautions or not.

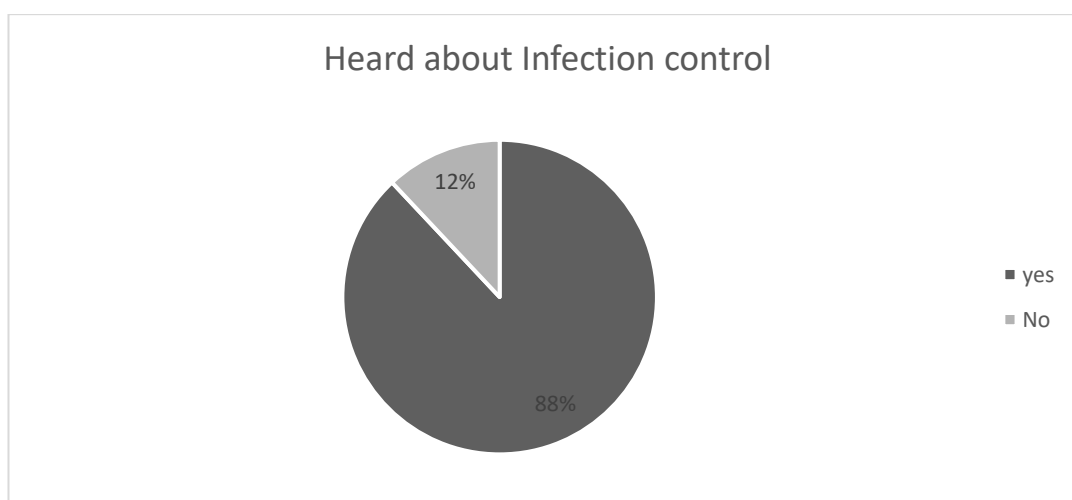


Figure 4: Infection control

It can be seen from above graph that 88% of staff have heard about the Infection control precautions. Comparing this graph with the category of staff (fig.1) It can be seen that here 12% belongs to the housekeeping staff.

4.2.2 Main source of information about infection Control Precautions: The figure below depicts, the main source of information from where they have heard about Infection Control Precautions.

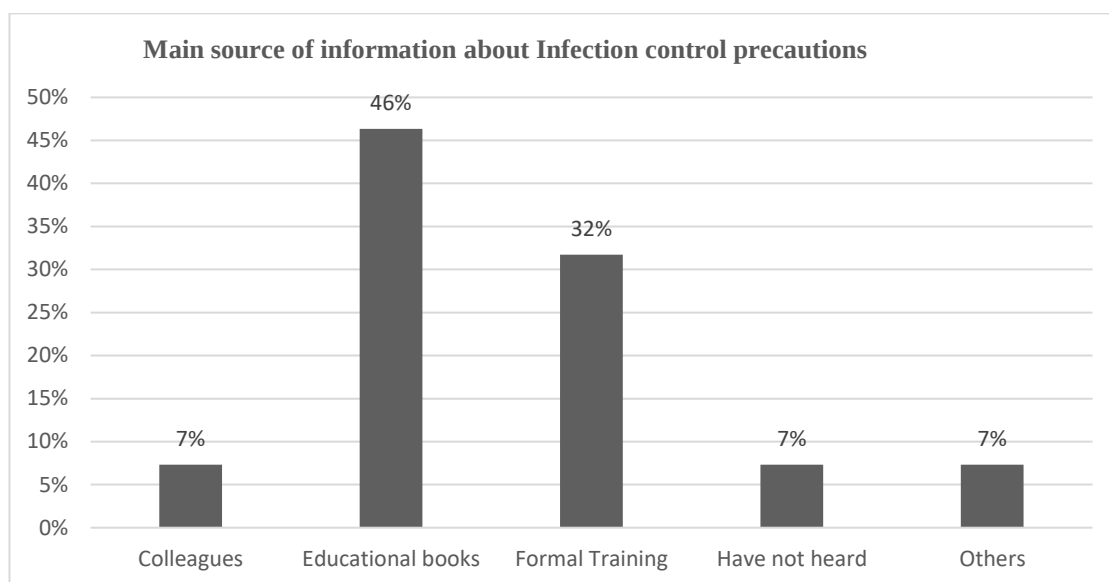


Figure 5: Sources of Information

The above graph shows that maximum staff have learnt about the infection prevention protocols from Educational books and formal trainings given at hospitals.

4.2.3:Components of infection control precautions: The components of Infection control precautions consists of hand hygiene, personal protective equipment, Needle and sharp injury prevention, waste Disposal, safe infection practice and respiratory Hygiene etiquettes. These components help to prevent healthcare workers from the infection that can be transferred from patients to the healthcare workers and vice versa.

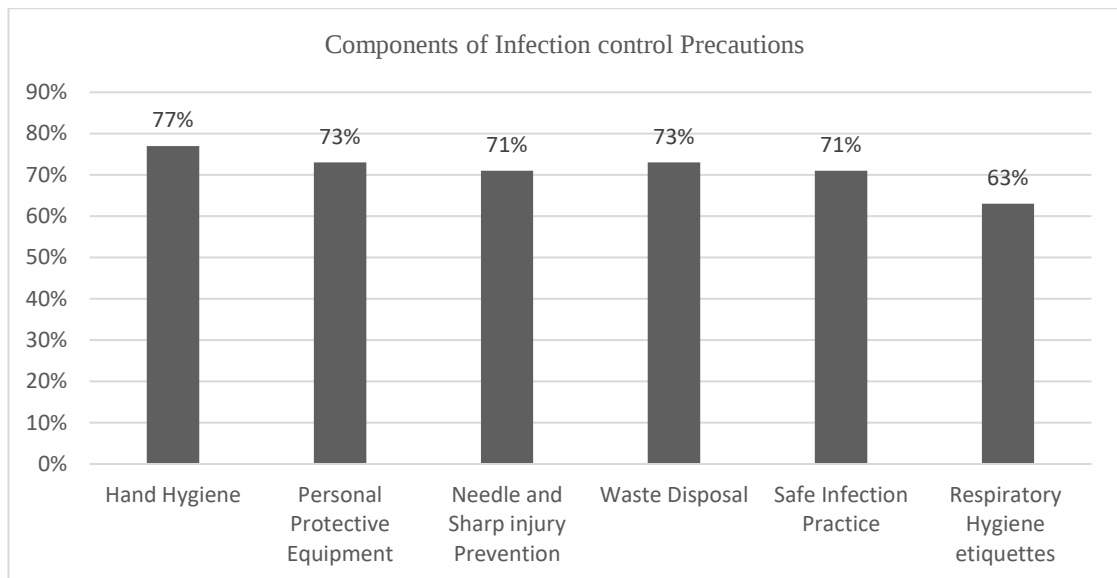


Figure 6: Components of Infection Precautions

The above graph represents about the knowledge of the staff about the components of Infection control precautions.

4.2.4: Advantages of Infection control precautions: this assessed the knowledge about the advantages of infection control precautions. It also help in assessing that, why healthcare workers are using infection control precautions.

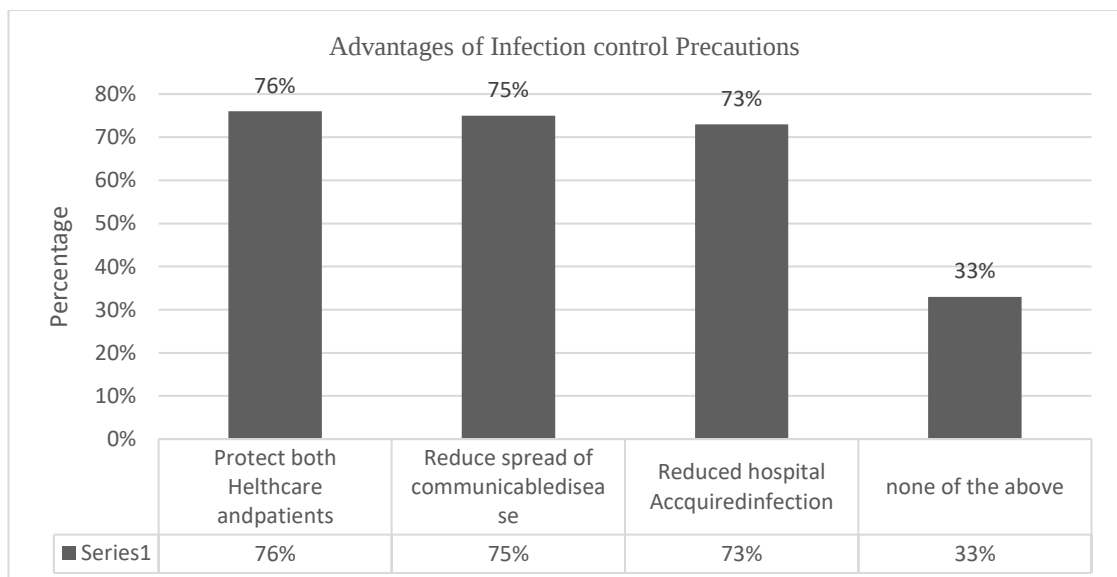


Figure 7: Advantages of Infection Control

The above graph shows that the knowledge of the of advantages of the infection control precautions is between 70-75%.

4.2.5 Moments of health hygiene: Only 64% of the staff were completely aware about the moments of hand hygiene

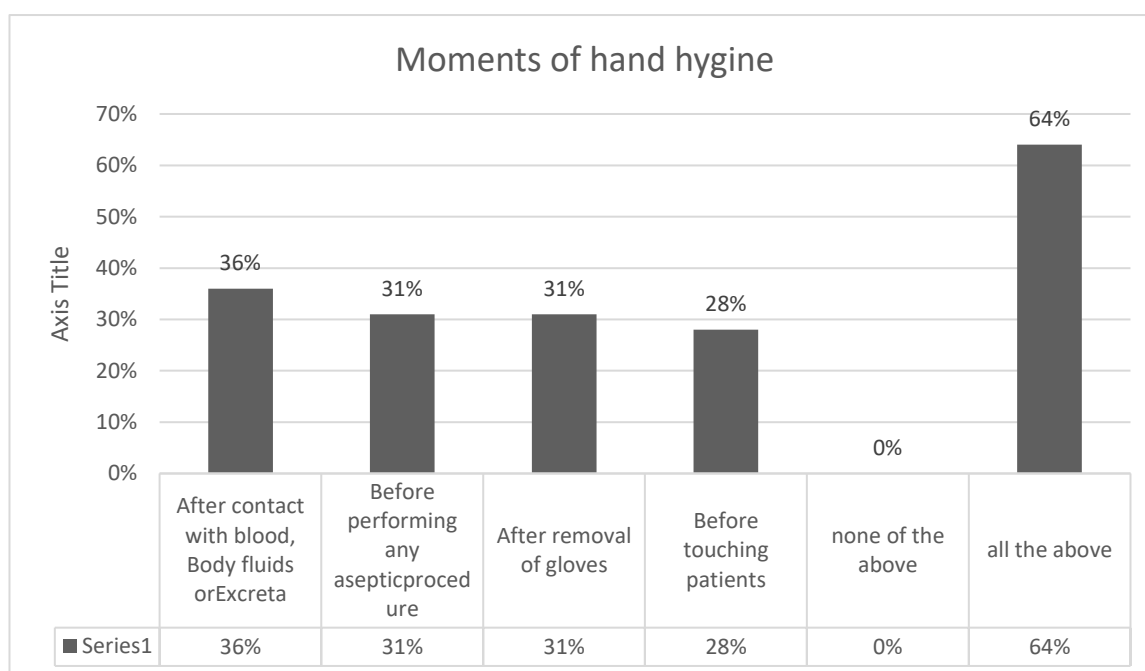


Figure 8: Moments of Hand Hygiene

4.3 Attitude of the staff : regarding the infection control was observed on the basis of following statements. Due to this statement it was easy to analyse what is the attitude hospital staff towards Infection control precautions and how much it is important for the

Table 1: Attitude of staff towards attitude of staff

Attitude of Staff towards Infection control precautions					
Attitude	Strongly agree	Agree	Indifferent	disagree	strongly disagree
Regular training should be provided to the hospital staff	86%	7%	5%	0%	2%
Infection control precautions help in reducing the occupational hazards, related to you	74%	17%	2%	7%	0%
Infection control precautions are not really important in hospital	3%	6%	0%	24%	68%
Infection control precautions are mainly related to the critical care of the hospital	43%	16%	5%	25%	11%

Interpretation: Most of the staff were agree for the regular training that can be conducted in the hospital, which showed the positive attitude towards the training regarding the infection control precautions. It also showed the behaviour towards the occupational hazards related to healthcare workers. When the question was asked about the importance

of the Infection control precautions which was in negative perspective and 68% people disagree with it. Whereas there was biased result for the neutral statement.

4.4Practice of the Infection control precautions

Table 2:Practice of Infection control Precautions

Practice of infection control precautions among Healthcare workers		
Practice	Frequency	Percentage
Hand washing is done after and before coming in contact with the patients or any procedure done on patients	69	92%
Autoclave of all equipment used (Especially in OT and Labour room) is done after every procedure	56	75%
Is proper PPE is used in a particular Department(OT, Labour room, Lab etc)	67	89%
manufacturers' instructions are followed while diluting disinfectants used in cleaning hospital surfaces	61	81%
Disposal of used needles and syringes among doctors, nurses and laboratory technician		
Recap needle and discard both syringe and needle	44	59%
Discard both syringe and needle into the safety box without recapping	18	24%
Disconnect and discard needle and replace with new needle for another drug administration on the same patient	13	17%
Immunization of Hepatitis B	65	87%
Awareness for handling and reporting NSI	49	65%
Practise of disposing the waste material	51	68%

As seen in the above table the lowest percentage of practice can be seen in the disposal of needle, Handling needle stick injury and disposing the Waste. These practices can be considered as the most important practices in the healthcare set ups. This precautions should be bring into the practice daily as these can be the main causes of infections among hospital staff and patients.

Chapter 5: Conclusion and recommendations:

The knowledge of the staff of various hospitals were fair as there were many aspects which were unknown to certain staff. The attitude towards the infection control prevention was observed to be positive. It can be recommended that the regular training should be given to the staff of hospital so that they can practice the infection control precautions in daily routine patient care. The immunization towards the Hepatitis is observed around 87%. Specific Training programs can be organised in the hospitals regarding the guidelines and improvements in guidelines of the hospital. The Hospital Infection control committee needs to take care of the guidelines followed in the hospitals.

Appendix

Questionnaire

Name: _____

Name of Hospital: _____

Designation: _____

Contact No: _____

Email ID _____

Age

- 20-29
- 30-39
- 39-40
- 40-49
- 49+

Years of Experience

- 1-5 Years
- 6-10 Years
- 10-15 Years
- 15+

1. Ever heard about the infection control precautions?

- Yes
- No

2. Main Source of Information from where you have heard about the Infection Control Precautions.

- Formal Training
- Educational books
- Colleague
- Others

- Have not heard
3. Components of Infection control precautions :
 - Hand Hygiene
 - Personal Protective Equipment
 - Needle and sharp injury prevention
 - Cleaning, Disinfecting and sterilization
 - Waste disposal
 - Safe infection Practice
 - Respiratory Hygiene etiquettes
 4. Examples of Body fluids which needs to be guarded from direct contact to anyone?

 5. Advantages of Infection Control Precautions?
 - Protect Both Healthcare and Patients
 - Reduce Spread Of communicable Disease
 - Reduces Hospital Acquired Infection
 - None of the above
 6. Moments of hand Hygiene Includes
 - After contact with blood, body fluids or excreta
 - Before performing any aseptic procedure
 - After glove removal
 - Before touching a patient
 - Before exiting the patient's care area
 7. Regular Training should be provided to the hospital staff
 - Strongly Agree
 - Agree
 - No difference
 - Dis agree
 - Strongly Disagree
 8. Infection control precautions help in reducing the occupational hazards, related to you:
 - Strongly Agree
 - Agree
 - No difference

- Dis agree
- Strongly Disagree

9. Infection Control Precautions are not really important in hospitals

- Strongly Agree
- Agree
- No difference
- Dis agree
- Strongly Disagree

10. Infection control Precautions are mainly related to the critical area of the hospital

- Strongly Agree
- Agree
- No difference
- Dis agree
- Strongly Disagree

11. Hand washing is done after and before coming in contact with the patients or any procedure done patients

- Yes
- No
- Sometimes

12. Autoclave of all the equipment's used(Especially in OT and Labour room) are done after every procedure

- Yes
- No
- Maybe

13. Is proper PPE is Used in a particular department(OT, Labour room, LAB etc)

- Yes
- No
- Maybe

14. manufacturers' instructions are followed while diluting disinfectants used in cleaning hospital surfaces

- Yes

- No
- Maybe

15. Disposal of used needles and syringes among doctors, nurses and laboratory scientists

- Recap needle and discard both syringe and needle
- Discard both syringe and needle into the safety box without recapping
- Disconnect and discard needle and replace with new needle for another drug administration on the same patient.

16. Are you Hepatitis B immunised ?

- Yes
- No

17. Are you aware how to handle and report NSI

- Yes
- No

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