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Impact of the SBAR mnemonic on the safety of nursing care for hospitalized people: Scoping Review

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INTRODUCTION

Review question / Objective Review and synthesize hospitalized person safety results reported in the literature on the use of the SBAR mnemonic by nurses, more specifically identify the services or inpatient units in which it is implemented, specify how it is used and identify the result(s) of patients, professionals and organizations.

Background The hospitalized patient's journey is complex, requiring effective clinical communication between multidisciplinary teams. In this way, a safe communication process makes it possible to minimize the omission of relevant information from the patient, the occurrence of Adverse Events (AE) and, consequently, hospital mortality. The National Patient Safety Plan (PNSD) 2021-2026 has as a strategic objective the implementation of

communication tools, such as SBAR, to ensure the improvement of information security regarding the provision of care.

As our reference article by Muller et. al presents results on the telephone handover method, in this review we decided to carry out a scoping review that covered other methods, based on the existing scientific evidence on the subject, selecting recent sources in agreement between it and clinical practice, in order to promote the provision of safe nursing care. Our objectives are: 1) to contextualize the importance of security and secure communication in healthcare; 2) define Patient Safety in Nursing; 3) identify barriers associated with secure communication; 4) analyze the importance of SBAR and derivations and 5) discuss the results analyzed in this article, on the topic under study, in light of the theoretical conceptual framework of Webster et al.

At the beginning of the century. In the 21st century, Patient Safety issues have emerged, in Europe and the United States of America (USA), recognized as an indicator of quality in healthcare. At that time, the report carried out by the Institute of Medicine “To err is human — Building a safer health system”, in 2000, revealed an estimate of deaths per year of 44,000 to 99,000, associated with medical errors. 4 The concept “medical error”, used by Lucian L. Leape 5, has been changing. For example, the 2005 World Health Organization (WHO) report presents the term Adverse Event, which is defined as an incident that results in harm to the patient. This new concept covers aspects of providing care to the patient, or lack of it, as potential threats to your security. In American literature, this term is called sentinel event and signals the need for immediate investigation. According to Sousa et al. 8, in Portuguese hospitals, the AE incidence rate was 11.1%, and 53.2% were considered preventable. Similar results were obtained in other countries: 1) Canada with 36%; 2) Australia with 51%; 3) England with 48% and 4) Sweden with 70%. By 2030, the WHO presents the prospect of zero preventable harm worldwide.

In order to minimize the incidence of AEs, there is worldwide concern about the safety culture implemented in hospital organizations. The PNSD 2021-2026 is a support instrument for all health institutions, which allows the development of good hospital safety practices in the management and reduction of AEs. One of its pillars is the safety culture, which is characterized by communication based on mutual trust in interdisciplinary teams, shared perceptions about the importance of safety and confidence in the effectiveness of preventive measures. The Joint Commission International (JCI) 10 considers that this determines the commitment to the quality of healthcare. A 2015 study, using the “Hospital Survey on Patient Safety Culture” instrument from the Australian agency AHRQ, in seven Portuguese hospitals found that, several dimensions of safety culture such as openness in communication, work between units and general perceptions about Patient Safety requires action to improve it.

Rationale The use of standardized instruments for Secure Communication reduces the occurrence of communication failures. In 2007, the WHO recommended the use of instruments such as the SBAR, along with providing sufficient time to communicate important information and questions, as well as providing information about the patient's health status, including medications, health plans, treatment, advance directives and significant changes. Furthermore, the importance of limiting

the exchange of information to only what is necessary to ensure Patient Safety was emphasized.

In healthcare, SBAR was first used as a communication standardization tool in 2003 by a clinical team at the Kaiser Permanente organization in Colorado. 29,35 After its initial use among nurses and doctors, it began to be used during shift changes to improve the transmission of information. This mnemonic has been suggested as a tool to improve the communication of clinical information in healthcare environments and to bridge gaps in different communication styles.

Although SBAR provides a framework for the communication process, this is not a linear process, as the flow of communication is interactive or exploratory around issues that require clarification.

There are several advantages to using SBAR by nurses: 1) it allows them to improve their ability to communicate effectively with doctors about changes in patients' health conditions, reducing differences in individual communication styles; 2) it allows nurses with less professional experience to provide information as complete as more experienced ones; 3) allows structuring communication between the healthcare team, especially nursing, in an organized, clear and objective manner, reducing communication errors and promoting Patient Safety; and 4) improves perception and collaboration between team members during shift change.

According to Shahid and Thomas, there are limitations to its use in patients with medical histories and care plans, especially in critical phases. This tool requires the training of healthcare professionals so that communication is understood and a cultural change to adopt and maintain structured communication formats by all healthcare professionals. Consequently, the unreflective adoption of a communication instrument, without investment by the team to reach an agreement on effective communication and a shared philosophy on teamwork, will lead to failure to improve interprofessional collaboration.

Three variants of SBAR are identified in the literature: ISBAR, ISBARR and ISoBAR.

METHODS

Strategy of data synthesis In this review, the conceptual framework of Webster et al. will be followed. 3, which allows us to understand the communication and dynamics of professional teams, focusing on handover. These authors defined three guiding elements: 1) Inputs – variable that contributes to obtaining a given result, which can directly affect teamwork – for example, the

environment, service organization, health professionals and tools /technologies used; 2) Mediators, a mechanism that converts inputs into outputs, through processes such as communication, leadership, coordination and decision making; and 3) Outputs – set of results composed of three interrelated levels: individuals (patients and/or healthcare professionals), work teams and adopted organization. The outputs provide feedback for future handover processes. Through communication, healthcare professionals transfer information about the patient, avoid repetition of tasks and prevent the occurrence of AEs. 3 According to the same authors, communication failures can also contribute negatively to the patient's well-being, and may even increase the risk of mortality. This article aims to review and summarize the hospitalized person safety results reported in the literature on the use of SBAR by nurses, more specifically identify services or inpatient units in which it is used, specify how it is used and identify the result(s). (s) of patients, professionals and organizations.

Eligibility criteria Inclusion criteria:

- 1) Articles with the implementation of SBAR and its derivations, in clinical routine
- 2) Articles where the main objective of the study is to investigate SBAR and its derivations, rather than as part of a handover quality improvement initiative
- 3) Articles that have at least one result described, regarding the occurrence of AE and, consequently, Patient Safety in Nursing.

Exclusion Criteria:

- 1) Articles that only describe SBAR and its derivations, but do not demonstrate evaluation data on safety outcomes
- 2) Articles in which SBAR and derivations were not the main intervention under investigation, or do not fall within the theme of secure communication
- 3) Literature reviews, conference proceedings, quality improvement projects
- 4) Studies involving nursing students, assistants, simulation context, websites, case studies, posters and editorials.

Source of evidence screening and selection To carry out the research in the databases, CINAHL Complete and Medline Complete, the English language limiter was first applied. Duplicate articles between databases were then excluded. By reading the titles and summaries of the selected articles, we validated which ones fit the research theme, obtaining a sample of articles. Subsequently, the publication year limitation was applied (2017 to 2023), and articles were excluded. This limiter was included, as our objective was to

continue the systematic literature review by Müller et al entitled "Impact of the communication and patient hand-off tool SBAR on patient safety: a systematic review", which encompasses studies carried out up to referred year. Finally, we analyzed the full text of the included articles and created an extraction table in order to describe the data from the sources of evidence covered.

Reporting results / Analysis of the evidence Impacts on the Patient

Only one of the studies identified the direct impacts of using SBAR on the occurrence of preventable AEs. This study was carried out by Chen et al. 54 in the area of ophthalmology and an increase in patient satisfaction was observed. After the implementation of SBAR, in the first year (n=425), a score of 85.55% was obtained and in the second year (n=432), a score of 95.74%, compared to the pre-survey. -implementation (n=358), with a score of 79.03%. Patient complaints and malpractices decreased significantly in the second year of implementation, with 1% of medical complications and zero malpractices recorded, i.e., no injuries were recorded to the patient, compared to the pre-implementation period with 8 % and 4%, respectively. Impact on the Patient:

According to Ghonem et al. 55, after the training program on SBAR, adequate practice achieved a 68.7% improvement in the preparation of nurses, in relation to handover. Handover transmission improved by 43.3%. Nurses' satisfaction with communication, SBAR and handover improved by 88%

Impacts on the interprofessional team

In the study by Chen et al. 54, the implementation of SBAR obtained results in terms of interprofessional communication. In the post-implementation phase, in the first year, a score of 85.35% was obtained and, in the second year, 94.97%, compared to the survey during the pre-implementation period, with 78.97%.

Impacts on the intraprofessional team

According to Ghonem et al. 55, after the training program on SBAR, adequate practice achieved a 68.7% improvement in the preparation of nurses, in relation to handover. Handover transmission improved by 43.3%. Nurses' satisfaction with communication, SBAR and handover improved by 88%. In the study by Leonardsen et al. 52, after the implementation of ISBAR, a significant improvement in handover quality was observed.

Language restriction To carry out the research in the databases, the English language limiter was first applied.

Country(ies) involved Portugal.

Keywords Transfer of responsibility to the Patient; Interdisciplinary communication; Adverse events; Patient safety; Health professionals.

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