

ORIGINAL RESEARCH ARTICLE

Assessing Compliance and Attitude to patient safety goal of patient identification among nurses: A cross-sectional observational survey

Adriel Quadros¹, Dr. Brayal Dsouza², Dr. Suneel Mundkur³, Jibu Thomas⁴,

Keywords: IPSPG, patient misidentification, safe health care delivery

ABSTRACT

Background

Patient identification is an important patient safety goal, healthcare providers have primary responsibility for verifying a patient's identity appropriately before intended interventions in the hospital. It is important for the hospital management team to develop and ensure the practice of patient identification policy.

Objective

To assess knowledge, attitude, and compliance to patient safety goal of patient identification.

Methods

An observational cross-sectional study was conducted among 231 staff nurses of inpatient departments using random sampling at a tertiary hospital. The staff nurses were assessed for knowledge, attitude, and practices on patient safety of right patient identification using a knowledge-based questionnaire, structured validated questionnaire to measure attitude towards patient safety, and observational checklist for compliance to patient identification in practice

Results

More than 50 percent of the nurses had a positive attitude towards reporting, acknowledging and dealing with mistakes, and concentrating on causes that could result in improving patient safety. Majority believed, management provided fair treatment for reporting but were more inclined and invested towards meeting targets of the organization. The compliance with all the identification practices was more than 80% with few areas of improvement identified for a compliance rate of less than 90%.

Conclusion

Patient identification practices require special attention in health care delivery to avoid misleading errors and harm. It is thereby important to measure compliance and attitude of HCP at regular intervals to improve reporting and devising strategies. The compliance rate can be further improved by using strategies like standardizing approaches, provision of clear protocol, training, and patient education, and most importantly creating a culture of reporting and demonstrating management's inclination towards quality assurance.

International Healthcare
Review (online)

eISSN: 2795-5567

How to Cite

Quadros, A., pundale, shweta, Thomas, J., Dsouza, B., & Mundkur, S. On Assessing Compliance and Attitude to patient safety goal of patient identification among nurses: A cross-sectional observational survey. International Healthcare Review (online). <https://doi.org/10.56226/58>

Published online:
22 January 2024

Copyright (c) 2023
The Publisher

Creative Commons License
This work is licensed under a Creative Commons Attribution 4.0 International License.

Authors retain copyright and grant the journal right of first publication with the work simultaneously licensed under a Creative Commons Attribution (CC-BY) 4.0 License that allows others to share the work with an acknowledgment of the work's authorship and initial publication in this journal.

Corresponding Author:

Brayal Dsouza
Department of Social and
Health Innovation, Prasanna
School of Public Health,
Manipal Academy Of Higher
Education
brayal.dsouza@manipal.edu

Authors' Affiliations:

¹ Kasturba Hospital , Manipal

²Department of Social and Health Innovation, Prasanna School of Public Health, Manipal Academy Of Higher Education

³ Department of Pediatrics, Quality Advisor at Kasturba Medical College, MAHE , Manipal, India

⁴ Kasturba Hospital at Manipal Health Enterprises

What is already known on this topic?

Previous research in patient safety has highlighted the significance of proper patient identification in preventing medical errors, ensuring accurate treatment, and enhancing overall patient care. Studies have demonstrated that errors in patient identification can lead to adverse events. It is well-established that adherence to patient identification protocols is a crucial component of safe and effective healthcare delivery.

Main contribution to Evidence-Based Practice

Empirical data that can be used to inform evidence-based practices in healthcare settings. The findings can serve as a foundation for developing targeted interventions and training programs aimed at improving patient identification practices among nurses, thereby enhancing overall patient safety.

Implications for public health practice

The results have direct implications for public health practice, particularly in the context of healthcare quality and patient safety initiatives. By identifying areas of non-compliance healthcare institutions can implement targeted strategies to improve adherence to protocols. Additionally, the study underscores the importance of ongoing education and training for healthcare professionals to maintain high standards of patient safety.

Author' Contributions Statement:

AQ assisted in data collection and analysis. Contributed to the literature review and interpretation of results. Participated in manuscript preparation and revisions.

BD conceptualized and designed the study. Provided oversight and supervision throughout the research process. Played a significant role in data interpretation and manuscript drafting.

SM offered expertise in the healthcare domain, particularly in patient safety. Assisted in reviewing and critiquing the study design and methodology. Provided valuable insights during data analysis and interpretation.

JT contributed to data collection and organization. Assisted in the implementation of the research protocol. Participated in the literature review and manuscript editing.

Introduction

Patient misidentification remains a key aspect of daily patient care practices. Knowledge adequacy on how to identify the right patient and ensuring compliance to identification processes is essential for patient safety. Hospitals use unique patient identification techniques within the healthcare facility. Each hospital has its way of generating a patient identifier. A patient identifier could be any unique number that is generated for a patient within the healthcare facility (PatientIdentifiers|NRCeS, 2021). Patient identification (PI) errors are known to be of the most dangerous healthcare issues in quality in view of maintaining the safety of patients. PI Errors that occur are the root causes for majority of the adverse events that take place. Patient identification stands as the very first International Patient Safety Goal; a few general procedures that can be used to identify patients and prevent PI errors include using a minimum of two

identifiers either the patient's full name and UHID or year of birth. Checking for the accuracy and completeness of details on wristbands, introducing standardized PI processes within the healthcare facility, and not utilizing shortcuts. Implanting standardized protocols such as a safe surgical site marking, a safe surgery checklist, the OT 'time-out', and stressing on compliance to the rule of the five rights for safe medication. PSO of ECRI Institute has given this particular definition of patient identification, adapted from the Australian Commission on Safety and Quality in Health Care: Patient identification is the process of correctly matching a patient to appropriately intended interventions and communicating information about the patient 's identity accurately and reliably throughout the continuum of care"(Yum, 2015). The major areas where patient misidentification can occur include drug administration, phlebotomy, blood transfusions, and surgical interventions. The Joint

Commission in the United States of America identified improving patient identification accuracy as the first of its National Patient Safety Goals introduced in 2003 and this continues to be a requirement for accreditation because patient misidentification is identified as the root cause of many errors. The effectiveness of this system is limited by missing wristbands or inaccurate patient information, even though in certain countries wristbands are traditionally used to identify hospitalized patients. The colour coding of wristbands makes it easier for people to quickly identify certain problems, but because there isn't a uniform coding system, caregivers at different facilities have made mistakes.

Methods

Study Design and Setting

An Observational cross-sectional study design was conducted between November 2020 and February 2021 in a tertiary hospital with 24-hour Accident & Emergency care facilities. 100 opportunities were observed by the researcher to measure compliance with the right identification.

Objective of the study

To measure the compliance and attitude to right patient identification and identify the deviations in practice and provide improvement measures.

Population and Samples

Nurses working in the inpatient areas and who were trained in patient safety practices. The study was conducted on 231 staff nurses of IP wards at the tertiary care hospital using random sampling.

Instrument

Semi-Structured questionnaire and observational checklist.

Ethical Consideration

Ethical approval for conducting this study was obtained from the Institutional Ethics Committee (IEC) of KMC, Manipal (Ref # 211/132/2020). The purpose of the study was explained to the participants and consent was obtained. Confidentiality, voluntary participation, and anonymity were maintained.

Data Management and Analysis

Inferential and descriptive statistics and Spearman's correlation and Pearson's correlation tests were used for testing the hypothesis.

Results

Attitude and practices of nurses on patient safety

Nearly 69 % of nurses believed that telling others about an error they made was easy. More than 80% believe that filling in reporting forms will help to improve patient safety, they were able to talk about their own errors, and by concentrating on the causes of incidents they can contribute to patient safety. If they learned from their mistakes, they can prevent incidents, Acknowledging and dealing with errors would be an important part of their job, to learn how best to acknowledge and deal. Nearly 85% believed that managers in the healthcare system are more interested in meeting performance targets than in patient safety, however, they believed that admitting an error they made would lead to just and fair treatment by management, and 45 % believed that It is easier to find someone to blame rather than focus on the causes of error. More than 50% of the nurses had a positive attitude towards reporting, acknowledging and dealing with a mistake, and concentrating on causes that could improve patient safety. Majority believed management provided fair treatment for reporting but were more inclined towards meeting targets.

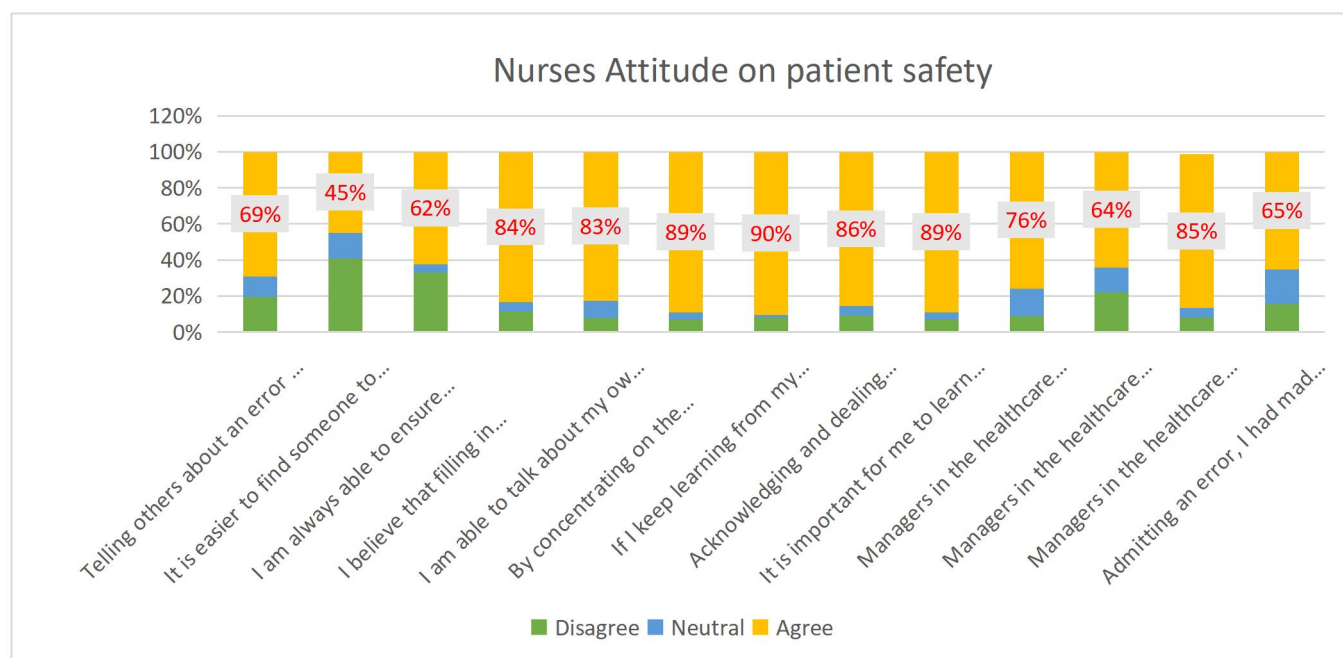


Figure 02: Nurses Attitude on patient patient safety

safety among nurses

Majority of the elements of observation Table 01: showed a good compliance level of 80 percent or more. However, Identifying the Patient by Full name,

Checking UHID on wrist band before injection, procedure, and labeling of IV fluids with patient identification were elements requiring improvement and had more scope for improvement.

Table :01: Overall compliance rate of the patient identification practices.

Sl.no	Elements of observation	Compliance (%)	Non-compliance (%)
1	Identifies patient by his/her Full name on admission.	85	15
2	The name and UHID number are clearly visible on the patient's wristband.	91	9
3	Checks the patient's file with full name and UHID number before medication administration.	91	9
4	Patient by Full name, Checks UHID before the procedure	67	33
5	IV fluid bottles are labeled with patient's name and UHID.	78	22
6	Identifies the Patient by Full name, Checks UHID on wrist band before venepuncture/blood collection.	86	14
7	Identifies the patient before transfer out, ID band with full name and UHID present on the patient during transfer out	100	100
8	Identifies the patient with full name and UHID number; and cross-checks with the patient file before blood transfusion.	86	14

9	<i>Identifies the patient by name and UHID during nursing rounds and handovers.</i>	100	100
10	<i>In case of patients with the same name: patients are placed at a distance and the documents are having full names with UHID numbers labeled on all sheets.</i>	80	20
11	<i>Identifies the Patient by Full name, Checks UHID on wrist band before injection procedure.</i>	67	33
12	<i>IV fluid bottles are labeled with patient's name and UHID.</i>	78	10
13	<i>Identifies the Patient by Full name, Checks UHID on wrist band before venipuncture/blood collection.</i>	86	14
14	<i>Identifies the patient before transfer out, ID band with full name and UHID present on the patient during transfer out</i>	100	0
15	<i>Identifies the patient with full name and UHID number; and cross-checks with the patient file before blood transfusion.</i>	86	14
16	<i>Identifies the patient by name and UHID during nursing rounds and handovers.</i>	100	0
17	<i>In case of patients with the same name: patients are placed at a distance and the documents are having full names with UHID numbers labeled on all sheets.</i>	80	20

The Knowledge and the Practice scores were tested for significance using Pearson's co-relation and Spearman's test with 0.093 for Pearson's and 0.043 for Spearman's co-efficient. This signifies that there is no significant relation between the two variables of knowledge and practice. However, there is a weak

positive co-relation between the two variables, practice level improved with knowledge. Therefore, the null hypothesis (H_0): There will be no significant relation between the knowledge and patient safety practice among the nurses is accepted and H_1 is rejected.

Discussion

Patient Identification plays an important role in maintaining patient safety practices. By ensuring good patient safety practices the hospital can uphold a high level of quality care services. In the current study conducted, it was found that the majority of the nursing staff had good knowledge on Patient safety practices, however, 69% of nurses believed it was easier to tell someone about their errors and 45% believed it is easier to blame someone probably because they find themselves at risk when they report anger from co-workers or lack of confidence or vulnerable to disciplinary actions. A culture of easing out reporting by management, teamwork training, cross-monitoring, and acting to correct each other's mistakes with consistent reinforcement is the key to improve reporting (<https://www.ncbi.nlm.nih.gov/books/NBK2652/>). Majority of staff, 85% believed that managers were more interested in meeting targets, this emphasizes the need for the management to build the trust among its employee on the lines of their mission, vision, and quality policy and regularly interact with employees emphasizing their participation and their employee's contribution in achieving patient safety goals.

The current hospital was a low resource-intensive setting that used unique hospital identification numbers with demographic details as identifiers. There are several other techniques adopted globally such as unique patient identifiers, and algorithms for hybrid models however no current patient identification has resulted in a 100% match rate (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7442501/>). Although an all-encompassing, organization-wide system for correctly and consistently identifying patients when providing care, medicine, therapy, and other services is in place, more emphasis should be paid to the use of these identifiers at the source. At least three approved identifiers should be used at the time of registration and admission; when care, medicine, treatment, or other services are supplied; and during clinical handover or transfer out or during discharge (Action, 2021). Similarly, the current findings are consistent with those of a study conducted in the University of Gondar specialized hospital by Henok Biresaw et al on "nurses' knowledge and attitude toward patient safety and its associated aspects where 48.4 percent of the

respondents had a good understanding. Similarly, 56.1 percent of respondents had a positive attitude toward patient safety. There was a favorable and significant link between nurses' knowledge and attitude. Although 52% of Ethiopian nurses showed limited awareness of patient safety, they had a positive attitude toward it (Biresaw,2020) . In the recent study conducted the nurses had good knowledge and attitude towards patient safety practices. Similarly reflected in a study by wake et al in a teaching hospital in Ethiopia (Wake AD, 2021).

The current study setting also observed low compliance in checking patient identifiers before procedures and medication administration similar results were reported by Nitro et al among nursing students (Nitro M, 2021). This result could seem to line up with Bártlová et al. and Cengiz et al., according to which most professionals would consider the margin of error linked to an incorrect identification process as negligible (Bártlová S, 2015) and would not use the good identification practices and checklists made available by the WHO (Cengiz C,2016). The current study only aimed at measuring knowledge, attitude, and compliance rate descriptively among nurses nursing staff as an internal audit however no reporting on the factors influencing them as they were reflected in another phase of the quality assurance study, and inferences were drawn with personal characteristics and years of experience. The hospital was able to further improvise and have better compliance through strategies like web-based reporting, disclosures mechanism through quality champions, root cause analysis following submission of event report, creating a culture for event reporting, poster displays, allowing staff to discuss areas of weakness and strategies for improvement can have a big impact on the patient safety.

Conclusion

The study investigated the knowledge, compliance, and attitude of nurses regarding good patient identification practices. The overall statistics in these domains were good, however, scope for further improvement through a web-based reporting system, disclosures mechanism through quality champions, root cause analysis following submission of event report, creating a culture for event reporting, poster displays, allowing staff to discuss areas of weakness

and strategies for improvement can have a big impact on the patient safety and strengthen the patient identification culture.

Consent for publication

The purpose of the study was explained to the participants and the consent form was obtained. Confidentiality, voluntary participation, and anonymity were maintained.

RECEIVED: 10/May/2023 ● ACCEPTED: 8/June/2023 ● TYPE: Original Research Article ● FUNDING: No funding ●
DECLARATION OF CONFLICTING INTERESTS: The authors declare no conflict of interest financial or otherwise. ●

References

- Abu Mostafa, F., Saadallah, A., El Barazi, H., & Alghammas, H. (2019). Assessing knowledge and compliance of patient identification methods in a specialized hospital in Saudi Arabia. *Global Journal on Quality and Safety in Healthcare*, 2(3), 53. https://doi.org/10.4103/jqsh.jqsh_27_18
- Antunes, V. (2022). On Nursing Research and Evidence-Based Practice: Topics for researchers and practitioners. *International Healthcare Review* (online), 1(1). <https://doi.org/10.56226/ihr.v1i1.12>
- Bártlová S, Hajduchová H, Brabcová I, Tóthová V. Patient misidentification in nursing care. *Neuro Endocrinol Lett*. 2015;36(2):17–22. [PubMed] [Google Scholar]
- Biresaw, H., Asfaw, N., & Zewdu, F. (2020). Knowledge and attitude of nurses towards patient safety and its associated factors. *International Journal of Africa Nursing Sciences*, 13, 100229. <https://doi.org/10.1016/j.ijans.2020.100229>
- Cengiz C, Celik Y, Hikmet N. Evaluation of patient wristbands and patient identification process in a training hospital in Turkey. *Int J Health Care Qual Assur*. 2016;29(8):820–34. [PubMed] [Google Scholar]
- Carla Fonte, Carla Barros, Pilar Baylina, Sónia Alves & Paulo Moreira (2022) Impact of work and personal life conciliation problems on healthcare workers, *International Journal of Healthcare Management*, DOI: 10.1080/20479700.2022.2112441
- Chen, S., & Qin, Y. (2023). On Ethics, Biomedical Education and Health Promotion: International and Chinese Perspectives. *International Healthcare Review* (online). <https://doi.org/10.56226/46>
- Chen, Y., Wu, Y., Wang, Q., & Ji, H. (2022). On difficulties faced by patients following orthopedic day surgery: an update on International Evidence . *International Healthcare Review* (online). <https://doi.org/10.56226/ihr.v1i2.35>
- Dsouza B, Prabhu R, Unnikrishnan B, Ballal S, Mundkur SC, Chandra Sekaran V, Shetty A, Moreira P. Effect of Educational Intervention on Knowledge and Level of Adherence among Hemodialysis Patients: A Randomized Controlled Trial. *Glob Health Epidemiol Genom*. 2023 Mar 31;2023:4295613. doi:10.1155/2023/4295613 - PMID: 37033597; PMCID: PMC10081894. <https://ops.hindawi.com/author/4295613/>
- Dsouza, B. (2022). On Sustainable Health Systems: A Research Emergency in Pandemic times. *International Healthcare Review* (online), 1(1). <https://doi.org/10.56226/ihr.v1i1.7>
- ECRI Institute, Welwyn Garden City, UK. (2021, May 11).Patient Identification: Executive Summary.*HealthManagement*. <https://healthmanagement.org/c/healthmanagement/issuearticle/patient-identification-executive-summary>
- Etchegaray, J. M., & Thomas, E. J. (2012). Comparing two safety culture surveys: Safety Attitudes Questionnaire and Hospital Survey on Patient Safety. *BMJ Quality & Safety*, 21(6), 490–498. <https://doi.org/10.1136/bmjqs-2011-000449>

Hale, G., & McNab, D. (2015). Developing a ward round checklist to improve patient safety. *BMJ Quality Improvement Reports*, 4(1), u204775.w2440. <https://doi.org/10.1136/bmjquality.u204775.w2440>

Han T, Han M, Moreira P, Song H, Li P and Zhang Z (2023) Association between specific social activities and depressive symptoms among older adults: A study of urban-rural differences in China. *Frontiers in Public Health* 11:1099260. DOI: <https://doi.org/10.3389/fpubh.2023.1099260>

Lin Zhang; Jie Lei; Jintao Zhang; Longlong Yin; Yanjiao Chen; Yan Xi; Joaquim Paulo Moreira (2022) Undiagnosed Long Covid-19 in China amongst non-vaccinated individuals: Identifying persistent symptoms and impacts on patients' health-related quality of life. *Journal of Epidemiology and Global Health*, PMID: PMC9702954 DOI: <https://doi.org/10.1007/s44197-022-00079-9>

Kehinde, O., Dixon-Lawson, K., & Mendelsohn, A. (2023). On Community Pharmacists and Promotion of Lifestyle Modification in Adults with Hypertension: Practice Protocol. *International Healthcare Review* (online). <https://doi.org/10.56226/49>

Moreira, P. (2022). On New Clinical Research Methods and Technologies: From decentralised designs to Artificial Intelligence. *International Healthcare Review* (online), 1(1). <https://doi.org/10.56226/ihr.v1i1.11>

Nitro M, Romano R, Marletta G, Sollami A, La Sala R, Artioli G, Sarli L. The safety of care focused on patient identity: an observational study. *Acta Biomed*. 2021 Jul 29;92(S2):e2021038. doi: 10.23750/abm.v92iS2.11328. PMID: 34328138; PMCID: PMC8383230.

Niu, M. (2023). On Planning and Designing General Hospitals in Smart Technology Contexts. *International Healthcare Review* (online). <https://doi.org/10.56226/59>

PatientIdentifiers|NRCeS.

<https://www.nrce.in/Standards/Government-of-India-Standards/Patient-Identifiers>. Retrieved May 28, 2021, from <https://www.nrce.in/standards/government-of-india-standards/patient-identifiers>

Ursprung, R. (2005). Real-time patient safety audits: improving safety every day. *Quality and Safety in Health Care*, 14(4), 284–289. <https://doi.org/10.1136/qshc.2004.012542>

Vaismoradi, M., Tella, S., A. Logan, P., Khakurel, J., & Vizcaya-Moreno, F. (2020). Nurses' Adherence to Patient Safety Principles: A Systematic Review. *International Journal of Environmental Research and Public Health*, 17(6), 2028. <https://doi.org/10.3390/ijerph17062028>

Zhao, Z., & Niu, M. (2022). On the Treatment and Disposal of Clinical Waste based on Bluetooth and LoRa Wireless IoT: A case study. *International Healthcare Review* (online). <https://doi.org/10.56226/ihr.v1i2.34>

Wake AD, Tuji TS, Gonfa BK, Waldekidan ET, Beshaw ED, Mohamed MA, Geressu ST. Knowledge, attitude, practice and associated factors towards patient safety among nurses working at Asella Referral and Teaching Hospital, Ethiopia: A cross-sectional study. *PLoS One*. 2021 Jul 1;16(7):e0254122. doi: 10.1371/journal.pone.0254122. PMID: 34197548; PMCID: PMC8248719.

Yum, H.(2015). Concept and importance of patient identification for patient safety. *Journal of the Korean Medical Association*,58(2), 93. <https://doi.org/10.5124/jkma.2015.58.2.93>

Web Sources:

<https://www.iihmr.edu.in/research/student-dissertation/2016-2018/study-on-the-compliance-of-international-patient-safety-goals-among-the-doctors-and-nurses-of-max-hospital-shalimar-bagh>

<https://www.ncbi.nlm.nih.gov/books/NBK2652/>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7442501/>

Action 6.5 | Australian Commission on Safety and Quality in Health Care. <https://www.safetyandquality.gov.au/standards/nsqhs-standards/communicating-safety-standard/correct-identification-and-procedure-matching/action-65>. Retrieved May 28, 2021, from <https://www.safetyandquality.gov.au/standards/nsqhs-standards/communicating-safety-standard/correct-identification-and-procedure-matching/action-65>