Gibbs' reflective cycle

Gibbs’ reflective cycle has 6 stages. They are usually given the following headings:

1. Description

2. Feelings

3. Evaluation

4. Analysis

5. Conclusion

6. Action Plan

As part of my Overseas Nurse program, I am required to make a reflective essay. This essay is based on my experience in clinical placement in the Operating Theatre. The aim of this essay is to discuss my learnings about the importance of team briefing, principles of asepsis, and Surgical Handscrubbing, as well as experiences throughout my placement. I have come to select the Gibbs reflective framework for this for I feel that through this framework I can better express in a systematic manner the describe the incidents, feelings, and how I was able learn.

Learning Outcome 1: Team Brief and WHO Surgical Safety Checklist

In June 2008, the World Health Organization (WHO) implemented a second Global Patient Safety Challenge, ‘ Safe Surgery Saves Lives’, to reduce the incidence of surgical deaths across the entire world. The initiative was developed to strengthen and improve the commitment of clinical staff to

address safety issues within the surgical setting. This included improving anaesthetic safety practices, ensuring correct site surgery, avoiding surgical site infections and improving communication and teamwork within the team. The WHO Surgical Safety Checklist is a core set of safety checks, identified for improving performance at safety critical time points within the patient's intraoperative care pathway. It is for use in any operating theatre environment, including interventional radiology with the expectation that it can be adapted to fit local practice. The three steps in the checklist (sign in, time out, sign out) are not intended as a tick box exercise, but as a tool to initiate meaningful and purposeful conversation between relevant members of the clinical team to improve the safety of surgery.

According to the National Patient Safety Agency, NHS, there are five steps to safer surgeries.

Namely Briefing, Sign in, Time out, Sign out and Debriefing.

During my placement, I was assigned to circulate in theatre two. One of the five running theatres that our hospital has. The there was only one case. Patient Keiser (not the real name). 63 year old male consented for a Primary Total Knee replacement under general anesthesia using a Zimmer " NexGen" Knee system. I was nervous because it was a major case and I needed to be quick with my actions and be focused. I did my reading a day before so I had an idea of about the sequence of the operation.

Before the patient was escorted to the theatre, the surgical team together with the anesthesia team had a team brief. In the briefing the patient details, laterality of site were confirmed as well as medication allergies, number of

staff and availability of implants were all discussed. Everything went smoothly. The patient was then escorted to the anesthetic room and additional checks, verifications, and the sign in was done in the anesthetic room. The patient claimed that he had a nickel allergy and that he would get mild rashes when in contact with the metal property. The ODP (Operating Department Personnel) the person who is responsible for assisting the anesthetist and initiating the WHO Checklist was fully aware of this metal allergy as it was also reflected in the care plan and preassessment. The incident happened when the ODP and anesthetist failed to inform the scrub team about the specific allergy because they thought a nickel allergy had no significance. They were only concerned with medication allergies. So they continued and put the patient to sleep with propofol and other anesthetic agents. The patient was then brought in the theatre with use of the trolley and placed safely on the Operating table. The scrub team on the other hand was almost done preparing the field and assembling equipment needed for the operation. When everything was ready. Being the circulating nurse, I then continued the WHO checklist and initiated the Time-out. The consent, patient verification and allergies were then reviewed but this time the ODP informed the team about the nickel allergy. The surgeon went ballistic! And ordered that the patient be woken up. There was a heated discussion between the surgeon and anesthetist and it they eventually had to wake the patient up. It was then explained to us by the surgeon that the System and implants to be used during the operation had a very small percentage of nickel present in its components which could cause a reaction if used to the patient. He was angry because it was the second time it happened to him and he did not want to go through all the paper works again. The patient was

brought to recovery and woke up in a few minutes. The surgeon then explained the incident and unfortunately the operation was cancelled. The opened sterile instruments, supplies, and consumables were all put to waste.

As I analyzed what happened, the mistake clearly rooted back to the team brief. There were vital information that the anesthetic team knew about the patient that was not shared to the scrub team because they did not see it as important. I personally think every allergy, be it medication, metal or objects should be taken into consideration. It was a major case and the team had to know everything relevant. I realized how important the team brief was. Often I would observe other teams not taking the team brief seriously. They would just breeze through it as if was just some unimportant routinely work. After the incident I learned a lot and the view I had on the team briefing and the importance of the WHO checklist drastically changed. It is a very important tool in ensuring a safe, effective and successful operation. I now plan to practice a thorough team brief as well as executing a proper WHO checklist. You never know, missing out on one important fact could mean a life of a patient.

Learning Outcome 2: Principle of asepsis:

Asepsis can be defined as the absence of pathogenic microorganisms that cause disease. It then can also be referred to as clean technique (Phillips, 2013). However, elimination of infection is the goal of asepsis, not sterility. (Ayliffe et al. 2000) suggest that there are two types of asepsis: medical and surgical asepsis. Medical or clean asepsis reduces the number of organisms and prevents their spread; surgical or sterile asepsis includes procedures to

eliminatemicro-organismsfrom an area and is practised byhealth care workersand nurses in operating theaters and treatment areas.

There are several principles of surgical asepsis. Although all are equally important, I have come to be more cautious and alert of specific principles more often than others. One principle I have chosen to share with is a principle stating that People who are sterile touches only sterile items or areas. (reference) It may seem as a very simple principle to follow but it could be at times difficult to imbed in our system. May it be a scrub role or circulating role this is one of the key things one should always keep in mind.

I had one incident during placement relating to this. It happened during an early shift of a busy Friday. There were 52 operations to be done that morning. Everyone was on the go. For some time now I have been with an orthopedic team but this time I was assigned with my mentor to assist a list of over 6 cataract extractions with ocular lens implantation. She was to scrub and I was to assist with the circulating role. Coming into this list I had not assisted a cataract extraction in the last 4 years. My knowledge was very minimal although I knew the purpose and roughly the length of time needed to finish the procedure in general but I did not know much about the fine instruments needed, supplies and set up of the Centurion Vision. Everything was new to me and I felt much pressured to deliver and I was uncomfortable knowing I could make mistakes. As the operation began my mentor scrubbed in and she was too busy to guide me thoroughly at the moment. The surgeon and scrub started asking me to position the machine according to the surgeon’s preference. I was reprimanded for being slow and hesitant since the surgeon was ready to start. After finally connecting the plugs, foot pedals

as well positioning the Centurion Machine above the patients head, the surgeon placed sterile plastic covers over each of the handles of the machine. These sterile plastic handles where used as a sterile field so that the surgeon can hold the machine. Like the principle states, only sterile people should touch sterile things and the other way around for unsterile. Already being reprimanded I was nervous that I would make another mistake and unfortunately I did. The surgeon wanted me to reposition the machine yet again to his preference but this time I unconsciously forgot my principles and touched the sterile handle and I compromised the sterility of the field. The surgeon requested for another sterile handle and the case was delayed.

I felt very bad knowing that I knew the principle but still it just slipped my mind and I committed an error which compromised the operation someway. After the incident I knew what I needed to do and how to position the machine efficiently and quickly. I already knew the preferred position and supplies needed. I just needed to be more focused, less anxious and hesitant and be more confident this way I would not make mistakes of that degree. The first case finished and I was able to effectively circulate on the remaining cases with carefulness, confidence, focus and efficiency.

Learning outcome 3: Surgical Hand scrubbing

Microorganisms transfer from the hands of health care providers to patients; this is an

Important factor with regard to health-care associated infections (i. e. nosocomial). Skin is a major source of microbial contamination in the surgical environment. Although the scrubbed members of the surgical team are

wearing surgical gloves and gowns, their hands and forearms are to be cleaned preoperatively to significantly reduce the number of microorganisms (AORN 2006)

According to the WHO Guidelines on Hand Hygiene in Health Care, Surgical hand scrubbing is the surgical hand preparation with antimicrobial soap and water performed preoperatively by the surgical team to eliminate transient flora and reduce resident skin flora (2009, World Health Organization). There are two methods of scrub procedure. One is a numbered stroke method, in which a certain number of brush strokes are designated for each finger, palm, back of hand, and arm. The alternative method is the timed scrub, and each scrub should last from three to five minutes, depending on facility protocol (Deborah Gardener 2011). In the operating theatres there are three most probable routes of infection transmission between successive/sequential surgical patients are via the air, from instruments, or from environmental surfaces. Journal of Hospital Infection(2002)

I have always felt and understood the importance of keeping our hands clean even since I was a little boy. This was a practice taught to me by my parents. As I studied nursing in my country I got to know more about it and how it was properly practised in the wards and theatre settings. During my placement I would always observe my mentor thoroughly before gowning and gloving. I knew the importance of this. She would use repetitive strokes on the hands and arms to further remove any microorganisms. She would be very meticulous and patient while stroking her hands and arms with soap and an antimicrobial agent but as Ive observed, along with most of the scrub nurses, together with my mentor did not use brushes when doing surgical

hand scrubbing despite brushes being available just at the side of the scrubbing area. This made a big question mark in my head and I was really confused. I wanted to know why they didn’t bother to use the brushes. So I decided to research about it.

There was a study that compared surgical hand scubbing with and without the use of brushes. Two groups were involved during this study. One group to scrub without a brush and another group to scrub with brushes. According to Life Science Journal 2014, the result showed that the group which used brushes had slightly higher bacterial counts, this could mean that brushes traumatize the skin creating an environment where bacteria thrived. Whereas using no scrub brush resulted in no skin damage and significantly lower bacterial count. (AORN journal, 2004. 79: p. 225-30). Based on this research, I was amazed on how the United Kingdom healthcare setting applied evidence based practice. I applied this research findings to how I scrub. I learned more about because of research and from that moment on I have been scrubbing without using a brush. Surgical site infections (SSIs) are the second to third most common site of health care associated infections. When providing health services, it is essential to prevent the transmission of infections at all times. (Engender Health 2001). I applied this research findings to how I scrub. I learned more about because of research and from that moment on I have been scrubbing without using a surgical brush.