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Implementation and Evaluation of a High-Fidelity, Interprofessional Simulation Project Using Standardized Patients to Address Aggression in a Psychiatric Emergency Department

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Abstract

INTRODUCTION: Increased aggression in a regional Comprehensive Psychiatric Emergency Program (CPEP) led to a significant rise in physical assaults, restraints, and use of security personnel. Root cause analysis revealed a need for more extensive training on de-escalation, teamwork and communication. **AIMS:** This quality improvement project evaluated the impact of an interprofessional, high-fidelity simulation project on interdisciplinary collaboration to manage de-escalation and aggression safely and effectively. **METHODS:** Interdisciplinary team members ($N = 171$ nurses, psychiatrists, social workers, crisis specialists, and safety officers) participated in a 2.5-hr educational initiative that included Crisis Prevention Intervention (CPI) and Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) interventions, high-fidelity simulation using standardized patients, observation, and debriefing. Quantitative data collection and analysis included the use of the Confidence in Coping with Patient Aggression Instrument (CCPAI), TeamSTEPPS Perception Questionnaire (T-TPQ), pre–post data on restraints, injuries, and an educational survey. A qualitative analysis of debriefing themes was also performed. **RESULTS:** Statistically significant improvement was noted in individuals' confidence to manage aggression. In addition, data collected over a 5-month period before and after simulation demonstrated a 35% reduction in restraints and a 52% reduction in injuries. Interestingly, quantitative evidence revealed no changes in perceptions of teamwork. Results from the educational survey highlighted the positive impact of standardized patients and debriefing, and gaining new insights into patient care. Qualitative analysis of debriefing themes revealed educational opportunities to improve communication, role clarity, de-escalation, and insights into patient impact. **CONCLUSION:** The use of high-fidelity simulation with standardized patients has the potential to strengthen interdisciplinary collaboration to safely manage aggression in an acute psychiatric setting.

Keywords

simulation, aggression, psychiatry, education

Introduction

There is substantial evidence in the literature that addresses the rising levels of violence in the health care system, especially emergency departments and inpatient psychiatry with more than 30% of nurses either witnessing or being victimized by violence (Abu, 2023; Aljohani et al., 2021; Richmond et al., 2012). Acts of aggression related to acute psychiatric illness often inflict physical and psychological trauma on patients and staff (Aljohani et al., 2021; Wong et al., 2015). In addition, the fear for one's own safety and lack of confidence in the use of de-escalation skills has become a major contributor to nurses leaving our profession (Li et al., 2019; Mitchell et al.,

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2020). The 2020 American Psychiatric Nurses Association Position Statement on Violence Prevention underscores the ethical and professional responsibility to facilitate and implement interventions and strategies to reduce and ultimately prevent violence. Further highlighted was the importance of teaching and promoting violence prevention approaches and skills for nurses (American Psychiatric Nurses Association [APNA], 2020).

Simulation-based education has been shown to improve interpersonal and team communication, and improve patient safety (International Nursing Association for Clinical Simulation and Learning [INACSL], 2016; Kaplonyi et al., 2017; Mitchell et al., 2020; Thomson et al., 2013; Vestal et al., 2017; Wong et al., 2015; Young et al., 2022). The use of standardized patients enhances a high-fidelity simulation experience by providing a highly structured, scripted level of realism and intensity to the training. These standardized patients are actors or lay persons who are trained to role-play a variety of mental health conditions and crisis situations. They are further coached on providing feedback to participants immediately following the simulation. Participants have reported the use of standardized patients in training is more beneficial than didactic lectures or other written learning resources (Jee et al., 2018; Lewis et al., 2017; Shawler, 2008). This immersive educational experience using standardized patients provides a realistic and safe opportunity to improve competence in de-escalation skills, interdisciplinary teamwork, and communication during a behavioral crisis. An additional important aspect of simulation is debriefing which plays a critical role by providing a safe and respectful space following the experience to engage in self-reflection, critical thinking, cognitive development, role clarity, and communication to enhance clinical practice (Clapper & Knowles, 2010; Fanning & Gaba, 2007; Neill & Wotton, 2011).

The Comprehensive Psychiatric Emergency Program (CPEP) used for this project was implemented in a large northeast medical center. Clinical care is provided by an interdisciplinary team of psychiatric nurses, psychiatrists, social workers, crisis specialists, and public safety officers. Since 2020, there has been a significant increase in CPEP admissions for assessment, crisis management, and triage to inpatient or outpatient services. Parallel with this, there has been a rise in aggression, assaults, restraints, patient/staff injuries, use of safety officers, and staff turnover. Following a major incident in late 2020, a root cause analysis revealed a significant need for more extensive interprofessional training on de-escalation, teamwork, leadership, and communication. Although there is significant data in the literature to support the positive impact of high-fidelity simulation with students and residents (Thomson et al., 2013; Vestal et al., 2017), there is a scarcity of publications on the integration of high-fidelity simulation using standardized patients in a psychiatric emergency department with interdisciplinary clinical teams. The aim was to describe the development, implementation, and evaluation of a high-fidelity simulation using standardized patients with an interdisciplinary CPEP team to improve safe clinical practice.

Methods

Design

Led by psychiatric nursing leadership, an interdisciplinary task force was established that included a lead psychiatrist, psychiatric nurses, social workers, department of public safety, and crisis specialists. The psychology simulation laboratory director, and a diversity and inclusion specialist provided ongoing consultation. The overarching goal was to develop an educational quality improvement project that would address the management of potential aggression and improve interdisciplinary collaboration and safety for patients and staff. Quantitative and qualitative data analysis was used to evaluate outcomes.

Participants

Individuals from all health care disciplines in CPEP were eligible to participate. Travelers and temporary employees were excluded. Participants included psychiatric nurses, psychiatric nurse practitioners, psychiatrists, psychiatric residents, social workers, psychiatric technicians, crisis specialists, and security personnel. Standardized patients who had worked at the medical center in other educational mental health initiatives were used to assist with training. An institutional determination checklist was used and determined the Institutional Review Board (IRB) approval was not required for this quality improvement project.

Setting

The setting used for this high-fidelity simulation education consisted of the Department of Psychiatry simulation laboratory, technician room, and the observation/debriefing room. Life-size cardboard people were placed in the simulation laboratory room along with a large mural of the view of the CPEP nurse's station from the patient waiting area. In addition, the hallway adjacent to the simulation laboratory room depicted the nurse's station in CPEP and needed equipment. All patient supplies such as the vital signs machine, laptop on wheels, bed board, personal hygiene items, towels, gowns, snacks, simulated medications, and a restraint bed were available in the identified nursing station. There was a designated space for the interdisciplinary team to discuss clinical assessments, plan of care, and role

responsibilities during simulation. A 45-min debriefing session in a large conference room followed the simulation and the facilitator explored perceptions, roles, and feelings to improve understanding and clinical competence when working within a team to manage a behavioral crisis.

Data Collection

Two instruments were used to collect quantitative data before and after the simulation. The TeamSTEPPS Teamwork Perception Questionnaire (T-TPQ) is a 35-item survey that assesses knowledge, performance, and attitude related to leadership, communication, situation monitoring, and mutual support (Agency for Healthcare Research and Quality, 2020; Battles & King, 2010). The Confidence in Coping with Patient Aggression Instrument (CCPAI) is a 10-item Likert-type scale intended to measure the potential impact of simulation on participants' confidence in managing aggression during a behavioral crisis (Thackrey, 1987). Permission was granted for both instruments. Study data were collected and managed using REDCap (Research Electronic Data Capture) electronic data capture tools hosted at the University of Rochester Medical Center (P. A.Harris et al., 2009; R.Harris et al., 2019). REDCap is a secure, web-based software platform designed to support data capture for research studies.

Instruments were completed at the beginning of the simulation session using a QR code and REDCap technology for data collection. The Confidence in Coping instrument was also completed following the simulation session to assess the initial impact of the intervention on confidence. The second TeamSTEPPS Perception survey was administered electronically 3 months following the intervention to assess the prolonged impact on various dimensions of teamwork. A 10-item, Likert-type scale educational survey developed by the authors was also completed. Per institutional policy, all restraint and injury data were documented on a standardized form and reported daily. Authors were able to access these data and compare findings for 5 months prior to the simulation to 5 months following the simulation.

In addition to quantitative measures, a qualitative analysis using a focus group approach for each of the debriefing sessions occurred. Notes were taken by an identified scribe, an advanced practice psychiatric nurse.

Procedures

The International Nursing Association for Clinical Simulation and Learning (INACSL): Standards of Best Practice was the framework used for this project and included simulation design, outcomes and objectives, facilitation, debriefing, and participant evaluation (INACSL, 2016). Meeting biweekly for several months, the interdisciplinary task force developed the following learning outcomes: (a) Describe and demonstrate effective communication skills during a behavioral emergency, including identifying barriers, increasing self-awareness of own beliefs and personal responses, along with the elements of TeamSTEPPS, (b) Describe and demonstrate effective interdisciplinary teamwork during a behavioral emergency, including role clarity, leadership, respect, collaboration, and elements of TeamSTEPPS, (c) Apply effective violence mitigation and de-escalation techniques during a behavioral emergency incorporating Crisis Prevention Intervention (CPI) de-escalation techniques, (d) Demonstrate ability to share thoughts and feelings during the debriefing related to caring for aggressive patients, engaging in self-reflective practice, using a non-judgmental approach when discussing differing perspectives and challenges, and engaging in conversation to explore unique considerations when working with persons of varying cultures, races, and genders.

There was a total of 17 sessions held over a 2-month period. Notably, 14 staff per session were divided into two distinct interdisciplinary teams. One team participated in a 15-min simulation followed by an 8-min feedback session. The simulation was observed by the second team via closed-circuit television in a conference room. Following this, teams were switched. This provided an opportunity to experience two simulations, one through direct participation and one through observation facilitating a richer debriefing discussion. Figure 1 depicts this simulation process. A 45-min debriefing session was held at the end of the simulation experience with both groups participating together.

All participants were required to review a 1-hr online Crisis Prevention Institute (CPI) module on de-escalation prior to simulation. At the beginning of each simulation, an overview of the process was provided along with the highlights of CPI de-escalation strategies (Crisis Prevention Institute, 2016) and TeamSTEPPS elements (Agency for Health care Research and Quality, 2020). In addition, clear mutual expectations were posted and reviewed to promote a supportive, safe learning experience. Standardized patients were paid an hourly rate for training and education on psychiatric clinical conditions and behaviors to be demonstrated. CPEP scenarios were developed using expert psychiatric nurses' clinical experiences and input from CPEP nursing leadership input and the lead security officer. Two male and one female standardized patients were hired. In consultation with the simulation laboratory director, two female and two male escalating agitation clinical scenarios were developed with scripts. Clinical presentations included psychosis with the risk of physical violence toward others, a patient attempting self-harm behavior with a sharp object, and a

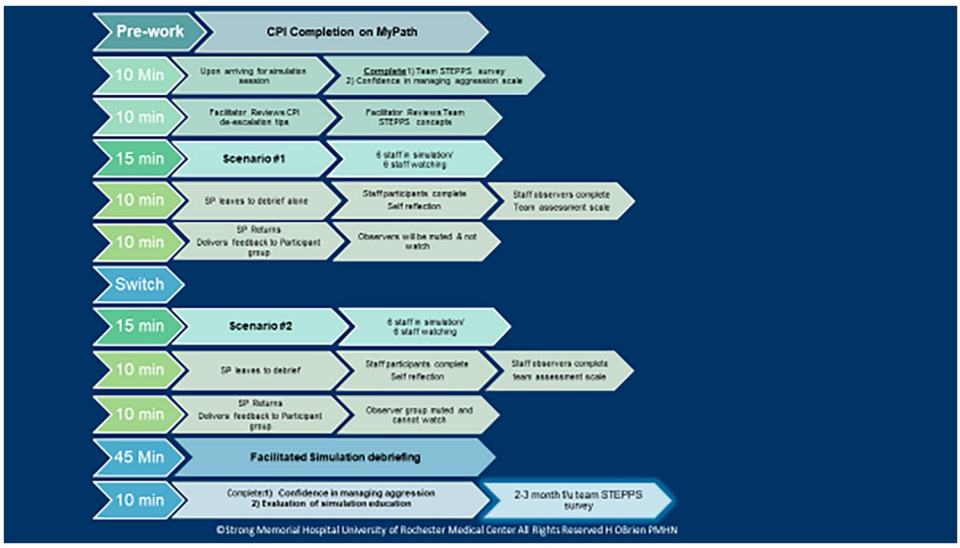

Figure 1. Timeframe of Simulation.

patient experiencing mania with a significant trauma history, threatening to harm others. All scenarios involved refusing medication, as this is a significant challenge in CPEP. To align with high-fidelity simulation standards of practice, standardized patients were also trained to lead an 8-min feedback session with each clinical group following simulation.

To ensure each high-fidelity simulation experience was facilitated in a structured, time-framed, and consistent manner, four distinct roles were developed. The Observation Instructor set up the simulation space, welcomed participants, directed them to begin pre-surveys using a QR code, oriented staff to the environment, and monitored the observation group. The Facilitator Instructor coordinated all simulation sessions, communicated group expectations and individual roles, described workflow, distributed self-reflection worksheets following each simulation, and assisted with debriefing through observation and note-taking. The Debriefing Instructor had no direct contact with participants during the simulation, remained in the simulation production room to observe, take notes, stop the simulation if needed, and facilitate debriefing sessions with all participants. The debriefing instructor followed an established framework and process for debriefing based on a review of the literature (Clapper & Knowles, 2010; Fanning & Gaba, 2007; Neill & Wotton, 2011; Rudolph et al., 2006). An additional significant role was the Simulation Laboratory Director who oversaw the simulation laboratory environment and technology. Communication and teamwork were key to a successful simulation experience. For each of the 17 simulation sessions, a worksheet was created with dates, names of staff and assigned roles for the session, names of participants by discipline for the session, simulation technician staff, the standardized patient assigned for the session, and a summary of which scenarios would be run that day. Two scenarios were chosen per session based on the training the assigned standardized patient had received. To promote fidelity to the process, a folder was created and given out at each session with laminated instructions for each instructor's assigned role, resources for their specific duties, and a session worksheet.

Analysis

Demographic and descriptive statistics of participants were performed and summary statistics were calculated for survey measurement tools. Paired data were used to assess outcome measure changes over study time periods with nonparametric Wilcoxon signed-rank tests and *t*-tests, depending on variable distribution. Data were analyzed using IBM SPSS Statistics (Version 29). Quantitative analysis was completed by an expert psychologist in statistical analysis. Thematic analysis was used to analyze the notes transcribed during debriefing sessions. Three senior psychiatric nurses analyzed these notes independently to identify concepts and recurrent emerging themes during the debriefing process. An additional session was held to discuss individual findings, merge themes, and identify key concepts.

Table 1. Educational Survey Results for Agree/Strongly Agree.

Question	*n*	%
The standardized patient experience helped me feel confident in my ability to use the skills	109	73.6
The standardized patient experience was realistic	113	76.4
Feedback from the standardized patient was helpful	112	82.4
Overall, the standardized patient experience will positively affect my work/role	116	79.5
Debriefing provided a safe opportunity to further explore my thoughts and feelings	129	87.8
I feel more confident working with the interdisciplinary team during a crisis	113	78.5
I feel confident applying effective violence mitigation and de-escalation techniques during a crisis	105	71.9
I feel more confident integrating racial/ethnic and multicultural approaches into my role	97	66.0
Today's discussion gave me new insights and experiences of patients, families, and coworkers	118	79.6
Participation in this experience was a meaningful way to learn	122	83.0

Results

Quantitative Findings

A total of 171 CPEP staff participated in a 2.5-hr highly structured high-fidelity simulation in a dedicated simulation laboratory area. This included 50 (95%) psychiatric nurses/technicians, 16 (59%) psychiatrists, 29 (97%) residents, 29 (67%) social workers, 4 (100%) nurse practitioners, 12 (86%) crisis specialists, and 31 (100%) security personnel. Survey data were collected from 160 simulation participants, of whom the participation rates for both pre- and post-surveys were 89.3% and 50.3%, respectively.

For participants with both pre- and post-simulation CCPAI participant scores, the median scores (range) were 67.00 (29.00–110.00) before and 76.00 (27.00–110.00) after the simulation A Wilcoxon signed-rank test on paired pre–post data indicated confidence to manage aggression was significantly higher after the simulation than before the simulation ($z = -8.01$, $p < .01$). For the TeamSTEPPS Perception survey data, the mean of T-TPQ participant scores was 3.84 ± 0.66) pre-simulation and 3.76 ± 0.56 3 months post-simulation. Comparative analysis with a paired *t*-test did not indicate a significant change pre-simulation and 3 months post-simulation ($t(67) = 1.23$, $p = .22$) on teamwork, communication, and leadership development. The educational survey findings reflected a 66.0%–83.0% positive response to this high-fidelity simulation for learning and confidence (Table 1).

In addition, data on the use of restraints and staff injuries were compared before and after the simulation. A total of 243 restraints were documented over a 5-month period before the simulation and 158 restraints were documented over a 5-month period following the simulation demonstrating an overall reduction in restraints by 35%. A total of 23 injuries were reported over a 5-month period before the simulation and 8 injuries were reported over a 5-month period following the simulation demonstrating a 52% reduction in staff injuries.

Qualitative Findings

The analysis of notes transcribed during debriefing sessions revealed prominent themes. Participants discussed varying degrees of tolerance for aggression by staff resulting in a negative impact on both patients and teamwork (Theme 1). For example, an experienced nurse who accepts a patient becoming more agitated due to underlying fear and frustration versus a newer nurse who intervenes quickly at any sign of aggression with more restrictive measures, such as a request for immediate security intervention or potential restraint, based on their own fear or uncertainty. This contributes to frustration between coworkers and increased agitation by the patient due to inconsistent responses to escalating aggression. A standardized set of expectations with corresponding consistent levels of intervention may reduce this concern. The repeated use of unclear language that is agitating to patients, such as "We need to follow the process," with no further explanation can result in increased confusion, distrust, and agitation by the patient (Theme 2). Participants described a lack of trust across disciplines based on varying degrees of training and repeated turnover (Theme 3) and a consistent lack of understanding of who is in charge during a behavioral crisis (Theme 4). This was evident in the lack of identifying a leader for the behavioral crisis and confusion as to each discipline's role. Role clarification during a behavioral crisis with clear identification of a leader would potentially improve safety for both patients and staff. An additional theme (Theme 5) identified by some staff was a sense of being devalued, if not "invisible," as a member of the clinical team. Staff describe this contributed to feeling demoralized and burnt out. This can further heighten staff frustration, turnover, and inability to provide quality, safe care. Continuous supervision and strengthening the value of each team member has the potential to improve this concern. Qualitative analysis revealed a need for further education on communication, role clarity, de-escalation,

self-awareness, and insights into the impact on patient care. In all sessions, observation revealed the power of a collective experience to enhance perspectives, reduce the sense of isolation, and improve communication.

Discussion

The purpose of this case was to describe in detail the development, implementation, and evaluation of a high-fidelity simulation using standardized patients with an interdisciplinary psychiatric emergency department team. As previously noted, simulation is well supported in the literature as an educational tool for teaching students and professional staff at all levels of practice. The findings in this report suggest the use of high-fidelity simulation provided in "real time" with standardized patients is a safe and effective learning experience for interdisciplinary clinical teams to strengthen knowledge, skills, and attitudes related to caring for aggressive patients (Lewis et al., 2017; Mitchell et al., 2020; Young et al., 2022). Furthermore, the findings suggest high-fidelity simulation using standardized patients followed by a debriefing process, enhance participants' level of confidence and comfort when responding to aggression, and improve interdisciplinary communication and self-reflective practice (Mitchell et al., 2020; Thomson et al., 2013).

As noted in the educational survey findings, participants provided substantial positive support for the use of standardized patients and a focused debriefing process as an important and meaningful educational experience to strengthen overall learning and confidence in managing aggression. This finding has been supported previously in the literature (Simulated Interprofessional Team Training, 2017; Young et al., 2022). It is important to further underscore the substantial reduction in restraints and staff injuries reported in the findings. This lends additional support to the positive impact of high-fidelity simulation with standardized patients on the staff's improved competence to manage potentially aggressive patients while maintaining a higher level of safety. This is a substantive finding as there is a lack of evidence in the literature that directly correlates the use of high-fidelity simulation training with standardized patients to a reduction in restraints and injuries.

Several strategies were used to strengthen the intervention and its fidelity including (a) clearly defined roles and interventions of simulation providers, (b) two identified individuals in the facilitator role or debriefing process for all sessions, (c) training standardized patients and providing set scripts, and (d) all debriefing instructors participated in the training and followed a clear, written framework for facilitation.

One limitation to this study was that it was single-site study, therefore findings are not generalizable to the larger population. An additional limitation is related to data collected from TeamSTEPPS Perception Survey data. Due to the lack of significance in comparing teamwork data between pre–post measures, a correlation between the impact of high-fidelity simulation on the improvement in multiple teamwork dimensions could not be made. Consideration for alternative methods to obtain follow-up survey data could assist with improving response rates.

Conclusion

Considering the rise in aggression and potential harm in emergency departments, institutions must commit to educational initiatives for clinicians beyond traditional didactic approaches. The use of high-fidelity simulation using standardized patients to address behavioral emergencies provides a unique and engaged learning experience that can strengthen interdisciplinary clinical practice while potentially reducing harm to patients and staff. Furthermore, including measurable outcome data specific to the use of restraints and injuries when implementing high-fidelity simulation with standardized patients has the potential to provide further data to evaluate the efficacy of interventions implemented to reduce restraint use and injuries to staff and patients.

Author Roles

All authors contributed to the conception or design of the study or to the acquisition, analysis, or interpretation of the data. All authors drafted the manuscript or critically revised the manuscript, and gave final approval of the version that was submitted for publication. All authors agree to be accountable for all aspects of the work, ensuring integrity and accuracy.

Declaration of Conflicting Interests

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References

Abu, I. (2023). The factors that affect violence against nurses in emergency departments. *Heliyon*, *9*(3), e14306. https://doi.org/10.1016/j.heliyon.2023.e14306

Agency for Healthcare Research and Quality. (2020). *TeamSTEPPS 2.0 pocket guide: Team strategies & tools to enhance performance and patient safety*. https://www.ahrq.gov

Aljohani, B., Burkholder, J., Tran, Q. K., Chen, C., Beisenova, K., & Pourmand, A. (2021). Workplace violence in the emergency department: A systematic review and meta-analysis. *Public Health*, *196*, 187–196. https://doi.org/10.1016/j.puhe.2021.02.009

American Psychiatric Nurses Association. (2020). *Violence prevention*. https://www.apna.org/news/violence-prevention/

Battles, J., & King, H. B. (2010). *TeamSTEPPS teamwork perceptions questionnaire manual*. American Institute for Research.

Clapper, T. C., & Knowles, B. (2010). What those conducting simulation need to know about adult learning theory. *Clinical Simulation in Nursing Education*, *6*(1), 140–146. https://doi.org/10.1016/j.ecns.2009.07.003

Crisis Prevention Institute. (2016). *CPI's top 10 de-escalation tips*. http://crisisprevention.com

Fanning, R. M., & Gaba, D. M. (2007). The role of debriefing in simulation-based learning. *Simulation in Healthcare*, *2*(2), 115–125. https://doi.org/10.1097/SIH.0b013e3180315539

Harris, P. A., Taylor, R., Thielke, R., Payne, J., Gonzalez, G., & Conde, C. J. (2009). Research electronic data capture (REDCap)—A metadata-driven methodology and workflow process for providing translational research informatics support. *Journal of Biomedical Informatics*, *42*(2), 377–381.

Harris, R., Taylor Minor, B. L., Elliott, V., Fernandez, M., O'Neal, M., McLeod, L., Delacqua, G., Delacqua, F., Kirby, J., Duda, S., & REDCap Consortium. (2019). The REDCap consortium: Building an international community of software partners. *Journal of Biomedical Informatics*, *95*, 103208. https://doi.org/10.1016/j.jbi.2019.103208

INACSL Standards Committee. (2016). INACSL standards of best practice: SimulationSM simulation design. *Clinical Simulation in Nursing*, *12*(S), S5–S12. http://dx.doi.org/10.1016/j.ecns.2016.09.005

Jee, S. H., Baldwin, C., Dadiz, R., Jones, M., & Alpert-Gillis, L. (2018). Integrated mental health training for pediatric and psychology trainees using standardized patient encounters. *Academic Pediatrics*, *18*(1), 119–121. https://doi.org/10.1016/j.acap.2017.06.014

Kaplonyi, J., Bowles, K. A., Nestel, D., Kiegaldie, D., Maloney, S., Haines, T., & Williams, C. (2017). Understanding the impact of simulated patients on health care learners' communication skills: A systematic review. *Medical Education*, *51*(12), 1209–1219. https://doi.org/10.1111/medu.13387

Lewis, K. L., Bohnert, C. A., Gammon, W. L., Hölzer, H., Lyman, L., Smith, C., & Gliva-McConvey, G. (2017). The association of standardized patient educators (ASPE) standards of best practice (SOBP). *Advances in Simulation*, *2*(1), 1–8. https://doi.org/10.1186/s41077-017-0043-4

Li, N., Zhang, L., Xiaoc, G., Chend, J., & Lub, Q. (2019). The relationship between workplace violence, job satisfaction and turnover intention in emergency nurses. *International Emergency Nursing*, *45*, 50–55. https://doi.org/10.1016/j.ienj.2019.02.001

Mitchell, M., Bernie, C., Newall, F., & Williams, K. (2020). Simulation-based education for teaching aggression management skills to health care providers in the acute health care setting: A systematic review protocol. *Systematic Reviews*, *9*(1), 1–10. https://doi.org/10.1186/s13643-020-01466-8

Neill, M. A., & Wotton, K. (2011). High-fidelity simulation debriefing in nursing education: A literature review. *Clinical Simulation in Nursing*, *7*(5), e161–e168. https://doi.org/10.1016/j.ecns.2011.02.001

Richmond, J. S., Berlin, J. S., Fishkind, A. B., Holloman Jr, G. H., Zeller, S. L., Wilson, M. P., & Ng, A. T. (2012). Verbal de-escalation of the agitated patient: Consensus statement of the American Association for Emergency Psychiatry Project BETA De-escalation Workgroup. *Western Journal of Emergency Medicine*, *13*(1), 17–25. https://doi.org/10.5811/westjem.2011.9.6864

Rudolph, J. W., Simon, R., Dufresne, R. L., & Raemer, D. B. (2006). There's no such thing as "nonjudgmental" debriefing: A theory and method for debriefing with good judgment. *Simulation in Healthcare*, *1*(1), 49–55.

Shawler, C. (2008). Standardized patients: A creative teaching strategy for psychiatric-mental health nurse practitioner students. *Journal of Nursing Education*, *47*(11), 528–531.

Simulated Interprofessional Team Training. (2017, April 6). *SPRinT training tool: Simulation with good judgment* [Video]. YouTube. https://youtu.be/jc22RLi6-MA

Thackrey, M. (1987). Clinician confidence in coping with patient aggression: Assessment and enhancement. *Professional Psychology: Research and Practice*, *18*(1), 57–60.

Thomson, A. B., Cross, S., Key, S., Jaye, P., & Iversen, A. C. (2013). How we developed an emergency psychiatry training course for new residents using principles of high-fidelity simulation. *Medical Teacher*, *35*(10), 797–800.

Vestal, H. S., Sowden, G., Nejad, S., Stoklosa, J., Valcourt, S. C., Keary, C., Caminis, A., & Huffman, J. (2017). Simulation-based training for residents in the management of acute agitation: A cluster randomized controlled trial. *Academic Psychiatry*, *41*(1), 62–67. https://doi.org/10.1007/s40596-016-0559-2

Wong, A. H., Wing, L., Weiss, B., & Gang, M. (2015). Coordinating a team response to behavioral emergencies in the emergency department: A simulation-enhanced interprofessional curriculum. *Western Journal of Emergency Medicine*, *16*(6), 859–865. https://doi.org/10.5811/westjem.2015.8.26220

Young, J., Fawcett, K., & Gillman, L. (2022). Evaluation of an immersive simulation programme for mental health clinicians to address aggression, violence, and clinical deterioration. *International Journal of Mental Health Nursing*, *31*(6), 1417–1426. https://doi.org/10.111/inm.13040