



HAL
open science

Identification of barriers and enablers to speaking up among nursing students: A qualitative study of debriefings after simulation sessions

Brivael Hémon, Estelle Michinov, Dominique Guy, Pascale Mancheron,
Antoine Scipion

► To cite this version:

Brivael Hémon, Estelle Michinov, Dominique Guy, Pascale Mancheron, Antoine Scipion. Identification of barriers and enablers to speaking up among nursing students: A qualitative study of debriefings after simulation sessions. International conference for multi-area simulation ICMASim 2019, Oct 2019, Angers, France. pp.245-250, 10.3389/978-2-88963-088-2 . hal-02453397

HAL Id: hal-02453397

<https://hal.science/hal-02453397>

Submitted on 19 Feb 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Identification of barriers and enablers to speaking up among nursing students: A qualitative study of debriefings following simulation sessions

Brivael Hémon^{1*}, Estelle Michinov¹, Dominique Guy², Pascale Mancheron², Antoine Scipion³

¹LP3C (Laboratoire de Psychologie : Cognition, Comportement, Communication) - EA 1285, Univ Rennes, Rennes, France*

²Institut de formation des infirmiers, Centre de formation des professionnels de la santé, CHU de Rennes, Rennes, France

³Centre Hospitalier Universitaire (CHU) de Rennes, Rennes, France

*brivael.hemon@gmail.com

INTRODUCTION

Speaking up refers to the “assertive communication in clinical situations that require (immediate) action through questions or statements of opinion or information with appropriate persistence until there is a clear resolution to prevent error or harm to reach the patient” (Schwappach & Gehring, 2015, p. 395). This ability is an element of the “teamwork” non-technical skill, and has been linked to team technical performances (Kolbe et al., 2012). However, health-care workers and students might hesitate before voicing concerns, especially facing asymmetrical status situation (nurse-physician, student-supervisor). Models of decision-making process in those situations emphasizes the role of contextual factors (e.g. team voice climate, time pressure), individual factors (e.g. personality, previous experiences), perceived safety and perceived utility of speaking up (Morrison, 2014). In turns, outcomes are displayed on individual (e.g. career consequences) and group (e.g. performance) levels.

It has been demonstrated that nursing students often choose to remain silent during clinical placement, particularly to avoid negative consequences (Bickhoff, Sinclair, & Levett-Jones, 2017). Observational studies using simulation highlight the lack of assertivity among nurses and medical students facing an error (Friedman et al., 2015; Sydor et al., 2013). Simulation-based training has been used to promote speaking up behaviors, especially among anesthesia and surgical trainees, with mixed results regarding their efficiency to change participants’ behaviors (Friedman et al., 2017; Pian-Smith et al., 2009; Raemer, Kolbe, Minehart, Rudolph, & Pian-Smith, 2016). However,

to our knowledge, no intervention using simulation has been used to study and promote speaking up behaviors among nursing students, and no studies has been set up in France to investigate the perception of voicing concerns during clinical internships targeting the nursing students population. A simulation-based intervention was designed to promote speaking up behaviors among nursing students at a French nursing school.

METHOD

The study was approved by the nursing school administration. Students were first met in a lecture on non-technical skills and safety. Students were informed of the purpose of the study, the nature of data collection, and the voluntary nature of their participation. All participants gave their written consent. Data were coded to preserve anonymity. To avoid altering the participants' behaviors during the simulation, the precise purpose of the study was not disclose until the debriefing, they were told that the purpose was to investigate teamwork. Simulation groups composed of 4 to 8 participants were created on the basis of this recruitment.

Simulation sessions followed a briefing – practice – debriefing format. During the briefing, major simulation principles (e.g. right to err, confidentiality, goodwill) and features of the study (right to withdraw, data collection) were reminded to the participants. In each group, 2 students were engaged in the scenario, while the rest of them were observers. The scenario was introduced through the lecture of a vignette. They were placed in a department of internal medicine, in which the head of department has decided to make the observation of bladder catheterization mandatory for every student before being authorized to perform the procedure by themselves, due to a recent rise of urinary bladder infections. They have had an opportunity to observe this procedure performed by their supervisor. The patient was a 85 year old man suffering from oligoanuria. A high-fidelity mannequin was used to figure the patient. Instructors from the nursing school played the role of the supervisor. Communication coming both from the patient and the supervisor were scripted. In order to generate occasions to speak up, a series of errors were introduced in the supervisor's practice. The use of a confederate making errors purposely during the scenario is a design classically used in literature (Barzallo Salazar et al., 2014; Pian-Smith et al., 2009). Three errors were scripted: a hand hygiene error (no hand washing before putting sterile gloves), a failure to respect aseptic rules (desterilization of the

end of the catheter), and a disrespectful communication toward the patient. The debriefing was organized in 3 phases. First, participants and observers spontaneously reacted upon the situation. When every member had reacted, the instructor disclosed the speaking up issue, and led them to discuss identified errors. Second, participants were invited to identify factors impacting their decision to voice concerns or to remain silent. Finally, participants discussed previous experiences, strategies used to speak up, and efficiency of those strategies. All participants were later invited to a short lecture on teamwork and voice behaviors in healthcare. This presentation contained a description of decision models, and structured communication tools such as SBAR script (Situation, Background, Assessment, Recommendation), DESC script (situation Description, Expression of concerns, Suggestion, statement of Consequences) and the two-challenge rule were introduced (King et al., 2008).

We conducted a qualitative analysis of the debriefings sessions, aiming at identifying barriers and enablers to speaking up behaviors, and strategies used to speak up. Two coders observed debriefings videos, and Cohen's kappa were computed to assess inter-rater reliability. The overall inter-rater reliability was acceptable (0.49 for barriers, 0.59 for enablers, and 0.74 for strategies).

RESULTS

Ninety-eight third year nursing students participated in the simulation ($M = 22.51$ years, $SD = 4.23$, 81 females), allocated to 18 groups. Students identified several barriers that prevent them from voicing concerns. The main barrier was their "student status", referring to the feeling of being "outside the team". As a participant pointed out, "Nurses are supposed to teach us the best practice, but if you are the one who detects errors... it's hard to tell the nurse." This element was also linked to the hierarchical differential with healthcare workers ("they are graduate, we are not"). The presence of a patient was also perceived as a major barrier, as they feared to harm the patient – nurse relationship ("it could discredit us in front of the patient"), and to worry the patient ("the patient may feel anxious"). Participants reported fearing the consequences on their evaluation if they were to voice their concerns, and subsequently the validation of their internship ("I think we are kind of selfish, but we always have in mind that we are evaluated."). Characteristics of the healthcare workers involved, such as a lack of openness, were perceived as being critical in their decision to speak up or not. The fear of damaging

relationships and generating conflict was mentioned, particularly in the first weeks spent in the department, associated with a lack of familiarity ("It is going to last ten weeks, and if it doesn't go well with your supervisor... ten weeks is long"). A feeling of futility, the severity of the error, and their uncertainty were also mentioned.

Participants identified some healthcare workers' characteristics such as inclusiveness (asking questions, looking for students' input) as a major element encouraging speaking up behaviors. A higher risk was associated with higher probabilities of voicing concerns, for example for medication errors versus hand hygiene errors ("he would have injected a product, and I would have seen it was an error, I would have stopped him"). Team familiarity was seen as enabling speaking up ("the fact that you have been in the department long enough, you know the physicians, the residents..."). Participants referred to the degree of certainty in the detection of error, often linked to their progression in their studies ("We are more aware of what we say, compared to our first year when we think, maybe I'm wrong"). A positive team climate and being encourage to intervene were also mentioned.

Finally, regarding strategies used to voice concerns, participants predominantly reported asking naive questions ("I try to phrase it to make it sound like I have no idea..."), or putting the discussion off until later depending on the risk for the patient ("If there is no immediate risk for the patient, it's easier to discuss it later"). Other strategies were mentioned, such as discussing the error in reference to what has been taught in the nursing school, to the patient, or to guidelines. Some students reported offering assistance to catch the error without challenging the healthcare worker.

DISCUSSION

We analyzed the content of a debriefing session following a simulation scenario designed to generate occasions to detect errors and communicate them. The debriefing structure aimed at identifying perceived barriers and enablers, along with strategies used to voice concerns. The student status, the presence of a patient, and the fear of consequences on their evaluation were the main barriers mentioned, similarly to other studies (Bickhoff et al., 2017). It must be emphasized that the consequences on their evaluation may be real, especially for more challenging forms of voice behaviors (Burriss, 2012). On the other hand, healthcare workers' characteristics, risk assessment,

and team familiarity were the most frequently reported enablers, echoing studies who highlighted the need of psychological safety to voice concerns (Nembhard & Edmondson, 2006). Regarding strategies, nursing students reported using naïve questions and putting off the discussion, at the expense of their efficiency to ensure the patient's safety. Those results should be mitigated by some limitations, especially regarding the small sample size and the one site focus. Nevertheless, we think our study offers an important insight to design future simulation-based training targeting nursing students' communication skills.

Keywords: patient safety, teamwork, nursing education, simulation training, speaking up

REFERENCES

- Barzallo Salazar, M. J., Minkoff, H., Bayya, J., Gillett, B., Onoriode, H., Weedon, J., ... Fisher, N. (2014). Influence of Surgeon Behavior on Trainee Willingness to Speak Up: A Randomized Controlled Trial. *Journal of the American College of Surgeons*, 219(5), 1001–1007. <https://doi.org/10.1016/j.jamcollsurg.2014.07.933>.
- Bickhoff, L., Sinclair, P. M., & Levett-Jones, T. (2017). Moral courage in undergraduate nursing students: A literature review. *Collegian*, 24(1), 71–83. <https://doi.org/10.1016/j.colegn.2015.08.002>.
- Burris, E. R. (2012). The risks and rewards of speaking up: Managerial responses to employee voice. *Academy of Management Journal*, 55(4), 851–875.
- Friedman, Z., Hayter, M. A., Everett, T. C., Matava, C. T., Noble, L. M. K., & Bould, M. D. (2015). Power and conflict: the effect of a superior's interpersonal behaviour on trainees' ability to challenge authority during a simulated airway emergency. *Anaesthesia*, 70(10), 1119–1129. <https://doi.org/10.1111/anae.13191>.
- Friedman, Zeev, Perelman, V., McLuckie, D., Andrews, M., Noble, L. M. K., Malavade, A., & Bould, M. D. (2017). Challenging Authority During an Emergency - the Effect of a Teaching Intervention. *Critical Care Medicine*, 45(8), e814–e820. <https://doi.org/10.1097/CCM.0000000000002450>.
- King, H. B., Battles, J., Baker, D. P., Alonso, A., Salas, E., Webster, J., ... Salisbury, M. (2008). TeamSTEPS(TM): Team Strategies and Tools to Enhance Performance and Patient Safety. In K. Henriksen, J. B. Battles, M. A. Keyes, & M. L. Grady (Eds.), *Advances in Patient Safety: New Directions and Alternative Approaches (Vol. 3: Performance and Tools)*. Retrieved from <http://www.ncbi.nlm.nih.gov/books/NBK43686/>.
- Kolbe, M., Burtscher, M. J., Wacker, J., Grande, B., Nohynkova, R., Manser, T., ... Grote, G. (2012). Speaking Up Is Related to Better Team Performance in Simulated Anesthesia Inductions: An Observational Study. *Anesthesia & Analgesia*, 115(5), 1099–1108. <https://doi.org/10.1213/ANE.0b013e318269cd32>.
- Morrison, E. W. (2014). Employee Voice and Silence. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 173–197. <https://doi.org/10.1146/annurev-orgpsych-031413-091328>.
- Nembhard, I. M., & Edmondson, A. C. (2006). Making it safe: the effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior*, 27(7), 941–966. <https://doi.org/10.1002/job.413>.

Pian-Smith, M. C. M., Simon, R., Minehart, R. D., Podraza, M., Rudolph, J., Walzer, T., & Raemer, D. (2009). Teaching residents the two-challenge rule: a simulation-based approach to improve education and patient safety. *Simulation in Healthcare: Journal of the Society for Simulation in Healthcare*, 4(2), 84–91. <https://doi.org/10.1097/SIH.0b013e31818cffd3>.

Raemer, D. B., Kolbe, M., Minehart, R. D., Rudolph, J. W., & Pian-Smith, M. C. M. (2016). Improving Anesthesiologists' Ability to Speak Up in the Operating Room: A Randomized Controlled Experiment of a Simulation-Based Intervention and a Qualitative Analysis of Hurdles and Enablers. *Academic Medicine*, 91(4), 530–539. <https://doi.org/10.1097/ACM.0000000000001033>.

Schwappach, D. L. B., & Gehring, K. (2015). Frequency of and predictors for withholding patient safety concerns among oncology staff: a survey study. *European Journal of Cancer Care*, 24(3), 395–403. <https://doi.org/10.1111/ecc.12255>.

Sydor, D. T., Bould, M. D., Naik, V. N., Burjorjee, J., Arzola, C., Hayter, M., & Friedman, Z. (2013). Challenging authority during a life-threatening crisis: the effect of operating theatre hierarchy. *BJA: British Journal of Anaesthesia*, 110(3), 463–471. <https://doi.org/10.1093/bja/aes396>.