

ORIGINAL RESEARCH

“Nurses eat their young”: A novel bullying educational program for student nurses

Gordon Lee Gillespie^{*1}, Paula L. Grubb², Kathryn Brown³, Maura C. Boesch⁴, Deborah L. Ulrich⁴

¹College of Nursing, University of Cincinnati, Cincinnati, OH, United States

²National Institute for Occupational Safety and Health, Cincinnati, OH, United States

³The Christ Hospital Health Network, Cincinnati, OH, United States

⁴College of Nursing and Health, Wright State University, Dayton, OH, United States

Received: October 18, 2016

Accepted: January 9, 2017

Online Published: February 12, 2017

DOI: 10.5430/jnep.v7n7p11

URL: <http://dx.doi.org/10.5430/jnep.v7n7p11>

ABSTRACT

Bullying is a known and ongoing problem against nurses. Interventions are needed to prepare nursing students to prevent and mitigate the bullying they will experience in their nursing practice. The purpose of this article is to describe the development process and utility of one such intervention for use by nursing faculty with nursing students prior to their students' entry into the profession. The educational program was critiqued by an advisory board and deemed to be relevant, clear, simple, and non-ambiguous indicating the program to have adequate content validity. The program then was pilot tested on five university campuses. Faculty members who implemented the educational program discussed (1) the program having value to faculty members and students, (2) challenges to continued program adoption, and (3) recommendations for program delivery. The proposed multicomponent, multiyear bullying educational program has the potential to positively influence nursing education and ultimately nursing practice. Findings from the pilot implementation of the program indicate the need to incorporate the program into additional nursing courses beginning during the sophomore year of the nursing curricula.

Key Words: Nursing student, Horizontal violence, Lateral violence, Active learning, Intervention

1. INTRODUCTION

“Nurses Eat Their Young” is an unfortunate idiom understood and used by nurses internationally.^[1–3] Dishearteningly, the idiom has been in use for over 30 years.^[4] As Meissner wrote, nurses eating their young does not literally refer to nurses being cannibalistic with other nurses but refer to the bullying behaviors experienced by nursing.^[4] For this paper, bullying is defined as work-related, personal-related, and physical-related negative behaviors such as withholding information, ignoring targets, spreading rumors, and intimidating others.^[5] Authors commonly report the existence of bullying against the nursing workforce including

newly licensed nurses by physicians, supervisors, and other nurses;^[5–8] however, the problem shows no signs of waning. It is therefore essential that interventions be developed and used by undergraduate nursing faculty members to address this problem.^[9] The purpose of this article is to describe the development process and utility of one such intervention for use by nursing faculty with nursing students prior to their students' entry into the profession.

1.1 Bullying against nurses

Recent estimates place the incidence of bullying targeting the nursing workforce around 30%.^[10–12] Berry et al.^[5] re-

^{*}**Correspondence:** Gordon Lee Gillespie; Email: gordon.gillespie@uc.edu; Address: PO Box 210038, College of Nursing, University of Cincinnati, Cincinnati, OH, 45221, United States.

ported a higher incidence of bullying against newly licensed nurses (nurses licensed for less than three years); 72.6% (n = 147) of the sample had experienced bullying within the previous month. Hutchinson^[9] further described bullying as a contagion spreading through the nursing workforce infecting future generations of nurses to adopt bullying behaviors. Griffin and Clark,^[13] Rush et al.,^[11] and Vogelpohl et al.^[14] have reported the incidence of bullying being highest against newly licensed nurses, particularly during the first three months after licensure. These findings indicate the need for future interventions to focus on this subset of the nursing workforce. Reported reasons newly licensed nurses are targeted for bullying include bullying being a rite of passage, a norm against new employees, and a result of environmental/organizational factors such as high job demand.^[15]

The experience of being bullied leads to a variety of consequences. The consequences of bullying include nurses reporting poorer mental health, decreased collaboration with team members, ineffective communication, reduced work productivity, and poor job commitment.^[5, 12, 14, 16–22] These consequences ultimately affected the care nurses delivered to their patients including poor quality of care, medication errors, and patient death.^[23–27] Bullying among nurses previously garnered such national recognition The Joint Commission^[28] issued a Sentinel Event Alert requiring all accredited hospitals to develop a code of conduct and implement processes to manage bullying. This alert has not eradicated the problem—in fact, bullying persisted leading the American Nurses Association^[29] to convene a Special Issues Panel on Incivility, Bullying, and Workplace Violence to identify treatments for the problem. Recommended actions included educating nurses about bullying, fostering positive interprofessional relationships, and using cognitive rehearsal to learn to professionally defend oneself.

1.2 Efforts to prevent and mitigate bullying against nurses

The Health Resources and Services Administration^[30] reported 140,000 new nurses enter the workforce each year. This annual number of newly licensed nurses coupled with the vulnerability to bullying indicates a need to develop and implement bullying interventions. Early efforts to prevent bullying included Griffin^[31] and her use of cognitive rehearsal education with 26 newly licensed nurses. In her intervention, nurses practiced specific responses to common acts of bullying. Griffin^[31] found the nurses effectively used rehearsed verbal responses to stop acts of bullying against them. Although other practitioners over the last decade began adopting this intervention, the problem persisted. Additional efforts used to address bullying have included learning com-

munities,^[32] discussion groups,^[33] journal clubs,^[34,35] de-escalation strategies,^[31] role play,^[36] cognitive rehearsal,^[37] and self-awareness for preference to managing conflict.^[32] The ultimate eradication of bullying will not only improve the mental health outcomes and work productivity of the nursing workforce at large, but potentially care delivery to patients yielding fewer errors and safer care that would have been negatively impacted by nurses with impaired work ability due to bullying victimization. Clark, Nguyen, and Barbosa-Leiker^[38] concluded bullying against nursing students worsens from the sophomore to senior year in nursing school. The bullying depicted by students in their study involved bullying directed against them by faculty members and other nursing students. Smith et al.^[15] identified bullying against nursing students was a significant problem in their study of 56 senior nursing students. Therefore bullying educational programs targeting nursing students are needed.^[2,3,39]

1.3 Oppressed group behavior related to bullying against nurses

The etiology of the persistence of bullying against nurses may relate to nurses behaving as an oppressed work group.^[40,41] In their concept analysis, Dong and Temple^[42] explained nurses may behave as an oppressed group, likely due to their lack of power within the healthcare system. According to Freire,^[43] oppressed persons are more likely to adopt oppressive behaviors against others including their own class rather than take a stance against their oppressors. Based on this supposition, nurses are more likely to become oppressive or bully other nurses rather than professionally intervening and mitigating the problems instigating the use of oppressive or bullying behaviors. These behaviors of oppression are accompanied by self-blaming, informal work alliances, misuse of legitimate authority, rewards for bullying behaviors, and organizational intolerance.^[40,41,44,45] This pattern of oppressed behavior is amenable to change through education and recognition that the behavior is occurring. Any education designed for nursing students needs to provide an overview of oppressed group behavior, discuss professional strategies for prevention and mitigation, and demonstrate how to garner support from colleagues rather than oppressing or bullying back against oppressors/bullies. Without intervention, bullying will continue to be passed down from one generation of nurses to the next.

2. METHODS

A non-experimental, descriptive design was used to develop, validate, and pilot test a novel program to educate student nurses about bullying against nurses. This study was approved by the Institutional Review Boards (IRBs) where the study procedures took place.

2.1 Educational program

The bullying educational program was developed to be a multicomponent, multiyear intervention for junior and senior level nursing students. The components were a web-based voiceover PowerPoint presentation, a classroom-based PowerPoint guided classroom assessment, a practicum-based debriefing guide, classroom-based role play simulation, and a Facebook page.

Component 1 was a 25-slide, web-based voiceover PowerPoint presentation intended to be viewed annually by junior and senior nursing students alongside other annual training such as bloodborne pathogen training. A script was developed to accompany the presentation for students whose preferred learning style is reading versus auditory. Accommodating multiple learning styles (e.g., read/write, visual) with the web-based PowerPoint presentation can increase the learning attainment.^[46] The script also was intended to be read by course faculty members who adopted the program for their junior and senior level nursing courses. The presentation provided an overview of bullying against nurses including differentiation of types of aggression, examples of bullying, epidemiology of bullying against nurses, consequences of bullying, oppression theory as an explanation for bullying against nurses, and recommendations to prevent and mitigate bullying in the workplace.

Component 2 was a 10-slide, classroom-based PowerPoint guided assessment intended to be delivered to junior nursing students during the Fall semester. The slides were developed as a post assessment to the web-based voiceover PowerPoint presentation. Each slide had a single multiple choice or open-ended question about bullying against nurses. For example, one of the multiple choice questions was “Which of the following is an emotional response to workplace bullying?” Multiple choice questions were to be answered using a personal response device, such as a remote “clicker”. Faculty member debriefing with students was based on the responses selected by students. An example of an open-ended question was “List potential consequences to employers as a result of workplace bullying.” After allowing time for students to write their responses on a piece of paper, faculty members then facilitated a class discussion on the responses. Rationale for the correct answer to the multiple choice questions and sample responses for the open-ended questions were provided within the PowerPoint presentation Notes section.

Component 3 was a practicum-based debriefing guide to be used by faculty members teaching junior or senior level nursing clinical practica. The guide was scripted and included several questions to be posed to nursing students during a post conference session after an event of bullying was witnessed at the clinical agency. See Table 1 for a copy of this intervention component.

Table 1. Practicum-based debriefing guide following an incident of workplace bullying

Review the Workplace Bullying Presentation. Then during one rotation each semester, ask the following questions during a clinical post conference:
1. Remind students of the group norms for confidentiality of the discussion.
2. Can someone tell me what workplace bullying is?
a. Prompts if no response or additional questions:
i. Workplace bullying deals with negative behaviors. Can you tell me any of those behaviors?
ii. Workplace bullying is a problem that is ongoing. Does anyone know how long the behaviors last before they are considered to be workplace bullying?
3. Why is it important to discuss workplace bullying?
a. Prompts if no response or additional questions:
i. How does workplace bullying affect a nurse’s ability to think about the care that is being delivered?
ii. How does workplace bullying affect a nurse’s physical ability or personal health?
iii. How does workplace bullying affect nurses emotionally?
iv. How does workplace bullying alter nurses’ normal behaviors when interacting with others?
v. What impact does workplace bullying have on the employer?
4. Has anyone witnessed or experienced any incivility or bullying during this clinical rotation?
a. If yes:
i. Tell us about your experiences.
b. If no:
ii. Can anyone share a story about workplace bullying from their past?
c. How did you feel afterwards?
d. Why do you think the aggression occurred?
e. What do you think could have prevented the event from occurring?
5. What do you think could help prevent a similar occurrence in the future?

Component 4 was a classroom-based role play simulation developed for Fall semester senior level nursing students. The simulation was designed to be a faculty-led exercise starting with students being placed into groups of four.^[47] Within each group, students assumed the roles of novice nurse, experienced nurse, bystander nurse, or patient. Students were provided instructional cards guiding their role in the simulation. Students with the novice nurse role assumed the role of target. Students with the experienced nurse role assumed the role of bully. The remaining students were to observe the bullying event. After the role play simulation, students were to reflect individually and in groups about the bullying role play experience. Next, the faculty member would conduct a classroom debriefing. The debriefing focused on each role in turn beginning with the role of the experienced nurse. Examples of the debriefing process included students in the role of experienced nurse describing their experience and motivation for using bullying behaviors. During the wrap-up and application phase of the debriefing session, students discussed ideal ways to handle bullying situations, potential responses for their efforts to stop bullying behaviors, and how they could apply this learning to their future clinical practice. The simulation as well as the debriefing were scripted for faculty member use.

Component 5 was a Facebook page using the name of Mary Ann Bickerdyke. Mary Ann Bickerdyke was born in Ohio (USA) in 1817.^[48] After the death of her husband and later the onset of the United States Civil War, Bickerdyke became a nurse providing care to wounded Northern soldiers. Soon she was appointed the Chief of Nursing under the command of General Ulysses S. Grant. She was a nursing leader and facilitated the development of hundreds of hospitals during the Civil War. During her tenure as a nurse and nurse leader during the war, she would not tolerate any negativity or unprofessional behavior from other healthcare providers, including physicians. She became revered not only by General Grant, but the soldiers as well who commonly referred to her as “Mother” Bickerdyke. Due to the strong will of Nurse Bickerdyke, her name was chosen for the intervention’s Facebook site. This Facebook page was intended to provide a virtual social forum for junior and senior level nursing students to post their reflections on the stressful situations they experienced in the clinical setting. The Facebook page was to be moderated by graduate nursing administration students and the clinical faculty overseeing the junior and senior level nursing practica.

2.2 Advisory board and external review procedures

A six-member advisory board was convened to evaluate the content of the bullying educational program during the de-

velopment phase. Four faculty members and two students comprised the advisory board. Two of the faculty members were tenured in a college of nursing. These faculty members also co-led a bullying special interest group. The other two faculty members were clinical track faculty members providing oversight to students in the clinical practicum setting and also participants in the bullying special interest group. One of the students was an occupational health nurse matriculating in a PhD program. This student’s research focus was on bullying against nurses. The second student was a prelicensure nursing student who had started his practica rotations.

A full copy of the web-based voiceover PowerPoint presentation (component 1), classroom-based PowerPoint guided classroom assessment (component 2), and practicum-based debriefing guide (component 3) materials were provided to the advisory board. Each board member independently evaluated the program components for their relevance, clarity, simplicity, and ambiguity using a 1 to 4 Likert scale rating based on Yaghmaie’s^[49] criteria. Board members then met to discuss their comments about the program components or if not able to attend the advisory board meeting, provided their feedback in writing. A full copy of the materials for the classroom-based role play simulation (component 4) and Mary Ann Bickerdyke Facebook page (component 5) then were provided to the advisory board. Board members independently evaluated the program components. Board members again met to discuss the program components or provided written feedback. Content validity scores were computed by averaging the relevance, clarity, simplicity, and ambiguity scores assigned by advisory board members.

Following a program revision, three external peer reviewers were selected to evaluate the bullying educational program. The three reviewers worked at separate research intensive universities. The first reviewer was a faculty member with research focused on community engagement with persons of color. In addition, she was a member of her university’s Institutional Review Board allowing her to critique the program and its implications for the protections of students who would participate in the education. The second reviewer was a faculty member whose research focused on personal and organizational factors and included previous work in workplace aggression. The third reviewer was a faculty member whose research focused on marginalized and ethnically/racially diverse populations. Her expertise was leveraged to assess program sensitivity to the culturally and racially diverse student populations who would receive the education. The reviewers received a copy of the five intervention components and were asked to provide critique specific to each component.

2.3 Pilot testing procedures

During Fall semester 2013, ten faculty members at three universities across five academic campuses were trained by the first author to deliver the educational intervention. The intervention was delivered to junior and senior nursing students during Spring semester 2014. During Summer semester 2014, faculty members who delivered the education components were interviewed about their experiences delivering the educational content to their students. Faculty members were approached again the following academic year to assess their ability to permanently adopt the program into their nursing curricula. Interviews were conducted individually in the faculty members' private offices. Interviews were audiorecorded and transcribed verbatim.

2.4 Qualitative data analysis

The first author audited the transcripts for accuracy. Two researchers then read and independently devised potential themes. The researchers came to agreement on themes and then independently coded the transcript data using a constant comparative analysis method.^[50] The researchers agreed on the data coded to each theme.

3. FINDINGS

3.1 Advisory board and external reviewer findings

Components 1 (web-based voiceover PowerPoint presentation), 2 (classroom-based PowerPoint guided assessment), and 3 (practicum-based debriefing guide) were deemed very relevant (mean 4.0), clear but needing minor revision (mean 3.2), simple but needing minor revision to implement (mean 3.3), and non-ambiguous, but needing minor revision (mean 3.0). Components 4 (classroom-based role play simulation) and 5 (Facebook page) were deemed very relevant (mean 3.7), clear but needing minor revision (mean 3.4), simple but

needing minor revision to implement (mean 2.8), and non-ambiguous, but needing minor revision (mean 3.6). Table 2 displays content validity scores by advisory board member. Additional qualitative feedback by the advisory board members and external peer reviewers about the intervention components is provided in Table 3.

3.2 Pilot testing findings

Of the ten faculty members who delivered the education, all were female and most were white (n = 9). Five of the faculty members were doctorally-prepared, five were master's-prepared. In addition, three faculty members were in a tenure track line while seven were in a clinical track line. Three themes were derived from faculty member interview data: (1) program had value to faculty members and students, (2) challenges to continued program adoption, and (3) recommendations for program delivery.

3.2.1 Program had value to faculty members and students

In this theme, the faculty members described the program's value to nursing faculty members and undergraduate nursing students. Overall, the faculty members liked the program. They valued the program for its ability to be delivered using multiple teaching methods, facilitating a discussion on an important clinical practice problem, and enhancing students' awareness of their risk for this problem. See Table 4 for representative statements for this theme. One faculty member believed the program was too long. This faculty member volunteered to teach the program in her medical-surgical nursing course. After the program had been delivered, the faculty member decided the content would be more appropriate in a leadership or community health course where medical-surgical nursing content would not be displaced.

Table 2. Content validity results for program components by advisory board member

	Relevance*	Clarity**	Simplicity†	Ambiguity§
Components 1, 2, and 3				
Tenured faculty member #1	4	3	3	3
Tenured faculty member #2	4	3	3	3
Clinical track faculty member #1	4	3	3.5	2
Clinical track faculty member #2	4	3	3	3
Graduate student	4	4	4	4
Undergraduate student	4	3	3	3
Components 4 and 5				
Tenured faculty member #1	3	3	3	3
Tenured faculty member #2	3	2	2	3
Clinical track faculty member #1	4	4	2	4
Clinical track faculty member #2	4	4	2.5	4
Graduate student	4	4	4	4
Undergraduate student	4	3.5	3.5	3.5

*1-Not relevant, 2-Needs some revision, 3-Needs minor revision, 4-Very relevant; **1-Content is clear, 2-Content needs some revision, 3-Content needs minor revision, 4-Content very clear; †1-Not simple, 2-Needs some revision, 3-Needs minor revision, 4-Very simple; §1-Doubtful, 2-Needs some revision, 3-Needs minor revision, 4-Meaning is clear

Table 3. Advisory board member and external reviewer feedback for the program components

Program Component	Advisory Board Member Feedback	External Reviewer Feedback
Web-based PowerPoint presentation	- Not a fan of voiceover PowerPoints, don't really tune into them, "check-out". - The students need an opportunity to draft their plan for managing workplace bullying.	No comments
Classroom-based PowerPoint presentation	- The questions will help the students think about workplace bullying and facilitate their learning. - The "Take Home Message" slide is nice and a keeper.	No comments
Practicum-based debriefing guide	It brings real life experiences into the education and allows something for students to really relate to.	- Should be done in every post-conference across the county and the world. - Need to follow-up with faculty members to assure that this component is completed by all students.
Classroom-based role play scenario simulation	- Role playing idea is great! - As worded, the students are not likely to use bullying behaviors to achieve their aims. Need to provide instructions to the students to use bullying behaviors in the simulation and provide bullying examples.	- My very favorite part is the role plays. Can we ask about the role playing and if it helped gain insight or learn skills? It is such an amazing part of the program. - Is there a way the students could act out the new strategies they have learned in your wonderful program? I would like to see a part where they can practice things like moving closer and standing next to the novice nurse. - The aggressor role as described in Scenarios 1 and 2 was confusing and difficult to determine the planned responses for the students. - Provide script to the student observers (i.e., nurse observer, patient observer).
Facebook page	- Be aware that cyber bullying could occur at the facebook site. - Not appropriate to mandate students to have a facebook account. - If you like a page on Facebook, other people who are Friends on Facebook can see that you have liked that page. Just so you know in terms of other confidentiality matters.	- Will the responses be standardized in any way? - Will a referral list be created and distributed to meet the needs of bloggers whose posts suggest significant emotional distress?

3.2.2 Challenges to continued program adoption

In this theme, challenges to adopting the program initially and in subsequent years were identified. For example, while the faculty members overall valued the program, several faculty members collaborated with adjunct faculty members to deliver the program to students on their campus. In their opinion, the adjunct faculty members who commonly taught the clinical practica in their schools of nursing were not as vested in delivering the program content or did so variably. See Table 4 for representative statements for this theme. In

terms of long term adoption, only the faculty members involved at one of the five campuses continued to implement the educational program beyond the initial pilot testing period. Several reasons account for the lack of adoption at the four remaining campuses. First, the faculty members relied on adjunct faculty members to deploy aspects of the program content – not all of the adjunct faculty members taught the same course during the subsequent academic year. Second, several of the original faculty members teaching the program content retired or changed employers after the first

year of program implementation. The original faculty members did not provide source materials to the faculty members who took over their courses where this program content was being delivered.

Table 4. Themes with representative statements from interviews of faculty members who delivered the educational program

Theme	Representative statements
Program Had Value to Faculty Members and Students	- You've got several different ways to do it, which I think was the strength of the study. - When we talked to the seniors, I think it was more eye opening for them because they were looking at situations that may not have been interpreted as more of an intimidation or bullying type scenario. - That may impact their confidence and ability to function. So, in that respect, this was very good because it kind of opened up that door for discussion and how do you handle this as a student.
Challenges to Continued Program Adoption	...having a better response from clinical faculty, but that's difficult because a lot of times it's adjunct. ...and they're only here for a semester and then they're gone. ...with most of them being adjunct. ...this wasn't their priority.
Recommendations for Program Delivery	- Now, I know the first clinical experience like is only a six-hour stint for the sophomores but maybe they could incorporate some sort of, um, role playing scenario in their lab sessions in Fundamentals I. ...maybe develop a—a—a booklet of some sorts with some case studies and they purchase it in the sophomore year and then they carry it all the way through and we use it, that's the thing. ...

3.2.3 Recommendations for program delivery

In this theme, faculty members provided recommendations to strengthen the program and increase its adoption. Recommendations provided by the faculty members who were interviewed included threading the program content throughout the curriculum so that multiple faculty members and multiple courses would be addressing the content. Optimally, the program content per their recommendation would need to start during the nursing students' sophomore year creating a curricular thread for the program content. Another recommendation was to imbed case studies that could be used in various courses. For example, the program content could be addressed during a medical-surgical rotation as a component of teamwork and patient safety and during psychiatric-mental health nursing rotation as a component of intervening during aggressive interactions with others. See Table 4 for representative statements for this theme.

4. DISCUSSION

The educational program was deemed by the advisory board members to be relevant, clear, simple, and non-ambiguous indicating the program to have adequate content validity. Five of the advisory board members were experts in bullying against nurses and seven of the advisory board members/external reviewers were expert nurse educators. An expert can be defined as "a person who has extensive skill or knowledge in a particular field."^[51] The expertise used by the advisory board members/external peer reviewers was

leveraged to make multiple program revisions prior to the program being pilot tested with nursing students. Although the undergraduate student on the advisory board was a "non-expert", his feedback was equally constructive. For example, one of his comments was to reduce the amount of content planned for web-based delivery. He communicated that even with quiz questions embedded into the voiceover PowerPoint presentation, his nursing student peers would skip through the PowerPoint slides as quickly as possible to "get done". This insight underscored the necessity of seeking input from stakeholders such as nursing students and newly licensed nurses during the development process of an educational product targeting nursing students.

The use of active learning strategies is a mainstay in nursing education; the program piloted in this study used a variety of strategies to promote active learning. Component 1, the web-based voiceover PowerPoint presentation, incorporated the aspect of a flipped classroom by having students review this content prior to coming to class. Having students watch voiceover PowerPoint presentations prior to class allows more time during class to be focused on the application of learning and less time on lecture. Betihavas, Bridgman, Kornhaber, et al.^[52] conducted a systematic review of the literature and concluded that the flipped classroom approach yielded positive student satisfaction and equal or superior test scores. Component 2, the classroom-based PowerPoint guided classroom assessment, was designed to facilitate active learning based on the classroom assessment technique

described by Rowles.^[53] This component served as a formative evaluation to gauge learning acquired following the voiceover PowerPoint presentation. During this component, students received immediate feedback reinforcing or correcting their knowledge base related to bullying against nurses. Component 3, the practicum-based debriefing, built upon the active learning strategy of small group discussion.^[54] As used in the educational program, the small group discussion permitted students to discuss problem-solving techniques for actual incidents of workplace bullying witnessed in the clinical arena. Component 4, the classroom-based role play simulation, incorporated the active learning strategies of role play simulation, reflection, and large group discussion. Reflection has the advantage of helping nursing students bring context from the clinical practice realm into the classroom situation.^[54] When incorrectly implemented, faculty members may opt to serve as expert and not allow adequate time for students to reflect on the learning experience.

The Facebook page ultimately was not included in the pilot testing phase of this study. Both advisory board members and external peer reviewers expressed concerns about breach of student confidentiality and further exposure to bullying behaviors. Lin and Lin^[55] attempted to obtain identifiable information about a cohort of Facebook users, specifically their birthdates and educational backgrounds. By reviewing Facebook posts of unintentional (information seen on friends' Facebook pages after posted by study subjects) and involuntary leakage (friends post information about study subjects on their Facebook pages), they correctly determined subjects' birthdates in 92% of the cases. In addition, they correctly determined the educational background of study subjects' in 86.3% of the cases. These findings demonstrate the difficulties with confidentiality in holding discussions about bullying safely via social media site such as Facebook. This inadvertent sharing of information is not limited to identifiable information such as birthdates and educational background. Syn and Kim^[56] discovered that college students also willingly share some personal health information on Facebook. While confidentiality is certainly a valid concern when using social media for student education, the use of Facebook has been shown to effectively improve health outcomes. For example, Wright, Rosenberg, Egbert, et al.^[57] compared the use of face-to-face interactions to Facebook interactions for the outcome of student depression. Satisfaction with both interaction types significantly correlated to lower depression scores, albeit the correlation was stronger for face-to-face interactions ($r = -.30, p < .01$) compared to Facebook interactions ($r = -.19, p < .01$). Ahmed, Sullivan, Schneiders, et al.^[58] presented solutions to overcome the risk for inadvertent breach of confidentiality: Facebook users

could be enrolled into a separate group with the privacy settings placed on "secret". This would reduce access to the posts to only those users enrolled into the group. However, this would not prevent the sharing of private information to persons outside the group, thus reinforcement of confidentiality would need to be emphasized and could not be completely assured. Ahmed et al.^[58] shared a concern similar to that of the board members/reviewers in the current study: the potential exists for bullying and other negative behaviors between members of the Facebook group. Faculty members would need to be vigilant in their efforts to monitor the site and check-in with students to verify that bullying was not occurring. Also, a preventive strategy would be to advise students via the course syllabus of civility expectations within the social media learning environment.^[59]

Challenges to program adoption identified in this study were retirement or departure of faculty members invested in the program and reliance on adjunct faculty members for program delivery. As retirement dates come, this leaves vacancies in schools of nursing throughout the country. One strategy adopted to mitigate the faculty vacancies is the use of adjunct faculty members. The American Association of Colleges of Nursing^[60] recommended that adjunct faculty members be formally oriented to the role of nursing faculty and be kept "up-to-date on school and course expectations, and offer guidance and development as required" (p. 23). Based on the interviews with faculty members in this study, adjunct faculty members even after receiving requisite training may not have been as engaged in the role of a faculty member to deliver educational content outside their scope of expertise (e.g., discussing bullying behaviors during the clinical site debriefing after pediatric clinical). A "simple" solution could be to have full time faculty members check-in periodically with adjunct faculty members and their students to verify that the program content was delivered as planned. However, this solution is limited by the overall retirements and departures of faculty members in the United States creating an estimated vacancy rate of 6.9% in 2014.^[61] Furthermore, a large proportion of the faculty members who initially oversaw the program delivery at four of the five college campuses participating in the pilot implementation also have retired or departed. Another strategy to overcome the challenge of faculty member transition is hosting the program content in a single location where it can be obtained by nursing faculty members at large including those not from the participating universities. This availability would require the program content be further refined such that the faculty instructions are clear enough to assure intervention fidelity.

5. CONCLUSION

The proposed multicomponent, multiyear bullying educational program has the potential to positively influence nursing education. Findings from the pilot implementation of the program indicate the need to incorporate the program into additional nursing courses beginning during the sophomore year of the nursing curricula (e.g., web-based voiceover PowerPoint presentation). This incorporation may permit the program content to be addressed multiple times over three years of study as well as potentially mitigate the problem of faculty members who are not available during subsequent academic years. If the program encompasses multiple years and multiple courses, even with faculty departures, nursing students are likely to be presented the content elsewhere in their nursing curricula. Future research is needed to identify whether the program can be implemented without one-on-

one training. More importantly to nursing practice, the program must be evaluated to determine if students completing the program are adopting and using the education to prevent and mitigate incidents of bullying in the workplace after graduation.

ACKNOWLEDGEMENTS

This research study was funded by contract No. 254-2011-M-40375 from the Centers for Disease Control and Prevention–National Institute for Occupational Safety and Health (CDC-NIOSH). Its contents are solely the responsibility of the authors and do not necessarily represent the official view of the CDC-NIOSH.

CONFLICTS OF INTEREST DISCLOSURE

The authors declare they have no competing interests.

REFERENCES

- [1] Echevarria IM. Change your appetite: Stop “eating the young” and start mentoring. *Nurs Critical Care*. 2013; 8(3): 20-24. <http://dx.doi.org/10.1097/01.CCN.0000429384.33344.2a>
- [2] Flateau-Lux LR, Gravel T. Put a stop to bullying new nurses. *Nurs*. 2013; 25: 24-28. PMID:24685753 <http://dx.doi.org/10.1097/01.NURSE.0000429803.49353.c8>
- [3] Iheduru-Anderson K. Educating senior nursing students to stop lateral violence in nursing. *Australian Nurs Midwifery J*. 2014; 22(1): 15. PMID:25090874
- [4] Meissner JE. Nurses: Are we eating our young? *Nurs*. 1986; 16(3): 51-53. PMID:3633461
- [5] Berry PA, Gillespie GL, Gates D, et al. Novice nurse productivity following workplace bullying. *J Nurs Scholarship*. 2012; 44(1): 80-87. <http://dx.doi.org/10.1111/j.1547-5069.2011.01436.x>
- [6] Castronova MA, Pullizzi A, Evans S. Nurse bullying: A review and a proposed solution. *Nurs Outlook*. 2016; 64(3): 208-214. PMID:26732552 <http://dx.doi.org/10.1016/j.outlook.2015.11.008>
- [7] Trépanier S-G, Fernet C, Austin S, et al. Work environment antecedents of bullying: A review and integrative model applied to registered nurses. *International J Nurs Studies*. 2016; 55: 85-97. PMID:26603730 <http://dx.doi.org/10.1016/j.ijnurst.2015.10.001>
- [8] Wilson JL. An exploration of bullying behaviours in nursing: A review of the literature. *British J Nurs*. 2016; 25(6): 303-306. PMID:27019166 <http://dx.doi.org/10.12968/bjon.2016.25.6.303>
- [9] Hutchinson M. Bullying as workgroup manipulation: A model for understanding patterns of victimization and contagion within the workgroup. *J Nurs Management*. 2013; 21(3): 563-571. <http://dx.doi.org/10.1111/j.1365-2834.2012.01390.x>
- [10] Ganz FD, Levy H, Khalaila R, et al. Bullying and its prevention among intensive care nurses. *J Nurs Scholarship*. 2015; 47(6): 505-511. <http://dx.doi.org/10.1111/jnu.12167>
- [11] Rush KL, Adamack M, Gordon J, et al. New graduate nurse transition programs: Relationships with bullying and access to support. *Contemporary Nurs*. 2014; 48(2): 219-228. <https://doi.org/10.1080/10376178.2014.11081944>
- [12] Simons S. Workplace bullying experienced by Massachusetts registered nurses and the relationship to intention to leave the organization. *Advanced Nurs Science*. 2008; 31(2): e48-e59. PMID:18497581 <https://doi.org/10.1097/01.ANS.0000319571.37373.d7>
- [13] Griffin M, Clark CM. Revisiting cognitive rehearsal as an intervention against incivility and lateral violence in nursing: 10 years later. *J Continuing Education in Nurs*. 2014; 45(12): 535-542. <http://dx.doi.org/10.3928/00220124-20141122-02>
- [14] Vogelpohl DA, Rice SK, Edwards ME, et al. New graduate nurses' perception of the workplace: Have they experienced bullying? *J Professional Nurs*. 2013; 29(6): 414-422. <http://dx.doi.org/10.1016/j.profnurs.2012.10.008>
- [15] Smith CR, Gillespie GL, Brown K, et al. Seeing students squirm: Nursing students' experiences of bullying behaviors during clinical rotations. *J Nurs Education*. 2016; 55(9): 505-513. <http://dx.doi.org/10.3928/01484834-20160816-04>
- [16] Allen BC, Holland P, Reynolds R. The effect of bullying on burnout in nurses: The moderating role of psychological detachment. *J Advanced Nurs*. 2015; 71(2): 381-390. <http://dx.doi.org/10.1111/jan.12489>
- [17] Ekici D, Beder A. The effects of workplace bullying on physicians and nurses. *Australian J Advanced Nurs*. 2014; 31(4): 24-33.
- [18] Keller R, Budin WC, Allie T. A task force to address bullying: How nurses at one hospital implemented an antibullying program. *American J Nurs*. 2016; 116(2): 52-58. PMID:26817556 <https://doi.org/10.1097/01.NAJ.0000480497.63846.d0>
- [19] Laschinger HKS, Nosko A. Exposure to workplace bullying and post-traumatic stress disorder symptomology: The role of protective psychological resources. *J Nurs Management*. 2015; 23(2): 252-262. <http://dx.doi.org/10.1111/jonm.12122>
- [20] Owayolu Ö, Owayolu N, Karadag G. Workplace bullying in nursing. *Workplace Health & Safety*. 2014; 62(9): 370-374. <http://dx.doi.org/10.3928/21650799-20140804-04>
- [21] Reknes I, Pallesen S, Magerøy N, et al. Exposure to bullying behaviors as a predictor of mental health problems among Norwegian

- nurses: Results from the prospective SUSSH-survey. *International J Nurs Studies*. 2014; 51(3): 479-487. <http://dx.doi.org/10.1016/j.ijnurstu.2013.06.017>
- [22] Simons SR, Mawn B. Bullying in the workplace—A qualitative study of newly licensed registered nurses. *AAOHN J*. 2010; 58(7): 305-311. <http://dx.doi.org/10.3928/08910162-20100616-02>
- [23] Budden LM, Birks M, Cant R, et al. Australian nursing students' experience of bullying and/or harassment during clinical placement. *Collegian*. Forthcoming 2015. <http://dx.doi.org/10.1016/j.collegn.2015.11.004>
- [24] Rosenstein AH, O'Daniel M. Managing disruptive physician behavior: Impact on staff relationships and patient care. *Neurology*. 2008; 70(17): 1564-1570. <http://dx.doi.org/10.1212/01.wnl.000310641.26223.82>
- [25] Sahay A, Hutchinson M, East L. Exploring the influence of workplace supports and relationships on safe medication practice: A pilot study of Australian graduate nurses. *Nurs Education Today*. 2015; 35(5): e21-e26. <http://dx.doi.org/10.1016/j.nedt.2015.01.012>
- [26] Wilson BL, Phelps C. Horizontal hostility: A threat to patient safety. *J Nurs Administration*. 2013; 15(1): 51-57. <http://dx.doi.org/10.1097/NHL.0b013e3182861503>
- [27] Wright W, Khatri N. Bullying among nursing staff: Relationship with psychological/behavioral responses of nurses and medical errors. *Health Care Management Review*. 2015; 40(2): 139-147. <http://dx.doi.org/10.1097/HMR.000000000000015>
- [28] The Joint Commission. Sentinel event alert: Behaviors that undermine a culture of safety. 2008. Available from: https://www.joincommission.org/assets/1/18/SEA_40.PDF
- [29] American Nurses Association. American Nurses Association position statement on incivility, bullying, and workplace violence. 2015. Available from: <http://www.nursingworld.org/Bullying-Workplace-Violence>
- [30] Health Resources and Services Administration. The U.S. nursing workforce: Trends in supply and education. 2013. Available from: <http://bhpr.hrsa.gov/healthworkforce/reports/nursingworkforce/nursingworkforcefullreport.pdf>
- [31] Griffin M. Teaching cognitive rehearsal as a shield for lateral violence: An intervention for newly licensed nurses. *J Continuing Education in Nurs*. 2004; 35(6): 257-263. PMID:15584678
- [32] Chippis EM, McRury M. The development of an educational intervention to address workplace bullying. *J Nurs Staff Development*. 2012; 28(3): 94-98. <http://dx.doi.org/10.1097/NND.0b013e31825514bb>
- [33] Osatuke K, Moore SC, Ward C, et al. Civility, respect, engagement in the workforce (CREW): Nationwide organization development intervention at Veterans Health Administration. *J Applied Behavioral Science*. 2009; 45(3): 384-410. <http://dx.doi.org/10.1177/0021886309335067>
- [34] Jenkins SD, Kerber CS, Woith WM. An intervention to promote civility among nursing students. *Nurs Education Perspectives*. 2013; 34(2): 95-100. <https://doi.org/10.5480/1536-5026-34.2.95>
- [35] Kerber C, Jenkins S, Woith W, et al. Journal clubs: A strategy to teach civility to nursing students. *J Nurs Education*. 2012; 51(5): 277-282. <http://dx.doi.org/10.3928/01484834-20120323-02>
- [36] Egues AL, Leinung EZ. Antibullying workshops: Shaping minority nursing leaders through curriculum innovation. *Nurs Forum*. 2014; 49(4): 240-246. <http://dx.doi.org/10.1111/nuf.12028>
- [37] Stagg SJ, Sheridan DJ, Jones RA, et al. Workplace bullying: The effectiveness of a workplace program. *Workplace Health & Safety*. 2013; 61(8): 333-338. <http://dx.doi.org/10.3928/21650799-20130716-03>
- [38] Clark CM, Nguyen DT, Barbosa-Leiker C. Student perceptions of stress, coping, relationships, and academic civility. *Nurs Educator*. 2014; 39(4): 170-174. PMID:24813939 <http://dx.doi.org/10.1097/NNE.0000000000000049>
- [39] Clarke CM, Kane DJ, Rajacich DL, et al. Bullying in undergraduate clinical nursing education. *J Nurs Education*. 2012; 51(5): 269-276. PMID:22495922 <http://dx.doi.org/10.3928/01484834-20120409-01>
- [40] Roberts SJ. Oppressed group behavior: Implications for nursing. *Advances Nurs Science*. 1983; 5(4): 21-30. <https://doi.org/10.1097/00012272-198307000-00006>
- [41] Roberts SJ. Lateral violence in nursing: A review of the past three decades. *Nurs Science Quarterly*. 2015; 28(1): 36-41. <http://dx.doi.org/10.1177/0894318414558614>
- [42] Dong D, Temple B. Oppression: A concept analysis and implications for nurses and nursing. *Nurs Forum*. 2011; 46(3): 169-176. PMID:21806627 <http://dx.doi.org/10.1111/j.1744-6198.2011.00228.x>
- [43] Freire P. *Pedagogy of the oppressed*. 1970. New York: Penguin Books.
- [44] Felblinger DM. Incivility and bullying in the workplace and nurses' shame responses. *J Obstetric, Gynecologic & Neonatal Nurs*. 2008; 37(2): 234-242. <http://dx.doi.org/10.1111/j.1552-6909.2008.00227.x>
- [45] Hutchinson M, Jackson D, Wilkes L, et al. A new model of bullying in the nursing workplace: Organizational characteristics as critical antecedents. *Advances in Nurs Science*. 2008; 31(2): E60-E71. PMID:18497582 <https://doi.org/10.1097/01.ANS.0000319572.37373.0c>
- [46] Stowe K, Clinebell S. An examination of learning preferences of U.S. and international students. *J Teaching International Business*. 2015; 26: 258-272. <http://dx.doi.org/10.1080/08975930.2015.1127796>
- [47] Gillespie GL, Brown K, Grubb P, et al. Qualitative evaluation of a role play bullying simulation. *Journal of Nursing Education and Practice*. 2015; 5(6): 73-80. <http://dx.doi.org/10.5430/jnep.v5n6p73>
- [48] Sartin JS. "Commissioned by God": Mother Bickerdyke during the Civil War. *Military Medicine*. 2003; 168(10): 773-777. PMID:14620637
- [49] Yaghmaie F. Content validity and its estimation. *J Medical Education*. 2003; 3(1): 25-27.
- [50] Lincoln YS, Guba EG. *Naturalistic inquiry*. 1985. Newbury Park, CA: SAGE Publications.
- [51] Dictionary.com. Expert. 2014. Available from: <http://dictionary.reference.com/browse/expert?s=t>
- [52] Betihavas V, Bridgman H, Kornhaber R, et al. The evidence for 'flipping out': A systematic review of the flipped classroom in nursing education. *Nurs Education Today*. 2016; 38: 15-21. <http://dx.doi.org/10.1016/j.nedt.2015.12.010>
- [53] Rowles CJ. Improving teaching and learning: Classroom assessment techniques. In DM Billings & JA Halstead (Eds.), *Teaching in nursing: A guide for faculty* (4th ed.) (p. 285-290). 2012. St. Louis, MO: Elsevier Saunders.
- [54] Rowles CJ. Strategies to promote clinical thinking and active learning. In DM Billings & JA Halstead (Eds.), *Teaching in nursing: A guide for faculty* (4th ed.) (p. 258-284). 2012. St. Louis, MO: Elsevier Saunders.
- [55] Lin PC, Lin PY. Unintentional and involuntary personal information leakage on facebook from user interactions. *KSII Transactions on Internet and Information Systems*. 2016; 10(7): 3301-3318. <http://dx.doi.org/10.3837/tiis.2016.07.024>

- [56] Syn SY, Kim SU. College students' health information activities on facebook: Investigating the impacts of health topic sensitivity, information sources, and demographics. *J Health Communication*. 2016; 21(7): 743-754. <http://dx.doi.org/10.1080/10810730.2016.1157652>
- [57] Wright KB, Rosenberg J, Egbert N, et al. Communication competence, social support, and depression among college students: A model of facebook and face-to-face support network influence. *J Health Communications*. 2013; 18(1): 41-57. <http://dx.doi.org/10.1080/10810730.2012.688250>
- [58] Ahmed OH, Sullivan SJ, Schneiders AG, et al. Ethical considerations in using facebook for health care support: A case study using concussion management. *Physical Medicine & Rehabilitation*. 2013; 5(4): 328-334. PMID:23622785 <http://dx.doi.org/10.1016/j.pmrj.2013.03.007>
- [59] Whitney KM, Luparell S. Managing student incivility and misconduct in the learning environment. In DM Billings & JA Halstead (Eds.), *Teaching in nursing: A guide for faculty* (4th ed.) (p. 244-257). 2012. St. Louis, MO: Elsevier Saunders. PMID:22873765
- [60] American Association of Colleges of Nursing. Faculty shortages in baccalaureate and graduate nursing programs: Scope of the problem and strategies for expanding the supply. 2005. Available from: <http://www.aacn.nche.edu/publications/white-papers/facultyshortage.pdf>
- [61] Rosseter RJ. Nursing faculty shortage fact sheet. 2015. Available from: <http://www.aacn.nche.edu/media-relations/FacultyShortageFS.pdf>