

Study to Assess the Clinical Practices of Nursing Staff

By

Kanika Sharma

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

Academic year, 2017-2019



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TO WHOMSOEVER MAY CONCERN

This is to certify that Dr. Kanika Sharma student of MBA Hospital and Health Management from The IIHMR University, Jaipur has undergone internship training at Thumbay Medical and Dental Specialty Centre, Sharjah from 24th February to 20th May, 2019

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 fulfillment of the course requirements.

I wish her all success in all his future endeavors.



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مركز ثومبي التخصصي للطب الأسنان
THUMBAY MEDICAL & DENTAL SPECIALITY CENTRE

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May 20, 2019

To Whom It May Concern

This is to certify that Dr. Kanika Sharma holder of Indian Passport Number K0026831 has undergone internship in our organization from 24th February 2019 till 20th May 2019, as a part of dissertation of her MBA in Hospital and Health Management program. She has completed the assigned project.

We wish all the best for her future endeavor.

For Thumbay Medical & Dental Speciality Centre, Sharjah



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THUMBAY MEDICAL & DENTAL SPECIALITY CENTRE
President

THE IIMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled A study on “A study to assess the clinical practices of nursing staff” submitted by Dr. Kanika Sharma, Enrolment No. 0584 under the supervision of Dr. Alok Mathur for award of MBA in Hospital and Health Management in Health and Hospitals of the University carried out during the period from 24-2-2019 to 20-5-2019 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

2.1.4 Acknowledgements

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Sincerely,

Kanika Sharma

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2.2.1 INTRODUCTION

Nursing professionals play a vital role in all aspects of healthcare, from health campaigns, educating community to serving patients. With their commitment and care, nurses are considered as the backbone of the healthcare system and their contribution is critical in achieving the healthcare goals of a nation. They constantly monitor clinical condition of patients, errors and near miss events, educate family and patients to ensure patient safety and high-quality care.

Changing environment of the healthcare sector poses a great challenge to acute care organisation like ensuring competent nursing staff to care the patient. In present scenario, patients are acutely ill, have shorter length of stay which places greater demand on the nursing staff to demonstrate their competency in caring patients. Patients evaluate the hospital by the attitude of the service provider, treatment given to him, and fulfilment of his expectations. Nurses being front line care provider have more evident and vital role in upholding organization and fulfilling patient's expectation. So, hospitals are required to assess, track, maintain and improve the competence and practices of the nursing staff.

Keeping this in background a cross sectional study was undertaken to assess the clinical practices of nursing staff working at Thumbay Medical and Dental Speciality Centre (TM&DSC), U.A.E

AIM

To assess the clinical practices of nursing staff working at Thumbay Medical and Dental Speciality Centre, U.A.E

OBJECTIVES

- To determine the compliance percentage of nursing practices in relation to communication with patient.
- To determine the compliance percentage of nursing practices in relation to patient safety measure
- To determine the compliance percentage of nursing practices in relation to infection control measures
- To determine the compliance percentage of nursing practices in relation to vital registration

2.2.2 LITERATURE REVIEW

In the study, clinical practices of nursing staff are assessed on four parameters, Communication with patients, Patient safety practices, Infection control practices and Recording and documentation of vital signs.

To stay competitive in the healthcare market, patient satisfaction is the prime focus area of all the healthcare organization. Nurses play a prominent role in patient satisfaction as the frontline care giver. Nurse – Patient communication is vital in all areas of activities from patient’s assessment, treatment, rehabilitation till education and health promotion. Nurse-patient communication should have a positive patient experience.

As indicated by Casey and Wallis (2011) there ought to be accentuation on improvement of nursing aptitudes so as to accomplish idea of nursing is minding and tolerant driven consideration to bring quiet fulfillment.

In an examination (Raya, 2006) it is presumed that logical technique for practicing and actualizing nursing care is accomplished through exchanges, relational condition and explicit verbal and non verbal relational abilities. Another investigation (College of Nurses of Ontario 2006) reasoned that the medical attendant patient association ought to be proficient and restorative, which assurances to organize the patient needs and

attendants should assume liability of it, regardless of patient conduct. In this way, Ellis et al (1995) and Rose 13 (2012) proposed that amid correspondence with patients, social attributes of sender and beneficiary ought to be considered. It is nurture obligation to guarantee powerful correspondence with patient to bring ideal consideration results notwithstanding of presence disparity. (Rowe 1999).

Several points to be kept in mind while communicating with patients: effective communication in nursing are as: Use of appropriate verbal/non-verbal behaviour (according patient age, culture, language). Nurses should determine the patients' dimension of comprehension and use language, remarks, inquiries in agreement to it. They should impart their mean to quiet before anticipating that them should take an interest in collaboration. Maintain a strategic distance from restorative languages: utilizing phrasing which quiet does not comprehend can scare the patient and empower the patient to comprehend the issue. Active listening: concentrating on the speaker, by maintaining eye contact, nodding head, asking questions from patients. Active listening is valuable skill to acquire. Explaining intervention to obtain verbal consent: explaining the process to the patient so that they are aware of the process, reduces their anxiety and obtains a consent which will builds up trust relationship between them and nursing staff.

Understanding security is turning into another serious issue in medicinal services frameworks over the world. Organization of Medicine's (IOM's) report 'To Err is Human: Building a Safer Health System assessed passings (44000 to 98000 every year and 1 million wounds) because of restorative blunder, making it eighth driving reason for death in USA. Number of activities was taken to report the blunder, discovering answer for the issues. 'An Organization with a Memory' featured the degree of restorative mishaps consistently around 400 individuals bite the dust because of medicinal gadgets, and 10,000 detailed unfavorable medication occasion, in the NHS. Government anticipated advancing security and spots persistent wellbeing with regards to the quality program.

As Nurses are at unique proximity with patients, they are ideal place to drive safety and quality agenda in the organization. A study demonstrating the impact on patient safety by empowering nursing staff concludes that gaps exists in understanding the roles and knowledge of nurses in patient safety improvement. Nursing empowerment, leadership can strengthen the quality and safety movement.

Implementation of patient safety in the hospital cannot be separated from the role of nurses as the most health personnel in the hospital and its existence during the 24 hours of serving patients. An examination in diaries on patient wellbeing and attendant consistence in the usage of patient security at the medical clinic, expressed that the dimension of attendant consistence in the execution of patient wellbeing differs for the current emergency clinic in Indonesia running from 56.1% to 95%, with a normal of 70.3%. Whereas for the European Countries the fewest hospitals for poor patient safety exists in Switzerland at 4%, and the hospital with the greatest number of poor patient implementation implementations is the Polish state at 18%. For consistence levels accurately recognize patients running from 64.5% to 75.8%, and Hand cleanliness consistence rates run at 35%. The motivation behind this survey writing is to distinguish the consequences of research on the usage of patient security by medical caretakers in emergency clinics.

World Alliance for Patient Safety was launched by the World Health Organization, to promote patient safety. JCI in conjunction with WHO, promotes the six international patient safety goals for increasing awareness and ensuring safe and quality care. The six International Patient Safety Goals are:

- Goal 1 –Identify Patient Correctly
- Goal 2 – Improve Effective Communication
- Goal 3 - Safe high-Alert Medications
- Goal 4 - Ensure safe surgery
- Goal 5 - Reduce Risk of Health Care-Associates Infections
- Goal 6 - Reduce the Risk of Fall

Correct patient identification is the first step towards safe patient care. Patient safety is compromised if patient is not identified correctly, so two patient identifiers depending upon demographic information should be used as recommended by Joint Commission.

A study on **Determining the awareness level of the nursing staff for policies and procedures related to the quality care and patient safety**, showed gap between the knowledge and policies. Nurses were aware on quality, patient safety and general safety but the compliance with patient safety policies were lower than the knowledge. Patient safety indicators which were consider were, compliance with patient identification,

compliance with verbal orders, compliance with hand hygiene, compliance with fall assessment policies.

As per the NCCMERP (National Coordinating Council for Medication Error Reporting and Prevention) a Medication blunder is characterized as 'any preventable occasion that may cause or prompt improper prescription use or patient mischief while the medicine is in the control of the human services proficient, patient or customer'. Frequency of drug blunder fluctuates somewhere in the range of 5% and 25%. 33% of all prescription blunder happens in medicine organization stage which is predominately nursing movement, drug process should be surveyed to guarantee understanding wellbeing. Attendants ought to be prepared and pursue routine with regards to "7 rights" of prescription organization: right patient, right medication, right portion, perfect time, right course, right reason and right documentation. An ISMP publication (Institute for Safe Medication Practices) expressed that "The 7 rights are comprehensively expressed objectives or wanted results of safe prescription practices for which associations must acknowledge obligation and structure safeguard ways that they can be accomplished". What's more, because of rupture in one of the rights, medicine mistake happens. The reason for this audit is to recognize quality markers for the 7 privileges of safe in-emergency clinic prescription organization.

Thousands of people die from medication error, Bar coding medication administration system reduces the error, however, many hospitals lacks pre-implementation workflow, a study “ **developing and testing a method for assessing nursing effort and workflow in the medication administration process**” concluded that workarounds, workflow inefficiencies, distractions during medication administration, leads to threats to patient safety.

Reviewing above cited literature, to assess the patient safety practices performed by the nursing staff, uses of patient identifiers and medication administration practices are observed.

Infected patients are the source of infection transmission to other patients, staff and visitors of a hospital. Nosocomial infections also know as the hospital acquired are leading cause of mortality and morbidity and causes economic burden due to increased hospitalization so prevention and control of infection is critical to the functioning of health system.

World Health Organization characterized contamination control as "Disease counteractive action and control estimates that means to guarantee the assurance of the individuals who may be defenseless against getting a disease both in the general network and in medical clinics while accepting consideration because of medical issues." Hygiene is the essential standard of disease aversion and control and hand cleanliness is broadly recognized to be the most significant movement that lessens the spread of contamination.

With showing compliance with standard precautions, nurses can play a crucial role in preventing and controlling transmission. By using knowledge, skills and infection prevention procedures nurses can demonstrate leadership in infection control. It is reported that, many healthcare infections are transmitted through healthcare personnel who fail to practice proper handwashing and change gloves in between. Therefore, guidelines from many organizations have supported that hand washing is the best measure in reducing the incidence of health care infections. **Brooker, Waugh, and Waston** stated that hospitalized patient exposed to infection resulting from a surgical or medical treatment called iatrogenic infection is frequently attributed to an invasive procedure and reported that over 60% of blood infection introduced by intravenous lines or catheter. Health care infections are considered a major public health problem in both epidemic and endemic form because they are the main causes of morbidity, mortality and economic burden. **WHO report** (2002) published data demonstrating that HIV cases (2.5%) and hepatitis Band C cases (40%) among health care workers are the results of occupational exposure.

The Joint Commission on Accreditation of health care Organization (**JACO**) and the centers for disease control and Prevention (**CDC**) documented that health care provider should follow certain infection control guidelines like hand hygiene, disposal of biomedical waste, use of personnel protective equipment when caring for clients.

Nursing staff assume a significant job in emergency clinic diseases control as they are in direct contact with patients, performs obtrusive and possibly debased methods, just as the control understanding hardware, instruments and prescriptions.

Another investigation intending to audit the consistence rate of HCW demonstrated low rate of consistence and information. It was prescribed to improve the information of HCWs so as to raise the consistence rate. Rules ought to be pursued to diminish the disease and death rate.

Another investigation "to inspect adherence rates among ED staff to chosen disease control rehearses" that incorporates hand cleanliness (HH) and aseptic method amid the situation of focal venous catheters and urinary catheters. Adherence rates were normal, medical attendants (60%), experts (half), doctors (20%). It was prescribed to give suggestions to the staff and routinely survey their exhibitions.

Biomedical waste administration are the exercises that includes isolation, stockpiling, accumulation, transportation and transfer of biomedical waste. An examination on Biomedical waste administration referred to that all the staff from doctor to servant must know about biomedical standards and its consistence to biomedical waste administration require duty from all the dimension of medical clinic staff. There is need of preparing and instruction with respect to biomedical waste and its effect on biological system as it is observed that the learning among medicinal services supplier is negligible about the natural poisons discharged as biomedical waste.

Study "Learning, mentality, practices, and advancements of Biomedical waste administration methods" closed about the mindfulness with respect to biomedical waste and utilization of different systems, for example, bright beams and ultrasonic beams to take out the danger of getting tainted amid biomedical waste treatment.

Another investigation on "Need of Biomedical Waste Management" discusses the effect of waste produced by the medicinal exercises and their straight route sway on humanity. The paper features that transfer of BMW waste or presentation to such waste have a genuine risk to nature and subsequently requires explicit treatment or the executives before transfer. Other than that, the paper manages the issues identifying with bio-medicinal waste and systems for taking care of and transfer strategy and make mindfulness among wellbeing faculty in regards to the biomedical waste

.Considering above literature review on infection control practices, handwashing, disposal of biomedical waste and use of personnel protective equipment are observed as indicators for infection control practices done by nursing staff.

Fundamental sign (patients' heartbeat, breath rate, temperature, pulse) observing is an essential segment of nursing care which is basic for distinguishing proof of clinical weakening of patient. There are numerous examinations demonstrating that indispensable signs are not consistently surveyed, recorded and translated as it is tedious errand and attendants recording imperative signs must be alert for strange esteem and patterns.

A writing survey of study "investigating elements of nursing routine with regards to fundamental signs checking in distinguishing and detailing disintegration" featured the attendants factors like learning, jobs and obligations and association factors were innovation, outstanding burden, perception outline configuration in observing imperative signs.

2.2.3 Research Question

What are the barriers to nursing care in the Outpatient Department of Thumbay Medical and dental Specialty Centre.

2.2.4 Methodology

Study design: Cross Sectional Study based on direct observation of nurse patient interaction.

Study Duration: March 2019 to May 2019

Study Area: The investigation was led in Medical Wing of Thumbay Medical and Dental Speciality Center, Sharjah which is a constituent unit of Thumbay Group (a universal business aggregate with its central station Dubai, United Arab Emirates). The inside has extent of administrations for Outpatients, drug store, radiology and a research facility. There are nine claim to fame office (Internal medication, Gynaecologist, Paediatrician, General specialist, Ophthalmologist, Cardiologist, Dermatologist, Orthopaedics and Dental with 16 seats) which keeps running for 21 hours daily upheld by 34 specific qualified and experienced specialists, 28 nursing staff and paramedic staff. It likewise underpins the clinical showing exercises of the Dental College of Gulf Medical University.

Target Population: The target population was the patients coming for the treatment in the study area. The interaction between the nursing staff and patient during vital registration, medication administration and blood sample collection was observed.

Inclusion Criteria:

1. Patient coming for OPD consultation, laboratory investigation and medication administration.

Exclusion criteria:

1. Patient coming for OPD consultation, laboratory investigation and medication administration during evening and night hours.
2. Follow up patients were not taken in study.

Sample Size: 130

Sampling technique: Convenience non-probability sampling

Data Type: Primary (by observing patient- nursing staff interaction)

Tools: Nursing practice assessment checklist and datasheet

Data was collected by observing patient-nurse interaction through pre-defined, structured, validated Nursing practices assessment checklist (Annexure 1). Checklist consisting of four parameters: Communication with patient, Patient safety practices, Infection control practices and record of vitals. Compliance for indicators of each parameters was assessed through checklist. Later all data was compiled through MS Excel.

Data Analysis Plan: Data was analysed through MS Excel. Compliance percentage for indicators of communication, patient safety, infection control and vital registration was computed. Cumulative percentage of each parameters was also calculated. Fishbone analysis for the low compliance was done.

Ethical Consideration

The examination was directed remembering that it ought not have any mischief (mental, budgetary, social) to anybody engaged with study. There was no disturbance in calendar and working of the representative or the association. It is not the slightest bit to gather between the patient and supplier relationship or pass on judgment. Impartial and

unpressurised data was gathered, and the outcomes were passed on sincerely to the association and straightforwardness was kept up.

2.2.5 Results

During the nurse-patient interaction following parameters were observed during vital registration, medication administration and blood sample collection

1. Communication

PARAMETRE	COMPLETE COMPLIANCE	NON COMPLIANCE	COMPLIANCE %AGE
Use of appropriate verbal/non-verbal behaviour (according to individual, age, culture)	85	45	65%
Active listening	130	0	100%
Avoid medical jargons	130	0	100%
Explaining intervention to obtain verbal consent (S.S 78)	55	23	70%

Table 2.1 Communication Compliance percentage

2.Patient Safety

PARAMETERS	COMPLTE COMPLIANCE	NON COMPLIANCE	COMPLIANCE %AGE
<u>Patient identification</u>			
Use of patient identifiers	100	30	78%
<u>Medication administration</u>			
Patch test done to check whether the patient is allergic to the medicine or not	30	0	100%
Check the expiry date of the medicine to be administered	30	0	100%
Ensures : Right medication, Right dose, Right route with the prescription.	30	0	100%
Aseptic conditions maintained during administration of medication	21	9	70%

Table 2.2 Patient Safety compliance percentage

3.Infection control practices

PARAMETERS	COMPLIANCE	NON COMPLIANCE	COMPLIANCE PERCENTAGE
Use of standardize hand hygiene practices	88	42	68%
Disposal of biomedical waste as per Biomedical Waste Management guidelines (S.S 78)	74	4	95%
Use of PPE wherever indicated	55	23	70%

Table 2.3 Infection Control Compliance percentage

4.Record of vitals

PARAMETRE	COMPLIANCE	NON COMPLIANCE	COMPLIANCE PERCENTAGE
Measurement of Blood Pressure	49	3	94%
Measurement of Pulse	49	3	94%
Measurement of Temperature	49	3	94%

Table 2.4 Record of vitals compliance percentage

In view of the discoveries of the examination, coming up next were the cumulative compliance percentage of following parameters:

- Infection control- 78%
- Communication- Nurse patient interaction-81%
- Patient Safety- 90%
- Record of vitals- 94%

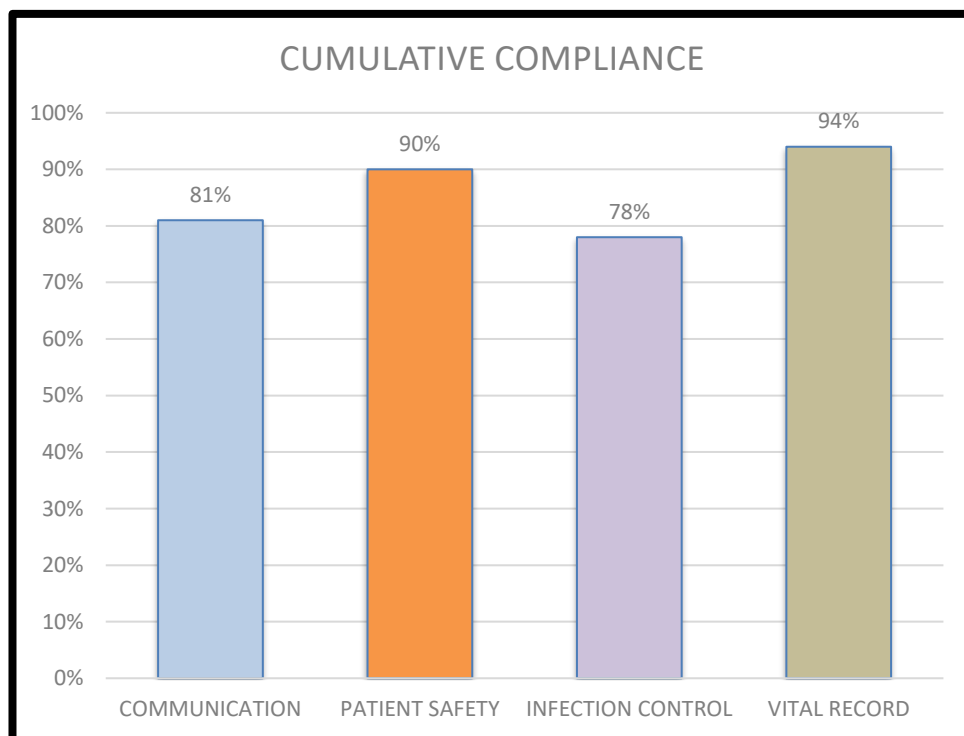


Figure 2.1: Cumulative compliance percentage of parameters

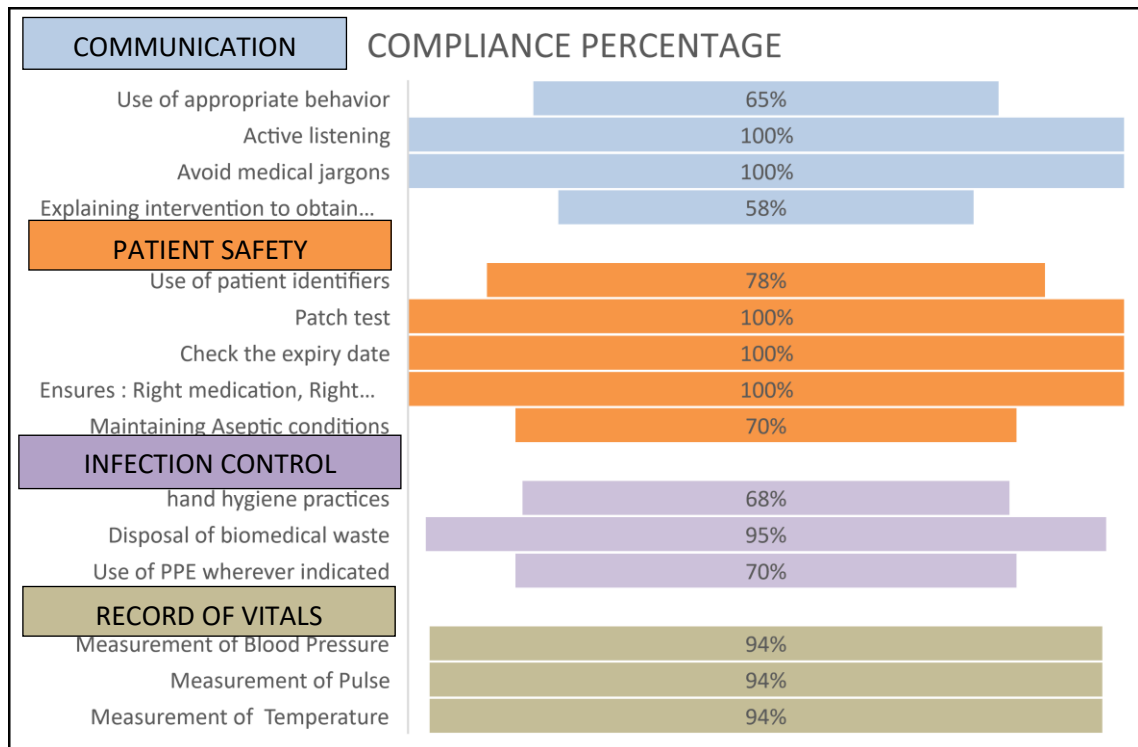


figure 2.2: Compliance percentage of all indicators

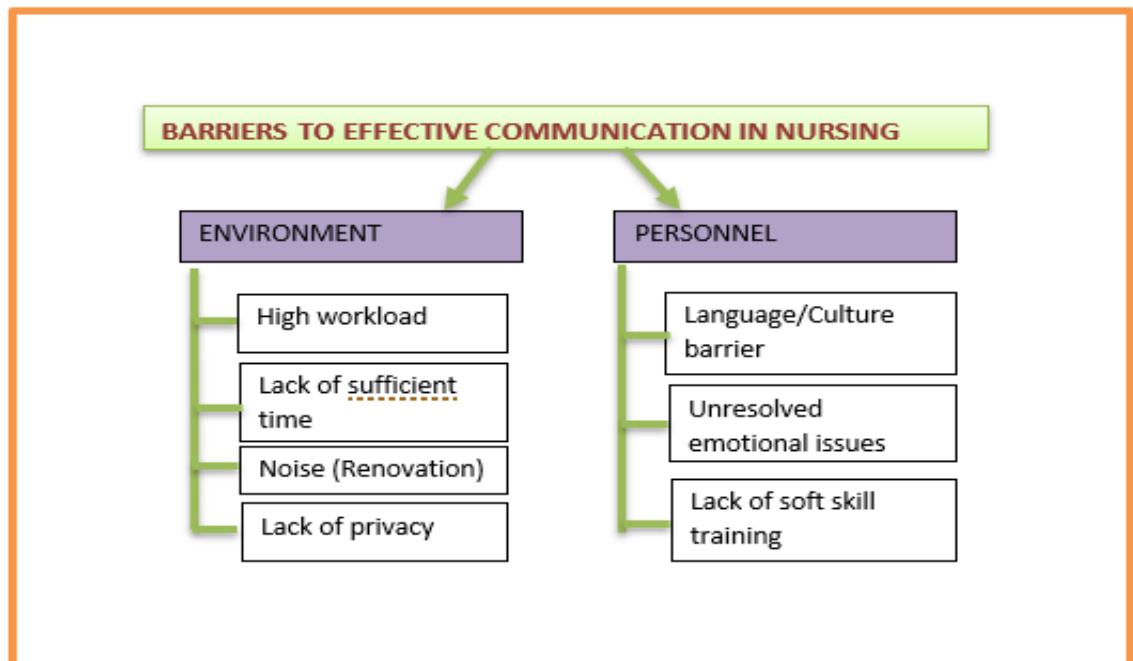


Figure 2.3: Barriers to effective communication

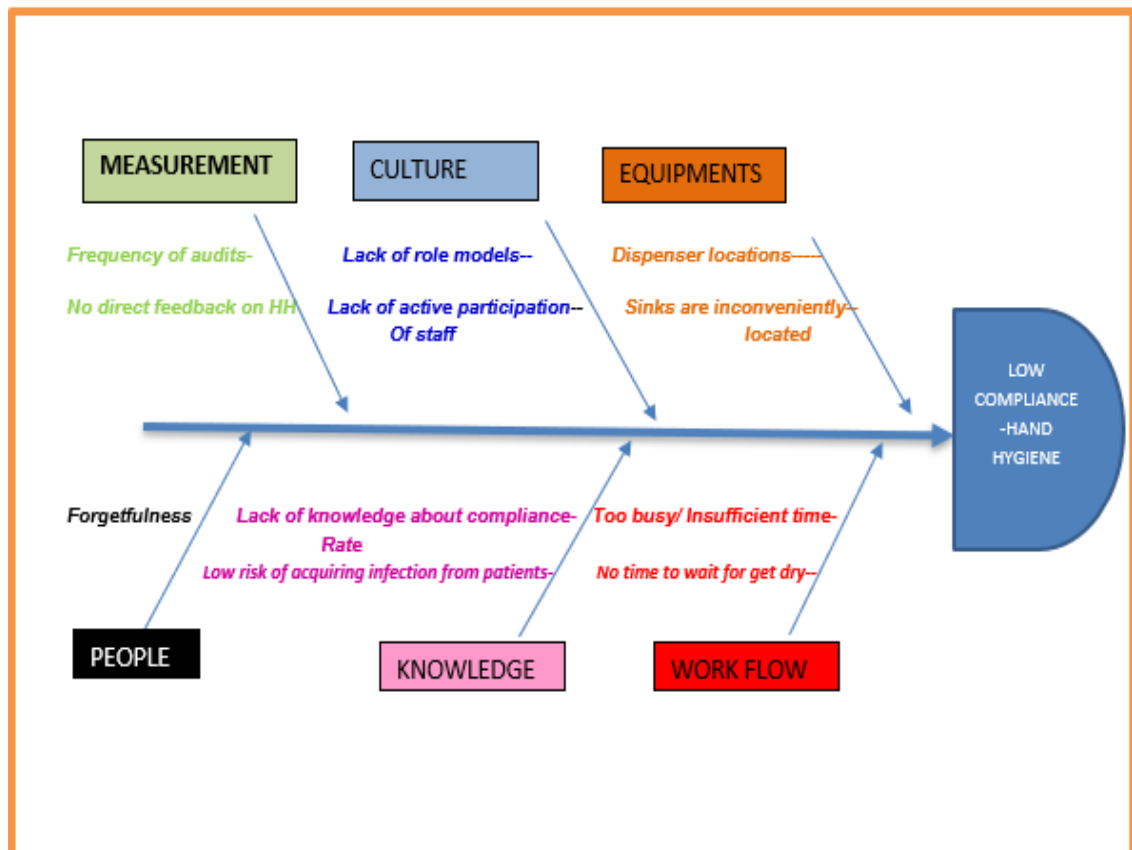


Figure 2.4 Fishbone analysis of low compliance of hand hygiene practices

2.2.6 Discussion

Communication is a vital element in Nursing in all areas of activity and in all its interventions. Attendants are on the forefronts of patient consideration, making medical attendant patient correspondence fundamental to have a positive patient encounter. Finding suggests that overall compliance with communication parameters was good (81%). All the nursing staff practices active listening and avoid medical jargons when interacts with the patients. Most of them (65%) used appropriate verbal/ non-verbal behavior. As documented in Patient Assessment policy, Patients shall be assessed based on the vitals, chief complaints, present and past medical and surgical history, general and systematic examination which is the primary responsibility of treating physician and nurse to collect the information and document the same. However during the peak hours, in few cases (35%), complete patient assessment was not done, only chief complaint of patient was recorded in EMR during vital registration and only (58%) patients, were explained about the intervention to obtain verbal consent before

medication administration and blood sample collection. Perceived barriers to effective communication among nurses and patients are work overload during peak hours, performing multiple jobs (vital registration, scanning claim forms, assisting clinicians during procedures), language barrier and noise (renovation in the hospital)

Patient safety is the cornerstone of high-quality health care. Nurses are essential to ensure patient safety and reduce adverse outcomes, nurses are continually challenged to ensure that their patients receive the right medication at the right time. According to the finding of the study cumulative compliance with patient safety parameters was high (90%). To prevent instances of misidentification and near-misses, there is a hospital policy on Patient Identification, which documents that there shall be use of two patient identifiers as a standard to improve the reliability of the patient identification process. The two patient identifiers in Outpatient Department, Treatment room, Phlebotomy are **“Full name of the patient and Date of Birth”** which is available on Patient Visit Record (PVR). Before starting any procedure (Vital registration, Medication administration, or Blood sample collection) nursing staff ask patients for their full name and date of birth. However, in few cases (30%), date of birth, was missed. There is complete compliance for medication administration safety, before administration of medication; medicine, dosage, and route are verified with the prescription. Expiry date was checked, and Patch test was done to ensure, patient safety. However, in 30 percent cases, aseptic conditions were not maintained, no handwash/handrub before wearing gloves and after removing gloves was done and with gloved hands, unsterile objects were touched (telephone, computer, side rails of beds, saline hanging stand) before or in between the procedure.

Hospital Acquired Infections constitute one of the greatest challenges resulting in extended duration of care, substantial morbidity and mortality, and excess costs. The nurse, as a front-line caregiver, should always apply standard precautions and to all patients, best practice to minimize the risks of infection. Overall compliance to the infection control practices was average (78%). Handwashing being efficient vehicle for preventing cross infection in a healthcare environment was taken as one of the indicators of infection control practices. Thumbay Medical and Dental Specialty centre has adopted and documented WHO Hand Hygiene guidelines in Policy on Personal Protective Equipment to support continued reduction of the healthcare associated infections. There was low (68%) adherences to hand hygiene guidelines.

While compliance with biomedical waste management guidelines is high (95%). Noninfectious waste (syringes cover, medicine cover, bed tissue covers and general waste) are thrown in black (noninfectious bin) and contaminated waste (gloves, cotton, gauges) are thrown in yellow (infectious waste). Syringes and needles disposed in puncture proof box immediately after the procedure.

Gloves are used for all invasive procedures (blood sample collection, medication administration) as single-use items and were changed between different patients, and between different care or treatment activities for the same patient.

Fundamental sign evaluation is basic in the assurance of a patient's wellbeing status. Cautious estimation procedures and information of the typical range in fundamental signs for a patient will guarantee that patients are reasonably evaluated and observed. Crucial sign observing is a center capacity of the medical attendant and treating doctor. Fundamental signs (Blood Pressure, Pulse and Temperature) were estimated for every patient through advanced screen hardware and archived in Patient Visit Record (PVR) by nursing staff in the imperative enrollment region. In any case, amid pinnacle hours, it was seen that indispensable indications of couple of patients (6%) were estimated and reported in Patient Visit Record (PVR) by medicinal systematic.

2.2.6 Conclusion

The general consistence of nursing staff on correspondence, understanding security rehearses, disease control practices and record of vitals was observed to be great. The consistence on correspondence with the patient and contamination control rehearses was lower than different parameters. In any case, the mindfulness and the information among the nursing staff is higher than the real practices. Challenge is to move information into patient consideration works on, considering working condition determinants in record, to make the medical clinic staff consistent to emergency clinic strategies and methods.

2.2.8 Intervention

On the bases of this study, an Infection control program was launched to improve hand hygiene adherence, not merely by dissemination of guidelines but by comprehensive, multidisciplinary efforts that included following improvement strategies:

1. Training and Education workshops

Two days training and education program targeting hand hygiene was conducted by the Infection control physician, for all the staff (doctors, housekeeping, nurses and administrative staff). Hand hygiene knowledge was assessed by the end of training program through pre and post- test consisting of questionnaire. Training and education included following topics:

- ✓ Types of Healthcare Associate Infections, prevention of HAIs
- ✓ Hand Hygiene, use of personnel protective equipment and maintaining aseptic conditions.
- ✓ Awareness about the “5 moments for Hand Hygiene” (WHO)
- ✓ Hand washing – products, indications, glove use and technique
- ✓ Use of alcohol-based hand rubs (ABHRs) – products, indications and technique

Pre and post training were conducted through pre-defined questionnaire (annexure 2) which distributed among staff who attending the training before start of the training and after completion of training. Results of pre and post training test showed marked increase in the knowledge and awareness of hospital staff about the infection control practices, giving clear indication that there was improvement in knowledge acquired post training. Evaluating training program gives feedback on quality of program and teaching methodology of program.

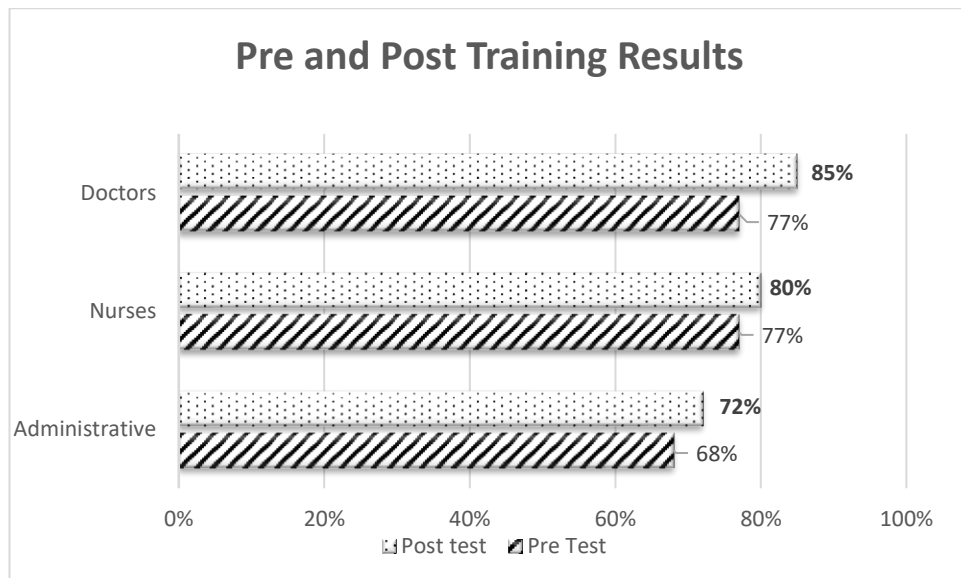


Figure 2.5: Pre-post training results

2. Audits and Feedback

To check the compliance with hand hygiene practices, hand hygiene audits were made on monthly bases. Hand hygiene compliance auditing method is by direct observation of healthcare workers through use of WHO Hand Hygiene Observation Audit Tool (Annexure 3). Hand hygiene audits were taken as one of the quality indicators for the organisation which will be regularly observed and monitored by Quality assurance department and results will be disseminated through quarterly meeting of Quality Improvement and Patient Safety Committees.

3. Reminders in the workplace

Hand Hygiene campaign was conducted on "World Hand Hygiene Day" ie 5th May, to create awareness and remind staff to maintain regular and effective Hand Hygiene. Video was shown to the staff about the importance of hand hygiene and how infection spread through the non-complaining with procedure and need to break the chain to stop the spread of infection. All the staff sign the pledge to clean their hands at all appropriate times especially before and after patient care.

4. Structural changes: introduction of table-top alcohol-based solutions, in all rooms at the point of care.

2.2.9 Recommendations

- Work environment determinants plays important role in compliance to hospital policies and procedures and performance of the staff. General and departmental orientation should be given to newly hired nursing staff to apprise orientees of the major hospital policies and procedures.
- Introducing Champion practices among the nursing staff that will help to influence other disciplines to do the same and assure quality care to the patient. Champions can be identified by peer nomination or self-nomination. Overarching goal of each champion is to educate, advocate, build relationships and navigates boundaries
- Repeated training and education programs to bring out behavioural change and create awareness about hospital policies and procedures
- Regularly monitoring and immediately feedback to the staff.
- Reminders in the workplace like posters, leaflet, videos and other IEC materials for promoting hand hygiene, should be displayed at key points of the hospital like waiting area, reception, vital registration that will remind the staff to maintain effective hand hygiene practices.
- Use of multidisciplinary teams. It is important to include all stakeholders in the process to gain cooperation. It is recommended to form an Infection Control Team comprising physician, nurse, housekeeping and front desk associate. Each member of the team should have a stake in the outcome, and all the members should work together to achieve the common goal.
- Communication training activities to enhance:
 - ✓ Relationships develop with grown-ups and kids (utilizing ideas of warmth, regard validity, sympathy and trust)
 - ✓ Active tuning in, perception and reacting
 - ✓ Telephone correspondence and expert introduction abilities
 - ✓ Communication methodologies with individuals who have explicit correspondence needs because of psychological wellness issues or potentially scholarly handicaps, among others.

This study scan be taken as base with which a post intervention analysis can be compared.

2.3.1 References

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ANNEXURE 1

NURSING PRACTICES ASSESSMENT TOOL

Sr. No	Parameters	Complete compliance	Partial compliance	No Compliance
1	COMMUNICATION WITH PATIENTS			
i	Use of appropriate verbal/non-verbal behaviour (according to individual, age, culture)			
ii	Active listening			
iii	Avoid medical jargons			
iv	Explaining intervention to obtain verbal consent			
2	PATIENT SAFETY			
2.1	Patient identification			
i	Use of patient identifiers			
2.2	Medication administration			
i	Patch test done to check whether the patient is allergic to the medicine or not			
ii	Check the expiry date of the medicine to be administered			
iii	Ensures: Right medication, Right dose, Right route with the prescription.			
iv	Aseptic conditions maintained during administration of medication			
3	INFECTION CONTROL			
i	Hand hygiene practices			
ii	Biomedical waste management			
iii	Use of PPE wherever indicated			
4	RECORD OF VITALS			
i	Measurement of Blood Pressure			
ii	Measurement of Pulse			
iii	Measurement of Temperature			

ANNEXURE 2

INFECTION CONTROL QUESTIONNAIRE

Name : _____

Employee ID : _____

Score: _____

Department : _____

Status: _____

Date : _____

1) What is HAI?

- A) Newly occur after 24 hrs of admission in hospital
- B) Super added infection
- C) Infection after discharge from hospital
- D) New infection occurring after 48 hrs of hospital admission

2) Examples of HAI

- A) CAUTI
- B) SSI
- C) VAP
- D) All of the above

3) Consequence of HAI

- A) Increase in mortality and morbidity
- B) Excess length of stay
- C) Increased cost
- D) All of the above

4) Which is the best skin disinfectant

- A) Tincture of iodine
- B) Iodophore
- C) 70% alcohol
- D) 2% Chlorhexidine

5) Most healthcare associated pathogens are transmitted from patient to patients via

- A. Improper isolation practices
- B. Inadequate sterilization of medical instruments
- C. Hands of healthcare personnel
- D. Ineffective disinfection of medical devices

- 6) What are care bundles?
- A) Individual best practice depending upon experience
 - B) Clinical care practice given by HCW
 - C) Evidence based set of best practice to reduce infection
 - D) Care bundles are used to care all patients
- 7) Critical level of instrument should go for
- A) Low level disinfection
 - B) High level disinfection
 - C) High level sterilization
 - D) All of the above
- 8) An open case of pulmonary tuberculosis needs admission for treatment. What is the best practise?
- A. Single room with good light and ventilation
 - B. Single room with negative pressure
 - C. Single room with negative pressure with 8-10 hrs exchange cycles/hour
 - D. Any one of the above
- 9) Which of the following processes should be used for contaminated endotracheal blades
- A. Cleaning followed by high level of disinfection
 - B. Cleaning with chlorhexidine followed by soaking in an enzymatic solution for 20 min
 - C. Cleaning followed by ultrasonic washer
 - D. Cleaning followed by alcohol disinfection
- 10) What is the preferred and widely used method to sterilize Implants?
- A) Flash Sterilization
 - B) ETO Sterilization
 - C) Plasma Sterilization
 - D) Autoclave

Annexure 3

WHO HAND HYGIENE OBSERVATION AUDIT FORM

	World Health Organization	Patient Safety A World Alliance for Safer Health Care	SAVE LIVES Clean Your Hands
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Observation Form

Facility:	Period Number*:	Session Number*:
Service:	Date: (dd/mm/yy)	Observer: (initials)
Ward:	Start/End time: (hh:mm)	Page N°:
Department:	Session duration: (mm)	City**:
Country**:		

Prof.cat Code N°	Opp.	Indication	HH Action	Prof.cat Code N°	Opp.	Indication	HH Action	Prof.cat Code N°	Opp.	Indication	HH Action	Prof.cat Code N°	Opp.	Indication	HH Action
	1	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		1	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		1	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		1	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves
	2	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		2	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		2	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		2	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves
	3	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		3	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		3	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		3	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves
	4	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		4	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		4	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		4	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves
	5	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		5	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		5	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		5	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves
	6	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		6	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		6	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		6	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves
	7	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		7	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		7	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		7	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves
	8	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		8	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		8	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves		8	☐ bef-pat. ☐ bef-asept. ☐ aft-b.f. ☐ aft-pat. ☐ aft.p.surr.	☐ HR ☐ HW ☐ missed ☐ gloves

* To be completed by the data manager.

** Optional, to be used if appropriate, according to the local needs and regulations.

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