Peer-Supervision of Nursing Professionals: A Shield Against Burnout

Kyle Gamache[1], PhD, LMHC, Sarah Gamache[2], DNP, NP-C, Joseph Robillard[3], BA

ABSTRACT

Introduction: Burnout is a major risk in healthcare professions and is a significant contributor to the current nursing shortage. Strategies to combat burnout of healthcare professionals are in desperate need. The purpose of this project is to introduce the clinical peer supervision model as a method to alleviate burnout in nursing professionals.

Approach: Eight nurses from in-patient settings participated in a peer-supervision support group, modeled after existing European nursing and mental health provider-support protocols. To assess the effect of this intervention, qualitative data analysis was conducted on the transcripts of session and the results described. All participants reported statistically high levels of dissatisfaction at work (M= 30.75, SD = 7.57, $p < 0.001$) prior to the group study implementation. The transcripts of the subsequent group sessions were coded using a multi-phase coding scheme, generating themes related to Maslach's burnout typology. The first-round coding resulted in 93 initial codes, which were further organized into 17 thematic categories, which were synthesized into five broad themes. Three of these themes deductively corresponded to Maslach's theoretical concepts (emotional exhaustion, depersonalization, and personal accomplishment), the remaining two themes were summarized as 'administrative stressors' and 'professional survival tactics'. Administrative decision making, depersonalization, and emotional exhaustion were noted as predominant causes for work-related stress and burnout. However, the participants valued the peer support group and were eager to continue meeting for peer-supervision.

Discussion: The peer support of the group showed promise in the relief of stress related to their helping profession. The clinical peer supervision model is frequently utilized in the United Kingdom and Europe, but rarely utilized in the United States. Based on these results, the authors recommend consideration for trial implementation of similar protocols by American nursing professionals as a mitigation to burnout.

INTRODUCTION

Nursing, as a critically manned healthcare profession, the growing shortage of nurses is of serious concern. The shortage of nurses in the United States is expected to exceed a quarter of a million by 2025 [1]. There are two main elements contributing to this shortage: (1) fewer nurses joining the profession, and (2) higher attrition of established nurses [2]. A major contributing factor to the attrition of nurses is burnout [3].

Summarized by Jenkins & Warren (2021), burnout occurs following prolonged exposure to chronic emotional and interpersonal stressors related to working with patients, leading to a combination of physical and emotional exhaustion. High levels of burnout are associated with significant physical and psychological issues including depression and cardiovascular disease [4, 5, 6, 7]. Nurses are thought to be particularly susceptible to burnout due to the stressful nature of their jobs, which can lead to migration out of the profession, as well as engenders a decrease in the quality of patient-care [8, 9]. Boyle (2015) argued that nurses who encounter emotional and highly stressful workplace environments, often lack outlets for feelings generated in these environments, thereby promoting burnout [10]. Social support, particularly peer support from fellow nurses or supervisors, diminishes the effects of burnout [11].

Clinical Supervision

Clinical supervision (CS) can offer the support needed to help combat burnout with nursing professionals [12]. The traditional practice of clinical supervision is a pragmatic dialog between senior and junior healthcare professionals to enhance the training of clinical practice [13]. The technique of clinical supervision is found across multiple healthcare field, but the format of this supervision varies greatly across the disciplines [13, 14]. Clinical supervision serves as a means to improve clinical skills, increase competency and accountability, and stimulate the clinicians' professional and personal growth [15, 16].

*Correspondence To: Kyle Gamache
Email: kgamache1@ccri.edu

Nursing clinical supervision

In the nursing field, clinical supervision is utilized with similar goals to improve competency, accountability, and foster learning [17]. Wide variation can be found with nursing clinical supervision in the application and scope of the practice, creating significant confusion and inconsistency [18, 19].The practice of clinical supervision is very different for nursing in the United States than with nurses practicing in the United Kingdom. The European model of nursing clinical supervision mimics the supervision models found in mental health fields [18]. While also a common practice with nurses in training, nurses are encouraged to continue career-long supervision to increase support and efficacy, to prevent burnout, and to improve morale [18]. Following this model of clinical supervision, nurses have reported that clinical supervision has offered them time to reflect and the support needed to grow professionally [20]. In the United States, clinical supervision traditionally is an educative and administrative relationship between an expert nurse and a novice nurse [18, 21]. Considering the high rates of burnout in the profession and the increase nursing shortage, some authors have suggested utilizing a European model of clinical supervision in the United States [18]. Specifically, an alternative method of clinical supervision known as peer supervision could be particularly helpful with American nurses. Peer supervision shares similarities with the group supervision model in that it has three or more practitioners, but with the peer model no senior professional acts as a supervisor [22, 23, 24]. In peer supervision, clinical professionals gather for mutual support and feedback to increase professional and personal growth [25, 26]. This model has become increasingly popular with clinical professionals, potentially because it is less intimidating without the hierarchical relationship present [23, 24].

Aims

Burnout is a critical concern for the nursing profession, and clinical supervision has been suggested as a way to combat burnout. The nursing profession in the United States rarely utilizes the clinical supervision model practiced in European countries. If American nurses embraced this different model of supervision, perhaps burnout could be prevented. After all, peer clinical supervision may be a method to increase nurses' sense of support and collaboration, factors that alleviate burnout and improve morale. Thus, the purpose of this project is to introduce the peer supervision model to a group of United States nurses and assess its effect. Through facilitating a peer supervision group, the authors' intent is to bring the peer-group supervision model found in European healthcare to a group of American nurses, offering them an avenue to share their experiences with burnout and work-related stresses, as well as teaching them how to facilitate their own independent peer supervision groups.

APPROACH

In this pragmatic qualitative research study, the authors introduced the peer-group supervision model to a group of professional nurses and explored their experiences within the treatment group. Adhering to the framework of pragmatism, the researchers are focused on the "real world" issues faced by participants, often with a specific problem as the focus [27].

Using this theoretical perspective, the authors conducted a phenomenological qualitative study utilizing the data from the clinical peer-supervision group formed to support nurses experiencing burnout in a local hospital setting. Specifically, the methodology utilizes a form of Moustakas's (1994) transcendental phenomenological approach [28]. In this methodology, researchers bracket their own experiences and collect data from several participants about their experiences with the phenomenon. This methodology is most appropriate as it is heavily psychological in nature and can be readily utilized in a group setting [28].

The phenomenon of interest was burnout [29]. Burnout is a well-established concern with healthcare professionals, especially nurses, and highly detrimental to the physical and emotional wellbeing of such practitioners. To understand this phenomenon, and how the participants experienced it, several research questions guided our research:

. R1: How are our participants experiencing burnout and work stress?
. R2: What are the factors contributing to burnout in American nurses?
. R3: Can the peer-group supervision model be of benefit to nurses experiencing burnout?

Group Model

The group model primarily utilized in this project was the group psychotherapy model summarized by Yalom & Leszac (2007) and Tuckman & Jensen (1977) [30, 31]. Additionally, this project's group followed the mutual aid model of group supervision [32], where group members collaborate and offer each other support rather than a tiered "supervisor-supervisee" group model, with group members also guiding the topics and feedback of the group sessions. The mutual aid model is less organized than other peer-supervision models such as the structured peer consultation model (SPCM), and offers an opportunity for all group members to empower and learn from each other through peer feedback and support [23, 32]. In this project, group members guided the discussion, focusing on topics that were important to them, while the first and second authors acted as group facilitators.

Participants

Participants were professional nurses currently working in a New England state. To encourage group compatibility and cohesion, participants were all registered nurses (RNs) and working in a hospital or assisted-living setting in New England [31]. Participants were recruited through convenience snowball sampling through the second author's professional contacts at local healthcare facilities. Participants were told about the purpose of the group and given introductory information on peer-supervision. If participants were interested in participating, they were invited to join and sign informed consent forms. Following Yalom & Leszac's (2007) recommendations, all participants were interviewed individually to ensure appropriateness for the peer-group prior to starting participation and to describe the peer-supervision modality [31]. To assess burnout,

all participants were given the quantitative measures during the initial interview.

Quantitative Measures

In order to confirm appropriateness for group membership, to prepare for inter-member discrepancies, and to increase validity, three quantitative scales were administered to the participants during their individual screening sessions to ensure that they were experiencing clinical levels of workplace stress and burnout. The first measure was the Maslach Burnout Inventory (MBI). The MBI is the most widely used scale to assess burnout and is widely applied to healthcare professionals [33, 34]. Additionally, the Nursing Profession Self-Efficacy Scale was utilized to assess nurse self-efficacy. While multiple scales related to self-efficacy as well as specialized scales for nursing students exist, the NPSES is the only scale designed for established nursing professionals [35]. The final instrument used in the quantitative assessment was the Trier Inventory for Chronic Stress (TICS). The TICS is a self-report scale designed to assess the presence and severity of stress within the past three months [36].

Procedure

This project was conducted during the winter of 2020, ending several weeks prior to the start of the COVID-19 pandemic. This project was reviewed and approved by the IRB of the University of Rhode Island (IRB# 00599). Once approved, participants were recruited and screened. Thereafter, participants were selected, and group meetings began. Participants met as a peer-supervisory group for five sessions over seven weeks. The first and second author co-facilitated the group, with Dr. Sarah Gamache being the primary facilitator in group discussions as needed. Each session lasted approximately one hour. The group sessions, following the mutual aid model, were unstructured with group members directing the session goals [32]. However, to remain on track, a series of discussion topics prepared by the co-facilitators were available to stimulate conversation as needed. Group sessions typically began with group members checking-in with each other and describing the issues that they experienced the preceding week. In the third and fourth group sessions, multiple group members brought a topic or question for the group to discuss following their check-ins. Group sessions closed with goals for the next group meeting as well as members' concerns for the coming week. Following the final group session, each participant was interviewed regarding their impression of the group's effect and were individually debriefed.

These group sessions were audio-recorded and transcribed. Following each session, the co-facilitators wrote several notes and continued memoing throughout the seven weeks in which the groups met. These transcripts and notes were coded and qualitatively analyzed to establish themes. Participants engaged in informal member checking by reviewing the transcripts and hearing the audio recordings to ensure accuracy, and engaged in formal member checking at the end of the study by reviewing completed work and responding to the authors' interpretations.

Qualitative Data Analysis

The data reviewed for this study included the notes and memos of the co-facilitators, the notes from the participant's screening and debriefing interviews, and the transcripts for the group sessions. The transcript data was coded using an inductive and deductive multi-phase coding procedure. The coding was conducted by the first and third authors. The first cycle of coding utilized initial coding procedure, in which the transcripts are analyzed and broken into discrete parts or elements [37, 38, 39]. Following this, the second cycle of coding utilized focused coding; taking the elements identified in the first cycle coding and coalescing them into salient categories [37]. These two cycles generated the prominent themes explored in the results. A third cycle of coding was also conducted utilizing a deductive approach with Maslach's [29] burnout symptoms as focus codes. These final codes served as the major themes for the qualitative analysis of this project. The data from the co-facilitator's memos and the interview notes were also analyzed and utilized for triangulation.

Evaluation of the Project

Thirty-four nurses working in New England healthcare settings were given information about the project and invited to participate. From this pool, thirteen responded that they wished to proceed. During initial interviews, four of these participants declined to continue due to scheduling demands, and one left the nursing field prior to the start of the group sessions, leaving eight registered nurses who participated in this study. The first and second author reviewed the initial interview transcripts and, with review of the intake screening tools, decided to include all eight remaining participants. With one exception, all the participants worked in a hospital setting, in either an emergency room or medical-surgical unit. All the group participants were registered nurses (RNs). Six of them had completed bachelor's degrees in science (either BS or BSN), with one participant holding an associate's degree in nursing science (ADN) and one earning a Master's degree (MSN). Participants varied in length of time they had worked in the healthcare field, but they were comparable, with the average years of experience being 5 years, with a range of 5 years.

Utilizing the established cutoff scores on the MBI, the participants had similar ratings of burnout. On the emotional exhaustion subscale, all except one participant scored moderately on the scale. On the depersonalization scale, all but one participant demonstrated high levels of depersonalization. However, the final subscale of personal achievement showed a counter trend, with the majority reporting a high sense of personal achievement and thus a lower level of burnout in this domain.

To assess efficacy levels of the participants, the scores on the NPSES were converted to z-scores and compared to the means of the attributes of caring (M = 3.92, SD= 0.84) and professional situations (M = 3.65, SD= 0.99) subscales of the NPSES. None of the participants were significantly different than the mean scores published by the authors. This suggests that the participants did not have low levels of efficacy supporting their scores on the personal achievement subscale of the MBI.

For the TICS work discontent subscale, a one-sample t-test was performed to compare the participants' scores to the instrument's means. All participants reported statistically high levels of dissatisfaction at work (M= 30.75, SD = 7.57, $p < .001$) compared to the normative mean (M = 11.83, SD = 5.55). This suggests that the participants were experiencing high levels of workplace stress that may be contributing to burnout, which is in-synch with the participant scores on the MBI emotional exhaustion and depersonalization subscales. See **Table 1** below for summary of participant scores on screening material.

Table 1: Group Member Scores on Screening Materials

Participant	NPSES - Attributes of Caring/Professional Situations Subscales		TICS- Work Discontent Subscale	MBI- Emotional Exhaustion Subscale	MBI- Depersonalization Subscale	MBI- Personal Achievement Subscale
1	4.16	/ 4.04	31	33	23	34
2	4.52	/ 4.73	37	35	34	36
3	4.50	/ 3.42	20	23	8	47
4	4.50	/ 3.14	40	12	14	26
5	3.50	/ 3.42	31	27	17	41
6	3.81	/ 4.28	27	30	27	31
7	4.58	/ 4.28	40	22	22	41
8	3.50	/ 3.28	26	18	13	27

The eight nurses participated in five peer supervision groups. All sessions had at least 6 participants in addition to the facilitators. All participants were present during the first session where the peer-supervision model was introduced and group building began. The participants quickly became a cohesive group, sharing and supporting each other with little prompting or interference from the co-facilitators. During the sessions, the nurses reported a myriad of issues that were affecting their personal and professional lives, and worked together to offer support and guidance to each other. An important event that was frequently cited in the group was the recent closing of a major local hospital, and the resulting strain on neighboring hospitals where the participants work.

Coding

As described above, a multi-cycle coding technique was utilized in review of the transcripts. Qualitative review was conducted on the transcripts of the five group sessions, the transcripts of the individual exit interviews, and the notes of the co-facilitators. The first-round coding resulted in 93 initial codes. During the second cycle of coding, these 93 codes were further organized into 17 thematic categories. In the third and final cycle of coding, these categories were synthesized into five broad themes. Three of these themes were chosen deductively to correspond to Maslach's (2003) theoretical concepts and were thus predetermined as emotional exhaustion, depersonalization, and personal accomplishment [29]. The remaining two themes of administrative stressors and professional survival tactics were generated inductively from the coding of the transcripts (See **Table 2**).

Review of Themes
Emotional Exhaustion

A consistent theme among group members were feelings associated with emotional exhaustion. Participants reported feelings of fatigue and general degradation of their mental health. The expansive role and workload of participants were cited as primary causes for emotional exhaustion in the workplace, as well as outside of work stressors. Participants mentioned on several occasions the idea of "decision fatigue." One group member went on to explain, "… your day can be so horrible that it really doesn't compare to like oh, the fax machine was down and everything got backed up and it makes it hard to give the appropriate emphatic responses to your family members." In response another participant replied, "I have decision fatigue. What is for dinner? I don't [know], I can't [make decisions anymore]." Situations where nursing professionals were overwhelmed with various responsibilities were mentioned as a reason for emotional exhaustion. Reoccurring feelings of powerlessness, despite their best efforts for self and client advocacy, were also mentioned within group.

Group members also reported that their time away from work settings were focused on relieving symptoms of workplace stressors. Several group members echoed the idea of needing "your entire day off just to recover." The group frequently brought up the idea of needing additional therapy to improve their mental health. One participant noted, "…then you have to find your own therapist on your own time and spend $50 dollars. I don't know how much your copay is. Fifty dollars for me to go see a therapist and I am like okay so much for mental health being a top priority." Participants made several references to the need for additional support to combat their feelings of exhaustion. Emotional exhaustion among these nursing professionals appears to have a profound impact on their personal and professional lives.

Table 2: Third Cycle Major Themes with Second Cycle Focused Codes

Emotional Exhaustion	Depersonalization	Personal Accomplishment	Administrative Stressors	Professional survival tactics
Hopelessness	Cynicism	Idealism	Management Disconnect	Solidarity
Stress	Detachment	Pride	High Staff Attrition	Teamwork
Transference	Avoidance	Patient Advocacy	Impractical Policies	Mentor Support
Health Issues	De-individualization			

JOURNAL of WELLNESS

UofL

Depersonalization

Workplace depersonalization is a consistent theme voiced throughout the interview and group sessions. The group members gave many examples of workplace stressors causing a reduced amount of empathy in their daily tasks. Participants were aware of the presence of depersonalization symptoms. They often attributed these behaviors to various administrative stressors. One participant explained, "You're not allowed to be human actually. Because you have to be professional and maintain composure like we work in a restaurant…" The effects of depersonalization discussed in session affected the group's interaction with patients, as well as with their co-workers, creating an increasingly challenging work environment. Group members articulated a sense of isolation that lingered past their time within the workplace. Examples of uncharacteristic sarcasm, abruptness and brashness were noticeable in the participants stories about difficult experiences in the workplace. Participants frequently reported that they had become cynical or "jaded" regarding their work. Citing the stress of the job, particularly due to the influx from the hospital closing, participants reported stress and frustration, describing that "[the hospital] is a prison" and that they were "tired of these patients". One participant jokingly commented that nurses should not be trusted to monitor suicidal patients because "we're half out the window ourselves". There was joking agreement to this statement, and one nurse acknowledged that "that's not funny, but I'm so jaded". The group members supported each other with this, discussing how they felt "broken down" by the situations they found themselves in, and feeling guilt that they had drifted from the idealism that led them into the profession.

Administrative Stressors

A reoccurring theme was that of administrative stressors, which the authors defined as demands not directly related to patient care that interfered with the nurses' ability to perform their tasks. The group members agreed there was significant concern regarding the management of their respective departments, describing that they felt the hospitals were poorly managed, and expressing frustration working with their supervisors, citing management's lack of understanding of the issues faced by nurses in the field. The participants described that management's focus at the hospitals appeared to be solely on achieving and maintaining high accreditation rather than supporting nurses. This pressure was summarized in session by one of the group members: "[they] had to re-vamp the whole thing and [because of the focus on Magnet Certification] they're freaked out so they are trying to start all these things right away, like they are all freaking out but not for the right reasons". Management created policies that "sounded good", but at best did not help the nurse's tasks and at worst were a hindrance. The environment was reported to be chaotic and unstable, with changes occurring with little notice or explanation. The participants also described frequently needing additional time to complete clinical notes, and then being penalized for claiming overtime for these tasks. In a later group, one participant described that they volunteered to switch their regular shifts for night and weekend shifts in order to avoid management.

Ultimately, one of the largest issues raised by the participants was a general lack of resources for them to complete their tasks. The most significant resource was staffing, with all of the participants citing that they frequently encountered maxed staff to patient ratios and had limited support while working. The group members described the difficulty in maintaining staff, with nurses frequently quitting during orientation. Indeed, during the sessions the participants reported that five nurses had quit suddenly across the hospital the same weekend. This had led to a decrease in the quality of care at their hospitals .

Personal Accomplishment

Though the participants reported extensive stress and scored high on the MBI domains related to emotional exhaustion and depersonalization, they also scored high in the personal accomplishment domain of the MBI and within the average for efficacy subscales of the NPSES. So, even though the participants demonstrated features of burnout, they remained confident in their abilities and demonstrated high levels of competency. The nurses frequently discussed how often they needed to advocate for their patients as a result of mismanagement or negligence on the part of the administration or physicians. One nurse described that they were "not sorry about using my nursing judgement to say 'no' [to doctors or managers]" because "[we] have to be responsible for what [we] do as well as being responsible for what they do". Though they were frustrated by this, they also described taking pride in the act, feeling a sense of accomplishment when helping their patients.

Professional Survival Tactics

Throughout the sessions, group members described the various stresses affecting them and their experiences with burnout. Reflections on burnout lead to in-depth discussions about techniques that the nurses employed to cope with and mitigate job-related stress. This was recognized as the theme of professional survival tactics: practices utilized proactively to allay stress and burnout. The nurses described the importance of mentorship, not simply preceptorship, and how mentor support helps them cope. This form of mentorship was described as informal, with experienced nurses "looking out for" new nurses and peers. Increasing communication between nurses on different hospital floors and departments was also thought to be important in reducing stress. The participants descried a silo effect, where often nurses do not get to work in different departments and do not know differences in procedure or technology in other areas of the hospital. This lack of understanding leads to frustration and resentment, which the participants believed could be easily avoided through open communication between nursing professionals. One participant summarized this as "think[ing] down the line to make things easier" for the patient and the future nurses that will work with them.

Participant Evaluation of the Peer-Supervision Experience

At the close of the group and in their exit interviews, group members discussed the peer-supervision model that was introduced as a positive experience and brought up the possibility of using the technique as a professional survival tactic. One

participant described that they were "so glad to know I'm not alone" in the stress of work and liked the support from other professionals. The group offered an opportunity to self-reflect. One of the group members described that she "[found reflecting on the stress of her role] very helpful, and you can definitely grow and learn a lot about yourself and about how to do better." The group served as a significant outlet to identify major issues within the hospital and profession. The nurses discussed that they likely could not change "the system" on their own, but in working together and supporting each other they could "influence it". Indeed, at the close of every session, the participants were excited to continue to meet and, after the final scheduled meeting, the participants stated that they wished to continue to meet as a peer-supervision group.

DISCUSSION

The goal of this project was to offer an alternative model of clinical supervision to a group of nurses in order address burnout. The data offered by the participants allowed the researchers deeper understanding of the concerns that these nurses were experiencing.

Ideally, this project will have had a positive effect on the participants and encourage their continual utilization of the peer supervision model. The preliminary results suggest that this is occurring, with the participants continuing to utilize their peer support during the later onset of the COVID-19 pandemic. The participants all reported moderate to high levels of burnout on multiple domains, and the group offered them an outlet to express their experiences. The participants reported that the group was a unique and unexpected benefit to them. They described that knowing other nurses were having similar experiences, and being able to interact with and support them, was a major benefit for these professionals. Several significant events happened in the participants' lives that were discussed extensively in later groups; the participants reported that having an outlet to discuss these events was a positive experience.

The life of the group will continue beyond this project: in the final session, participants describing a desire to continue to be in contact with each other and meet as needed. Participants reported wanting to read more about the peer-group model so that they could repeat this experience with other nurses as they moved into new environments.

Because of this, the authors argue that this pilot project suggests the effectiveness of the clinical peer-supervision model for nursing professionals, and recommend that American nurses consider this modality like their European colleagues [18]. Ideally, groups would be formed independently by nurses that work in similar settings. The groups can convene to respond to specific issues or events, or could be open and informal. The frequency of the groups would be decided by the participants.

Following the European style, peer-supervision groups need to be supported by the facilities' administration and management [18]. This can be achieved in several key ways. Administration can offer information about groups, encourage nurses to join a peer-supervision group at their facility, and provide a space for the group to meet privately. The ideal time to offer the group would be during the workday, however

most American facilities do not have the ability to allow multiple nurses to be absent from their floors for an extended period of time. Considering this, the groups could be conducted prior to or after the nurses' shifts and offer incentives (pay, vacation time, food, etc.) for the nurses to attend the groups. Administrative support for these groups would likely be instrumental to their success.

Limitations

The results of this study are promising; however, several limitations must be considered. First, a low number of subjects participated in the study and these subjects were recruited through convenience sampling. While this is not uncommon for such forms of qualitative research, this may limit the generalizability and transferability of these results to other nursing professionals or healthcare settings.

Second, while the group was carefully composed and the group members actively participated, not all of the participants were equally articulate or perceptive. This is common in focus groups and similar qualitative studies utilizing group design, but this means that the data generated must not be considered as the uniform perspective of all the group members. Similar to a true group supervision or group therapy scenario, if continual sessions occurred, further group cohesion could have brought forth a greater diversity of participant perspectives.

Third, because of the nature of the convenience sampling, many of the participants had previously worked with one of the group's co-facilitators. The degree to which this influenced the responses of the participants is unknown. It may have helped facilitate genuine conversation, but it also may have directed their responses in undetermined ways. Additionally, the presence of the other co-facilitator, an individual who was not a nursing professional, may have had further influence on the group. Considering that a true clinical peer-supervision group would not include an outsider, the transferability of these results to a peer-supervision group in the field is unknown.

Finally, this study is not experimental in design. Due to limitations in scope and number of participants, a pre-post statistical evaluation with quantitative tools could not be completed. This is a pity, as the screening tools demonstrated that the participants were experiencing occupational distress and the qualitative data from the exit interviews suggest the peer-supervision group may have served as an intervention. Without a true pre-post evaluation, however, the validity of these results is significantly limited.

Future research should respond to these limitations, especially adopting an experimental or quasi-experimental design to assess the validity of the results of this pilot investigation.

CONCLUSION

Considering that burnout is a major contributor to nurses leaving the profession in such high rates, new methods to alleviate workplace stress and improve employee well-being need to be explored. Further research needs to explore primary causes of burnout in American healthcare settings, as well as methods to prevent burnout or reduce its determinantal effects. Burnout is a threat to the emotional and physical health of nurses,

and clinical supervision and peer-support have been offered as options to combat burnout [2, 6, 9-12]. The European model of clinical supervision for nurses has been shown to be beneficial for nursing professionals [18]. The model of clinical peer supervision is frequently used with other healthcare fields such as counseling, but this has not been utilized by nurses in the United States. This model could be readily adapted for American nurses, but to do so will require significant changes in work culture and support by healthcare administrators. Clinical peer-supervision groups could be a method to reduce burnout, increasing employee well-being and retention while decreasing stress that can contribute to med-errors. Creating a supportive workplace environment and reducing stress maintains and improves staff, further reducing stress and alleviating burnout.

REFERENCES

1. Lowe LD. Creating a caring work environment and fostering nurse resilience [Internet]. Int J Hum Caring. 2013;17(4):52–9. https://doi.org/10.20467/1091-5710.17.4.52.

2. Brown S, Whichello R, Price S. The impact of resiliency on nurse burnout: an integrative literature review. Medsurg Nurs. 2018;27(6):349–78.

3. Flynn L, Thomas-Hawkins C, Clarke SP. Organizational traits, care processes, and burnout among chronic hemodialysis nurses [Internet]. West J Nurs Res. 2009 Aug;31(5):569–82. https://doi.org/10.1177/0193945909331430 PMID:19270274

4. Jenkins B, Warren NA. Concept analysis: compassion fatigue and effects upon critical care nurses [Internet]. Crit Care Nurs Q. 2012;35(4):388–95. https://doi.org/10.1097/CNQ.0b013e318268fe09 PMID:22948373

5. Melamed S, Shirom A, Toker S, Berliner S, Shapira I. Burnout and risk of cardiovascular disease: evidence, possible causal paths, and promising research directions [Internet]. Psychol Bull. 2006 May;132(3):327–53. https://doi.org/10.1037/0033-2909.132.3.327 PMID:16719565

6. O'Brien JL. Relationships among structural empowerment, psychological empowerment, and burnout in registered staff nurses working in outpatient dialysis centers. Nephrol Nurs J. 2011;38(6):475–81. PMID:22338940

7. Tennant C. Work-related stress and depressive disorders [Internet]. J Psychosom Res. 2001 Nov;51(5):697–704. https://doi.org/10.1016/S0022-3999(01)00255-0 PMID:11728512

8. Clarke SP, Sloane DM, Aiken LH. Effects of hospital staffing and organizational climate on needlestick injuries to nurses [Internet]. Am J Public Health. 2002 Jul;92(7):1115–9. https://doi.org/10.2105/AJPH.92.7.1115 PMID:12084694

9. Halbesleben JR, Wakefield BJ, Wakefield DS, Cooper LB. Nurse burnout and patient safety outcomes: nurse safety perception versus reporting behavior [Internet]. West J Nurs Res. 2008 Aug;30(5):560–77. https://doi.org/10.1177/0193945907311322 PMID:18187408

10. Boyle DA. Compassion fatigue: the cost of caring [Internet]. Nursing. 2015 Jul;45(7):48–51. https://doi.org/10.1097/01.NURSE.0000461857.48809.a1 PMID:26083295

11. Avendano C, Bustos P, Espinoza P, Garcia F, Pierart R. Burnout and social support staff of a public hospital psychiatry. Cienc Enferm. 2009;15(2):55–68. https://doi.org/10.4067/S0717-95532009000200007.

12. Hallberg IR, Norberg A. Strain among nurses and their emotional reactions during 1 year of systematic clinical supervision combined with the implementation of individualized care in dementia nursing [Internet]. J Adv Nurs. 1993 Dec;18(12):1860–75. https://doi.org/10.1046/j.1365-2648.1993.18121860.x PMID:8132916

13. White E, Winstanley J. Clinical supervision and the helping professions: an interpretation of history. Clin Supervisor. 2014;33(1):3–25. https://doi.org/10.1080/07325223.2014.905226.

14. Snowdon DA, Leggat SG, Taylor NF. Does clinical supervision of healthcare professionals improve effectiveness of care and patient experience? A systematic review [Internet]. BMC Health Serv Res. 2017 Nov;17(1):786. https://doi.org/10.1186/s12913-017-2739-5 PMID:29183314

15. Bernard JM, Goodyear RK. Fundamentals of clinical supervision: Pearson new international edition. 5th ed. London, England: Pearson Education; 2013.

16. Grant J, Schofield M. Career-long supervision: patterns and perspectives [Internet]. Couns Psychother Res. 2007;7(1):3–11. https://doi.org/10.1080/14733140601140899.

17. Bifarin O, Stonehouse D. Clinical supervision: an important part of every nurse's practice [Internet]. Br J Nurs. 2017 Mar;26(6):331–5. https://doi.org/10.12968/bjon.2017.26.6.331 PMID:28345984

18. Jones JM. Clinical supervision in nursing: what's it all about? Clin Supervisor. 2006;24(1–2):149–62. https://doi.org/10.1300/J001v24n01_08.

19. Winstanley J. Manchester clinical supervision scale [Internet]. Nurs Stand. 2000 Jan;14(19):31–2. https://doi.org/10.7748/ns.14.19.31.s54 PMID:11209386

20. Olofsson B. Opening up: psychiatric nurses' experiences of participating in reflection groups focusing on the use of coercion [Internet]. J Psychiatr Ment Health Nurs. 2005 Jun;12(3):259–67. https://doi.org/10.1111/j.1365-2850.2005.00827.x PMID:15876231

21. Benner P. From novice to expert: Excellence and power in clinical nursing practice, commemorative edition. Upper Saddle River (NJ): Pearson; 2000.

22. Sloan G. Clinical supervision in mental health nursing. John Wiley & Sons; 2006.[A1]

23. Benshoff JM, Paisley PO. The structured peer consultation model for school counselors [Internet]. J Couns Dev. 1996;74(3):314–8. https://doi.org/10.1002/j.1556-6676.1996.tb01872.x.

24. Crutchfield LB, Borders LD. Impact of two clinical peer supervision models on practicing school counselors [Internet]. J Couns Dev. 1997;75(3):219–30. https://doi.org/10.1002/j.1556-6676.1997.tb02336.x.

25. Lassiter PS, Napolitano L, Culbreth JR, Ng KM. Developing multicultural competence using the structured peer group supervision model [Internet]. Couns Educ Superv. 2008;47(3):164–78. https://doi.org/10.1002/j.1556-6978.2008.tb00047.x.

26. Wagner CA, Smith JP Jr. Peer supervision: toward more effective training. Couns Educ Superv. 1979;18(4):288–93. https://doi.org/10.1002/j.1556-6978.1979.tb01889.x.

27. Murphy JP, Murphy AR. Pragmatism: From Peirce to Davidson. Philadelphia (PA): Westview Press; 1990.

28. Moustakas CE. Phenomenological research methods. Thousand Oaks (CA): SAGE Publications; 1994. https://doi.org/10.4135/9781412995658.

29. Maslach C. Burnout- The cost of caring. Cambridge (MA): Malor Books; 2003.

30. Tuckman BW, Jensen MA. Stages of small-group development revisited [Internet]. Group Organ Stud. 1977;2(4):419–27. https://doi.org/10.1177/105960117700200404.

31. Yalom ID, Leszcz M. The theory and practice of group psychotherapy. 5th ed. La Vergne (TN): Basic Books; 2008.

32. Knight C. The mutual aid model of group supervision. Clin Supervisor. 2017;36(2):259–81. https://doi.org/10.1080/07325223.2017.1306473.

33. Maslach C, Jackson SE, Leiter MP. Maslach burnout inventory. Evaluating stress: A book of resources. Lanham, MD, US: Scarecrow Education; 1997., Retrieved from https://www.researchgate.net/publication/277816643_The_Maslach_Burnout_Inventory_Manual

34. Kim MH, Mazenga AC, Yu X, Simon K, Nyasulu P, Kazembe PN, et al. Factors associated with burnout amongst healthcare workers providing HIV care in Malawi [Internet]. PLoS One. 2019 Sep;14(9):e0222638. https://doi.org/10.1371/journal.pone.0222638 PMID:31550281

35. Caruso R, Pittella F, Zaghini F, Fida R, Sili A. Development and validation of the Nursing Profession Self-Efficacy Scale. Int Nurs Rev. 2016 Sep;63(3):455–64. https://doi.org/10.1111/inr.12291 PMID:27291103

36. Schulz P, Schlotz W, Becker P. Manual: Trierer Inventar zum chronischen Stress (TICS). Go¨ttingen: Hogrefe; 2004.

37. Charmaz K. Constructed grounded theory: A practical guide through qualitative analysis. Thousand Oaks (CA): Sage; 2006.

38. Corbin J, Strauss A. Basics of qualitative research: Techniques and procedures for developing grounded theory. 4th ed. Christchurch, New Zealand: Sage Publications; 2014.

39. Strauss CR, Corbin J. Basics of qualitative research: grounded theory procedures and techniques. Newbury Park (CA): Sage; 1990.