ABSTRACT
Objective: To analyze the implementation of the ISBAR method in the transfer of care between nursing shifts in an intensive care unit.
Method: A quasi-experimental study. 432 care transfers were observed between July and September 2019, using an instrument based on the ISBAR method, with identification, clinical situation, care context, assessment, and recommendations for the patient. The data were treated with descriptive statistical measures.
Results: In relation to identification, the patient’s name was the most reported (96.30%). As for the clinical situation, the change in vital signs (49.54%). Among the diverse information associated with care, skin integrity (66.67%). Regarding the actions taken, interventions and examinations stood out (53.70%). Pending information appeared in 28.94%.
Conclusion: It was noticed that involving nurses facilitated the implementation of ISBAR. The uniformity of care transfer in the investigated unit proved to be a starting point for the prevention of incidents related to communication.

DESCRIPTORS: Health Communication; Critical Care; Transfer of Responsibility for the Patient; Patient safety; Nursing care.

HOW TO REFERENCE THIS ARTICLE:
APLICABILIDADE DO MÉTODO ISBAR EM UMA UNIDADE DE TERAPIA INTENSIVA ADULTO

RESUMO
Objetivo: analisar a implementação do método ISBAR nas transferências de cuidados entre turnos de enfermagem em uma unidade de terapia intensiva.
Método: estudo quase experimental. Foram observadas 432 transferências de cuidados entre julho e setembro de 2019, através de instrumento pautado no método ISBAR, com identificação, situação clínica, contexto assistencial, avaliação e recomendações para o paciente. Os dados foram tratados com medidas estatísticas descritivas.
Resultados: em relação à identificação, o nome do paciente foi o mais relatado (96,30%). Quanto à situação clínica, a alteração nos sinais vitais (49,54%). Dentre as informações associadas ao cuidado, a integridade da pele (66,67%). No que tange às ações realizadas, destacaram-se as intervenções e exames (53,70%). As informações sobre pendências apareceram em 28,94%.
Conclusão: pôde-se perceber que envolver os enfermeiros facilitou a implementação do ISBAR. A uniformidade da transferência de cuidados na unidade investigada mostrou-se como ponto de partida para a prevenção de incidentes relacionados à comunicação.

DESCRITORES: Comunicação em Saúde; Cuidados Críticos; Transferência da Responsabilidade pelo Paciente; Segurança do Paciente; Cuidados de Enfermagem.

Raphaella de Moraes Araujo | Luana Ferreira de Almeida | Vanessa Galdino de Paula | Raquel de Mendonça Nepomuceno | Ana Lucia Cascardo Marins

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APLICABILIDAD DEL MÉTODO ISBAR EN UNA UNIDAD DE CUIDADOS INTENSIVOS PARA ADULTOS

RESUMEN:
Objetivo: analizar la implementación del método ISBAR en la transferencia de cuidados entre turnos de Enfermería en una unidad de cuidados intensivos.
Método: estudio cuasi-experimental. Se observaron 432 transferencias de cuidados entre julio y septiembre de 2019, a través de un instrumento basado en el método ISBAR, con identificación, situación clínica, contexto asistencial, evaluación y recomendaciones para el paciente. Los datos se trataron con medidas estadísticas descriptivas.
Resultados: en relación con la identificación, el nombre del paciente fue lo más reportado (96,30%). En cuanto a la situación clínica, prevalecieron los reportes sobre la alteración de los signos vitales (49,54%). Entre los datos asociados con el cuidado, lo más reportado fue la integridad de la piel (66,67%). En lo referente a las acciones realizadas, se destacaron las intervenciones y los exámenes (53,70%). Los datos sobre cuestiones pendientes aparecieron en el 28,94% de los casos.
Conclusión: se puede percibir que implicar a los enfermeros facilitó la implementación del método ISBAR. La uniformidad de la transferencia de cuidados en la unidad investigada se presentó como un punto de partida para prevenir incidentes relacionados con la comunicación.

DESCRIPTORES: Comunicación en Salud; Cuidados Críticos; Transferencia de la Responsabilidad por el Paciente; Seguridad del Paciente; Cuidados de Enfermería.
INTRODUCTION

Failures in communication among health professionals are among the causes of more than 70% of the adverse events related to care, and can be associated with erroneous/incomplete communication or with lack of understanding of the information conveyed

Within this context, since the clinical situation of the critical patient may change in seconds, sectors of high complexity are more prone to errors related to communicative processes, because decisions often need to be quick and accurately informed for carrying out interventions inherent to the preservation of life.

In addition to the situations of clinical changes, routinely, the processes of transmission of information occur at different times during the same shift, such as in the transfer of patients between sectors and in the shift changes of the nursing team. In view of the severity of these patients, it is imperative that the entire team is aware of the relevant information and knows the best way to carry out this transmission.

Mostly, the transmission of information is considered a moment of transition of care in which there will be a review of the health status and needs of each patient, ensuring the transfer of responsibility for the continuity of care. This information makes up the basis of the decision-making process, and supports the planning, execution, and evaluation of the actions to be developed.

That said, it is important to ensure that communication among the teams is organized and without interruptions, especially within environments that provide care to critical patients. The simultaneous performance of several professionals, added to the interdependence of their actions for the continuity of care, confirms the need to use assertive and standardized forms of communication.

In the everyday practice, the variability of the care transition process performed by the nursing team is observed, either because of the characteristics of the patients, due to the dimensioning or organization of the team, or to the nurse’s choice about which information is a priority.

In this sense, the international literature is unanimous in indicating the use of structured forms for the transfer of care. Among the indicated models, there is mnemonic ISBAR, which allows professionals to organize their care based on knowledge of the patient’s situation and condition, in addition to emphasizing the assessment and recommendations for continuity of care.

Thus, this study aimed to analyze the implementation of the ISBAR method in the transfer of care between nursing shifts in an adult intensive care unit. The contribution of this work is based on encouraging the international scientific community to implement the ISBAR acronym when transferring care. It is expected to offer an instrument with appropriate information, in a clear and concise manner, for the profile of patients seen at the unit.

METHOD

A quasi-experimental study developed in an adult intensive care unit of a university hospital located in the city of Rio de Janeiro.

The proposed intervention was the implementation of an instrument based on the ISBAR method for the moments of shift transfers. To this end, the authors first performed a literature review regarding the recommendations for information transmitted between
nursing teams in intensive care units when transferring care. This stage included consulting the Virtual Health Library database.

The second stage was to structure the recommendations found in the literature using the ISBAR method. Namely: a) Identification of the patient, of their comorbidities and of the conditions that led them to intensive treatment; b) Patient's situation, which includes sleep patterns, clinical changes, and care goals, indicating invasive devices and life support mechanisms; c) Background, which corresponds to the patient's care context; d) Assessment of the patient by the nurse in the face of the occurrences and actions performed; and e) Recommendations/Pending issues for continuity of care.

This way, an instrument of care transmission was elaborated, which was presented individually to each nurse in the unit under study. This stage took place at the workplace, during the shift hours, and at the most convenient time as assessed by each professional.

An environment without many noises and interruptions was sought, which would avoid distracting nurses’ attention regarding the careful reading of the elaborated instrument. At that time, there was the opportunity to read the instrument, ask questions and make suggestions. This moment sought to bring nurses closer to the scope of decisions, with a view to greater adherence to the new method, when effectively implemented.

After the reading, the doubts were clarified and the suggestions recorded for further evaluation. Then, the records of improvement suggestions signaled by all the nurses were compiled, discussed among the authors in the light of the literature and, after selection of the suggestions, served as a basis for the creation of the final model, adequate to the demand of the work process of the professionals responsible for the process of transferring nursing care.

The nurses identified the instrument as very long and chose to remove items such as the identification of those responsible for the transfer and continuity of care, location of the patient’s identification bracelet, and information on antibiotic therapy.

After making the consensual changes and preparing the final instrument, it was read with each professional individually, also in the work environment, seeking their understanding about its application and clarifying any doubts related to its completion. That is, each nurse had the opportunity to get to know the final instrument after suggestions from the group and consensus with the study authors.

Subsequently, the instrument was implemented in the unit under study and started to be used by all the nurses (22) working in the sector, during care transmissions among nursing shifts. Data collection started after 15 days, with direct observation of transmissions and care among nursing shifts, through a checklist that included the same items as the proposed instrument.

The care transmissions performed by nurses working in the sector from July to September 2019 were included in the study. Those carried out by undergraduate and graduate students as well as by nursing professors were excluded, given that they did not participate in the stages for the elaboration of the instrument.

The variables of interest were the following: 1) patient identification (name, bed, age, diagnosis/comorbidities, allergies); 2) clinical situation (changes in vital signs, sleep patterns, family visits, goal of care); 3) information on care (skin integrity - injury site, dressing used, peripheral perfusion; level of consciousness; Respiratory system - labial commissure, ventilation mode, tracheal secretion; Nutritional situation - zero diet/outflow, diet route, oral diet/acceptance, glycemic escape; Drains; Vascular accesses - location, date of peripheral access changes, infusions/flow rate; Excretory system - device/lumps/change/diaper, water balance; Last intestinal function; 4) actions performed (blood transfusion, dialysis, interventions, assessment); and 5) information for continuity of care (pending issues/scheduled exams, recommendations).
The data obtained were organized in spreadsheets in Microsoft Excel®, from each recommended moment by the ISBAR technique: by the stages of identification, situation, care context, evaluation, and recommendations for the patient. Then, the conformity of the transmitted information was evaluated, in relation to the instrument elaborated and used by the nurses. Subsequently, the conformities were added, applying the absolute and relative frequencies, which were organized in tables, according to each recommended stage.

All the ethical and legal precepts were met and the study was approved by the Research Ethics Committee under opinion number 3,301,861 of May 3rd, 2019.

RESULTS

In relation to identification, it was noticed that the patient’s name was the information most reported by the nursing professionals (96.30%; n=416), followed by the bed number (75.93%; n=328) and by clinical diagnosis (43.06%; n=186), as shown in Table 1.

Table 1 - Data related to patient identification reported by the nursing professionals. Rio de Janeiro, RJ, Brazil, 2019 (n=432)

<table>
<thead>
<tr>
<th>Patient identification</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>416</td>
<td>16</td>
</tr>
<tr>
<td>Bed</td>
<td>328</td>
<td>104</td>
</tr>
<tr>
<td>Age</td>
<td>103</td>
<td>329</td>
</tr>
<tr>
<td>Diagnosis/Comorbidities</td>
<td>186</td>
<td>246</td>
</tr>
<tr>
<td>Allergies</td>
<td>69</td>
<td>363</td>
</tr>
</tbody>
</table>

Regarding the clinical situation of the patient, vital signs alterations was the most mentioned item by the nurses (49.54%; n=214), followed by information on the patients’ sleep pattern (14.81%; n=64) and by family visits (10.42%; n=45), as shown in Table 2. The “goal of care” item was mentioned in 34 (7.87%) of the 432 observations.

Table 2 - Data referring to the clinical situation of the patient reported by the nursing professionals. Rio de Janeiro, RJ, Brazil, 2019 (n= 432) (continues)

<table>
<thead>
<tr>
<th>Clinical situation of the patient</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vital signs alterations</td>
<td>214</td>
<td>218</td>
</tr>
</tbody>
</table>

Applicability of the ISBAR method in an adult intensive care unit
<table>
<thead>
<tr>
<th>Information on care</th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin integrity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injury site</td>
<td>286</td>
<td>66.2</td>
<td>146</td>
</tr>
<tr>
<td>Dressing used</td>
<td>138</td>
<td>31.94</td>
<td>197</td>
</tr>
<tr>
<td>Peripheral perfusion</td>
<td>107</td>
<td>24.77</td>
<td>325</td>
</tr>
<tr>
<td>Level of consciousness</td>
<td>304</td>
<td>70.37</td>
<td>128</td>
</tr>
<tr>
<td>Respiratory system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labial commissure</td>
<td>51</td>
<td>11.81</td>
<td>321</td>
</tr>
<tr>
<td>Ventilation mode</td>
<td>284</td>
<td>65.74</td>
<td>143</td>
</tr>
<tr>
<td>Tracheal secretion</td>
<td>66</td>
<td>15.28</td>
<td>364</td>
</tr>
<tr>
<td>Nutritional situation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zero diet/flow</td>
<td>140</td>
<td>32.41</td>
<td>233</td>
</tr>
<tr>
<td>Diet route</td>
<td>241</td>
<td>55.79</td>
<td>185</td>
</tr>
<tr>
<td>Oral diet/acceptance</td>
<td>103</td>
<td>23.84</td>
<td>257</td>
</tr>
<tr>
<td>Glycemic escape</td>
<td>182</td>
<td>42.13</td>
<td>247</td>
</tr>
<tr>
<td>Drains</td>
<td>93</td>
<td>21.53</td>
<td>161</td>
</tr>
<tr>
<td>Vascular accesses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location/Date of peripheral access changes</td>
<td>254</td>
<td>58.8</td>
<td>178</td>
</tr>
<tr>
<td>Infusions/Flow</td>
<td>279</td>
<td>64.58</td>
<td>153</td>
</tr>
<tr>
<td>Excretory system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Device/Lumps/Change/Diaper</td>
<td>203</td>
<td>46.99</td>
<td>229</td>
</tr>
<tr>
<td>Water balance</td>
<td>86</td>
<td>19.91</td>
<td>346</td>
</tr>
<tr>
<td>Last intestinal function</td>
<td>247</td>
<td>57.18</td>
<td>185</td>
</tr>
</tbody>
</table>

Caption: NA – Not Applicable
Regarding the actions performed, data on interventions and tests were the most reported (53.70%; n=232), followed by those related to dialysis procedures (23.38%; n=101). Of the 90 blood transfusions, 71 (16.44%) were mentioned during the transfers (Table 4).

Table 4 - Data referring to the actions performed during the shift reported by the nursing professionals. Rio de Janeiro, RJ, Brazil, 2019 (n=432)

<table>
<thead>
<tr>
<th>Actions performed</th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Blood transfusion</td>
<td>71</td>
<td>16.44</td>
<td>19</td>
</tr>
<tr>
<td>Dialysis</td>
<td>101</td>
<td>23.38</td>
<td>16</td>
</tr>
<tr>
<td>Interventions</td>
<td>232</td>
<td>53.70</td>
<td>200</td>
</tr>
<tr>
<td>Assessment</td>
<td>99</td>
<td>22.92</td>
<td>333</td>
</tr>
</tbody>
</table>

Caption: NA – Not Applicable

Information on recommendations, pending issues and scheduled exams appeared in 125 (28.94%) observations (Table 5).

Table 5 - Information reported by the nursing professionals for continuity of care. Rio de Janeiro, RJ, Brazil, 2019 (n=432)

<table>
<thead>
<tr>
<th>Information for continuity of care</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Pending issues/Scheduled exams</td>
<td>136</td>
<td>31.48</td>
</tr>
<tr>
<td>Recommendations</td>
<td>125</td>
<td>28.94</td>
</tr>
</tbody>
</table>

DISCUSSION

It was possible to realize the importance of the local management in involving the professionals before making important decisions, seeking to understand how these changes can influence the performance of each professional, and consequently, the team’s work. In the context of implementing a structured form for the transfer of care, it is recommended to adapt it to the context of the unit in which it will be used\(^6,7\). There was some initial resistance from the professionals to the documentary change, a fact that can be related to work overload\(^8\).
It should be noted that there is no consensus among the intensivists as to what the essential information is during a transfer of care; and what is assumed to be important on a daily basis, is not effectively conveyed. Accordingly, it was observed in this study that many items of the instrument were not mentioned during transfers, even though the form was built by the professionals who used it\(^9,10\).

Throughout the data collection period, a gradual improvement in adherence to the tool was observed. Corroborating this finding, a study reports that the nurses’ response to the use of ISBAR was more positive after four weeks using the instrument. In this interval, the professionals demonstrated greater confidence in the transfer of information related to the patient\(^11\).

From this context, the need for periodic monitoring for the standardization and updating of communication becomes evident. The training of communicative skills significantly improves the integration of the multidisciplinary team and contributes to the implementation of a safety culture, placing individual and organizational behavior in synergy in order to minimize risks related to care\(^9,12\).

From the results, 416 (96.30%) patients were identified by name, with valorization of the identification through the reference to their hospital bed in 328 (75.93%) observations. In the context of intensive care, care with patient identification needs to be ensured, since the patients themselves may not be responsive to confirm their data. In addition, the occurrence of bed changes or hospitalization of homonyms can increase the risks related to incorrect identification of the patients\(^13\).

Still in the context of identification, it was observed that information regarding the presence or absence of allergies was not mentioned in 363 (84.03%) cases, a worrying fact since, in the last decades, deaths related to anaphylactic reactions increased by 300% and many errors have been related to the undervaluation of this data\(^14\).

The lack of information about the clinical context of the patients and their comorbidities is also a concern, since this data provides support to the professionals about what care should be given to each patient, including the personal protection equipment that is indicated for specific conditions\(^7\).

It was observed that, in cases of prolonged hospitalizations, the patient’s identification was seen as unnecessary by the professionals, as everyone would already be familiar with the case\(^15\). This factor may have been responsible for the low frequency of reference to the aforementioned items.

In relation to the patient’s current situation, references on changes in the vital signs predominated (49.54%; \(n=214\)). This fact may be related to the prioritization of direct and clinical aspects related to the severity of the patient and which directly affect the care provided to him. Items such as sleep patterns or family visits were underreported\(^8\).

Information on sleep patterns is important, as irregular or insufficient patterns are related to changes in cardiovascular functions, respiratory compensation responses, and insulin release, factors that directly interfere with clinical recovery\(^16\). Also, the presence of family members can reduce the incidence of delirium, a common disorder in intensive care, making information about visits extremely important\(^17\).

It was also observed that the goal of care was not defined in 398 (92.13%) transfers. The absence of content related to future plans for the clinical management of the patient may lead to errors of the professional, compromising the safety and quality of care. Situations of palliative care or orders for cessation of efforts deserve due attention in this context, as failure to communicate the decision completely changes the direction of care\(^7\).

The item referring to the background helps to list the patient’s context, informing his clinical condition. At that moment, there is a prioritization of systems whose deterioration can worsen the clinical situation and which are directly related to the care provided. As in
a related study, the systems most referred to during the transfer of care were the nervous system/level of consciousness (69.91%; n=302), integumentary system/skin integrity (66.67%; n=288), and respiratory system/ventilation mode (65.74%; n=284)\(^7\)\(^8\)\(^11\).

Items related to the hemodynamic context were mentioned earlier, within the context of the “Situation” of the mnemonic, a factor that corroborates the prioritization of important data by the professionals responsible for the transfer.

In contrast, information on tracheal secretion was not transmitted in 364 (84.26%) observations, which translates into great risk for the patient. Tracheal aspiration should only occur when necessary, and information on the quantity and characteristics of secretion are important for the individualization of care\(^18\).

The absence of information on water balance in more than 80% of the observed transfers is highlighted, being constantly replaced by the total urine output during the period. It should be noted that changes in the water balance are directly related to changes in electrolytes, which are already common in patients admitted to intensive care units, and which can lead to disorders that result in death\(^19\).

In relation to item A of the mnemonic, referring to the evaluation and the actions performed during the shift, the professionals mentioned interventions in 232 (53.70%) transfers, among which the preparation for exams and the installation of invasive devices stood out. The nurse’s assessment was not mentioned in 333 (77.08%) observations, restricting transfers only to the reference to technical factors related to care. The authors correlate this fact to a likely lesser understanding of the clinical condition on the part of the recipient, and the transfer must be accompanied by interpretations and judgments by the professionals responsible for the care\(^10\).

In the field of recommendations, the nurses report their impression of what is important for continuity of care, and what needs to be done for the patient’s recovery. In this item, information about test results that directly interfere with care should also be mentioned\(^7\)\(^11\).

In 296 (68.52%) transfers, the nurses made no reference to pending care and scheduling exams and, in 307 (71.06%), they did not make recommendations for the professional who would assume the care. It is emphasized that the inclusion of the recommendations during the transfer is crucial for continuity of care, for planning discharge, and for scheduling new exams\(^7\).

Despite the low reference to items listed as essential in the literature, it is known that, during transfer of care, the nurses are concerned with reporting the criticality of the case and information regarding the risks to which patients are subjected; these being the professionals who are more attentive to issues that can bring risks and more proactive in this analysis after the transfers of care\(^9\).

The implementation of the mnemonic directly influences this process, making the transfer clearer and more effective, directly reflecting on the quality of care. In view of the results, it is observed that there was an improvement in communication, since the use of the instrument enabled uniformity in the transmission of care among the nursing teams.

It was found in this study that, after the implementation of the ISBAR method in the unit under study, the information transmitted by the nurses occurred in a consistent and accurate manner. Although the professionals did not convey all the necessary information for safe care, the use of the instrument by all the nurses led to an increase in the quality of care transfer, corroborating with other studies\(^20\)\(^22\), since the use of standardized instruments enables better planning and triggering of actions developed by the nursing teams during their work shift.

The main limitation of this study is the short observation time interval. The team’s adherence is believed to increase as they become familiar with the new proposal. Still, the
fact is cited that there is an institutionalized patient as a research bias, since his transfers did not follow the instrument’s structure and may have been responsible for the percentage reduction of some items referenced in the results.

CONCLUSION

In compliance with the objective, it was possible to notice that involving the nurses in the construction of the instrument facilitated the implementation of ISBAR in the researched unit. It was possible to bring them closer to the method of transmission of care and reduce doubts about each item, as well as to organize the information considered relevant in the proposed instrument according to the profile of the patients.

Although this study showed flaws in the transmission of information by the nurses, as recommended in the instrument developed, the uniformity of care transfer in the researched unit presented itself as a starting point for the prevention of incidents and adverse events related to communication among the nursing teams.

REFERENCES


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Corresponding author:
Luana Ferreira de Almeida
Universidade do Estado do Rio de Janeiro
R. Ituverava, 314 - 22750-006 - Rio de Janeiro, RJ, Brasil
E-mail: luana.almeida3011@gmail.com

Role of Authors:
Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - RMN, ALCM
Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved - RMA, LFA, VGP

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