ABSTRACT
Objective: to develop and validate a script to plan and execute the oral debriefing guided by a single facilitator in the clinical simulation of Basic Life Support. Method: methodological study, conducted at a public university in the state of São Paulo, Brazil, between July and November 2020. We proceeded to synthesize the evidence of the script through review and its validation with 16 judges, adopting the Content Validity Index. Results: 284 studies were identified and five were selected. The contents are definition and objective of the debriefing; characteristics of the instructor; target audience; learning objectives; debriefing method; material resources; procedure; time; and references. The script reached a Content Validity Index of 0.95. Conclusion: the script was considered valid and capable of contributing to research, assistance and teaching in nursing, for conducting the planning and execution of debriefing in Basic Life Support and being adaptable to other health realities.

DESCRIPTORS: Simulation Technique; Simulation Training; Cardiopulmonary Resuscitation; Education, Nursing; Validation Study.

HOW TO REFERENCE THIS ARTICLE:
INTRODUCTION

In the training of nursing students, priority is given to teaching and learning strategies capable of developing clinical skills, and the adoption of simulation is recommended, since it is a pedagogical resource that imitates clinical situations with realism\(^1\).

Clinical simulation is composed of three stages: preparation, divided into pre-simulation, a period of instrumentation of the participant with knowledge, and the pre-briefing/briefing, a moment in which guidance on the criteria involved in the simulation scenario is offered\(^2\). Next, the participation stage is performed, characterized by the execution of the proposed scenario, and then the debriefing, a group discussion/reflection process about the experience, capable of consolidating the learning\(^2\,\,2\).

The debriefing stage has been adopted to enhance learning in nursing and articulate the simulated experience with reality, supporting more assertive decision making and the quality of clinical practice, for example, in cardiopulmonary resuscitation, through Basic Life Support (BLS) in adults\(^3\).

There is a diversity of debriefing techniques capable of enabling BLS learning; however, regardless of the strategy, it is recommended that a structured debriefing be used, which can be conducted “without judgment”, when the errors committed by the participants are not pointed out, only the positive points; “with judgment”, characterized by the direct pointing out of errors; or with “good judgment”, a constructive analysis of the events that occurred, which does not embarrass the participant and values his/her actions\(^4\).

In this context, a technique commonly adopted in clinical simulation of any theme is called oral debriefing with a facilitator\(^5\). It is characterized by the verbal conduction of the discussion by an expert, and, although it is considered traditional, a script that supports its planning and execution is not yet identified in the literature\(^5\), especially regarding the simulated BLS theme.

Obtaining a script for oral debriefing with a facilitator is configured as a pedagogical mechanism capable of supporting a consistent and excellent reflective process about the simulated experience, and consequently, provoking the improvement of the participant’s clinical judgment about his/her weaknesses and potentialities, which enables the achievement of educational objectives\(^1,\,4-5\). Moreover, because it is frequently adopted by facilitators in a simulation, this technique has been demanding an execution standard that avoids gaps during reflection and underlies its planning, conditions supported by the adoption of a script for this purpose\(^4\).

Therefore, performing oral debriefing with a facilitator without using a validated script may negatively affect the learning outcomes of nursing students, the achievement of educational objectives, the articulation of theory and practice, assertive decision making, and patient safety\(^5\). This study aimed to develop and validate a script to plan and execute the oral debriefing guided by a single facilitator in the clinical simulation of Basic Life Support.

METHOD

Methodological study, conducted at a public university in the interior of the state of São Paulo, from July to November 2020, based on a referential\(^6\) that covers: (1) theoretical procedure - identification of the contents that make up the script; (2) empirical procedure - content validation; (3) analytical procedure of the results.
In the theoretical procedure, an integrative review was carried out by identifying the theme and guiding question; search and selection of studies; categorization; analysis and presentation of the review\(^7\), based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) recommendation\(^8\).

The research question was structured in the mnemonic combination Population; Concept; Context - PCC\(^9\). The P (population) was nursing students; the C (concept) was oral debriefing with a facilitator, and the C (context) was nursing education focused on simulated Basic Life Support, setting up the question: what is the available evidence in the literature about the necessary contents to compose an oral debriefing script that supports nursing students’ learning through clinical simulation of Basic Life Support?

The search for manuscripts took place on September 16, 2020, in PubMed\(^\)®, Latin American and Caribbean Literature on Health Sciences (LILACS), Scopus, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Web of Science, and Educational Resources Information Center (ERIC). The information sources, descriptors and respective search strategies are described in Chart 1.

We included primary studies that addressed the contents for the oral debriefing script, without delimiting time or language, published in scientific journals. Literature reviews, case studies, dissertations, theses, monographs, and abstracts published in proceedings were excluded.
There were three stages of selection. In the first phase, two nurses, experts in clinical simulation, debriefing and cardiopulmonary resuscitation, independently assessed the articles by titles and abstracts, using the Rayyan Qatar Computing Research Institute (Rayyan QCRI) software\(^\text{10}\). In the second phase, seven divergent studies were sent to a third expert, who was responsible for making the inclusion or exclusion decision. In the third phase, the full texts were evaluated to define the sample.

Evidence was extracted using a validated instrument\(^\text{11}\) that considered: authors, year of publication, country of origin, type of study/number of participants, interventions, outcomes, and level of evidence classification\(^\text{12}\).

The findings were analyzed using Thematic Analysis\(^\text{13}\), which comprised: pre-analysis, configured by floating reading of the evidence and organization of convergent information, exploration of the material, with grouping of the registration units, and data treatment.

After the review, we proceeded to the empirical procedure stage, with the content validation of the script. Through the Lattes Platform, the judges were sought, establishing the commands: “simulation in nursing”; “doctors” and “Health Sciences and nursing”.

The curricula were analyzed considering four points for a doctoral degree with a thesis in the area; three points for a doctoral degree; three points for a master’s degree with a dissertation in the area; two points for a master’s degree; two points for publication of an article in a reference journal in the area; and two points for professional experience of at least two years in the area. A value of five points was established for the selection of judges\(^\text{14}\).

The curricula of 29 nurse professionals, PhDs and experts in the themes involved, were identified. Of these, 16 agreed to participate in the study. A data collection instrument was sent, built using the Google Forms tool, with a 30-day deadline for response, consisting of two parts: (1) characterization of the judges and (2) analysis of the script items: a Likert-type scale (strongly agree: four points; agree: three points; don’t know: zero point; disagree: two points; and strongly disagree: one point), followed by the evaluation of 12 criteria: behavior; objectivity; simplicity; clarity; relevance; precision; variety; modality; typicality; credibility; breadth; and balance\(^\text{6}\). This instrument presented an open space for comments and suggestions from the experts.

In the analytical procedures stage, the findings were organized in Microsoft Excel 2010 spreadsheets. Descriptive statistics, frequency, percentage, and mean were used. The measures used to evaluate inter-rater agreement were the Content Validity Index (CVI) per item and the overall CVI of the instrument\(^\text{15}\).

A Likert-type scale with scores from one to four was employed to assess the representativeness of the judges’ responses: (1) not representative (strongly disagree), (2) item needs major revision to be representative (disagree), (3) item needs minor revision to be representative (agree), and (4) item representative (strongly agree). The answer “don’t know” was considered as zero value.

The CVI was evaluated per item, using the formula: number of answers 3 or 4/total number of answers obtained. The items that received a score of 1 or 2 were reviewed. Then, the instrument’s overall CVI was calculated by adding each index value and dividing the result by the number of items that made up the script. The overall CVI was interpreted adopting the following classification: result <0.00 for poor agreement; from 0.00 to 0.20, mild agreement; from 0.21 to 0.40, acceptable agreement; from 0.41 to 0.60, moderate agreement; from 0.61 to 0.80, considerable agreement; and from 0.81 to 1.00, almost perfect agreement. A general CVI of 0.80 was established to consider the script valid\(^\text{16}\).

The Delphi technique\(^\text{17}\) was adopted, reaching in the first round an agreement higher than 80%. Even so, a second round was carried out to provide the necessary feedback to the judges. The research is numbered 3.826.306, dated February 6\(^\text{th}\), 2020.
RESULTS

The studies included in the sample were selected, as shown in Figure 1.

![Flowchart of the process of identification, selection and inclusion of studies based on the PRISMA recommendation](image)

Figure 1 - Flowchart of the process of identification, selection and inclusion of studies based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) recommendation. Ribeirão Preto, SP, Brazil, 2020
Source: Authors (2020)

Five studies were considered eligible for the sample, detailed in Chart 2.
The publications date from 2015\(^{22}\), most from 2018\(^{18,20-21}\). All studies are quasi-experimental type, conducted in South Korea, and set out to compare oral debriefing with other techniques, verifying its effectiveness for learning in nursing.

The following contents were identified: (1) instructor characteristics - the technique requires an instructor in a face-to-face manner, with expertise to carry out the discussion, who accompanies the execution of the scenario; (2) discussion format - it is suggested to adopt a model of relationship management between instructor and students; (3) procedure to carry out the oral debriefing: follow the method called Structured and Supported Debriefing - formed by the steps Gather, Analysis, Summarize or G.A.S debriefing, indicated for learning cardiopulmonary resuscitation.

About time (4), the oral debriefing should be long enough to reach the stipulated objectives for learning BLS, and not only consider it to be twice as long as the time spent on the scene\(^{18-22}\).

In the content validation, 16 (100%) nurses participated, experts in clinical simulation,
most of them female (68.8%), with a mean age of 39 years and a mean professional experience of 17 years. The majority, represented by 14 judges (87.5%), were PhDs and teachers in Higher Education; 15 judges (93.8%) had training in simulation, published articles on the subject, and participated in simulation events.

All 16 judges (100.0%) developed clinical simulations. The inter-rater agreement considered the items that made up the script and the 12 criteria for content validation, as presented in Table 1.

Table 1 - Judges’ evaluation regarding the components/contents of the oral debriefing script guided by a single instructor. Ribeirão Preto, SP, Brazil, 2020

<table>
<thead>
<tr>
<th>Criteria that made up the script</th>
<th>Relevance/representativeness of the answer</th>
<th>CVI Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 (Don’t know)</td>
<td>1 (Strongly disagree)</td>
</tr>
<tr>
<td></td>
<td>n(%)</td>
<td>n(%)</td>
</tr>
<tr>
<td>Title of the screenplay</td>
<td>2(12,5)</td>
<td>3(18,7)</td>
</tr>
<tr>
<td>Definition</td>
<td>3(18,7)</td>
<td>4(25)</td>
</tr>
<tr>
<td>Objective</td>
<td>2(12,5)</td>
<td>5(31,2)</td>
</tr>
<tr>
<td>Debriefing method</td>
<td>3(18,7)</td>
<td>13(81,25)</td>
</tr>
<tr>
<td>Material Resources</td>
<td>6(37,5)</td>
<td>10(62,5)</td>
</tr>
<tr>
<td>Procedure</td>
<td>5(31,2)</td>
<td>11(68,7)</td>
</tr>
<tr>
<td>Time</td>
<td>4(25)</td>
<td>4(25)</td>
</tr>
<tr>
<td>References</td>
<td>1(6,25)</td>
<td>3(18,7)</td>
</tr>
</tbody>
</table>

Content evaluation

| The script is applicable and clear | 3(18,7) | 13(81,25) | 16(1,00) | 1 |
| Reaches the objective             | 3(18,7) | 13(81,25) | 16(1,00) | 1 |
| Expresses a single idea            | 3(18,7) | 13(81,25) | 16(1,00) | 1 |
| Content is clear                  | 4(25) | 12(75) | 16(1,00) | 1 |
| The script is relevant             | 6(37,5) | 10(62,5) | 16(1,00) | 1 |
| Each item is distinct              | 3(18,7) | 13(81,25) | 16(1,00) | 1 |
| Language is appropriate            | 1(6,25) | 3(18,7) | 12(75) | 15(93,75) | 0,93 |
| Vocabulary is appropriate          | 4(25) | 12(75) | 16(1,00) | 1 |
| Matching vocabulary                | 5(31,2) | 11(68,7) | 16(1,00) | 1 |
| Content is understood              | 4(25) | 12(75) | 16(1,00) | 1 |
| Content is current                 | 5(31,2) | 11(68,7) | 16(1,00) | 1 |
| Sequence is balanced               | 4(25) | 12(75) | 1 |

CVI* total 0,95

CVI*: Content Validity Index per item; total CVI†: Total Content Validity Index of the script.

Source: Authors (2020)
All items of the script were rated as “almost perfect agreement” (0.81 to 1.00), except the time item, which was rated as “considerable agreement” (0.75). On the other hand, the content evaluation criteria were all rated as “almost perfect agreement” - most of them with 1.00 agreement. The overall CVI of the script showed a value of 0.95 (almost perfect agreement).

The final version of the script was based on the articulation of the contents identified in the review and the criteria suggested by the judges, consisting of eight items: (1) definition of oral debriefing, (2) objective of the debriefing and instructor characteristics - a verbal discussion, guided by a single facilitator, face-to-face, aiming to develop clinical skills; (3) target audience - aimed at professional nurses and nursing students, adaptable to other health professionals; (4) learning objectives for BLS, based on Bloom’s taxonomy and the American Heart Association (AHA) guidelines for BLS; (5) debriefing method selected - Structured and Supported Debriefing - G. A. S. debriefing; (6) material resources to enable the debriefing; (7) procedure - step by step to plan and execute the debriefing, arranged in the three stages that compose the G.A.S debriefing; (8) time and references. The script was entitled: Script for oral debriefing oriented by a single facilitator in Basic Life Support.

DISCUSSION

This study is unprecedented in nursing, as it presents a script for debriefing in clinical simulation of a fundamental theme for the survival of cardiac arrest victims, the BLS, and although it is directed to cardiopulmonary resuscitation, it can be adapted to other themes in nursing and other professional realities. Clinical simulation facilitators can use this script to plan and conduct the debriefing, in line with the best educational practices in healthcare.

As for the implications for research and practice, the items that make up the script guarantee the planning and execution of the technique, based on a qualitative analysis of the results. By appropriating this construct, it is recommended that the facilitator directs his or her practice, following each item for the success of oral debriefing.

Although the sample of studies proved to be incipient and indicates that, even if commonly used, oral debriefing with an instructor needs to be explored, the quasi-experimental study type, with a good level of evidence can support the reliability of the findings.

It was identified that oral debriefing requires the presence of a properly trained facilitator. This is corroborated by a study conducted at a university in South Korea in 2016, with 65 undergraduate nursing students, which compared oral debriefing with a facilitator and that performed by pairs of students, for BLS learning, revealing that the oral debriefing conducted was more effective, since the instructor had experience around simulation.

In the present study, a face-to-face discussion format based on a relationship management model was suggested. A literature review indicated the need to adopt a relationship management model during debriefing, characterized by criteria of good coexistence between instructor and participants of a simulation, improving the face-to-face relationship, a condition capable of improving learning outcomes.

The oral debriefing procedure was considered in the development of the proposed script. The studies that comprised the sample of the present review indicated the G.A.S debriefing method as the main route to base the debriefing aimed at learning BLS in adults.

The G.A.S debriefing, developed by the Winter Institute for Simulation Education and Research, at the University of Pittsburgh in partnership with the AHA, comprises...
three stages: gather (G), characterized by the gathering of information and reassurance of the participants’ feelings; analyze (A), which consists of the articulation of the experience with the theoretical framework for cardiopulmonary resuscitation, and summarize (S), which corresponds to the synthesis of information and reflections for future practice(18-22).

Research conducted with 63 nursing students in South Korea compared oral debriefing with an instructor with self-debriefing, in which the student conducts the reflection without support from a facilitator, using the G.A.S debriefing as a benchmark for the student to conduct their own reflection. The adoption of this benchmark made this practice possible and organized, both for a self-debriefing and for the instructor-led debriefing(18).

The time criterion was considered an important content, since it is possible to identify in the literature reflections that go beyond the premise that the debriefing should last twice if the scenario, suggesting that it last until the learning objectives are met(1,3-5,21).

Content validation was performed, a critically important step due to the need for the construct to be based on reliable evidence, highlighting its remaining weaknesses and potential solutions(27). In 2019, a study aimed at the construction and validation of a questionnaire to assess knowledge on BLS resulted in a 20-question tool, which is like the result obtained in the present research, due to the “almost perfect” agreement identified in the judges’ evaluation(28).

Despite being considered a subjective type of assessment, content validation makes it possible to recognize whether the context presented in instruments is adequate, coherent, and meets the learning objectives(29).

In the process of validating nursing scripts, following well-defined criteria (6) characterizes more accurately if the desired construct has utility/relevance, consistency, clarity, objectivity, simplicity, feasibility, timeliness, and accuracy, which helps to certify that the instrument is adequate and legitimate for applicability in practice(30).

The total CVI of the script, of “almost perfect agreement”, may evidence its scientific recognition, since the judges’ suggestions allowed the instrument to become close to the intended objectives and to provide benefits to the student, being characterized as a fundamental step, without which there is the risk of producing material without effective educational objectives(30).

The main limitation was the scarce number of manuscripts describing the contents pertinent to the proposed debriefing and validation of instruments for this purpose in the context of BLS, which makes comparison with other realities difficult, but does not compromise the quality of the presentation of evidence.

CONCLUSION

A script was developed to plan and execute oral debriefing with an instructor, for the teaching and learning process of Basic Life Support in adults, structured by eight components: definition, purpose of the debriefing, and characteristics of the instructor; target audience; learning objectives for Basic Life Support; debriefing method; material resources; procedure; time; and references.

An overall Content Validity Index of 0.95 was obtained for the script, considered a “near perfect agreement” and valid to support a single instructor-led oral debriefing about Basic Life Support.

This study contributes to research, assistance, and teaching in nursing, by presenting a valid script that standardizes and gives quality to the technique of oral debriefing with a
facilitator and configures a guide capable of enhancing the development of clinical skills for cardiopulmonary resuscitation, besides allowing its adaptation for teaching and learning in other health themes or realities.

REFERENCES


