## A REPUTATIONAL RISK FOR THE PROFESSION: WORKPLACE VIOLENCE TOWARD NURSING STUDENTS

#### Short title: Workplace violence toward nursing students

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## ABSTRACT

**Background:** Workplace violence (WV) within nursing has been recognized internationally as a significant problem. In developing countries, such as Turkey, where nurses face WV frequently, it is an under-researched area and there is an absence of an effective system for reporting such acts.

**Aim:** This study aimed to identify the incidence of WV experienced by Turkish student nurses, and to explore the implications and actions needed to reduce the incidence and impact.

**Methods:** This study employed a cross-sectional design. Data were collected from 1216 nursing students using the student nurse datasheet and the workplace violence scale.

**Findings:** The workplace has a considerable impact on nursing students and to varying degrees, WV affects more than half of student nurses in Turkey. The types of WV ranged from receiving racist remarks and being shouted at, to being kicked or having an unwanted advances for intimate physical contact.

**Discussion:** The findings from this study add to the evidence that violence among nursing students is almost a daily occurrence, and is also underreported. Having an understanding of student nurses' experiences and the impacts of WV, along with effective systems for reporting, can help mitigate the risk of violence occurring during clinical practice. Undergraduate nursing programs and continuing education for nurses should include preparation and role-play on how to handle and report WV, to improve the resilience of students. It is only through such a concerted and proactive approach will we promote more positive perceptions towards nursing programmes and the nursing profession as a whole.

**Keywords:** Bullying, clinical placements, nursing, harassment, staff-student relationships, workforce issues

### **Summary of relevance**

### Problem

Workplace violence is a significant cause of stress during clinical placement and student nurses are at risk of being victimized and bullyed. We need to understand the factors associated with WV so that such behaviours can be appropriately addressed.

## What is already known

Internationally, WV toward nursing students is common with many experiencing the impact of such behaviours.

## What this paper adds

The findings provide insight into the perspectives of nursing students in Turkey and give a richer understanding of the challenges arising from workplace violence, which inform preparatory training and policy.

### 1. INTRODUCTION

Workplace Violence (WV) is considered a form of occupational hazard, which may have acute and long-term adverse consequences on individual well-being (Gluschkoff, Elovainio, Hintsa, Pentti, Salo, Kivimäki, & Vahtera, 2017; Hanson, Perrin, Moss, Laharnar, & Glass, 2015). WV incidents are categorized as physical violence, verbal abuse, threats, sexual harassment, and bullying (Boyle & Wallis 2016; Tee, Üzar-Özçetin, Russell-Westhead, 2016). WV is a global problem affecting not only the physical but also the psychological health of the victim (Park, Cho, & Hong, 2015). The victims may suffer physical and mental distress and a high degree of anxiety (Mantzouranis, Fafliora, Bampalis, & Christopoulou, 2015; Pai & Lee, 2011).

While WV affects all healthcare professionals, nurses are at particular risk because typically they have the highest degree of contact with people in distress (Jiao, Ning, Li, Gao, Cui, Sun, et al, 2015). The sources of WV can be patients, caregivers, peer colleagues, nurse mentors, and nurse leaders. Like violence in general, WV is an underreported, tolerated, and a persistent problem. This is due to accustomization to violence, peer pressure not to report episodes, predominently female gender of the victim, fear of blame or reprisals and excessive paperwork for reporting such incidents (Powers, 2017). Unfortunately, WV is often accepted as "part of the job." (Albrecht, Gavish, & Siliciano, 2008) and increase nurses' intentions to leave their jobs or the profession (Jiao et al., 2015). It is also a common concern amongst student nurses who are seen as 'easy prey' (Birks, Cant, Budden, Russell-Westhead, Özçetin, & Tee, 2017).

The evidence from WV studies within nurse education, suggest a 'dark-side' to the clinical learning environments, with students too often citing bullying and harassment as one of the causes of dissatisfaction with their training (Tee et al. 2016). Studies suggest the causes can be multiple, but typically include impaired personal relationships, lack of experience, powerlessness, lowered self-esteem and understaffing causing high workload (Berry, Gillespie,

Gates, & Schafer, 2012; Islam, Ahmed, & Ali, 2019). Studies also show that student nurses may frequently be the victims due to their vulnerability arising from their younger age, less job experience and lower status in the hierarchy (Magnavita & Heponiemi 2011; Tee et al., 2016).

The growing body of literature, suggests WV is a widely-occurring phenomenon involving nurses and nursing students around the world, and the prevalence appears to be increasing (Birks et al., 2017). In developing countries, such as Turkey, it is under-researched and there are no specific systems for reporting such violent acts. Given the importance of this issue for the reputation of the profession and the nursing workforce in Turkey, attention needs to be paid to the preparation of student nurses to understand the factors associated with WV, so that WV can be proactively addressed.

This study, the largest undertaken across Turkey, examines data drawn from nursing students from seven nursing schools across Turkey, to identify current incidence levels and to make recommendations for curriculum design and delivery and student support. Prevention is essential and this study sought to understand the student nurses' perspectives and to make recommendations to health service providers and higher education institutions that might ameliorate the problem. We believe that the insights derived from this study will have wider relevance and appeal to developing countries facing similar challenges.

### 2. METHODS

#### 2.1. Aim

The aim was to determine the incidence of WV experienced by Turkish nursing students and to explore the implications and actions needed to reduce the incidence and impact. The study sought specifically to address the following questions;

- What are student nurses' perceptions of WV?
- What is the level of WV experienced by student nurses?
- What are the implications arising from students' experience of WV for education providers?

2.2.Design

This study employed a cross-sectional design. The study adhered to the STROBE guidelines for cross-sectional studies.

2.3.Setting

All nursing schools had very similar characteristics regarding their education system, theoretical and practical courses and the duration of their programs. The educational activities of nursing schools are based on three elements:

- the Taba-Tyler educational model, to develop students' thinking through a social studies oriented curriculum to support the development of students' critical thinking skills and learning through comprehension.
- 2. The classic educational system, which offers students theoretical lectures
- **3.** Innovative educational technology which uses simulations/ standardized patients to develop practice

The nursing Faculty Undergraduate Program consists of compulsory courses, elective courses, and practice. To graduate, students have to take 240 ECTS, with 75% of the course being compulsory and 25% elective. Practice commences in the first year and continues each year alongside compulsory nursing lectures. Student nurses are required to understake clinical practice day-shifts (8am - 4pm) 16 hours/week during a 14 week semester. During clinical practice they are under the supervision of their academic mentors and the head nurses of the clinics.

The academic mentors evaluate and grade the performance of students and head nurses are responsible for helpfing students to adapt to the clinic's routine and related procedures. Students undertake practice in courses entitled Nursing Fundamentals, Internal Medical Nursing, Surgical Nursing, Obstetric-Womens Health Nursing, Child Health and Illness Nursing, Mental

Health Nursing and Public Health Nursing. Placements take place in University hospitals, public hospitals, community health centers and within the wider community.

### 2.4.Sample

This cross-sectional study was carried out between May to December 2018. In total 1,500 final year nursing students enrolled on the nursing programs across seven universities were eligible to participate (1216 students participated, with a response rate of 81%). A purposive sampling method was used to recruit student nurses in order to provide information-rich data to investigate the issue in accordance with the study's aims. Only final year nursing students who had undertaken all the compulsory nursing lectures and attended at least 1500-hours of clinical placement were purposively selected to participate in the study. Inclusion criteria also included being 18 years and over and agreeing to voluntarily participate in the study.

#### 2.5.Data Collection

Data were collected through face-to-face interviews using the student nurse data sheet (1) and the workplace violence scale (2):

**2.5.1.** *Student Nurse Data Sheet:* was used to identify sociodemographic characteristics, such as age and gender, and has been used in a number of previous studies (Allen, Holland, & Reynolds, 2015; Birks et al., 2017; Tee et al., 2016).

**2.5.2.** Workplace Violence Scale was developed and tested by Hewett (2010). The tool comprised five sections with 66 individual items relevant to WV including, intimidation, bullying or verbal abuse, non-physical violence, and reporting and management of WV. The questionnaire used mainly closed questions that were rated using a 4-point response scale on frequency, with an opportunity for respondents to provide textual descriptions (Hewett 2010). The content validity of the original tool was established via a pilot study and adapted by researchers in Turkey. Minor changes were made to the language after receiving feedback from the experts in a related field. The scale comprised 13 questions using the response scale on

and [4] 'Often' (> 5 times). The scale ends with an open-ended question "Do you have any further comments you would like to make regarding bullying and/or harassment during clinical placement?" to explore deeper perspectives on WV. The scale does not contain a total score or sub-dimensions.

frequency of [1] 'Never' (0 times); [2] 'Occasionally' (1–2 times); [3] 'Sometimes' (3–5 times)

## 2.6. Data Analyses

Data management and statistical analysis were conducted using SPSS v 24 software (IBM, Armonk, New York). A *p*-value of <.05 was the significance level for statistical tests. Descriptive statistics and percentages, related to sociodemographic and scale data, were used to present the findings.

## 3. RESULTS

The majority of students were female (n=1137; 93.5%), 98.9% (n=1203) were 18–25 years old. There were 1216 final year student nurses who participated in the study.

# **3.1. Experiences and Sources of WV**

In the past year while on clinical placement, 60.9% (n = 740) of the participants reported feeling personally bullied with a further 3.6% (n = 44) being unsure whether it was violence. Most had witnessed such incidents in a hospital setting (86.9%; n = 1057). Many students (35.2%; n =655) had witnessed violence from nurses and nearly a quarter (16.8%; n = 313) had witnessed bullying from doctors, and other nursing students (16.5%; n = 308) (Table 1).

## **3.2. Reporting Violence**

Only 4.0% (n=49) had actively reported an episode of violence. Those that did report to the university (63.2%; n=31), to the clinical facility (30.6%; n=15) or to the police (6.2%; n=3). After reporting, the majority indicated that the issue not resolved to the student's satisfaction (63.2%; n=31). When asked about the cause of not reporting, some students (26.1%; n=862) reported they thought it part of the job, 16.5% (n=545) did not know where/how to report,

18.0% (n=596) indicated they believed nothing would be done about it, 17.2% (n=566) feared being victimized, and 15.3% (n=506) thought that bullying was not important enough to report (Table 1).

#### 3.3. Type and effects of WV and feelings about workplace

In the past year while on clinical placement half of the students were exposed to a racist remark (51.6%, n = 628) and/or sexually related remarks (49.9%, n = 607). Nearly half (49.5%, n = 602), felt unfairly treated with regard to shifts. More than one-fourth experienced verbal abuse (17.8%, n = 217), one third faced unfair work allocation (34.9%, n = 424), half (49.3%, n=599) ridiculed, 36.3% (n=442) denied acknowledgement for good work, 44.2% (n=537) denied learning opportunities, nearly one third (28.5%, n=346) harshly judged, 33.1% (n=402) unfairly criticised, half of them (55.3%, n=671) treated as though they are not part of the multidisciplinary team, 32.6% (n=397) ignored, 44.2% (n=538) pushed, 62.8% (n=764) showed, 9.5% (n=116) kicked, 0.2% (n=2) slapped, 0.1% (n=1) punched, 44.6% (n=542) been inappropriately touched, 3.6% (n=44) threatened with an object/weapon, 3.3% (n=40) been threatened with physical violence, 19.1% (n=232) been threatened with sexual assault, 3.9% (n=47) had a sexist remark directed, 14.1% (n=171) had a suggestive sexual gesture directed and 10.0% (n=122) had an unwanted request for intimate physical contact (Table 2).

Half of the students (50.3%, n=612) indicated that the incident negatively affected the way they worked with others, one third of the students (30.1%, n=365) consider leaving nursing, 18.8% (n=228) stated that they were afraid to check orders when they were not sure, 40.4% (n=491) reported that the standard of patient care was negatively affected and 43.3% (n=527) stated that WV caused them to call in absent (see Table 2).

#### **3.4. Impact on Feelings**

There were also significant impacts on the feelings and mood of the students with respondents feeling angry (25.2%, n=307), depressed (46.0%, n=559), humiliated (48.5%, n=590),

embarrassed (49.7%, n=604), anxious (48.5%, n=590), fearful (47.2%, n=574), confused (45.6%, n=555), inadequate (36.5%, n=444), and unsafe (76.0%, n=924) (see Table 2).

#### 3.5. Student Quotes

The tool ended with an open-ended question. In total fifty-two nursing students chose to share their personal experiences and opinions, of which twenty-nine had a high level of duplication. Hence, twenty-three student quotes are presented in table 3 below.

#### 4. **DISCUSSION**

WV can have severe negative impacts not only on patient care but also on nurses' safety and well-being (Longo, 2013). It can also result in occupational burnout, a lack of job satisfaction and health risks (Allen et al., 2015). To our knowledge, this study is the first comprehensive research to explore student nurses' experiences of WV faced during their clinical placements in Turkey.

The findings suggest that violent acts in the workplace have a considerable impact on nursing students and that to varying degrees, WV affects more than half of student nurses. The most prevalent negative behaviors were related to nursing colleagues, doctors, student nurses and mentors respectively. Student nurses have been recognized to be at high risk of horizontal violence (Tee et al., 2016; Weaver, 2013), and the literature frequently mentions nurse colleagues as major perpetrators of bullying (Lee, Chen, & Chu, 2013; Tee et al. 2016; Weaver, 2013). These results suggest there is some reality to the common myth that *'nurses eat their own young'*.

All forms of WV can result in significant psychological and physical consequences (Gong, Han, Yin, Yang, Zhuang, Chen, & Lu, 2014; Jiao et al. 2015). The results indicate that students faced both physical and psychosocial violence during clinical placement. The types of WV ranged from receiving a racist remark and being shouted at, to kicking or pushing and/or having an unwanted request for intimate physical contact. However, psychological violence

was more prevalent than physical violence, which supports other similar studies outside of Turkey such as Spector et al. (2014), where 31.8% of nurses were exposed to physical violence, whilst 62.8% experienced nonphysical violence, such as bullying, and sexual harassment. The impact of either can be profound with bullying victims experiencing feelings of guilt, fear, panic, and insecurity with psychosomatic symptoms such as depression and tearfulness (Felblinger, 2008). The student nurses reported feeling angry, embarrassed, depressed, humiliated, anxious, fearful, confused, inadequate and unsafe as a result of WV. These negative feelings also drove students to question the values of nursing and may force them to consider leaving the profession.

The findings from this study provides evidence that suggests violence among Turkish student nurses is an almost daily occurrence and is underreported. A process of an accustomization occurs leading to under-reporting as they are "afraid of being victimized", or it being "seen as trifling" or thinking "it is part of job". These results highlight the persistence of a culture of acceptance around WV for student nurses. Jiao et al. (2015) found that nurses expected violence as part of their job and consider being a victim of violence to be 'normal', but with the resulting stigma and threat of further violence, preventing victims from reporting violent behaviour.

It is evident from this and other studies that WV can adversely affect the individual, such as self-esteem, self-efficacy and coping capacity (Einarsen, Hoel, Zapf, & Cooper, 2011). Factors like violent acts cause distress in the workplace and reduce not only the quality of nursing care provided but also nurses' job satisfaction levels and interest in their work (Hutchinson & Jackson, 2013). The consequences of lost productivity and students leaving the nursing profession, clearly impede the ability to deliver effective patient care and require zero-tolerance policies, safety measures, and procedures for reporting and responding to WV. Educators also need to develop strategies for improving the resilience of student nurses towards

WV. Resilience is defined as the capacity to regulate, and cope with ongoing life challenges in order to ameliorate the negative effects (DiCorcia & Tronick, 2011; Schetter & Dolbier, 2011).

Such definitions serve as a starting point for developing additional measures within the workplace and based on the findings we propose a four-pronged model consisting of awareness, coping, resilience and personal growth which provides a method for understanding, applying and activating coping mechanisms for overcoming WV in practice. The aim of this model is to articulate a strategy and framework to support nursing students to develop resilience and experience personal growth to better cope with WV to prevent potential negative effects.

Delivering the model involves four steps;

**1: First Step:** Determining the awareness levels of the incidence and negative impact of WV and the myths that abound, such as the belief that it is a part of the job. Providing insight will help individuals to realize the origins and risks of violent acts and their effects.

**2. Second Step:** Assessing the adaptive and non-adaptive coping styles. This step helps identify coping skills deficits and encourages the individual to take actions such as reporting the violent act and gaining support.

**3. Third Step:** Knowledge enhancement which includes student nurses' interest in and ability to develop resilience and the enablers/barriers which promote or prevent the development of resilience.

**5.** Forth (Final) Step: Unifying and integrating all the previous steps into a personal toolkit, and promoting personal growth by developing resilience, coping styles and awareness.

## Using the model in practice:

The first step of this very practical model can be addressed through student induction before they go into practice placements, through awareness-raising sessions that acknowledges WV as a problem. Such sessions facilitate discussion on what WV looks like, how to recognize it and the potential impact on self and others. Step two helps students explore their individual reactions and will guide them to support systems and reporting procedures. Role-play can be used in groups to work through scenarios and identify possible solutions, thus preparing them with the tools required to take action. Step three can be best addressed through post-placement debriefings with groups of students, that explore specific incidents and encourage students to identify their positive coping strategies, thus reinforcing self-belief and building confidence. The final step can be achieved through reflective accounts and a personal portfolio, enabling the students to identify their learning, their coping strategies, and vulnerabilities and developing the toolkit that will help them grow through their experiences.

#### 5. CONCLUSION

This study sought to provide a comprehensive overview of the prevalence of WV toward nursing students in Turkey. Workplace safety is a crucial issue in health care, but due to the lack of awareness of WV, it still continues to have a high impact. National strategies are needed to respond to WV, as ending violence is a legal and ethical responsibility of health providers and educators. It is dependent on efforts from nurse administrators and educators to improve training and reporting mechanisms and maintain supportive learning environments. Prevention training programs, such as the one reported here, need to be enhanced to decrease the incidence of WV against nursing students who are, after all, only seeking to learn how to provide the best care for their patients within a safe and supportive learning environment.

#### 6. IMPLICATION FOR NURSING PRACTICE

Overcoming uncivil behaviors in clinical practice toward nursing students is crucial to maintaining standards within the nursing profession. It will give students confidence to address such issues and increase their sense of hope that things can change. It will also demonstrate to others that such behaviors are unacceptable.

This study evaluated WV experiences of student nurses which helps us understand the deeper dynamics that create cultures in which WV may occur. These, in turn, can be used as a

basis for educational materials and a model that can be beneficial in providing awareness to both nurses and students.

From the outset, education and healthcare providers in Turkey should have effective policies ensuring transparency and confidence that increase positive values towards working relationships. It seems evident that an education provider who is not actively dealing with harassment and bullying will ultimately deter applicants and increase attrition. From an education provider perspective, there seems little point in trying to pretend such issues do not exist and so undergraduate programs and continuing education for nurses should include preparation and perhaps role-play on how to handle WV, detailing the potential implications to improve the resilience of students. Nursing students are the future and deserve our protection (Tee et al., 2016). It is only through such a concerted and transparent approach will we promote a more positive view of the profession.

#### **Strengths and Limitations**

This study's generalizability is limited by the sample size and inclusion of seven nursing faculty. However, we do believe that the results are significant enough to raise real concerns for the nursing practice of students in Turkey to increase awareness of this phenomenon in order to challenge and demonstrate that such behaviours are not tolerated in a caring profession.

### **Conflict of Interests**

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

## **Ethical Considerations**

The study adhered to the principles of the Declaration of Helsinki. The study procedures were approved by The University's Ethics Commission (protocol no. 431-1394) before it was initiated and the necessary permissions from the nursing faculties were approved. All the

participants were informed of the voluntary nature of their participation. A verbal and written informed consent was obtained from each participant.

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### REFERENCES

- Allen, B.C., Holland, P., & Reynolds, R. (2015) The effect of bullying on burnout in nurses: the moderating role of psychological detachment. *Journal of Advanced Nursing*, 71(2), 381-390. doi: 10.1111/jan.12489.
- Birks, M., Cant, R.P., Budden, L.M., Russell-Westhead, M., Özçetin, Y.S.Ü., & Tee, S. (2017). Uncovering degrees of workplace bullying: A comparison of baccalaureate nursing students' experiences during clinical placement in Australia and the UK. *Nurse Education in Practice*, 25, 14-21. doi: 10.1111/jan.12489.
- Berry, P.A., Gillespie G.L., Gates, D., & Schafer, J. (2012). Novice nurse productivity following workplace bullying. *Journal of Nursing Scholarship*, 44(1), 80-87. doi.org/10.1111/j.1547-5069.2011.01436.x
- Boyle, M.J., & Wallis, J. (2016). Working towards a definition for workplace violence actions in the health sector. *Safety in health*, 2(1), 4. doi: 10.1186/s40886-016-0015-8
- DiCorcia, J.A., & Tronick, E.D. (2011). Quotidian resilience: Exploring mechanisms that drive resilience from a perspective of everyday stress and coping. *Neuroscience & Biobehavioral Reviews*, 35(7), 1593-1602. doi: 10.1016/j.neubiorev.2011.04.008
- Einarsen, S., Hoel, H., Zapf, D., & Cooper, C.L. (2011). The concept of bullying and harassment at work: The European tradition. Bullying and harassment in the workplace: Developments in Theory. *Research, and Practice*, 2, 3-40.

Felblinger, D.M. (2008). Incivility and bullying in the workplace and nurses' shame responses.

Journal of Obstetric, Gynecologic, & Neonatal Nursing, 37, 234–42. doi: 10.1111/j.1552-6909.2008.00227.x.

- Gluschkoff, K., Elovainio, M., Hintsa, T., Pentti, J., Salo, P., Kivimäki, M., & Vahtera, J. (2017). Organisational justice protects against the negative effect of workplace violence on teachers' sleep: A longitudinal cohort study. *Occup Environ Med*, 74(7), 511-516. doi: 10.1136/oemed-2016-104027.
- Gong, Y., Han, T., Yin, X., Yang, G., Zhuang, R., Chen, Y., & Lu, Z. (2014). Prevalence of depressive symptoms and work-related risk factors among nurses in public hospitals in southern China: a cross-sectional study. *Scientific reports*, 4, 7109. doi: 10.1038/srep07109.
- Hanson, G.C., Perrin, N.A., Moss, H., Laharnar, N., & Glass, N. (2015). Workplace violence against homecare workers and its relationship with workers' health outcomes: a crosssectional study. *BMC Public Health*, 15(1), 11. doi: 10.1186/s12889-014-1340-7.
- Hewett, D. (2010). *Workplace violence targeting student nurses in the clinical areas* (Doctoral dissertation, Stellenbosch: University of Stellenbosch).
- Hutchinson, M., & Jackson, D. (2013). Hostile clinician behaviours in the nursing work environment and implications for patient care: a mixed-methods systematic review. *BMC Nursing*, 12(1), 25. doi:10.1186/1472-6955-12-25
- Islam, T., Ahmed, I., & Ali, G. (2019). Effects of ethical leadership on bullying and voice behavior among nurses: mediating role of organizational identification, poor working condition and workload. *Leadership in Health Services*, 32(1), 2-17. doi: https://doi.org/10.1108/LHS-02-2017-0006.
- Jiao, M., Ning, N., Li, Y., Gao, L., Cui, Y., Sun, H., et al. (2015). Workplace violence against nurses in Chinese hospitals: a cross-sectional survey. *BMJ Open*, 5(3), e006719. doi: 10.1136/bmjopen-2014-006719.

- Lee, C.B., Chen, M.S., & Chu, C.M.Y. (2013). The health promoting hospital movement in Taiwan: recent development and gaps in workplace. *International Journal of Public Health*, 58(2), 313-317. Doi: 10.1007/s00038-012-0391-8
- Longo, J. (2013). Bullying and the older nurse. *Journal of Nursing Management*, 21(7), 950-955. doi: 10.1111/jonm.12173.
- Magnavita, N., & Heponiemi, T. (2011). Workplace violence against nursing students and nurses: an Italian experience. *Journal of Nursing Scholarship*, 43(2), 203-210. doi: 10.1111/j.1547-5069.2011.01392.x
- Mantzouranis, G., Fafliora, E., Bampalis, V.G., & Christopoulou, I. (2015). Assessment and analysis of workplace violence in a Greek tertiary hospital. *Archives of Environmental & Occupational Health.* 70(5), 256-264. doi: 10.1080/19338244.2013.879564.
- Pai, H.C., & Lee, S. 2011. Risk factors for workplace violence in clinical registered nurses in Taiwan. *Journal of Clinical Nursing*, 20(9-10), 1405-1412. doi: 10.1111/j.1365-2702.2010.03650.x.
- Park, M., Cho, S.H., & Hong, H.J. (2015). Prevalence and perpetrators of workplace violence by nursing unit and the relationship between violence and the perceived work environment. *Journal of Nursing Scholarship*, 47(1), 87-95. doi: 10.1111/jnu.12112.
- Powers, H. (2017). Bullies among us: Dealing with Workplace Violence in Health Care. *Canadian Journal of Medical Laboratory Science*, 79(4), 21-24.
- Schetter, C.D., & Dolbier, C. (2011). Resilience in the context of chronic stress and health in adults. *Social and Personality Psychology Compass*, 5(9), 634-652. doi: 10.1111/j.1751-9004.2011.00379.x
- Spector, P.E., Zhou, Z.E., & Che, X.X. (2014). Nurse exposure to physical and nonphysical violence, bullying, and sexual harassment: A quantitative review. *International Journal* of Nursing Studies, 51(1), 72-84. doi: 10.1016/j.ijnurstu.2013.01.010.

Tee, S., Özçetin, Y.S.Ü., & Russell-Westhead, M. (2016). Workplace violence experienced by nursing students: A UK survey. *Nurse Education Today*, 41, 30-35. doi: 10.1016/j.nedt.2016.03.014.

Weaver, K.B. (2013). The effects of horizontal violence and bullying on new nurse retention. Journal For Nurses in Professional Development, 29(3), 138-142. doi: 10.1097/NND.0b013e318291c453 Click here to access/download **Table** Table.1.R2.collegian.docx

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	Item No	Recommendation	Page Number
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or	0
		the abstract	
		(b) Provide in the abstract an informative and balanced summary of	1
		what was done and what was found	
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation	3
		being reported	
Objectives	3	State specific objectives, including any prespecified hypotheses	2-3
Methods			
Study design	4	Present key elements of study design early in the paper	3
Setting	5	Describe the setting, locations, and relevant dates, including periods of	3
C		recruitment, exposure, follow-up, and data collection	
Participants	6	( <i>a</i> ) Give the eligibility criteria, and the sources and methods of selection	3
		of participants	
Variables	7	Clearly define all outcomes, exposures, predictors, potential	3
		confounders, and effect modifiers. Give diagnostic criteria, if applicable	
Data sources/	8*	For each variable of interest, give sources of data and details of	4
measurement		methods of assessment (measurement). Describe comparability of	
		assessment methods if there is more than one group	
Bias	9	Describe any efforts to address potential sources of bias	4
Study size	10	Explain how the study size was arrived at	4
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If	5
		applicable, describe which groupings were chosen and why	
Statistical methods	12	( <i>a</i> ) Describe all statistical methods, including those used to control for	5
		confounding	
		(b) Describe any methods used to examine subgroups and interactions	5
		(c) Explain how missing data were addressed	5
		( <i>d</i> ) If applicable, describe analytical methods taking account of	5
		sampling strategy	
		( <u>e</u> ) Describe any sensitivity analyses	5
Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers	5
		potentially eligible, examined for eligibility, confirmed eligible,	
		included in the study, completing follow-up, and analysed	
		(b) Give reasons for non-participation at each stage	5
		(c) Consider use of a flow diagram	-
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical,	5
		social) and information on exposures and potential confounders	
		(b) Indicate number of participants with missing data for each variable	5
		of interest	~
Outcome data	15*	Report numbers of outcome events or summary measures	5
Main results	16	( <i>a</i> ) Give unadjusted estimates and, if applicable, confounder-adjusted	5
	10	estimates and their precision (eg, 95% confidence interval). Make clear	~
		received and and precision (eg, so to contractice interval). Marke clear	

# STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies*

		( <i>b</i> ) Report category boundaries when continuous variables were categorized	5
		( <i>c</i> ) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	-
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	8
Discussion			
Key results	18	Summarise key results with reference to study objectives	7
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	10
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	10
Generalisability	21	Discuss the generalisability (external validity) of the study results	11
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	11

\*Give information separately for exposed and unexposed groups.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.