# RIASE

REVISTA IBERO-AMERICANA DE SAÚDE E ENVELHECIMENTO REVISTA IBERO-AMERICANA DE SALUD Y ENVEJECIMIENTO

## ISBAR COMMUNICATION IN THE QUALITY OF HEALTH CARE

#### COMUNICAÇÃO ISBAR NA QUALIDADE DOS CUIDADOS DE SAÚDE

# COMUNICACIÓN ISBAR SOBRE LA CALIDAD DE LA ATENCIÓN SANITARIA

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## **ABSTRACT**

**Introduction:** Communication is a fundamental pillar for human interactions and is present in nursing care. However, it possesses boundaries that can be outline using ISBAR tool.

**Objective:** Understanding how ISBAR communication is a relevant factor in quality of health care.

**Methods:** Systematic literature Review, with the investigation question: "How ISBAR communication can influence the quality of health care?", using the methodology B-on and EBSCOhost. The articles selected were published with the year gap 2017-2020 and were in Portuguese and English.

**Results:** With this research were selected 381 articles. After evaluating the eligibility and methodologic quality were selected 6 articles, 3 quantitative studies and 3 qualitative.

**Conclusions:** It is visible a notorious efficacy on communication, using ISBAR, that allows in simple way to systematize complex framing, to be used in verbal communication, ensure therefore better continuity and quality of nursing care.

**Keywords:** ISBAR (Identification, Situation, Background, Assessment, Recomendations); Quality of Health Care; Nursing.

## **RESUMO**

**Introdução:** A comunicação constitui um dos pilares fundamentais nas interações entre indivíduos, estando presente nos cuidados de enfermagem, no entanto esta possui barreiras que podem ser contornadas através da ferramenta ISBAR.

**Objetivo:** Compreender de que modo a comunicação ISBAR constitui um fator relevante na qualidade dos cuidados de saúde.

**Métodos:** Revisão Sistemática da Literatura, partindo da questão de investigação "De que forma a comunicação ISBAR influencia a qualidade de cuidados de saúde?", com recurso aos motores de busca B-on e EBSCOhost. Os artigos selecionados foram publicados entre 2017 e 2020 em Português e Inglês.

**Resultados:** Através da pesquisa foram selecionados 381 artigos. Após avaliação de elegibilidade e qualidade metodológica resultaram 6 artigos, 3 quantitativos e 3 qualitativos.

**Conclusões:** É visível uma eficácia notória na transmissão de informação, através da comunicação ISBAR, permitindo de forma simples, sistematizar informação complexa, a ser utilizada na transmissão verbal, assegurando uma eficaz continuidade e qualidade dos cuidados de enfermagem.

**Palavras-chave:** Enfermagem; ISBAR (Identification, Situation, Background, Assessment, Recomendations); Qualidade de Cuidados de Saúde.

### **RESUMEN**

**Introducción:** La comunicación es uno de los pilares fundamentales en las interacciones entre los individuos, estando presente en el cuidado de enfermería, sin embargo tiene barreras que se pueden evitar mediante el uso de la herramienta ISBAR.

**Objetivo:** Comprender cómo la comunicación ISBAR es un factor relevante en la calidad de los cuidados de salud.

**Métodos:** Revisión sistemática de la literatura, a partir de la pregunta de investigación "¿Cómo influye la comunicación ISBAR en la calidad de los cuidados de salud?", utilizando los motores de búsqueda B-on y EBSCOhost. Los artículos seleccionados se publicaron entre 2017 y 2020 en portugués e inglés.

Resultados: Mediante la búsqueda se seleccionaron 381 artículos. Después de evaluar la elegibilidad y la calidad metodológica, resultaron 6 artículos, 3 cualitativos y 3 cuantitativos. Conclusiones: Es visible una notable eficiencia en la transmisión de información, a través de ISBAR, permitiendo de manera sencilla sistematizar información compleja, para ser utilizada en transmisión verbal, asegurando una efectiva continuidad y calidad de la atención en el cuidado de enfermería.

**Descriptores:** Calidad de la Asistencia Sanitária; Enfermería; ISBAR (Identification, Situation, Background, Assessment, Recomendations).

## INTRODUCTION

Humanity has always had the need to establish contact between individuals from the most different communities, promoting these interactions throughout our history, and "[...] communication is inherent to the condition of being a person. It is present in all its actions and conditions its entire existence."<sup>(1)</sup>. In this perspective of interaction between individuals and having communication as the driving force behind its promotion, a concept of interpersonal communication emerges that "[...] corresponds to that established between two individuals or small groups. It is understood as a continuous process that leads to the relationship."<sup>(2:30)</sup>. Communication is important in the relationships that are established between people, however it can be applied to specific contexts, such as health, with a view to establishing a relationship that aims to collect information for a purpose, which refers to its use

for the benefit of people and in response to their needs, namely therapeutic communication<sup>(3)</sup>.

Since communication plays a major role in the interactions that individuals establish with each other in the most varied environments, it becomes fundamental for everyday life in society. The environment adds pressure to several dimensions, which determines a response on the part of individuals, in this way, "[...] the environment in which people live and develop is made up of human, physical, political, economic, cultural and organizational elements, that condition and influence lifestyles [...]"(4:9-10).

Based on the transversality that communication has in each person's life and interactions, it is easy to see the importance of this theme for the practice of health professionals. The exercise of nursing practice is guided by a series of essential competences from the point of view of facilitating a good and effective relationship between professional and user. In this way, we can point out that communication plays a fundamental role in this field in which "[...] any moment of the provision in which the transfer of responsibility for care and information between providers takes place, has as its mission the continuity and security of the same." (5:4). However, effective communication has to emerge at all levels of the hierarchies so that communication "[...] between health professionals and between institutions providing care, on identification and information on the patient's health status, whenever there is a transfer, temporary or permanent, the responsibility of providing care." (5:4).

Due to the great importance that communication has in a nurse's day-to-day life, it depends on its use to maximize nursing care and actively promote "[...] reducing the risk of unnecessary harm to the person receiving care health [...]" (5:4). Bearing in mind that this is a topic that requires constant work to improve it, it is of great importance to provide nurses with the necessary tools for a more assertive performance in this dimension of their practice, with the aim of gradually improving their skills, with a view to the performance of their functions assertively and with scientific evidence, for which it is necessary to mobilize cognitive, psychomotor and socio-affective skills<sup>(2,6)</sup>.

The National Plan for Patient Safety 2015-2020 in force, integrated into the National Strategy for Quality in Health, created by Order No. 1400-A/2015, of February 10, 2015, is a support to managers and clinicians in the application of good safety practices. This Plan aims to achieve 9 objectives, one of which is to increase communication security. In order to achieve this objective, the actions to be taken by the different institutions are to carry out actions to raise awareness and provide information to the citizen, carry out internal audits to the transfer of information in the transitions, transfers and discharges of patients, integrate the internal computer systems of the institutions providing health care, ensuring

the intercommunication of computer systems between the various institutions providing health care and publishing a rule on safe procedures in the transition of care<sup>(7)</sup>.

One of the tools that we can use to overcome the needs felt and the barriers that we can find in terms of communication is the ISBAR, being a duly studied and recognized tool in promoting the maximization of patient safety in situations where the transmission of information is necessary<sup>(5,8)</sup>. From this tool we can extract its mnemonics in a simple way and with the main objective of helping nurses in their practice. To this end, ISBAR is understood as: "I" corresponds to the "identification" of the communication actors, "S" refers to the "current situation" in which care is required, "B" refers to the "background" of greater relevance for those who will be the target of care, "A" refers to the constant and systematic "evaluation" that we seek to make of our interventions and their benefit, and finally, "R" refers to "recommendations" which are designed and designed for the user<sup>(5:4, 7,9)</sup>.

That said, it is important for nurses, in their academic and professional careers, to be aware of the importance of communication in its most varied contexts and to seek constant training in order to encourage an improvement in nursing care, having the ISBAR tool for the auxiliary<sup>(9)</sup>.

Thus, this article's main purpose is to understand how the ISBAR methodology constitutes a relevant factor for the effectiveness of communication in health care.

## **METHODOLOGY**

This article is based on a Systematic Literature Review which, according to the Joanna Briggs Institute (JBI)<sup>(10)</sup>, aims to provide a comprehensive and impartial synthesis of relevant studies, in a single document, using rigorous and transparent methods.

The structuring of the research question was carried out based on the methodological design of the JBI<sup>(10)</sup> PICOD – Participants/Problem: Quality of Health Care; Intervention: ISBAR Communication; Comparison: Not applicable; Outcomes: How can the ISBAR methodology influence the effectiveness of communication in the quality of Health Care; Study Design: Quantitative, Qualitative and Mixed; resulting in the research question "How does the ISBAR methodology influence the effectiveness of communication in the quality of health care?" (Chart 1<sup>a</sup>).

The Systematic Literature Review was performed using search engines: Online Knowledge Library (B-on) and Elton Bryson Stephens Company (EBSCOhost). To this end, keywords relevant to the research were used and measured both in the Health Sciences Descriptors

(DeCs) and in the Medical Subject Headings (MeSH), namely: Nursing – "Nursing", Quality of Health Care – "Quality of Health Care" and ISBAR. The keyword ISBAR is not validated, however it proves to be essential for carrying out the research. When searching in the aforementioned search engines, the Boolean operator "AND" was used.

In Figure 1<sup>a</sup>, which follows, there is a summary of the inclusion and exclusion criteria used during the research, as well as all the steps taken to obtain the 6 final articles through the diagram "Preferred Reporting Items for Systematic Review and Meta-Analyses" (PRISMA)<sup>(11)</sup>.

For the research, the following inclusion criteria were selected: articles in Portuguese and English; published in the period between 2017 and 2020; with full text; peer reviewed; communication between nurses – nurses and nurses – other professionals. Exclusion criteria were also selected, namely: literature reviews; communication carried out only between other professionals, not including nurses.

The selection of articles was carried out in a progressively phased manner. Initially, the descriptor "Nursing" was introduced in selected search engines, resulting in a total of 7,954,449 articles. Subsequently, the descriptor "Quality of Health Care" was introduced, followed by the Boolean operator "AND", resulting in a total of 1,145,148 articles. Accompanied again by the Boolean operator "AND", the keyword ISBAR was added, resulting in a total of 385 articles. From these results, inclusion and exclusion criteria were selected. Initially, the articles were reduced by publication date, having selected articles only between 2017 and 2020, obtaining a total value of 200 articles. By selecting only articles with full text available, a total of 133 articles were available. After selecting the option of peer-reviewed articles, a total of 124 articles were obtained. Subsequently, the languages of the research were selected, with articles in Portuguese and English being selected, thus obtaining a result of 121 articles. After reading and examining the title and abstracts of the articles, 89 articles were excluded, as they did not fit the objectives of the review and did not respond to the starting question, thus leaving 12 articles for in-depth analysis.

In the next phase, all articles were submitted to a Critical Assessment, by more than one reviewer, through the application of evaluation grids of the level of evidence, reliability and relevance of the JBI<sup>(12)</sup>, allowing the classification of the studies found. After this evaluation, 6 articles were excluded from the review, as they did not present a sufficient level of evidence for their inclusion in the study. The remaining 6 articles, in the continuation of the evaluation process, were submitted to a classification stage, according to the Levels of Evidence, considering the JBI<sup>(13)</sup>, as can be seen in Table 1<sup>a</sup>, and Chart 2<sup>a</sup>.

## **RESULTS**

After the process of selecting and validating the quality of the articles found, considering the aims of this review and the research question, six articles were included in this systematic review. These are schematized in Chart 3<sup>a</sup>, in order to facilitate their interpretation.

## DISCUSSION

The transfer of information during the provision of care to team members has an influential role in patient safety, which must comply with effective communication, being standardized using the ISBAR technique<sup>(5)</sup>. In this sense, the study conducted by Ying-Hui Hou, Li-Jung Lu, Pei-Hsuan Lee, Chiu Chang (2019) shows that the aforementioned technique effectively ensures the transmission of information among nurses, contributing to the continuity of care and for the prevention of associated complications<sup>(15)</sup>.

Authors argue that the use of the ISBAR methodology helps to organize thinking, avoiding loss of important information during communication. The transmission of information based on a checklist, as is the case with the ISBAR technique, can increase the information transmitted, providing concise and relevant information, preparing the receivers for the next shift, and, in this way, minimizing the risk of adverse effects<sup>(14,17)</sup>. The same is mentioned by the World Health Organization, which states that the ISBAR technique is used to communicate critical information about the person who needs immediate attention and action, as well as to ensure that the information and its importance is correctly transmitted between healthcare professionals<sup>(7)</sup>.

The ISBAR technique is recommended for use in several health organizations due to its easy memorization and understanding, as it uses a simple, flexible, concise and clear methodology for communicating information<sup>(5)</sup>. Thus, according to Carpini and Flemming (2019), the main aims of ISBAR communication focus on reducing the complexity of the information that is transmitted, through the creation of a structure, which allows the information receiver to focus on the content of the message. The use of ISBAR can contribute to reducing some of the challenges in the communication chain by limiting the amount of information and increasing the quality of information that is transmitted<sup>(16)</sup>.

The use of an information system using the ISBAR technique explains the greater effectiveness of communication compared to systems that do not use this technique. For groups that do not use the ISBAR system, its ease of use is the factor that most affects the quality of transmitted information. Whether in services with an ISBAR system or without an ISBAR system, the quality of the information transmission system positively influences the quality of information, which indicates that the better the information transmission system, the better the quality of that same information (14,15). Thus, training nurses to use the ISBAR system shows positive results, increasing confidence in its use by professionals (18,19).

The ISBAR system can also facilitate the effectiveness of communication between different health professionals, between different institutions and in shift changes<sup>(15,16,18)</sup>, as it contributes to quick decision-making, promotes critical thinking, reduces information transfer time and promotes the rapid integration of professionals<sup>(5)</sup>. Authors also state that a way to use the ISBAR system more effectively is to identify its structure and write it down, since when information is communicated in a concise and structured way, there is more space for the receiver to make judgments about that same information<sup>(16)</sup>, fostering critical judgment<sup>(5)</sup>.

The National Plan for Patient Safety (2015-2020) highlights as one of its main objectives to increase communication safety<sup>(7)</sup>. Considering the studies previously presented, the ISBAR technique presents itself as a viable solution for achieving this same objective, since this technique significantly optimizes the communication transmission chain, contributing to the continuity and quality of care, maximizing safety of the patient and, consequently, contribute to a healthier life and a better work environment<sup>(14,15,16,17,18,19)</sup>.

ISBAR communication positively influences the quality of health care, as it constitutes an effective tool in the transmission of information through different health professionals, promoting better continuity of care provided.

## FINAL THOUGHTS

ISBAR communication proves to be a relevant factor in the quality of health care, as communication between health professionals is essential to ensure continuity of care, as well as its quality. Communication between professionals occurs throughout the shift and in their transition, whether in passing information to another professional who starts the shift or transferring patients to another service.

In a permanent quest for excellence in the care provided, nursing evolves, adapting to different realities and seeking different approaches to the situations experienced. An example of this tireless search for excellence, in this context, was to adapt ISBAR communication in the transmission of patient information between health professionals in different environments. Using this system, and after analyzing the aforementioned studies, there is a remarkable efficiency in the transmission of information, possible through this mnemonic, which allows, in a simple way, to memorize complex information, to be transmitted verbally. It was also verified in some studies, after using the ISBAR technique, the promotion of a better work environment, greater proactivity and greater motivation of professionals to provide better health care.

Throughout clinical practice, emphasis is placed on the importance of transmitting information from patients, contributing to the quality of care provided. This can be verified through audits of shift handovers, evaluations of the results of comparative studies and analysis of the adaptation of ISBAR communication in different media with its non-use. This confirms a direct relationship between the effectiveness of this type of system and the quality of health care provided. In this way, it appears that communication based on the ISBAR mnemonic constitutes a crucial tool for the continuity of health care, promoting safety and improving its quality, through the promotion of effective communication that allows gains in terms of the quality of health care. For this to reach a more significant impact on the quality of health care, there must be a greater commitment from managers to the knowledge, dissemination and application of the ISBAR technique.

## REFERENCES

- 1. Furtado LR. A comunicação como elemento central do cuidar. Jornal Açoriano Oriental. 2015 [accessed 2020 Nov 7]. Available from: https://www.ordemenfermeiros.pt/acores/os-enfermeiros-e/?title\_field=&month\_field=1&year\_field=2015
- Coelho MTV. Comunicação Terapêutica em Enfermagem: Utilização pelos Enfermeiros.
   Instituto de Ciências Biomédicas Abel Salazar da Universidade do Porto. Porto: 2015.
- 3. Coelho, M. T. V., & Sequeira, C. Comunicação terapêutica em enfermagem: Como a caraterizam os enfermeiros. Revista Portuguesa de Enfermagem de Saúde Mental. 2014;(11):31-xx.
- 4. Ordem dos Enfermeiros. Padrões de Qualidade dos Cuidados de Enfermagem. Lisboa: OE; 2012 [accessed 2020 Nov 6]. Available from: https://www.ordemenfermeiros.pt/media/8903/divulgar-padroes-de-qualidade-dos-cuidados.pdf
- 5. Direção-Geral de Saúde. Comunicação eficaz na transição de cuidados de saúde. Lisboa: DGS; 2017 [accessed 2020 Nov 7]. Available from: https://www.dgs.pt/directrizes-da-dgs/normas-e-circulares-normativas/norma-n-0012017-de-08022017-pdf.aspx
- 6. Schmidt T, Kocher DR, Mahendran P, Denecke K. Dynamic Pocket Card for Implementing ISBAR in Shift Handover Communication. German Medical Data Sciences: Shaping Change Creative Solutions for Innovative Medicine. 2019:224-229.

- 7. Direção-Geral da Saúde. Plano Nacional para a Segurança dos Doentes 2015-2020. Lisboa: DGS; 2015 [accessed 2020 Nov 11]. Available from: https://www.dgs.pt/qualidade-e-seguranca/seguranca-dosdoentes.aspx
- 8. Wold Health Organization. Patient Safety
  Curriculum Guide. Switzerland: WHO; 2011
  [accessed 2020 Dec 14]. Available from: https://www.who.int/patientsafety/education/mp\_curriculum\_guide/en/
- 9. Burgess A, Diggele CV, Roberts C, Mellis C.
  Teaching clinical handover with ISBAR. BMC
  Medical Education. 2020;20(2):1-8.
- 10. Porritt K, McArthur A, Lockwood C, Munn Z.

  JBI Handbook for Evidence Implementation. JBI;

  2019 [accessed 2020 Nov 7]. Available from: https://wiki.jbi.global/display/JHEI/Downloadable+PDF?

  preview=/62392432/67733019/JMEI2020August.pdf
- 11. David M, Alessandro L, Jennifer T, Douglas GA, The PRISMA Group. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Medicine. 2009;6(7):1-7.
- 12. Joanna Briggs Institute. CRITICAL
  APPRAISAL TOOLS. [Página Web] Austrália: JBI;
  2020 [updated 2020; accessed 2020 Nov 7].
  Available from: https://joannabriggs.org/critical-appraisal-tools
- 13. Joanna Briggs Institute. JBI EBP Database Guide. [Página Web] Austrália: JBI; 2020 [updated 2020 Aug 13; accessed 2020 Nov 7]. Available from: http://ospguides.ovid.com/OSPguides/jbidb.htm

- 14. Pakcheshm B, Bagheri I, Kalani Z. The impact of using "ISBAR" standard checklist on nursing clinical handoff in coronary care units. Nursing Practive Today. 2020 [citado a 7 nov 2020]; 7(4):266-274. Disponível em: https://doi.org/10.18502/npt.v7i4.4036
- 15. Hou Y-H, Lu L-J, Lee P-H, Chang I-C. Positive Impacts of Eletronic hand-off systems designs on Nurses' communication effectiveness. J Nurs Manag. 2019;27:1055-1063.
- 16. Carpini JA, Flemming AFS. Eight techiques to support high-quality perioperative communication: reflections on the NASSF WA survey. Day Surgery Australian. 2019;18(2):10-12.
- 17. Pun J, Chan EA, Eggins S, Slade D. Training in communication and interaction during shift-to-shift nursing handovers in a bilingual hospital: A case study. Nurse Education Today. 2019;84(10421): 1-9.
- 18. Mannix T, Parry Y, Roderick A. Improving clinical handover in a paediatric ward: implications for nursing management. Journal of Nursing Management. 2017;25:215-222.
- 19. Kitney P, Bramley D, Simons K. Perioperative handover using ISBAR at two sites: A quality improvement project. Journal of Perioperative Nursing. 2018;31(4):17-25.

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#### Authors' contributions

AG: Study coordination, study design, data collection, storage and analysis, review and discussion of results.

FB: Study design, data analysis, review and discussion of results.

JS: Study design, data analysis, review and discussion of results.

JA: Study design, data analysis, review and discussion of results.

MR: Study design, data analysis, review and discussion of results.

MM: Study design, data analysis, review and discussion of results.

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#### Chart 1 – PICOD according to $JBI^{(10)}$ .

Description	Question Component
Problem	Quality of Health Care
Intervention	ISBAR Communication
Comparison	Not applicable
Outcomes	How ISBAR can influence the Quality of Health Care
Study Design	Quantitative, qualitative and mixed
	Problem Intervention Comparison Outcomes

#### Chart 2 - Evidence Level<sup>(13)</sup>.<sup>△</sup>

Article	Type of study	Evidence Level		
Article 1 <sup>(14)</sup>	Quantitative	2.d		
Article 2 <sup>(15)</sup>	Quantitative	2.c		
Article 3 <sup>(16)</sup>	Qualitative	2		
Article 4 <sup>(17)</sup>	Qualitative	2		
Article 5 <sup>(18)</sup>	Qualitative	2		
Article 6 <sup>(19)</sup>	Quantitative	2.d		

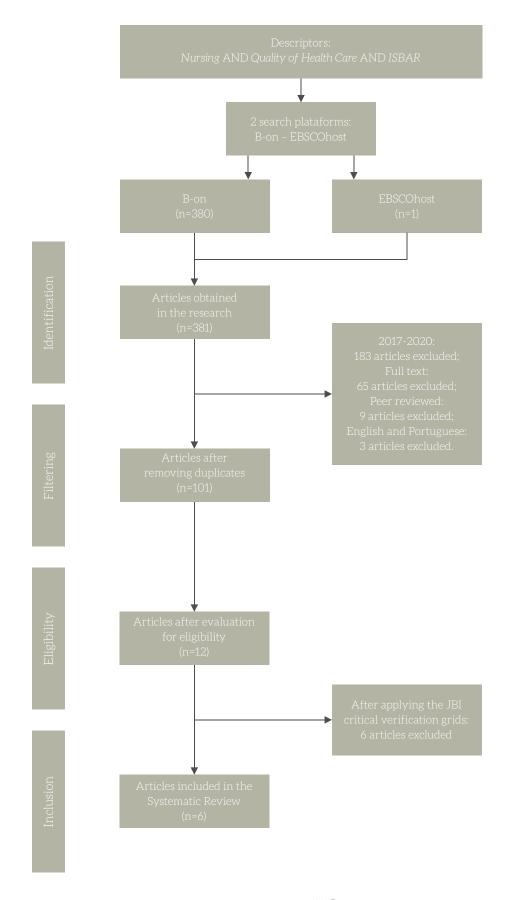


Figure 1 – PRISMA diagram<sup>(10)</sup>. <sup>K</sup>

Table 1 – Critical Appraisal Checklist of JBI  $^{(12)}$ .

Article	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Total
Article 1 – The impact of using "ISBAR" standard checklist on nursing clinical handoff in coronary care units <sup>(14)</sup> .	Y	Y	Y	N	Y	Y	Y	Y	Y	_	88,8%
Article 2 – Positive Impacts of Electronic hand-off systems designs on Nurses' communication effectiveness <sup>(15)</sup> .	Y	Y	Y	Y	N	Y	Y	Y	Y	_	88,8%
Article 3 – Eight techniques to support high-quality perioperative communication: reflections on the NASSF WA survey <sup>(16)</sup> .	Y	Y	U	N	N	NA	Y	Y	Y	_	71,4%
Article 4 – Training in communication and interaction during shift-to-shift nursing handovers in a bilingual hospital: A case study <sup>(17)</sup> .	Y	Y	Y	Y	Y	N	Y	N	Y	Y	80%
Article 5 – Improving Clinical handover in a paediatric ward: implications for nursing management <sup>(18)</sup> .	Y	Y	Y	N	Y	Y	Y	Y	Y	_	88,8%
Article 6 – Perioperative handover using ISBAR at two sites: A quality improvement project <sup>(19)</sup> .	Y	Y	N	Y	Y	Y	Y	Y	Y	_	88,8%

Chart 3 - Data synthesis.→<sup>K</sup>

Study Identification/Authors/ Year/Country	Study aim	Study method	Participants, type and number	Study results	Conclusions
Article 1 <sup>(14)</sup> The impact of using "ISBAR" standard checklist on nursing clinical handoff in coronary care units. (Impacto da ISBAR checklist na transmissão de informação em unidades de doença coronária). Autores: Behrouz Pakcheshm, Imane Bagheri, Zohreh Kalani. 2020, Iran.	To evaluate the impact of the standard list on the transmission of clinical information in a coronary disease unit.	Quasi-experimental Pre and Post-test.	24 nurses in two coronary disease units, 282 passages of information were recorded, before and after the implementation of ISBAR.	The rate of information provided in the five ISBAR domains increased significantly (P < 0.001) after the intervention.	The transmission of information based on a checklist, with a specific organization (ISBAR) can increase the information transmitted during shift changes.
Article 2 <sup>(15)</sup> Positive Impacts of Electronic hand-off systems designs on Nurses' communication effectiveness. (Impacto Positivo dos sistemas de transmissão de informação na comunicação eficaz dos enfermeiros). Autores: Ying-Hui Hou, Li-Jung Lu, Pei-Hsuan Lee, Chiu Chang. 2019, Thailand.	To validate the effectiveness of information transmission systems that use ISBAR compared to those that do not.	Quasi-experimental, Case-control.	147 nurses, 70 from Hospital A, using an electronic system with ISBAR, served as the experimental group and 77 from Hospital B, using a system that did not follow ISBAR, served as the control group.	Using the ISBAR system, nurses increased the effectiveness of their communication, which was beneficial for improving shift changes. When the ISBAR system is not used, the effectiveness of communication depends only on the nurses' cognitive and expressive skills.	The system with ISBAR manages to ensure an effective transmission of information between nurses, contributing to the continuity of care and the prevention of complications.

Chart 3 – Data synthesis. $\leftarrow \kappa$ 

Study Identification/Authors/ Year/Country	Study aim	Study method	Participants, type and number	Study results	Conclusions
Article 3 <sup>(16)</sup> Eight techniques to support high-quality perioperative communication: reflections on the NASSF WA survey. (Oito técnicas que suportam a comunicação peri-operativa de alta qualidade: reflecções no estudo NASSF WA). Autores: A F Stewart Flemming, Joseph A Carpini. 2019, Australia.	To identify common barriers to effective communication and techniques that can help improve communication.	Quasi-experimental, Qualitative.	46 nurses from the universe of 129 members of NASSF-WA (Nurses Association of Short Stay Facilities Western Australia).	It has been proven that there is a direct relationship between effective communication and the provision of quality health care. Nurses are aware of communication barriers and are able to identify them, but they need to be trained in order to find and adapt the best strategies to achieve this.	With the active application of the eight techniques addressed, health care teams can maximize user safety in order to contribute to a healthier life and to improve the work environment. In this way, it is recommended that there be leaders in the teams that are well trained and capable of implementing the best communication practices, as well as the strategies to be followed.
Article 4 <sup>(17)</sup> Training in communication and interaction during shift-to-shift nursing handovers in a bilingual hospital: A case study. (Treino na comunicação e interação durante a passagem de turno num hospital bilingue: Um estudo de caso). Autores: Jack Pun, E. Angela Chanb, Suzanne Egginsc, Diana Slade. 2018, Hong Kong (China).	To investigate nurses' perceptions and practices regarding shift handovers.	Exploratory Case Study, Qualitative.	50 Nurses from different departments of a hospital.	The use of Shift Handover protocols (e.g. ISBAR) changed the attitude of the Nurses in which the study was carried out, concluding that they are more awake and proactive in providing care.	The change from monologue shift changes, in which the receivers had a passive role, to collaborative shift changes, where all nurses took an active role in the shift change, after training in communication techniques, was significant.

Chart 3 - Data synthesis. ← N

Study Identification/Authors/ Year/Country	Study aim	Study method	Participants, type and number	Study results	Conclusions
Article 5 <sup>(18)</sup> Improving Clinical handover in a paediatric ward: implications for nursing management. (Melhorar a passagem de informação numa ala pediátrica: implicações para a gestão de enfermagem). Autores: Trudi Mannix, Yvonne Parry, Allison Roderick. 2017, Australia.	To describe how nurses in the pediatric unit improved the transmission of information using a hands-on approach.	Quasi-experimental, Pre and post test, Qualitative.	30 nurses from a pediatric ward.	After the intervention, there was a strong relationship between the nurses' understanding of the ISBAR and its application in the transmission of information, improving the transmission of information, including families and safety conditions.	There was an improvement in the passage of information in the pediatric ward under study.
Article 6 <sup>(19)</sup> Perioperative handover using ISBAR at two sites: A quality improvement project. (Passagens de turnos no peri- operatório utilizando o ISBAR: Um projeto de melhoria da qualidade). Autores: Patricia Kitney, Dr David Bramley, Dr Raymond Tam, Dr Koen Simons. 2017, Melbourne (Australia).	To evaluate the effectiveness of long-term strategies to improve shift passes with ISBAR in a study previously, cohort. A secondary objective is collect data from shift changes during care delivery.	Quasi-experimental, Pre and post test.	2 hospitals (4 services in each hospital) with nurses from different services with a minimum of 50 and a maximum of 56 shift handover audits.	There was an improvement in the transmission of information, during the shift change using the ISBAR, between nurses from different services (over 1 week in different locations).	The study showed that the use of the ISBAR system improved the transmission of information between anesthesiologists and nurses.