



CS MEN – Simulation Publications Update

August 2020

Bulletin on Faculty Development

Welcome

Welcome to the Simulation Publications Update a service brought to you by CSMEN in partnership with NES Knowledge Services.

The focus for this Simulation bulletin is on FACULTY DEVELOPMENT. These articles may be of interest or relevance to your current role in NHS Scotland. The articles may also be of use in your research. These articles are from those journals we currently subscribe to. If there are any articles or journals that you would like us to add/consider please let us know.

Until now we have tried to provide approximately 30 links to articles on all aspects of simulation. We are now moving to shorter bulletins focusing on different aspects of simulation.

FACULTY DEVELOPMENT in simulation is key to providing high standards of safe learning experiences for participants which they can then transfer to the workplace.

If you would like to suggest a focus topic or become a reviewer, please also let me know. Jean.ker@nes.scot.nhs.uk

The plan is to widen this service to focus on topic areas and to monitor its use and effectiveness so feedback would be much appreciated.

This bulletin has been developed by Jean Ker clinical lead CSMEN in partnership with Alan Gillies from NES Knowledge Services.

Access to journals

Different journals have different processes for login so please follow the instructions for accessing the full text of the articles through the links provided.

On your behalf NES Knowledge Services subscribes to some journals direct and others via aggregators (i.e. journal collections or full text databases). We use something called a 'link resolver' to link you via the best route using your NHS Scotland OpenAthens password.

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None of the links should require you to set up a separate login – where there are login boxes for personal accounts, look for an OpenAthens or 'institutional login' option as well, which will accept your OpenAthens password.



Focus: Faculty Development In Simulation based Education

[The utilization of debriefing for simulation in healthcare: A literature review](#), Kim, Y. & Yoo, J., Nurse Education in Practice, Vol 43. 2020.

A focus of the current literature on faculty development in simulation based education is on the debriefing part of the process. This is key to checking the ILOs have been met and to supporting the transformation of the learning to the workplace. This month's CSMEN search has identified a number of articles in the nursing literature.

Kim and Yoos' review of the literature identified 22 studies from 962 articles retrieved in which they analysed the debriefing component based on six criteria identified by the International Nursing Association for Clinical Simulation and Learning (INACLS). The search strategy and study selection process are described and presented.

They used the Mixed Methods Appraisal Tool (MMAT) to appraise the methodological quality of the studies identified. The INACLS criteria identified:

- When the debriefing occurred
- Who undertook it
- How it was undertaken
- Where it occurred based on the location of the facilitator
- How long it took and
- What if any structure was used (eg PEARLS, debriefing with good Judgement , diamond debrief, GAS models).

Peer led debriefing was found to be more effective with more experienced practitioners/learners and virtual or tele debriefing was also effective which in a post pandemic world may become increasingly utilised.

Most reassuring was the consistency of high standards of debriefing undertaken in the studies.

Professor Jean Ker

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[A statewide curriculum model for teaching simulation education leaders.](#) Beroz S., et al, Nurse Educator, Vol 45, 1, 56-60. 2020.

The Maryland Clinical Simulation Resource Consortium (MCSRC) was funded to increase the quality and quantity of simulation used in nursing education. MCSRC developed a statewide curriculum model for a 3-day train-the-trainer program framed in theory and grounded in evidence. The program teaches nurse educators across 3 levels: novice, competent, and expert. The evaluation plan was developed using Kirkpatrick's 4 levels to measure outcomes of the program. The curriculum model has proved effective in increasing the quality and quantity of simulation used in educating Maryland's nurses.

[Into the black-box of learning in simulation debriefing: A qualitative research study,](#) Frandsen, A. & Lehn-Christiansen, S., Nurse Education Today, Vol 88. 2020.

The paper aims to better understand debriefing by presenting an in-depth, qualitative analysis of the practice of debriefing, carried out with first-year nursing students (n = 40) at a university hospital in Copenhagen, in relation to roleplay simulation, training in clinical decision-making and patient involvement. An important finding is that the curricular overload leads to a prioritization of learning outcome related to natural science at the expense of "softer" competencies, e.g. patient involvement. The analysis also finds that students' motivation to process their real-life clinical experiences tends to be neglected. The conclusion thus points to a profound dilemma, unidentified in the literature, of learning ambitions in debriefing: the tension between attaining the formal learning objective and thus facilitating a tightly structured and focused debriefing on the one side, and the wish to develop critical and independent thinking on the other.

[Development of an instructor guide tool: 'three stages of holistic debriefing'.](#) Goes, Fernanda Dos Santos Nogueira de & Jackman, D., Revista Latino-Americana De Enfermagem, e3229. 2020.

This paper describes the development of an English and Brazilian Portuguese Holistic Debriefing Tool focused on nursing educator to promote a reflective learning. A panel of nursing experts analysed the quality of the tool.

[Effects of peer-led debriefing using simulation with case-based learning: Written vs. observed debriefing,](#) Ha, E., Nurse Education Today, Vol 84, N.PAG-N.PAG. 2020.

Peer-led written debriefing (PLWD) and peer-led observed debriefing (PLOD) are types of peer-led debriefing. Despite their advantages, these methods are sparingly used among debriefing experts. The study aimed to identify effects of peer-led debriefing (written versus observed) using simulation with case-based learning (CBL) and compare levels of satisfaction with CBL, debriefing, and simulation-based learning (SBL) between the two groups. It was carried out at a Department of Nursing in South Korea and involved sixty-nine third-year undergraduate nursing students. The study suggests that both the PLWD and PLOD could be used to achieve students' learning outcomes when debriefing experts are unavailable.

[The utilization of debriefing for simulation in healthcare: A literature review,](#) Kim, Y. & Yoo, J., Nurse Education in Practice, Vol 43. 2020.

The aim of this review was to examine how debriefings have been conducted in healthcare simulations. A total of 22 studies were reviewed. The authors found that peer-led debriefing might be more appropriate for experienced healthcare professionals than unlicensed students due to a gap in knowledge and problem-solving skills between them. In addition, tele-debriefing was feasible in some studies. Key findings were identified as: there is no absolute way to do the best debriefing; self-led and peer-led debriefings can be effective when learners have enough ability to reflect and criticize by themselves; learners can have rich and informative simulation



learning when various methods were used for debriefing; structured debriefing allows learners to reflect on their performance in a psychologically safe environment.

Debriefing model for psychological safety in nursing simulations: A qualitative study. Ko, E. & Choi, Y., International Journal of Environmental Research & Public Health [Electronic Resource], 2020. *This study was conducted to explore nursing students' emotional experiences during simulations, and to develop a debriefing model for psychological safety. Data were collected through interviews with 23 undergraduate nursing students in South Korea. On the basis of the qualitative findings, the researchers developed the Share-Explore-Notice-Support-Extend (SENSE) debriefing model, which includes stress management and emotional support, as a strategy for effective simulation practices to reduce the negative experiences of stress in nursing students in simulation-based learning.*

Debriefing methods and learning outcomes in simulation nursing education: A systematic review and meta-analysis, Lee, J., et al, Nurse Education Today, Vol 87. 2020. *In this systematic review and meta-analysis, the focus was on debriefing methods and learning outcomes in simulation in nurse education. A total of 18 studies were selected and 7 studies were included in the meta-analysis using four types of scales measuring learning outcomes after debriefing. The overall effect size of the learning outcomes, according to the type of debriefing method, was 0.31. The results regarding debriefing methods were statistically non-significant in the learning outcomes. The study findings indicated that structured debriefing helped to improve learning. Future studies are needed to provide effective debriefing strategies with larger sample sizes.*

Simulation fellowships: Survey of current summative assessment practices. Meguerdichian M., et al, Simulation in Healthcare : Journal of the Society for Simulation in Healthcare, Vol 14, 5, 300-306. 2019.

Please note when you get to the abstract you need to click on the link above the abstract - "Institutional members access full text with Ovid®".

The simulation fellowship training community has commenced efforts toward the development of core curricular elements for healthcare simulation fellowships but has not deployed the same effort to create evaluation strategies to monitor fellows' progress. In this study, fellowship directors in North America were surveyed to identify what competencies are being used by the simulation fellowship community to monitor fellows' progress. A follow-up survey was sent to further clarify which tools with published validity evidence were being applied by current programs. The most commonly assessed skill was debriefing and the most common published tool used was the Debriefing Assessment for Simulation in Healthcare, with only a few other tools mentioned. The authors conclude that there is a paucity of tools with published validity evidence being used to monitor a fellow's progression.

Effects of post-scenario debriefing versus stop-and-go debriefing in medical simulation training on skill acquisition and learning experience: A randomized controlled trial. Schober P., et al, BMC Medical Education, Vol 19, 1, 334. 2019.

Traditionally, debriefing is provided only after the end of a scenario. A possible alternative is to debrief specific portions during an ongoing simulation session (stop-and-go debriefing). It is not commonly used due to concerns that interruptions disturb the fidelity and adversely affect learning. This study randomly assigned 50 medical students participating in a simulation-based cardiopulmonary resuscitation training to either a post-scenario debriefing or stop-and-go



debriefing. The study concludes that stop-and-go debriefing does not adversely affect skill acquisition compared to the classic post-scenario debriefing strategy.

[Avoiding 5 common pitfalls of simulation design in medical education.](#) Soffler M.I., et al, Academic Medicine : Journal of the Association of American Medical Colleges, 2020.

Simulation-based medical education is widely used; however, many educators lack formal training in facilitating simulation. This article presents a chart describing common pitfalls in simulation design and strategies to avoid them.

[DebriefLive: A pilot study of a virtual faculty development tool for debriefing.](#) Wong, N.L., et al, Simulation in Healthcare: The Journal of the Society for Medical Simulation, 2020.

Please note when you get to the abstract you need to click on the link above the abstract - "Institutional members access full text with Ovid®".

The Simulation Learning, Education and Research Network (SimLEARN) developed DebriefLive, a virtual teaching environment. In this pilot study, recorded simulation sessions were viewed followed by the opportunity for participant debriefers to debrief virtual learners. Participant debriefers were then provided structured and objective debriefings of the debriefings with the added opportunity for immediate practice. Simulation instructors and fellows across the spectrum of the Veterans Health Administration found the innovative computer-based faculty development program acceptable as well as effective in increasing self-efficacy in debriefing. The authors suggest that DebriefLive is an innovative and potentially disruptive tool, combining best practices in simulation theory and virtual technologies.

[Perceptions of video-facilitated debriefing in simulation education among nursing students:](#)

[Findings from a Q-methodology study.](#) Yeun, E.J., et al, Journal of Professional Nursing, 62-69. 2020.

This study aimed to identify the patterns of nursing students' perceptions of video-facilitated debriefing (VFD) after simulation. A sample of 39 participants, who had simulation and debriefing experience, at a college of nursing in Seoul, Korea was recruited to participate in the study. Three patterns emerged as nursing students' perceptions of VFD in simulation education: positive immersion, reluctant traditionalist, and support seeker. The authors conclude that to conduct a successful debriefing in nursing education, these different perceptions of VFD should be considered by nursing faculty and educators.

[Developing a structured three-phase video-assisted debriefing to enhance prelicensure nursing students' debriefing experiences, reflective abilities, and professional competencies: A proof-of-concept study,](#) Zhang, H., et al, Nurse Education in Practice, Vol 44, N.PAG-N.PAG. 2020.

Video-assisted debriefing (VAD) refers to using video capture and playback to support learning in debriefing. Despite being deemed as the gold standard in simulation, VAD has received little attention to its structure development. This paper aimed to describe the development process of a structured three-phase VAD and report its preliminary effects on nursing students' debriefing experiences, reflective abilities, and professional competencies following a code blue simulation. The three-phase VAD significantly improved nursing students' debriefing experiences, reflective abilities and professional competencies.