

A STUDY ON ADHERENCE OF SURGICAL SAFETY CHECKLIST IN OPERATION THEATRES, IN ONE OF THE LEADING HOSPITAL, BANGALORE

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Abstract- Patient Safety remains the most important priority in the healthcare organization and this includes ensuring safe experience for patients who undergone surgery in the hospital. Surgery become integral part of global healthcare system all over the world. Surgical complications are common and often preventable. WHO has undertaken a number of global and regional initiatives to address Surgical Safety. WHO Second Global Patient Safety Challenge “Safe Surgery Saves Lives”, to improve the safety of surgical care around the world by defining a core set of safety standards. The WHO Surgical Safety Checklist was developed after extensive consultation aiming to decrease errors and adverse events, and increase teamwork and communication in surgery. In Operation theatres, Surgical Safety Checklist has been followed in order to enhance patient safety. This paper explores an adherence of Surgical Safety Checklist followed in the hospital. A WHO Surgical Safety Checklist was reframed as per the selected hospital requirements and used for the data collection in the operation theatres. The expected outcome of this paper is to create awareness regarding (SSCL) checklist and focus more on Patient Safety. The findings are also expected to pave the way for future research work.

Key Words: Surgical Safety Checklist (SSCL), Patient Safety, Adherence level, WHO (World Health Organization), Hospital and Operation theatres (OT).

1. INTRODUCTION:

1.1. Definition:

The Surgical Safety Checklist is a simple tool designed to improve communication and teamwork by bringing together the Surgeon, Anaesthetist, Nurses and Technicians involved in care to confirm that critical safety measures are performed before, during and after an operation.

1.2. BENEFITS: The delivery of healthcare is complex and riddled with the potential for errors due to human factors, system failure, or a combination of both. Checklists or protocols are a common tool for preventing human errors in complex and high intensity areas of work. It has various benefits the following are:

1. Prevent communication failures
2. Reduce complications of surgery and Anaesthesia
3. Reductions in both morbidity and mortality
4. Increase in Patient Safety
5. Promote process improvement
6. Effective at reducing errors
7. Ensure Safe Surgical Care
8. Ensures no procedural step is forgotten

1.3. The objectives of the study include:

1. To study on adherence of Surgical Safety Checklist in Operation theatres
2. To catalogue deviations for the purpose of identifying improvements
3. To provide recommendations on how to overcome the deviations in order to

enhance the patient safety in Operation theatres.

2.1. LITERATURE REVIEW:

1. According to Mathew E.Gitelis, Adelaide Kaczynski, Torin Shear, Mark Deshur, Mohammad Beig, Metedith Sefa, Jonathan Silverstein, Michael Ujiki (2017), "The World Health Organization SSC is a validated tool to increase patient safety and reduce intraoperative complications. The electronic SSC has demonstrated an increased compliance rate, a reduced number of risk events, and most operating room personnel believe it will have a positive impact on patient safety".
2. According to Mariyah Anwer, Shahneela Manzoor, Nadeem Muneer and Shamim Qureshi (2016), The checklist is intended to give teams a simple, efficient set of priority checks for improving effective teamwork and communication and to encourage active considerations of the safety of patients in every operation performed".
3. According to Christofer, Gerd, Odenrick, Kristina and Per Anders Larsson (2013), "Checklists facilitates communication and provides memory support for critical task. Each Checklists item is presumed to be important, it reduces medical complications and supports development of better safety attitudes".

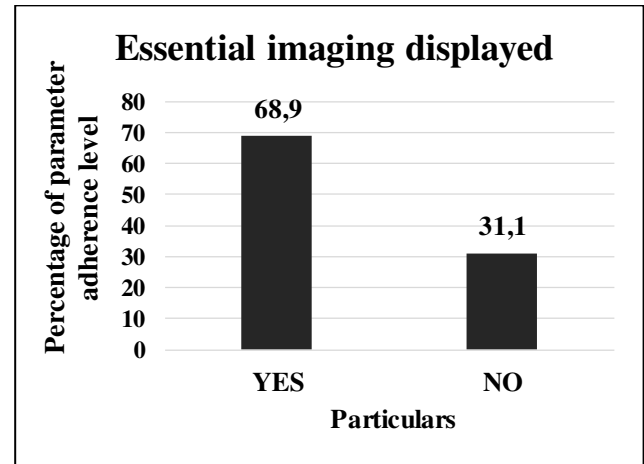
2.2.METHODOLOGY:

This is a descriptive study took place in the surgical department of the selected hospital from January 2021- February 2021. The simple random sampling is used in order to collect data. The target population consisted of 1500 patients who were undergone surgeries in the selected hospital. It is true representative sample of where the sample size is 151 (10%) was collected from the total population. For this purpose, WHO Checklist has been used for the data collection. The compliance rates were

computed using SPSS (Statistical Package for the Social Sciences).

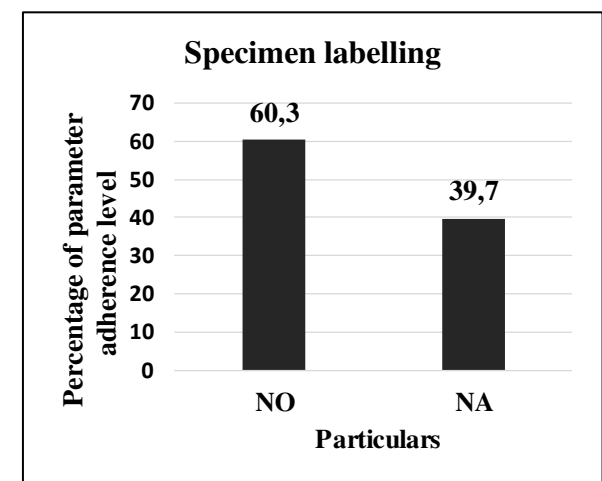
2.3. ANALYSIS:

Chart-2.3.1: Chart showing the adherence level towards the Checklist parameter, "Is Essential imaging has been displayed"



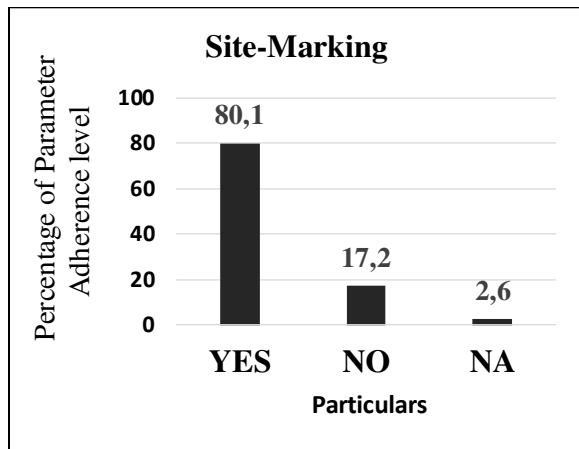
From Chart-2.3.1, it is evident that about 68.9% of the cases adherence level identified as compliance (YES), 31.1% of the cases adherence level identified as non-compliance (NO), towards the parameter "Is essential imaging displayed".

Chart-2.3.2: Chart showing the adherence level towards the parameter, "Nurses verbally confirms, Specimen labelling has been read aloud with the Patient name"



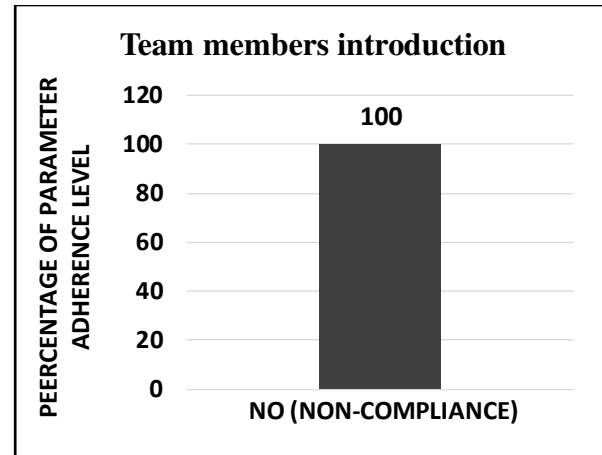
From Chart-2.3.2, it is evident that about 60.3% of the cases adherence level identified as compliance (YES), 39.7% of the cases adherence level identified as non-compliance (NO), towards the parameter, “Nurses verbally confirms, Specimen labelling has been read aloud with the Patient name”.

Chart-III: Chart showing the adherence level towards the parameter, “Is the Site-marked”



From Chart-2.3.3, it is evident that about 80.1% of the cases adherence level identified as compliance (YES), 17.2% of the cases adherence level identified as non-compliance (NO), 2.6% of the cases adherence level identified as not-applicable towards the parameter, “Is the Site-Marked”

Chart-2.3.4: Chart showing the adherence level towards the parameter, “Confirms all team members have introduced themselves by name and role”



From Chart-2.3.4, it is evident that about 100% of the cases adherence level identified as non-compliance (NO) towards the parameter, “Confirms all team members have introduced themselves by name and role”

2.4.MAJOR FINDINGS&RECOMMENDATIONS:

- 100% of the cases adherence level identified as non-compliance (NO) towards the parameter, “Confirms all team members have introduced themselves by name and role”
- 68.9% of the cases adherence level identified as compliance (YES), 31.1% of the cases adherence level identified as non-compliance (NO), towards the parameter “Is Essential imaging displayed”
- 60.3% of the cases adherence level identified as compliance (YES), 39.7% of the cases adherence level identified as non-compliance (NO), towards the parameter “Nurses confirms, Specimen obtained and labelling has been read aloud with the Patient name”.
- 80.1% of the cases adherence level identified as compliance (YES), 17.2% of the cases adherence level identified as non-compliance (NO) towards the parameter, “Is the site marked”

The recommendations include,

- Reviewing of hospital’s Surgical Safety Checklist as per the WHO’s Checklist for upgrading the

checklist in order to enhance the patient safety in Operation theatres.

- Training should be conducted for Nurses on Surgical Safety Checklist
- Possible Site-Marking should be done in the respective ward itself, before shifting the patient to Operating Room
- Site-marking & Specimen labelling should be captured with the help of instant photo/film camera and finally it could be documented in the respective patient's file.
- Artificial Intelligence could be implemented in Operating rooms for Surgical Safety Checklist adherence in order to reduce the non-compliance rate.

3. CONCLUSION:

Surgical Safety Checklist is a Patient Safety communication tool, it serves to remind the surgical team of important items to be performed before and after the surgical procedure in order to reduce adverse events such as surgical site infections or retained instruments. It is one affordable and sustainable tool for reducing deaths from surgery. Engagement by theatre teams was frequently incomplete. To improve compliance and involve the whole team, the concept of risk and the perceived relevance of checklist items for all team members should be addressed and that results in the increase of compliance rate in the Operation theatres.

VII. REFERENCE

1. Varun Suresh, P R Ushakumari, C Madhusoodanan Pillai, Raja Krishnan Kutty, Rajmohan Bhanu Prabhakar and Anilkumar Peethambaran, Implementation and adherence to a speciality-specific checklist for neurosurgery and its influence on patient safety, Indian Journal of Anaesthesia, Feb-2021; 65(2):108-114, PMC7983834. (2021)
2. Kristin Harris, Eirik Litlere Moi, Harthug, Anetter Storesund, Sebastius, Nick Sevaldis & Arvid Steinar Haugen, Patients and Healthcare workers recommendations for a surgical patient safety checklist, BMC Health Services Research, Volume 20, Article number:43, Jan (2020)
3. Cranfield, Alistair Deen Betsy, Vreede Eric, Improving the implementation of the WHO Surgical Safety Checklist in a Sierra Leone teaching hospital, International Journal of Risk & Safety in Medicine, Volume 32, Issue 1, October (2020)
4. Rana Wall, Tina Halai, Sonita Koshal, WHO Surgical Safety Checklist training: An alternative approach to training in local safety standards for invasive procedures, European Journal of Dental Education, Volume 24, Issue 1, Feb (2020)
5. T.G. Weiser and A.B. Haynes, Ten years of the Surgical Safety Checklist, The British Journal of Surgery, 105(8): 927-929. Jul (2018).
6. Brigid M Gillespie, Emma L Harbeck, Joanne Lavin, Kyra Hamilton, Therese Gardiner, Teresa K Withers, Andrea P Marshall, Evaluation of a patient safety programme on Surgical Safety Checklist Compliance, BMJ Journals, Volume 7, Issue 3, July (2018)
7. Mariyah Anwer, Shahneela Manzoor, Nadeem Muneer and Shamim Qureshi, Compliance and Effectiveness of WHO Surgical Safety Checklist, Pakistan Journal of Medical Science, 32(4).831-835, July-Aug (2016)
8. Christofer Rydenfält, Gerd Johansson, Per Odenrick, Kristina Akerman, Per Anders Larsson, Compliance with the WHO Surgical Safety Checklist: deviations and possible improvements, International Journal for Quality in Health Care, Volume 25, Issue 2, April (2013)
9. A.S. Haugen, E. Sefteland, G.E. Eide, N. Sevaldis, C.A. Vincent, M.W. Nortvedt, S. Harthug, Impact of the World Health Organization's Surgical Safety Checklist on safety culture in the operating theatre, British Journal of Anaesthesia, Volume, 110, Issue 5, May (2013)

10. Axel Fudickar, Kim Horle, Jorg Wiltfang, Berthold Bein, The Effect of the WHO Surgical Safety Checklist on Complication Rate and Communication, PMC Journal, Deutsches Arzteblatt International, US National Library of Medicine, National Institutes of Health, 109(42): PMC695-701 (2012)