

ORIGINAL RESEARCH

Beautifully broken: Implementing a peer support program to help healthcare providers heal

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ABSTRACT

Introduction: This evidence-based project aimed to determine the feasibility of implementing a peer support program to minimize trauma in healthcare professionals (HCP)s following unanticipated adverse events. Based on the forYOU Program designed by Sue Scott at the University of Missouri Health System, this program trained peers to offer real-time caring and support to other clinicians coping with such events. Most healthcare professionals are involved in at least one adverse event in their careers. Albert Wu, MD (2000) coined the term second victim to capture the essence of the trauma experienced by healthcare professionals when an unanticipated event negatively impacts a patient. When left unchecked, this trauma can result in moral distress, stress disorders, and burnout as the clinician ruminates over the event. Providing emotional support has improved second victims' emotional well-being and recovery. Therefore, healthcare leaders are encouraged to develop comprehensive programs to provide easy access to peer and social support when they experience an adverse event.

Methods: Designed for implementation in the Women's Service Department of a 350-bed southwestern hospital, this project employed a pre-/post-evaluation of subjective outcomes using an online survey for nurses. A core group of trainers attended a two-day peer support train-the-trainer event hosted by the forYOU Program at the University of Missouri Health Care System. This group trained 26 peer supporters representing the four departments in Women's Services and both shifts. Baseline data was collected (n = 44) to assess the frequency and impact of unanticipated adverse events, the perceived support, and the type of support received. Following the four-month implementation in the Summer/Fall of 2020, post-data was obtained, including a program awareness assessment (n = 17).

Results: Pre- and post-implementation of the Peer Support Program, nurses in Women's Services reported adverse events impacting their emotional well-being. Post-program, more nurses reported receiving support (86% post-program versus 43% pre-program). Before employment, 79% of nurses who received support received peer support, versus 86% receiving peer support post-implementation. The implementation occurred during the COVID pandemic, which may have resulted in a decreased post-assessment sample size. However, the peer supporters reported hesitancy in completing encounter forms feeling that providing support was "too personal". The participants said that they found the peer support program worthwhile.

Conclusions: Nurses on the implementation units indicated receiving more support after the peer support program was implemented and felt the program was beneficial. Since unanticipated events are inevitable in health care, the steering committee recommended sustaining and spreading the program to all the nursing departments. More data is needed to determine the full impact of the program.

Key Words: Peer support, Second victim, Adverse event, Unanticipated event

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1. INTRODUCTION

In their 2000 seminal report *To Err is Human: Building a Safer Health System*,^[1] the Academy of Medicine (formerly Institute of Medicine) highlighted the tremendous burden medical errors place on the American healthcare system. Fast forward to 2016, Johns Hopkins^[2] declared that medical errors were the third leading cause of death in the US. If each medical error involves one or more health care professionals (HCPs), adverse events (AEs) touch many clinicians. Seys et al. estimated that almost half of clinicians could be negatively impacted by an AE in their career.^[3] Albert Wu, MD, coined the term second victim to capture the essence of the trauma experienced by HCPs when an unanticipated event occurs.^[4] This trauma can result in psychological and physical distress as the clinician ruminates over the event when not addressed.^[5,6] Moreover, some clinicians develop less confidence in their ability to provide care, leading to an increased risk of medical errors.^[3,6,7]

Scott et al. expanded the definition of second victims to include HCPs involved in medical errors and other unanticipated events involving patient injury that lead to psychological trauma, feelings of personal responsibility, or questioning of their clinical abilities.^[6] The extent of trauma depends on the degree of patient harm, type of event, age of the patient, and investigative process.^[3,6,7] Although each HCP may experience an unanticipated event, the people involved in or witnessing adverse events can experience disruption in their professional and personal lives.^[3,7] This suffering can affect their quality of life, work performance, and how they provide care to other patients.^[3,6] Table 1 defines the types of unexpected events that can lead to becoming a second victim.

Table 1. Types of unanticipated events^[8,9]

Medical Errors	Preventable harm caused to a patient due to a human or system error—a mistake.
Near Miss	A preventable event that could have caused harm to a patient but did not reach the patient.
Adverse Events	Unpreventable harm due to a complication/event that cannot be anticipated.
Ameliorable Adverse Events	Unpreventable harm, the severity of which could have been mitigated to some degree with a different course of action.

Providing real-time emotional support following an adverse event has been associated with enhanced emotional well-being and recovery of second victims.^[10,11] Unfortunately, other than employee assistance programs and chaplain referrals, many HCPs do not have access to real-time emotional support after an unanticipated event.^[10] This evidence-based project aimed to determine if a peer support program

would enhance the nurses’ perceived emotional support following unexpected adverse events. Based on the forYOU Program^[11] designed by Sue Scott at the University of Missouri Health Care System (MUHC), this program trained peers to offer real-time care and support to other clinicians coping with such events.

1.1 Background

US healthcare has a trend, especially in obstetrics: our patient population has become sicker with more comorbidities. The CDC^[12] reported that indicators of severe maternal morbidity had been steadily increasing in recent years. Because of the US’s increased maternal morbidity and mortality rates, this shift places women at higher risk for adverse events throughout pregnancy, labor, delivery, and postpartum care.^[13,14] As health care becomes more complex and patient acuity increases, unforeseen and adverse outcomes become more frequent.^[7,14]

Yet, there was little emotional or spiritual support offered to staff outside of chaplains in the primary author’s organization and the Employee Assistance Program (EAP) to help process those negative experiences.^[11] After two decades of experiencing adverse patient events and attempting to cope with the detrimental effects caused to HCPs, it became a mission and passion to help clinicians thrive instead of just survive. The intent is to help clinicians overcome adverse events, become resilient, and flourish in their professions.^[15]

One catalyst that spurred efforts for developing a peer support program to overcome the trauma of experiencing unanticipated events occurred when a patient’s spouse suffered head trauma in his wife’s postpartum room. The clinical nurses provided life support until the code team arrived, and he was life-flighted to the medical center. The trauma and anguish were palpable, and the offered EAP and chaplaincy support helped but did not meet the staff’s needs. Many nurses involved suffered months or years after the event. In fact, team members shared this event through teary eyes during peer support training seven years later. Although grateful for EAP and chaplaincy support, staff indicated it was difficult to relate to someone who did not provide direct patient care.

There are few people HCPs can turn to for emotional or spiritual support after an adverse patient event. Reasons include patient privacy concerns, the stigma of weakness associated with seeking help,^[11] and many laypeople do not understand the experience because they do not provide healthcare. When coping with a traumatic AE, most nurses instinctually turn to their peers who genuinely understand.^[16] This confidante could be a nurse or other HCP they know and trust. This sharing of events with their peers allows healing to begin. To this

end, receiving just-in-time support from a peer knowledgeable regarding the second victim phenomenon and emotional support would be beneficial.^[11]

1.2 Literature review

Before the initial survey in L&D, the primary author conducted a comprehensive review of the literature to determine if evidence was available that guided interventions for mitigating the impact of adverse patient events on HCPs. The databases searched included CINAHL, PubMed, and Cochrane Database of Systematic Reviews, employing the search terms medical errors, second victim, adverse events, peer support, and staff support. The inclusion criteria included articles in English that described studies regarding peer support for second victims. Additionally, the team identified studies from a hand search of the references.

The authors noted strong evidence supporting implementing practices to help HCPs overcome the second victim phenomenon.^[5,11,17] Most studies recommended that healthcare facilities provide clinicians with some form of support system.^[5,16,18] Only a few institutions offered existing programs that were sustainable, successful, and focused predominantly on peer support: the forYOU program at MUHC, Resilience in Stressful Events (RISE) at John's Hopkins, Code Lavender at Cleveland Clinic, and Care for the Caregiver at Kaiser Permanente.^[18-21]

There are many positive benefits to building and sustaining a robust peer support program. Johns Hopkins demonstrated a \$2 million annual savings with the RISE program, founded by Albert Wu.^[22] The nurses who received peer support were four times less likely to leave their positions after a high-impact event than peers who did not receive support.^[22] Kaiser Permanente demonstrated decreased medication errors, improved quality of care, and improved retention by taking care of their HCPs following AEs.^[21] The literature revealed that these programs helped with moral distress and traumatic stress while preventing absenteeism, attrition, and disengagement.

After careful review, the steering committee agreed that the best fit for their needs was the MUHC forYOU Program. This program best embodied the culture of care and exemplified a sustainable peer support program that could be feasibly adapted using the Three-Tiered Interventional Model for Second Victim Support.^[23] Moreover, Sue Scott, the founder of the peer support program, was welcoming and informative.

2. METHODS AND FRAMEWORK

Given the impact of the second victim phenomenon and the evidence base supporting peer support, the primary author

presented the information to the newly formed steering committee. Based on the data demonstrating the prevalence of negative sequelae following adverse events and the literature supporting peer-provided emotional first aid, the steering committee agreed that implementing a peer support program based on the MUHC forYOU curriculum was an organizational priority. The Iowa Model Revised^[24] guided this EBP practice change, which employed a pre/post-test methodology.

The conceptual framework for the program mirrored the forYou program using Jean Watson's theory of transpersonal caring and Critical Incident Stress Management (CISM).^[18] Watson asserts that caring is a precursor to healing and acknowledges that recovery follows a personal path.^[25] Caring contributes extensively to excellent patient care and can also contribute to supportive peer-to-peer interactions. CISM provides a structured model for dealing with traumatic events that allows for debriefing, defusing emotions, and providing support.^[26] Although used primarily for first responders, CISM affords support for any adverse human experience.

2.1 Setting and sample

The peer support program was implemented in a 358-bed Southwestern hospital, providing a full spectrum of health and wellness services, including a very busy Women's Services Department. The four Women's Service units are antepartum, labor and delivery, mother-baby, and neonatal intensive care. As a Magnet® designated organization that supports a learning culture, the leadership supports reporting safety events and near misses.

Staff members (n = 44) from these units were asked to complete an anonymous 4-question survey voluntarily and again four to five months after the peer support was implemented (n = 17). The pre-implementation contained 44 responses, and the post-data only included 17.

2.2 Design team

The Peer Support Steering Committee consisted of the Chief Nursing Officer (CNO), the Chief Quality and Patient Safety Officer, the Associate Chief Nursing Officer, the Magnet Program Director, the Director of Spiritual Care, the Director of Women's Services, the Nurse Managers from each unit, the Director of Education, and the primary author (L&D Charge Nurse) with the CNO serving as the executive sponsor. This team designated a core group of three trainers to attend a two-day peer support train-the-trainer workshop hosted by the MUHC forYOU Program.

Upon completing this training, the team created the framework for the program for promoting resiliency and inspiring spiritual and emotional well-being using peer support

(PRAISE UP). Having been a long-term military chaplain trained in CISM, including critical incident stress debriefing (CISD), the Director of Spiritual Care was instrumental in designing the program and ensuring that the program allowed for timely emotional and psychological support.^[18] Additionally, the Chief Quality Officer’s experience with the Cleveland Clinic’s Code Lavendar program provided experiential guidance and additional information.

2.3 The implementation plan

Once the steering committee approved the framework, the trained core team designed peer support training based on the forYOU content with Susan Scott’s guidance. The decision was to begin the program with a Women’s Services department pilot. If the implementation were successful, the team would slowly include oncology and other high-acuity areas (critical care and emergency services) until the program was implemented hospital-wide. The goal is to implement the program in all the sister hospitals within the system.

The primary author surveyed the Labor and Delivery (L&D) staff to determine the impact of adverse events on Women’s Services and the need for a peer support program. The pre-survey consisted of single-response questions to assess the prevalence of unanticipated events, their impact, the type of support or debrief received, the effect of the intervention, and if they felt they would benefit from a peer support program.

The peer support trainers then provided the peer support curriculum to chaplains and 26 peer supporters representing the four departments in Women’s Services to cover both shifts, seven days a week, on all service lines. Their coworkers and leadership perceived the training attendees as supportive and trustworthy. The trainers designed the course to explain the significance of the second victim phenomenon and healing trajectory, discuss strategies for providing emotional first

aid, and define when to escalate a referral for additional support using a three-tier model.^[11] The training also involved case scenarios and role-play to integrate the information into experiential knowledge. Additionally, the training team provided several tools to guide the peer supporters in delivering real-time emotional first aid to their peers.

Following each peer support session, the peer supporters documented on an encounter form. Designed to track only the volume of peer support provided and ensure confidentiality, the records contained only the name of the peer supporter, the type of support offered, the professional class, event type, and type of referral (if needed). The peer supporters did not record the second victim’s name, the date, or clinical information.

Once the program had been in place for six months, the team distributed the post-survey via email and posted a quick response (QR) code in the break room. Seventeen nurses responded after receiving reminders. The post-survey contained the same questions regarding unanticipated events, their impact, and the type of support received, with additional questions regarding program awareness. The data was then compared to the pre-data and presented to the Steering Committee.

3. RESULTS

The pre-survey results indicated that 37 of 44 HCPs had been involved in an adverse event that affected their performance during their subsequent shift. Moreover, 30 respondents felt their work performance was still impacted, even years after the event. The staff (38 of 44) also felt they would benefit from a peer support program. Based on this data, the steering committee endorsed the organization’s need for peer support following unanticipated adverse outcomes (see Figure 1).

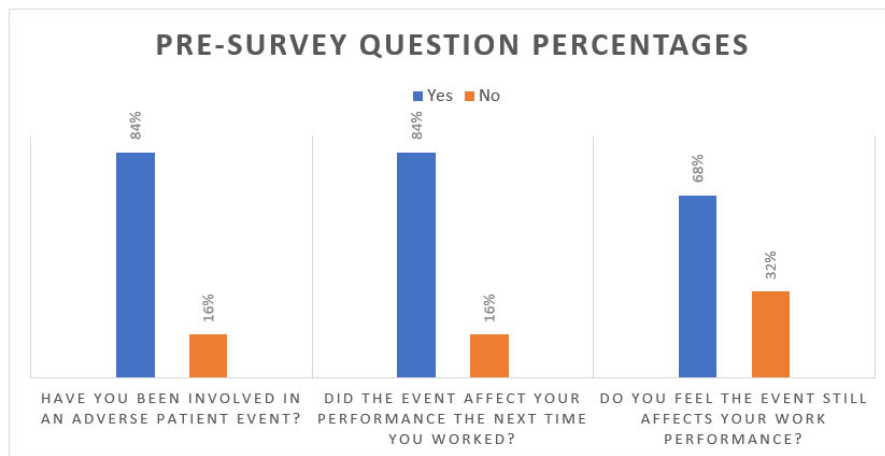


Figure 1. Percentage of employees by response

Note: The pre-implementation data depicts the percentage of employees involved in an adverse event, its impact, and the duration of the effects on their work performance, indicating a need for the intervention.

Pre- and post-implementation of the Peer Support Program, nurses in Women's Services reported adverse events impacting their emotional well-being. Yet post-program, more nurses reported receiving support (86% post-program ver-

sus 43% pre-program). Before the implementation, 79% of nurses received peer support, versus 86% receiving peer support post-implementation (see Figure 2). Although 88% of nurses reported being aware of the program, only 53% knew who their peer supporters were, indicating a need for more staff awareness. The implementation occurred during the COVID pandemic, which may have resulted in a decreased post-assessment sample size. Overall, the participants indicated that they found the peer support program worthwhile.

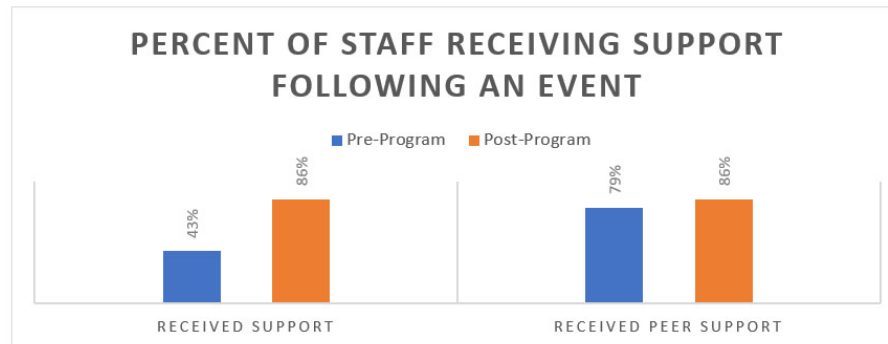


Figure 2. Percentage of staff receiving support following an unanticipated event

Note. This figure depicts the increase in support received post-implementation, supporting the program's efficacy and feasibility.

The team also collected the encounter forms to quantify the amount of peer support provided (n = 19). Despite efforts to ensure confidentiality, the supporters did not consistently complete the forms. They reported hesitancy in completing encounter forms stating that providing support was "too personal" and that they acted as a friend—not necessarily as a peer supporter. Therefore, the team provided additional information to the peer supporters regarding their role and the support they afford.

4. DISCUSSION

This article describes the initial implementation of a peer support program to support resiliency in clinicians following an unanticipated event. Most medical errors in health care result from defective processes and systems, not clinicians.^[27] Clinicians are thwarted by systems that impede quality and create sub-optimal care environments.^[28] Additionally, the complex healthcare environment exposes clinicians to other unanticipated events. As a result, many clinicians suffer as second victims.

The executive-level support for peer support following unanticipated adverse events establishes an organization's commitment to their employees' mental, spiritual, physical, and behavioral health and patient safety related to adverse events.^[11] Although not every AE warrants peer support, implementing a flexible peer support program designed to guide

peer supporters is essential in the current complex healthcare environment.^[7]

Although limited by a small convenience sample, this evidence-based program demonstrates the feasibility of implementing a program to support clinicians and mitigate the negative sequelae of being involved in AEs. Using a validated tool to measure the second victim experience, such as the Second Victim Experience and Support Tool (SVEST),^[6] would have added to the program's value. In health care, there exists a perception that seeking support indicates weakness,^[18] which may explain the hesitancy of peer supporters in completing and submitting encounter forms. Creating more awareness of the program and its significance in health care while decreasing the stigma of asking for help is warranted for its success.

5. CONCLUSION

Nurses on the implementation units indicated receiving more support after the peer support program was implemented and felt the program was beneficial. Since unanticipated events are inevitable in health care, the steering committee recommended sustaining and spreading the program to all the nursing departments. The team has also purchased badge reels to identify the trained peer supports and simplify the tracking forms. Each Women's Services unit also has a flyer with Peer Support information and peer supporters

to increase program awareness for the entire service line. As the program is implemented on other service lines, the SVEST tool will be used to measure the program's success. More data is needed to determine the program's total impact necessitating an iterative process as the program spreads to other units and eventually throughout the system.

Evidence demonstrates that peer support programs can alleviate the negative impact AEs have on nurses and other HCPs. This emotional aid helps clinicians cope with the trauma and continue being productive in their practice. Yet, more research is still needed, as there are few successful, sustained peer support programs in the US.

The COVID pandemic has affected an already overburdened nursing profession and increased the number of deaths and

adverse events.^[29] A 2020 national survey found 45 percent of nurses reported they did not receive adequate emotional support during the COVID pandemic, and 38 percent of respondents stated they turned to coworkers for emotional support.^[30] These findings support investigating peer support programs' impact on clinicians.

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CONFLICTS OF INTEREST DISCLOSURE

The authors have no conflicts of interest to declare.

REFERENCES

- [1] Kohn LT, Corrigan JM, Donaldson MS, et al. *To Err is Human: Building a Safer Health System*. Washington, DC: Committee on Quality of Health Care in America, Institute of Medicine. National Academies Press; 2000. ISBN: 9780309068376.
- [2] Johns Hopkins Medical: Study suggests medical errors now the third leading cause of death in the U.S. Baltimore: John Hopkins Medicine; 2016 May [cited 2021 Aug 26]. Available from: https://hopkinsmedicine.org/news/media/study_suggests_medical_errors_now_thrid_leading_cause_of_death_in_the_us
- [3] Ozeke O, Ozeke V, Coskun O, et al. Second victims in health care: current perspectives. *Adv Med Educ Pract*. 2019; 10: 593-603. PMID:31496861 <https://doi.org/10.2147/AMEP.S185912>
- [4] Wu A. Medical error: The second victim. *BMJ*. 2000; 320(7237): 726-7. PMID:10720336 <https://doi.org/10.1136/bmj.320.7237.726>
- [5] Scott SD, Hischinger LE, Cox KR, et al. The national history of recovery for the healthcare provider "second victim" after adverse patient events. *Qual Safe Health Care*. 2009 Jun; 18, 325-330. PMID:19812092 <https://doi.org/10.1136/qshc.2009.032870>
- [6] Burlison JD, Scott SD, Browne EK, et al. The second victim experience and support tool (SVEST): Validation of an organizational resource for assessing second victim effects and the quality of support resources. *J Patient Saf*. 2017 Jun; 13(2): 93-102. PMID:25162208 <https://doi.org/10.1097/PTS.0000000000000129>
- [7] Harrison R, Wu A. Critical incident stress debriefing after adverse patient safety events. *Am Manag Care* 2017 May 16; 23(5): 310-312.
- [8] Kapaki V, Souliotis K. Defining adverse events and determinants of medical errors in healthcare". *Vignettes in Patient Safety - Volume 3*, edited by Stanislaw Stawicki, Michael Firstenberg. IntechOpen, 2018. <https://doi.org/10.5772/intechopen.75616>
- [9] Adverse events, near misses, and errors [Internet]. Washington, DC: Agency for Health Care Quality Patient Safety Network; c2019 [cited 2022, Mar 28]. Available from: <https://psnet.ahrq.gov/primer/adverse-events-near-misses-and-errors>
- [10] Merandi J, Liao N, Lewe D, et al. Deployment of a second victim peer support program: A replication study. *Pediatr Qual Saf*. 2017 Jul/Aug; 2(4): 1-8. PMID:30229168 <https://doi.org/10.1097/pq9.0000000000000031>
- [11] Scott SD. *The second victim phenomenon: A harsh reality of health care professions*. Rockville (MD): Agency for Healthcare Research and Quality; 2011 May 1 [cited 2021 Aug 11]. Available from: <https://psnet.ahrq.gov/perspectives/perspective/102/the-second-victim-phenomenon-a-harsh-reality-of-health-care-professions>
- [12] Severe Maternal Morbidity in the United States [Internet]. Washington, DC: Center for Disease Control and Prevention; 2021, Feb 2 [cited 2021, Sept 15]. Available from: <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/severematernalmorbidity.html>
- [13] Margulies SL, Benham J, Liebermann J, et al. Adverse Events in Obstetrics: Impacts on Providers and Staff of Maternity Care. *Cureus* 2020 Jan; 12(1): e6732. PMID:32140315 <https://doi.org/10.7759/cureus.6732>
- [14] Morton CH, Hall MF, Schaefer SJM, et al. National partnership for maternal safety: Consensus bundle on support after a severe maternal event. *JOGNN* 2021 Jan; 50 (1): 88–101. PMID:33220179 <https://doi.org/10.1016/j.jogn.2020.09.160>
- [15] Busch IM, Moretti F, Campagna I, et al. Promoting the psychological well-being of healthcare providers facing the burden of adverse events: A systematic review of second victim support resources. *Int J Environ Res Public Health*. 2021 May; 18(10): 5080. PMID:34064913 <https://doi.org/10.3390/ijerph18105080>
- [16] Stone M. Second victim support programs for healthcare organizations. *Nursing Management*. 2020 Jun; 57(6): 38-45. PMID:32472858 <https://doi.org/10.1097/01.NUMA.0000662664.90688.1d>
- [17] Turner A. Hospital's "code lilac" aims at reducing care givers' emotional stress [Internet]. *Houston Chronicle*. Houston: 2016 Dec 17 [cited 2021, Aug 26]. Available from: <https://www.houstonchronicle.com/life/houston-belief/article/Hospital-s-Code-Lilac-aims-at-reducing-care-10803484.php>
- [18] Hirschinger LE, Scott SD, Hahn-Cover K.: Clinician support: Five years of lessons learned [Internet]. Middleton, MA: Patient Safety & Quality Health Care; 2015 Apr 13 [cited 2021, Aug 26]. Avail-

- able from: <https://www.psqh.com/analysis/clinician-support-five-years-of-lessons-learned/>
- [19] Stone M. Second victim support: Nurses' perspectives of organizational support after an adverse event. *Journal of Nursing Administration*. 2020 Oct; 50(10): 521-5. PMID:26796817 <https://doi.org/10.1097/NNA.000000000000298>
- [20] Edrees H, Connors C, Paine L, et al. Implementing the RISE second victim support programme at the Johns Hopkins Hospital: a case study. *BMJ Open*. 2016 Sep 30; 6(9): e011708. PMID:27694486 <https://doi.org/10.1136/bmjopen-2016-011708>
- [21] Greene A. Code lavender: The sweet smell of support. 2014. Available from: <https://www.patient-experience.org/Resources/Newsletter/Newsletters/Articles/2014/Code-Lavender.aspx>
- [22] Helping clinicians through traumatic events also helps the bottom line, cost benefit analysis shows [Internet]. Baltimore: Johns Hopkins Bloomberg School of Public Health; 2017, May 10 [cited 2021, Aug 26]. Available from: <https://publichealth.jhu.edu/2017/helping-clinicians-through-traumatic-events-also-helps-the-bottom-line-cost-benefit-analysis-shows>
- [23] Scott SD, Hirschinger LE, Cox KR, et al. Caring for our own: Deploying a systemwide second victim rapid response team. *Jt. Comm. J. Qual. Patient Saf.* 2010; 36: 233-240. PMID:20480757 [https://doi.org/10.1016/S1553-7250\(10\)36038-7](https://doi.org/10.1016/S1553-7250(10)36038-7)
- [24] Buckwalter KC, Cullen C, Hanrahan K, et al. Iowa Model of Evidence-Based Practice: Revisions and validation. *Worldviews Evid Based Nurs.* 2017; 14(3): 175-182. PMID:28632931 <https://doi.org/10.1111/wvn.12223>
- [25] Wei H, Watson J. Healthcare interprofessional team members' perspectives on human caring: A directed content analysis study. *Int J Nurs Sci.* 2019 Jan 10; 6: 17-23. PMID:31406864 <https://doi.org/10.1016/j.ijnss.2018.12.001>
- [26] Critical Incident Stress Management International. What is CISM? [cited 2021, Aug 26]. Available from: https://www.criticalincidentstress.com/what_is_cism_
- [27] Conway J, Federico F, Stewart K, et al. (2011, March). (2nd ed.) Respectful management of serious clinical adverse events (White Paper – IHI Innovation Series). Available from: Institute for Healthcare Improvement: www.ihi.org/IHI/WhitePapers/.
- [28] National Academies of Sciences, Engineering, and Medicine. Crossing the global quality chasm: Improving health care worldwide. Washington, DC: The National Academies Press; 2018. PMID:30605296 <https://doi.org/10.17226/25152>
- [29] Fauteux N. COVID-19: Impact on nurses and nursing. *AJN, American Journal of Nursing.* 2021 May [Cited 2022 Mar 30]; 121(5): 19-21. Available from: <https://doi.org/10.1097/01.NAJ.0000751076.87046.19>
- [30] The mental health of healthcare workers in COVID-19 [Internet]. Alexandria, VA: Mental Health America; c2022 [Cited 2022 Mar 30]. Available from: <https://mhanational.org/mental-health-healthcare-workers-covid-19>