Research Article

Experiences of using the ISBAR tool after an intervention: A focus group study among critical care nurses and anaesthesiologists

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ABSTRACT

Objective: The ISBAR tool is a structured approach to communication between healthcare professionals and refers to Identity, Situation, Background, Assessment, and Recommendation. The objective of this study was to explore how critical care nurses and anaesthesiologists experience using the ISBAR tool in clinical practice.
Design: Three focus groups were conducted with a total of three anaesthesiologists and 14 critical care nurses from two hospitals in Norway after they had attended an intervention.
Setting: The intervention consisted of two days at a university, with a four-month interval between, attending resource lectures and simulation exercises focusing on the ISBAR tool. The focus groups were audio-recorded, transcribed and analysed thematically to understand the participants' experiences.
Findings: Three major themes emerged from the data: (1) predictability and security, (2) usability and (3) recommendations for further use. A feeling of predictability and security was identified through increased awareness of communication and professional roles. Usability included identifying appropriate situations to use the ISBAR tool in clinical practice, the importance of tailoring the use to each situation and some physicians were not interested in using it. Finally, recommendations for further use of the ISBAR tool were identified.
Conclusion: The findings highlight the importance and need to improve the use of the ISBAR tool to increase patient safety. It is essential that healthcare professionals work together to ensure that everybody has the same situational awareness and that good clinical handover practices are developed and maintained.

Implications for Clinical Practice

- Improving communication between healthcare professionals is essential.
- Use of the ISBAR tool may improve quality and patient safety in clinical practice.
- The ISBAR tool may improve communication and teamwork between healthcare professionals.
- Simulation exercises may be an effective pedagogical approach to learn to use the ISBAR tool.

Introduction

The communication structure Identify, Situation, Background, Assessment and Recommendation (ISBAR) is based on 'SBAR'—a system developed by the United States (US) Navy to ensure clear, precise communications between nuclear submarines (Burgess et al., 2020) and was adopted by the public health service in the 2000s (Narayan, 2013). The ISBAR tool, endorsed by the World Health Organisation (2011), provides a standardised approach to communication that can be used in a wide range of clinical contexts, such as escalation of a deteriorating

Table 1
The ISBAR tool (Moi et al., 2019).

I Identify	**Specify.**	
	- Who are you?	
	- Where are you?	
	- Patient's name, age, gender, and department	
S Situation	**What is the problem/reason for contact?**	
	- I'm calling because… (describe)	
	- I have observed major changes… (ABCDE)	
	- I have measured the following values…	
	(RR*, SpO2**, pulse/heart rhythm, BP***, capillary refill time, Tp****)	
	- I have received test results….	
B Background	**If it's urgent and/or you are concerned—speak up!**	
	Brief and relevant case history.	
	- Admission diagnosis and date	
	- Previous illnesses of significance	
	- Relevant problems and treatment/interventions to date	
	- Allergies	
A Assessment	**Assessment (of the situation and background).**	
	- I think the problem/reason for the patient's condition is related to (respiration, circulation, neurology).	
	- I don't know what the problem is, but the patient's condition has deteriorated.	
	- The patient is unstable; we need to do something.	
	- I am concerned.	
R Recommendation	**Request specific advice and interventions and clarify expectations.**	
	- I suggest…/What interventions do you recommend?	
	o Immediate intervention	
	o Investigation/treatment	
	o How often should I…	
	- When should I next make contact? When will you be here?	
	- Confirm messages and interventions with a closed loop.	

The table is an adapted version of the ISBAR tool based on various national and international models.
RR* = respiratory rate.
SpO2** = peripheral capillary oxygen saturation.
BP*** = blood pressure.
Tp**** = temperature.

patient, shift changeover, patient transfer for a test or an appointment and inter-hospital transfers (Burgess et al., 2020; Institute for Healthcare Improvement, 2021). The ISBAR tool not only facilitates engagement in nurse-to-nurse handoff processes but is also used in communication between nurses, physicians and other healthcare personnel (Chiew et al., 2019). The version of the ISBAR tool used in this study is shown in Table 1 (Moi et al., 2019).

Several studies have shown improvements in communication, teamwork and patient safety since the implementation of the ISBAR tool (Chiew et al., 2019; Hou et al., 2019; Leonardsen et al., 2019). Today's dynamic clinical environments are becoming increasingly complex and health care professionals must contend with rapid changes and ways of managing communication (Cant et al., 2020). Inadequate communication prolonging the patients' stay in hospital, may lead to severe consequences such as adverse patient events and poor patient outcomes (Pakcheshm et al., 2020; Sankpal et al., 2020). For improvements to occur, the use of simulation exercises is recommended for training in communication and teamwork (Foronda et al., 2014; Hegland et al., 2017). Imperfect communication can lead to further complications in hospitals, and this is particularly problematic in intensive care units (ICUs) with highly vulnerable patients (Müller et al., 2018; Wang et al., 2018). The ICU is a time-pressured environment prone to continuous distractions. Patients are critically ill and require timely care at a moment's notice (Spooner et al., 2018). The COVID-19 pandemic has underlined the importance of effective communication and interprofessional collaboration especially in the ICUs. The capacities in the ICUs are vulnerable, and research studies that may prevent unnecessary patients in ICUs should therefore be a priority. To the best of the authors' knowledge, no focus group studies including both critical care nurses' and anaesthesiologists' experiences with using only the ISBAR tool in

clinical practice have been conducted. Clinical handovers work best when all members in the interprofessional team are using the same framework (Burgess et al., 2020), and nurses and physicians are highly important stakeholders of the healthcare system workforce (Wang et al., 2018). At present, research evidence that unequivocally supports the benefit of the ISBAR tool and aligned approaches is rather limited. There is some evidence of the effectiveness of '*SBAR*' implementation on patient outcome, however this evidence is limited to specific circumstances such as communication over the telephone (Müller et al., 2018). Therefore, more research in this area is recommended to further demonstrate the benefit of the ISBAR tool in terms of patient safety and keep raising the awareness of communications errors.

Methods

Objective

The objective of this study was to explore how critical care nurses and anaesthesiologists experience using the ISBAR tool in clinical practice after an intervention.

Design

A qualitative design with three focus groups was used. The design was chosen because it was desired to draw upon respondents' attitudes, beliefs and feelings by exploiting group processes in an interprofessional team (Freeman, 2006). To use a thematic analysis, based on Braun and Clarke (2006), was therefore deemed relevant for this study. The study was conducted in line with the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist (Tong et al., 2007).

Participants and setting

Anaesthesiologists and critical care nurses from two ICUs at two hospitals in Norway, where the ISBAR tool was not part of expected practice, were invited to participate in the study in autumn 2016. The ICUs were a 27-bed and a 21-bed ICU with a staffing of between 60 and 90 nurses. Both ICUs were general units at hospitals in urban areas in southern Norway. Only one of the ICUs offered treatment to children. Otherwise, there were not noteworthy differences between the units. A convenience sampling approach was used. Two members of the research team contacted two leaders at the ICUs (one leader at each ICU), who further invited all their employed critical care nurses and anaesthesiologists based on the following inclusion criteria: 1) currently working in an ICU and, 2) at least two years of work experience in an ICU. Characteristics of the participants are displayed in Table 2. A total of 17 participants voluntarily attended and no-one that wanted to participate in the study was excluded. The participants had never used the ISBAR tool before the study. The participants were divided into three

Table 2
Participant demographics (n = 17).

	Team 1 (n = 6)	Team 2 (n = 5)	Team 3 (n = 6)
Gender			
Female	4	4	5
Male	2	1	1
Age in years			
Md (Range)	42 (35–48)	52 (32–58)	41 (35–59)
Profession			
Critical care nurse	5	4	5
Anaesthesiologist	1	1	1
Hospital			
A	X		X
B		X	
Percentage of employment			
100%	5	3	6
80%	1	1	
75%		1	

Day one at the university
- Simulation exercise without the use of the ISBAR tool
- Resource lecture about the use of the ISBAR tool
- Simulation exercise with the use of the ISBAR tool

Four months in clinical practice at hospitals
- Encouraged to use the ISBAR tool
- Encouraged to attend a resource lecture about the ISBAR tool in clinical practice (one month after day one at the university)

Day two at the university
- Resource lecture about the use of the ISBAR tool
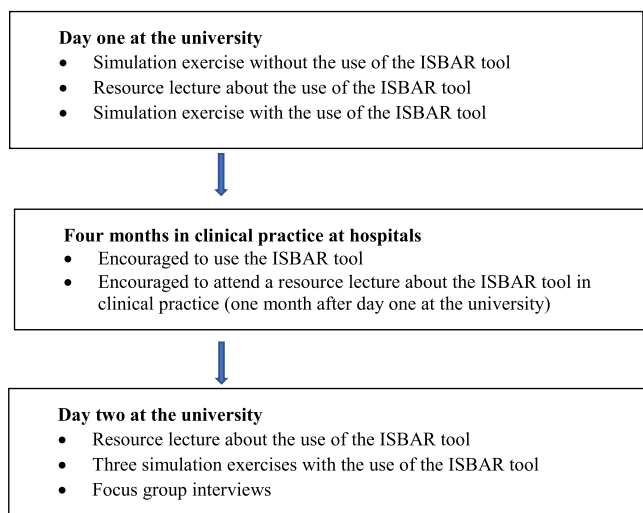- Three simulation exercises with the use of the ISBAR tool
- Focus group interviews

Fig. 1. Flow of the study and the data collection for all participants.

Table 3
Information regarding the simulation exercises in the study.

Learning objectives:	'Recognize and respond appropriately to acute patient deterioration'. 'Communicate and work appropriately in a team'.
Intervention delivery:	A total of three faculty members were involved in organizing the simulation sessions. Two facilitators and one operator were present in each simulation group.
Patient information:	The setups in all simulation sessions comprised emergency situations, where patients' conditions were deteriorating quickly in an ICU. Information on each patient included 'cardiac arrest', 'commotio', 'pelvic fracture', 'pain', and 'pneumothorax'. The participants did not receive information about the patient cases in any of the simulation sessions before the intervention, to ensure that they could not prepare as is often the cases in clinical practice.
Roles in the scenarios:	Critical care nurse x 2, physician, relatives, and observers.
Simulation equipment:	Laerdal SimMan 3G.

interprofessional teams of between five and six members from the same ICU (hospital A = 2 teams, hospital B = 1 team). Feeling secure seems to be essential for learning in simulation exercises (Haddeland et al., 2021) and the participants were added in teams together with members from the same ICU in order to create a safe environment. Each team consisted of one anaesthesiologist (see Table 2).

Each team attended an intervention, which consisted of two days in a simulation laboratory at one university, with a four-month interval between (see Fig. 1). More information regarding the simulation exercises is given in Table 3.

Ethical Approval

Participation in the study required oral and written information and signed informed consent. Approval by the Norwegian Centre for Research Data, project number 45068, was received before data collection. The principles of the Helsinki Declaration (World Medical Association, 2013) were followed.

Data collection

The interview guide consisted of 12 open-ended questions made by the authors. The questions were made based on previous research about the ISBAR tool. One academic, who had expertise in qualitative research, evaluated the interview guide regarding relevance and clarity before the data collection. Examples of questions used were: *How would you describe your experiences with using the ISBAR tool in clinical practice*

(positive/negative)? Has the use of the ISBAR tool affected patient care, and can you explain how? What is positive with using the ISBAR tool in clinical practice? What is negative with using the ISBAR tool in clinical practice? How has the use of the ISBAR tool affected you in your role as a nurse/anaesthesiologist? Will you continue to use the ISBAR tool in clinical practice, and in case why? All the focus groups were audio-recorded and lasted for 42, 51 and 57 minutes. The focus groups were conducted by the second and the last author, who both were critical care nurses, immediately after the last simulation session. The same person acted as the moderator and the other as the secretary during all interviews.

Data analysis

Data from the focus groups were transcribed into written form by a professional service. The transcribed text was then read by all authors to familiarise themselves with the data. A thematic analysis in six steps based on Braun and Clarke (2006) was performed. As a first step, all the authors read the transcript focus groups, searching for meanings and patterns in the transcription. Some of the patterns were discussed among the authors. One of the authors (KH) searched for the highest number of possible codes during the second step. All authors cross-checked the codes, and as the third step, they searched for themes based on the initial codes. Some initial codes formed main themes, whereas others formed subthemes. During the fourth step, the themes were reviewed. In the fifth step, the themes and subthemes were defined and further refined. The subthemes were themes within a main theme. They were useful for giving structure to a larger and more complex theme. In the sixth step, the themes and subthemes were reported based on the data. Examples of the qualitative thematic analysis process are displayed in Table 4.

Findings

The three main themes and seven sub-themes identified in this study are presented in Table 5.

Table 4
Examples of the qualitative thematic analysis resulting in three main themes.

Examples of text coded	Sub-theme	Theme
Has learned a procedure for structuring communication, which makes one more aware and secure.	Increased awareness of communication	Predictability and security
The ISBAR tool leads to everyone becoming more equal and included in the team collaboration, and some may therefore feel degraded.	Some physicians were not interested in using the ISBAR tool	Usability
Have used the ISBAR tool without being aware of using it.	Need for increased focus on training	Recommendations for further use

Table 5
The three main themes and seven sub-themes identified in the study.

Main themes	Sub-themes
Predictability and security	Increased awareness of communication
	Increased awareness of professional roles
Usability	Situations where it was appropriate to use the ISBAR tool
	Tailored use of the ISBAR tool to each situation
	Some physicians were not interested in using the ISBAR tool
Recommendations for further use	Need for increased focus on training
	Important to support each other

Predictability and security

Feeling a sense of predictability and security seems to be essential for managing situations in clinical practice. In order to obtain such a feeling, the participants in this study emphasised the increased awareness of communication and professional roles the use of the ISBAR tool had given them.

Increased awareness of communication

The importance of using the same content and language when using the ISBAR tool was emphasised by all participants. To have an agreed common technique to communicate was described as useful:

"As a common technique for everyone, so that everyone knows which language we should speak, I think it is good." (Participant 5 in team 1, nurse).

The participants experienced that the ISBAR tool led to increased awareness of structuring communication. It also made several of the participants think through what was important to report before doing it:

"I think the positive thing about it is that we are more specific, and you think a little more about what to say…." (Participant 4 in team 1, nurse).

It was pointed out that if all knew the content and structure in the ISBAR tool, unnecessary interruptions such as follow-up questions in reporting contexts could be avoided:

"The report gets much more effective (…) There are no wastes of time. I notice the difference here. Definitely." (Participant 4 in team 2, anaesthesiologist).

The ISBAR tool also seems to support the process of clinical assessment and reasoning. Several of the participants who were nurses reported that the ISBAR tool helped them to find the answers themselves, resulting in a decreased need to call the physicians for assistance:

"Very often we use the ISBAR tool to discuss: should we call the physician? That we have talked together and gone through a little ourselves is helpful." (Participant 1 in team 1, nurse).

Several of the participants said that the ISBAR tool had made them more aware of how important it is to ask for advice, get clear feedback, and confirm messages and interventions with a closed loop:

"I have become more aware of how to end a conversation. That you are sure that you have understood what you have heard with a closed loop." (Participant 3 in team 2, nurse).

They reported that use of the ISBAR tool was necessary to reduce mistakes in patient treatment due to misunderstandings or unclear communication.

Increased awareness of professional roles

The importance of using the same content and language when using the ISBAR tool made interprofessional collaboration better, according to several of the participants. All members in the interprofessional team became more equivalent and included, and it was more appreciated that everyone had an important role. The importance of thinking aloud together in the team to get a common understanding of how to best manage a situation was emphasised by the participants:

"We know what the other person is thinking, he knows what I am thinking, we have synchronised. We think alike and work towards the same goal." (Participant 3 in team 3, nurse).

The participants felt that teamwork had improved between nurses, between nurses and physicians, between physicians, and between themselves and personnel on different wards (e.g. radiology department) after using the ISBAR tool. According to several participants, using the ISBAR tool had improved their understanding of the role of other professionals:

"I got my eyes open for how the physicians work. (…) I have not understood that he prepares mentally on the way to the intensive unit: Is there a patient who is bleeding? What am I doing? It is important to report accurately when calling the physician. Don't just call and say: 'please come, it is an acutely ill patient here'." (Participant 5 in team 2, nurse).

Some of the participants who were nurses also felt that they received more respect from other healthcare professionals when they used the ISBAR tool. More respect and understanding for the work of the different team members also led to an increased focus on clarity of roles and responsibilities in the team. Several of the participants emphasised the necessity that the person who had the best knowledge about the patient called the physician to give the most accurate information. Most of the participants felt that the patient's problem was communicated more swiftly when using the ISBAR tool. One participant reported:

"When I gave the report earlier, I said all the background data about the patient first (…) It is okay to structure it a little differently and get to the problem a little faster. I have learned that." (Participant 5 in team 2, nurse).

The participants also identified that the patient problem was communicated more clearly and more specifically when they used the ISBAR tool. Several of the participants who were nurses also reported that they used more expert knowledge:

The ISBAR tool gives greater awareness of how to communicate in a professional way as well, to use expert knowledge in the right places. (Participant 1 in team 1, nurse).

They got the impression that this made the physicians listen more and that they were more available. One participant, who was a physician, confirmed this and highly appreciated that the ISBAR tool had resulted in more prepared phone calls from the nurses. Some of the participants also experienced that the use of the ISBAR tool helped them not to forget important information.

Several of the participants who were nurses agreed that the ISBAR tool had made it easier for them to propose their solutions for patient treatment. They also highly valued the importance of planning further patient treatment together with the physicians:

"There has been much more focus on asking 'what do we do next? What should I do if it does not work?' These questions have been very useful to me." (Participant 5 in team 3, nurse).

Making an agreed plan together clarified the roles and responsibilities in the team. It created clearer expectations that agreements were followed up:

"I think I have become better at using Recommendation, especially in communication with people that are a little more peripheral from the patient. To make them more committed to follow up and make an agreement such as: Now I take the blood samples and then you come here in an hour to control them." (Participant 2 in team 1, nurse).

Usability

Another theme was how the participants experienced the usability of the ISBAR tool in clinical practice. Situations where they had found it appropriate to use, the importance of tailoring it to each situation, and that some physicians were not interested in using it were identified as subthemes.

Situations where it was appropriate to use the ISBAR tool

Several of the participants had positive experiences with using the

ISBAR tool in managing acute patient deterioration (trauma patients). This was mentioned as particularly useful outside the hospital, in the emergency department, and during surgery. The participants also reported that the ISBAR tool was useful in oral and written documentation and particularly effective during patient transfer:

"I strongly believe in using the ISBAR tool between the intensive care unit and general wards to get a complete report of the whole situation: What has happened in the intensive care unit, and what is the plan further regarded to medication, mobilization, and all that?" (Participant 2 in team 2, nurse).

Finally, some participants mentioned that they found ISBAR especially useful when they supervised new employees or students:

"If I provide guidance to a student or a new colleague (…) I go through some of these points, and it can be a good tool to ask questions." (Participant 2 in team 1, nurse).

Tailored use of the ISBAR tool to each situation

All the participants found the ISBAR tool effective in different situations. However, they found that the sequential order must be tailored to each situation. They pointed out that if they focused too much on the sequential order in the ISBAR tool, it could slow them down:

"Do not use the order if it takes too much time (…). Then we might skip a few points, but still something in the ISBAR tool works." (Participant 1 in team 1, nurse).

They also emphasised the need for a professional to tailor the use to fit the unique situation:

"I think the ISBAR tool and other procedures and algorithms are the basis, they are what you train on the football field, all the techniques, but in a match, you have to actually be able to tailor them to reality, that is when you win." (Participant 3 in team 1, anaesthesiologist).

Some of the participants who were nurses felt more comfortable with using IBSAR instead of ISBAR. However, one participant concluded like this:

"The most important thing is that we get all the points, and not in which order we give the data." (Participant 3 in team 1, anaesthesiologist).

Some physicians were not interested in using the ISBAR tool

Both nurses and physicians experienced that some physicians did not find the ISBAR tool appropriate for them. Some of the participants who were nurses reported that one of the physicians perceived summary as criticism or as being degraded, even if it was meant to ensure common understanding. One of the participants felt that for the ISBAR tool to be effective, there could not be a strict hierarchy. Some of the participants who were nurses found that certain physicians did not allow a dialogue in which they could convey their assessments. Sometimes they felt as though they were invisible to the physicians:

"I have experienced being with a patient and physicians came into the room. They did not see me, they just walked straight to the monitor showing the patients vital signs and talked together. They did not see the patient either." (Participant 1 in team 2, nurse).

Further, several of the participants suggested that a change in the clinical environment was needed for the ISBAR tool to become more acceptable to use, especially among older physicians.

Recommendations for further use

The participants emphasised the need for increased focus on training and the importance of supporting each other.

Need for increased focus on training

The participants suggested several interventions to increase the use of the ISBAR tool. They emphasised the importance of having written information about it easily available and attending resource lectures to learn more about it. Several of the participants also suggested participating in simulation exercises at their workplace to increase use:

"I think that everyone should attend this simulation exercise (…) It was in the first simulation exercise here that I realised that the ISBAR tool was quite effective." (Participant 1 in team 3, nurse).

The use of simulation exercises was also identified as effective for continuing training on the use of the ISBAR tool. Several of the participants wanted a greater focus on using it among their colleagues. They had not talked together about using the ISBAR tool as much as they wanted. However, some of the participants reported that they had used it without thinking about using it:

"I have been worrying all along that we have not used the ISBAR tool enough, but today when attending the simulation exercise, I realised that we have actually used it all the time." (Participant 4 in team 1, nurse).

Important to support each other

Several of the participants agreed that giving positive feedback to each other regarding their use of the ISBAR tool may result in increased use. One participant reported:

"I think it is important to give positive feedback when you notice that colleagues are using the ISBAR tool. Or say: 'So great that you asked for feedback' or 'It was nice that you repeated what I said to ensure that you understood what I meant'." (Participant 3 in team 2, nurse).

They agreed that if they talked more aloud about the use of the ISBAR tool, the use of it among their colleagues would probably increase.

Discussion

The objective of this study was to explore how critical care nurses and anaesthesiologists experience using the ISBAR tool in clinical practice after an intervention. Our findings revealed that the ISBAR tool had several advantages and contributed to more specific and effective communication between nurses and physicians. Further, the findings indicate that the use of the ISBAR tool improves quality and patient safety, these findings are in line with the results of several other studies (Chiew et al., 2019; Hou et al., 2019; Leonardsen et al., 2019). Hou et al. (2019) identified that electronic handoff systems with ISBAR design can ensure effective information transmission among nurses for care continuity and prevention of adverse events. Further, Chiew et al. (2019) found that the use of the ISBAR tool was proven to prevent communication errors and improve staff satisfaction and patient safety. In addition, Leonardsen et al. (2019) identified that health care personnel found it easier to establish contact at the beginning of the handover, ambiguities were resolved, and documentation became more complete after implementation of the ISBAR tool in the operating room and the postoperative anaesthesia care unit. Furthermore, other studies have identified that the communication flow and interaction in the treatment team improved, and that participants' felt more confident in their role after using the ISBAR tool (De Meester et al., 2013; Foronda et al., 2014; Gausvik et al., 2015).

Several of the nurses in the present study emphasised that the ISBAR tool had made it easier for them to propose their solutions for patient treatment. Cornell et al. (2013) found that using the ISBAR tool helped nurses to be more focused and spend less time during handovers. Pakcheshm et al. (2020) found a significant increase in the two domains of Assessment and Recommendations when evaluating the impact of using the ISBAR tool in the clinical handoff between nurses. The findings

identified a nearly 40% increase in system assessment, indicating that nurses did not fully understand the importance and necessity of this domain before being familiar with the ISBAR tool (Pakcheshm et al., 2020). This is also in line with the results of the study by Beigmoradi et al. (2019), which showed that nurses paid the least attention to system assessment during a clinical handoff in general wards.

Some of the nurses in the present study reported that they received more respect from the physicians when they used the ISBAR tool. They highly valued the importance of planning further patient treatment together with the physicians. However, some participants found that certain physicians did not allow a dialogue in which they could convey their assessments. Effective communication implies that the exchange of information among healthcare professionals brings opportunities for asking questions and assigning responsibility (Smith, 2014). A systematic literature review shows that different modes of communication, offensive behaviour, and team culture are barriers to effective nurse-–physician communication (Tan et al., 2017). The importance of leadership and team culture on the quality implementation of structured communication has been identified as vital (Kitney et al., 2016; Tobiano et al., 2017). For the participants in team one, the four-month period using the ISBAR tool in clinical practice was during the summer vacation. The absence of their leader at the ICU may have influenced our results, as leadership styles may influence communication results. Kanerva et al. (2017) found that the ISBAR tool was used more systematically in units where it was used regularly by the leader.

The participants in this study suggested organising simulation exercises at the workplace to increase the use of the ISBAR tool. Insufficient staff education has been identified as a barrier to effective clinical handover (Tobiano et al., 2017) and studies have shown that staff education in teamwork and communication can contribute to an enhanced patient safety culture within organisations (Cant et al., 2020; Weaver et al., 2013). A meta-analysis showed that simulation exercises had a significant impact compared to other learning strategies to improve healthcare quality (Hegland et al., 2017). Organising interprofessional simulation exercises, such as those conducted in this study, provides participants with useful verbal feedback from the other members in the simulation groups. Multidisciplinary feedback can help to provide an increased understanding of the knowledge, roles and skills of other healthcare professionals and provide an increased understanding of how this relates to their health discipline (Burgess et al., 2020).

The participants in this study found the use of the ISBAR tool beneficial in their professional practice. However, the use of the ISBAR tool alone does not maintain quality of care or ensure patient safety. In addition to the ISBAR tool, a commitment to the duty of care and to using one's full body of professional competence when assessing patients is essential to maintaining patient safety.

Strengths and limitations

There were some limitations to this study. First, the data is five years old. Second, the group dynamics and varying opinions can silence participants in focus groups (Spooner et al., 2018) and third, the participants did not have access to the transcripts to check for accuracy. There was only one anaesthesiologist in each focus group, whereas the rest of the participants were nurses. It may be a limitation that the anaesthesiologists were underrepresented in the sample, however being only one anaesthesiologist working together with nurses often represent the interprofessional team around patients in ICUs. The findings are supported by quotes from all the focus groups and from both anaesthesiologists and nurses, where different voices are heard. There were also numerous congruent findings in the data collection, which may be an indication of saturation. Saturation refers to the point during data analysis at which incoming data produce little or no new useful information related to the study objectives (Guest et al., 2020). Determining the point of saturation is a difficult endeavor, and the authors acknowledge that the time for ending the data collection was based on

the authors judgement and previous experience with similar research. All the authors are female academics. Three are critical care nurses, and four have experience using the ISBAR tool in simulation exercises. All the authors have expertise in qualitative analysis. Some of the participants knew the interviewers before the data collection because they had been in a student–teacher relationship, or collaborated with the interviewers on critical care student guidance in clinical practice. This may have influenced their answers. However, the interviewers endeavoured to counteract this possible influence by explicitly encouraging participants to share their negative as well as their positive experiences with the ISBAR tool in clinical practice.

All focus groups were conducted at the end of the last day of the intervention. As the focus groups focused on the participants' experiences of using the ISBAR tool in clinical practice, it may have been better to conduct the interviews before the participants attended other activities the same day. However, the researchers specified that the topic in the focus groups was to explore experiences with using the ISBAR tool in clinical practice. It was a strength that the same interview guide was used for all participants and that the same academics conducted all the focus groups. It was also a strength that all the participants attended the whole intervention.

Conclusions

This study has identified that the use of the ISBAR tool can provide nurses and anaesthesiologists with a sense of predictability and security. This was identified through increased awareness of communication and professional roles. The study participants perceived that interprofessional teamwork improved when the ISBAR tool was used. Further, several situations in clinical practice where it was appropriate to use the ISBAR tool were identified. The importance of tailoring the ISBAR tool to each situation and that some physicians were not interested in using it were elaborated. Finally, recommendations for further use of the ISBAR tool were identified. The findings highlight the importance and need in clinical practice for use of the ISBAR tool to improve patient safety. Continuous effective training and practice in the use of the ISBAR tool are essential to ensure that all healthcare personnel are competent in using it.

Ethical Statement

Participation in the study required oral and written information and signed informed consent. Approval by the Norwegian Centre for Research Data, project number 45068, was received before data collection. The principles of the Helsinki Declaration (World Medical Association, 2013) were followed.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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