#### RESEARCH ARTICLE

# Occupational Health and Safety of Nurse Clinical Instructors in Selected Local Universities in Metro Manila

Mary Pauline V. Saquing-Sellers, EdD, MSN, RN 1

#### **Abstract**

This study was conducted to determine the occupational health and safety of 47 nurse clinical instructors employed in four selected local universities in Metro Manila to provide input for policy formulation. It employed a descriptive cross-sectional design using a researcher-made survey tool for data gathering.

Results showed that the respondents, majority of which belong to the age bracket of 40 below (49%), were females (66%), had been employed in their respective local universities for 6 to 10 years (44.7%), and were Master's degree holders (87%), generally have a high exposure to occupational hazards, low incidence of injury, and low level of workplace security. It was also found that there was no significant difference in the level of exposure to occupational hazards when grouped according to age, sex, length of service, area of assignment, and highest educational attainment at p-values of more than 0.05 level of significance (0.557, 0.678, 0.473, 0.229, and 0.292, respectively), no significant difference in the level of occupational injury incidence when grouped according to the same profile variables (0.559, 0.736, 0.763, 0.442, and 0.361, respectively), and no significant difference in the level of workplace security for occupational hazards when grouped according to the same variables (0.719, 0.469, 0.905, 0.113, and 0.269, respectively). Moreover, no significant relationship between the level of health and safety encounter and level of workplace security in terms of hazard exposure was observed with p-value of 0.073, and no significant relationship in terms of injury incidence was with two-tailed significance of 0.208.

Despite such a lack of significant differences found in the study, the nurse clinical instructors consistently had a low level of occupational security to protect them from the hazards and injuries they are faced with. With no significant relationship found, it can be reflected that irrespective of level of occupational health and safety encounters, the nurse clinical instructors manifested the same level of security.

Given the issues concerning affiliating health institutions and educational institutions as problems emphasized by the respondents that they have encountered in their practice environment, it was apparent that actions need to be taken to augment the workplace security of nurse educators. Among the recommendations were to increase the awareness and sensitivity of the public to the occupational health and safety situation that nurse clinical instructors were confronted with in the exercise of their duties in their respective health institutions of assignment, and urged legislators and appropriate authorities for the prevention of accidents and illness at the practice environment, and the protection of nurse clinical instructors' occupational health and safety through inclusion or policy formulation.

Keywords: nurse clinical instructors, occupational hazard, workplace security

#### Introduction

ursing education is one of the professions that contribute significantly to society since this is where aspirants are molded by nurse clinical instructors to become the very soldiers of health care who are made capable of providing safe and effective care to the human race.

According to CMO 14, s. 2009, nurse clinical instructors execute their tasks in supervising nursing students during their related learning experiences (RLE). As such, they are faced with a twofold responsibility in their practice environment – as a nurse (or health worker), and as a teacher. As a health worker, a clinical

<sup>&</sup>lt;sup>1</sup> Trinity University of Asia - St. Luke's College of Nursing; https://orcid.org/0000-0002-0829-5814; Email address: mpvsaquing-sellers@tua.edu.ph

instructor ensures that they function in accordance with a Code of Ethics which provides specific guidelines and regulations advocating health as a person's basic right, and recognizing that nurses are responsible to preserve it at all cost, or to assist the person towards peaceful death if the former is impossible. Based in the Code of Ethics for Teachers, a clinical instructor is expected to possess both the dignity and the reputation that warrants high moral values, and armed with technical and professional competence in the practice of the profession.

As nurses, clinical instructors who practice in communities, hospitals, clinics, and other health facilities may suffer potential injuries that are experienced by the rest of the health team in their respective practice environments where work hazards pose risks. As such, it may be said that certain biological, chemical, physical and psychosocial health and safety risks (Rhule, 2012) may be shared by nurse clinical instructors with these health workers by virtue of their exposure to the same practice environment and with those of similar tasks.

As educators, clinical instructors may also be faced with professional hazards in their supervision of their students. Such possibilities are those coming from their various liabilities for the acts of their students who are under their custody, as well as, injuries that these students may encounter. The Civil Code of the Philippines provides that teachers or heads of establishments of arts and trades shall be liable for damages caused by their pupils and students or apprentices, so long as they remain in their custody (Art. 2180). According to Decano (2004), even students already of age are covered by the said Civil Code provision, if they are equally in the custody of the school and subject to its discipline, and that it is not necessary that at the time of the injury, the teacher be physically present and in a position to prevent it.

In addition to their living and working conditions in terms of employment, the social and economic well-being of public health workers in the Philippines are aimed to be promoted and improved through the provisions of Republic Act No. 7305, known as the Magna Carta of Public Health Workers (Section 2). This law contains provisions on specific rights of the public health workers in recognition of the hazardous nature of their occupation. Similarly, public school teachers in the Philippines are protected from 'special hardship' and professional injuries, among others, by certain provisions of Republic Act No. 4670, also known as the Magna Carta for Public School Teachers.

While a plethora of studies about staff nurses' occupational health and safety exists, there is a lack of attention given to the conditions of nurse clinical instructors in the workplace. As such, a research focusing on nurse educators is essential to respond to the mentioned gap in light of evidence-based practice. It can serve as an initiative that can be used as a basis for law and policy makers to address the needs of these professionals towards their

overall well-being, and ultimately, their provision of quality education to the future nurses of the country.

Considering these realities, this study was conducted to determine the occupational health and safety of nurse clinical instructors employed in selected local universities in Metro Manila.

#### Methodology

#### Research Design

In order to determine the practice environment of clinical instructors of selected local universities in Metro Manila offering the Bachelor of Science in Nursing (BSN) program, this study utilized a descriptive cross-sectional design of research. It employed a survey method of gathering data.

#### Setting

The research work was conducted in four local universities in Metro Manila which offer the Bachelor of Science in Nursing program.

#### **Variables**

The independent variables involved in the study are age, sex, area of assignment, length of service, and highest educational attainment. Age and sex were included as variables (Mohammad, 2013). Javed and Yaqoob (2011) also studied gender-based occupational health hazards among paramedical staff. According to Wu, Zhu, Wang, and Lan (2007), surgical and medical nurses were statistically more occupationally stressed than other nurses, thus the area of assignment was considered crucial to be part of the study. Length of service, along with sex and age, among others, was included by Ndejjo, et al. (2015) in their research on occupational hazards of health workers. As for educational attainment, previous studies, such as that of Golubic, Milosevic, and Mustajbegovic (2009) found relevance in such a variable in perceiving hazards at workplace and shifting work.

The dependent variables are the respondents' levels of hazard exposure, incidence of injury, and workplace security. These variables were based on the 2016 preliminary study of the author on the practice environment of clinical instructors through the lens of nursing education administrators in which themes that emerged included occupational hazards faced, actual occupational injuries/illnesses encountered, and protection offered by the institution.

#### Samples and Sampling Techniques

Participants in this study include both full-time and part-time nurse clinical instructors teaching in selected local universities.

The total number of such clinical instructors in the four universities is 58. With a rather small size of clinical instructors, the entire population was considered as the respondents of the study. Purposive sampling technique was utilized since the number of participants in this study totals to 47 and also because of the limitations in the retrieval process in data gathering.

#### Data collection process

Data was gathered in 2016 through a pen and paper survey, using a researcher-made tool that underwent expert validation and reliability testing with Cronbach's alpha scores of 0.906 for hazard exposure, 0.936 for injury incidence, and 0.809 and 0.825 for workplace security for hazard exposure and injury incidence, respectively. The tool used has five parts. The first one covered the work-related profile of the respondents. The second part contains items to determine their level of exposure to occupational hazards. The respondents were asked to rate the hazards according to their frequency using a modified Likert-type scale as follows:

Scale	Range	Verbal interpretation		
4	3.50-4.00	very high exposure (always)		
3	2.50-3.49	high exposure (often)		
2	1.50-2.49	low exposure (seldom)		
1	1.00-1.49	very low exposure (never)		

The third part included items about the incidence of injury experienced by the respondents during their entire employment in their current institution, under the same subdivisions above. Here, the respondents were asked to rate the frequency of such incidences using a modified Likert scale as follows:

Scale	Range	Verbal interpretation		
4	3.50-4.00	very high incidence (always)		
3	2.50-3.49	high incidence (often)		
2	1.50-2.49	low incidence (seldom)		
1	1.00-1.49	very low incidence (never)		

The fourth part assessed the respondents' level of security from hazards and injuries. In this part, they were asked to rate the applicability of positive statements on their security using a modified Likert-type scale as follows:

Scale	Range	Verbal interpretation		
4	3.50-4.00	very high security (extremely applicable)		
3	2.50-3.49	high security (moderately applicable)		
2	1.50-2.49	low security (slightly applicable)		
1	1.00-1.49	very low security (not applicable)		

Items included in the instrument were based on Philippine laws pertaining to

liabilities of teachers, to nursing practice, to nursing education, and to health workers, as well as on occupational safety and health standards, and on different studies on health and safety of nurses, one of which is that of Rhule (2012).

To validate the quantitative responses of the participants, the fifth part of the questionnaire asked the open-ended question, "What other issues and concerts on health and safety are you faced with?"

#### Statistical Analysis

To determine the work-related profile of the respondents, the researcher used frequency and percentage distribution. To measure the level of health and safety encounters and the level of workplace security of the respondents, the researcher utilized weighted mean. To discern if there are significant differences when grouped according to sex, Mann-Whitney U was used. Independent t-test was used to determine if there are significant differences when grouped according to highest educational attainment. Moreover, to determine if there are significant differences when grouped according to the remaining profile variables, the researcher used One-Way Analysis of Variance (ANOVA). To measure if there is a significant relationship between the respondents' level of health and safety encounters and their level of security, the Kendall's tau correlation coefficient was used. To examine the other issues/concerns of the respondents on occupational health and safety, data was treated using content analysis of the written textual response of the respondents, from which themes and subthemes were identified. Finally, to determine what inputs for policy formulation can be developed based on the study, the output was conceptualized by the researcher in consideration of the items under the workplace security variable which were computed to be below two and fifty hundredths (2.50) interpreted as low and very low levels of workplace security. The researcher also utilized the data on occupational health and safety encounters to support the basis for the determined needs for protection.

Based on the Shapiro-Wick test of normality, the demographic profile variables of the respondents, namely, age, area of assignment, length of service, and highest educational attainment were normally distributed in the comparison of health and safety encounters in terms of hazard exposure and injury incidence. Thus, the data acquired met the assumptions of the ANOVA and t-test respectively. However, the results on sex and injury incidence were not normally distributed, thus, were considered non-parametric data, and were tested using Mann-Whitney U.

#### Ethical considerations

Ethical considerations were employed in the conduct of the research. Prior to the administration of the questionnaire, the

study went through the research ethics protocol of Universidad de Manila. In this process, it was ensured that ethical standards in terms of consent, confidentiality and anonymity, and information were observed, prior to the floating of the questionnaires.

#### **Findings**

#### The profile of the participants

Table 1 shows the frequency and percentage distribution of the nurse clinical instructors' profile. As can be seen, the majority of the respondents belong to the age bracket of 40 below at around forty nine percent (49%). The set of respondents is relatively young, bordering between young and middle adulthood.

As evidenced, the majority of the respondents are female at approximately sixty-six percent (66%). Moreover, most of the nurse clinical instructors were assigned in special areas, with approximately forty seven percent (47%). The table also shows that 44.7% of respondents had been employed in their respective local universities for 6 to 10 years, while 8.5% had just started in less than a year. It further shows that most of the nurse clinical instructors' highest educational attainment is a master's degree as reflected in the level distribution of eighty seven percent (87%) or forty-one (41) out of forty-seven (47).

**Table 1.** Profile of the 47 nurse clinical instructors of local universities in Metro Manila

Profile			%
Age	>50	6	12.8
	41-50	18	38.3
	<41	23	48.9
Sex	Male	16	34.0
	Female	31	66.0
Area of Assignment	Special Area	22	46.8
	Ward	14	29.8
	Community/Clinic/OPD	11	23.4
Length of service	>10 years	9	19.1
	6-10 years	21	44.7
	1-5 years	13	27.7
	<1 year	4	8.5
Highest educational attainment	Master's degree	41	87.2
	Doctorate degree	6	12.8

**Table 2.** The level of health and safety encounter of the nurse clinical instructors in terms of exposure to occupational hazards and injury incidence

Exposure to occupational hazards					
Hazard	Weighted Mean	Interpretation	Rank		
Biological	2.889	High	1		
Chemical	2.247	Low	5		
Physical	2.817	High	2		
Psychosocial	2.440	Low	3		
Vicarious	2.426	Low	4		
Total	2.564	High			
Injury incidence	·				
Injury Weighted Mean Interpretation Rank					
Biological	1.826	Low	2		
Chemical	1.447	Very low	4		
Physical	1.783	Low	3		
Psychosocial	1.898	Low	1		
Vicarious	1.221	Very low	5		
Total	1.635	Low			

## The level of health and safety encounter of the nurse clinical instructors in terms of exposure to occupational hazards

Table 2 presents the summary of the level of health and safety encounter of the nurse clinical instructors in terms of hazard exposure. Result of the analysis shows that in general, the nurse clinical instructors have a high exposure to occupational hazards often, with a weighted mean of 2.564. This means that the nurse clinical instructors are generally often exposed to occupational hazards. Biological hazards are found to be the most common occupational hazard encountered by clinical instructors with a weighted mean 2.888, followed by physical hazards at 2.817. The least type of hazards the nurse clinical instructors revealed they are exposed to is chemical with a weighted mean of 2.247.

## The level of health and safety encounter of nurse clinical instructors in terms of injury incidence

Table 2 also presents the summary of the level of health and

safety encounter of the nurse clinical instructors in terms of injury incidence. It is shown that the nurse clinical instructors have a low level of encounter with occupational injury. This means that there is a seldom incidence of occupational injury among the nurse clinical instructors. The result of the analysis shows that, of the five dimensions, psychosocial and biological injuries got the first two ranks, with the highest mean scores of 1.898 and 1.826, respectively, with description rating of "low". Vicarious injuries turned out to have the lowest mean score of 1.221, ranking fifth (5<sup>th</sup>) with description rating "very low".

## The level of workplace security in terms of occupational hazards

Table 3 reveals the level of workplace security of nurse clinical instructors in terms of occupational hazards. It shows that the nurse clinical instructors' level of security on hazard exposure in the practice environment is generally low at a mean score of 1.842. This implies that generally, the nurse clinical instructors do

**Table 3.** The level of workplace security in terms of occupational hazards and injury incidence

Occupational hazards			
Items	Weighted Mean	Interpretation	Rank
work only in facilities where health-and-safety friendly equipment, devices, and signage are in use.	2.532	high	1
am provided with adequate seminars and trainings to equip me with knowledge on the direct and vicarious risks involved in my job as a clinical instructor, and skills to avoid or deal with injuries.	2.191	low	2
undergo free and adequate medical examination a least once a year.	1.936	low	4
am provided with complete and appropriate vaccinations free of charge.	1.468	very low	6
am able to avail of free quality psychological counseling services that are available for my psychosocial concerns.	1.489	very low	5
am compensated with appropriate hazard and/or special hardship allowances for the risks and difficulties I encounter in the workplace.	1.298	very low	7
act in accordance with an established institutional protocol for occupational hazards.	1.979	low	3
General weighted mean	1.842	low	
Injury incidence			
Items	Weighted Mean	Interpretation	Rank
am completely covered by my employer in terms of expenses for medical, surgical and/or psychological treatment.	1.574	low	3
am able to avail of free hospitalization when needed.	1.596	low	2
am adequately protected with life insurance in case of death.	1.319	very low	5
am provided with free legal services in the event that legal injuries occur due to vicarious liabilities.	1.511	low	4
act in accordance with an established institutional protocol for actual occupational injuries.	1.851	low	1
General weighted mean	1.570	low	

not perceive themselves to be protected enough from occupational hazards. Among the items, indicator no. 1, which states that the current employer ensures that the nurse clinical instructor works "...only in facilities where health-and-safety friendly equipment, devices, and signage are in use", got the highest mean score of 2.532, interpreted as "high". The lowest ranking indicator of the respondents' level of security in item no. 6 stating that the present employer ensures that the nurse clinical instructor is "...compensated with appropriate hazard and/or special hardship allowances for the risks and difficulties I encounter in the workplace" at a 1.298 mean score, interpreted as "very low".

## The level of workplace security in terms of occupational injuries

Table 3 also presents the level of workplace security of nurse clinical instructors in terms of occupational injuries. It shows that the nurse clinical instructors' level of security for injury incidence in the practice environment is generally low at a mean score of 1.570. This implies that the nurse clinical instructors see themselves to be not sufficiently protected in case of incidences of occupational injury. Though with the highest mean score, item no. 5, "I act in accordance with an established institutional protocol for actual occupational injuries" surfaced to have a rather low level of security at 1.851 mean score. The lowest ranking indicator of the respondents' level of security in terms of occupational injury in item no. 6 stating that the present employer ensures that the nurse clinical instructor is "adequately protected with life insurance in case of death" at a 1.319 mean score, interpreted as "very low level of security".

#### Comparison of the level of the health and safety encounter of the nurse clinical instructors in terms of occupational hazards when grouped according to profile variables

Table 4 displays the comparison of the level of health and safety encounter of nurse clinical instructors in terms of hazard exposure when grouped according to profile variables. It is illustrated that null hypothesis 1 was accepted, there being no significant difference in the level of exposure to occupational hazards when grouped according to age, sex, length of service, area of assignment, and highest educational attainment at p-values of more than 0.05 level of significance (0.557, 0.678, 0.473, 0.229, and 0.292, respectively).

#### Comparison of level of health and safety encounter of the nurse clinical instructors in terms of injury incidence when grouped according to profile variables

It is also illustrated in Table 4 that null hypothesis 2 was accepted, there being no significant difference in the level of occupational injury incidence when grouped according to age, sex, length of service, area of assignment, and highest educational attainment

at p-values of more than 0.05 level of significance (0.559, 0.736, 0.763, 0.442, and 0.361, respectively). This implies that the above-mentioned variables do not significantly affect the level of incidence of occupational injury of nurse instructors.

## Comparison of level of workplace security for occupational hazards when grouped according to profile variables

Table 5 shows the comparison of the level of workplace security of nurse clinical instructors for occupational hazards when grouped according to profile variables. It illustrates that null hypothesis 1 was accepted, there being no significant difference in the level of workplace security for occupational hazards when grouped according to age, sex, length of service, area of assignment, and highest educational attainment at p-values of more than 0.05 level of significance (0.932, 0.228, 0.650, 0.076, and 0.269, respectively). This finding suggests that regardless of differences in age, sex, length of service, area of assignment, or highest educational attainment, the nurse clinical instructors manifest the same level of security for occupational hazard exposure.

## Comparison of level of workplace security in case of occupational injury when grouped according to profile variables

Table 5 also presents the comparison of the level of workplace security of nurse clinical instructors in case of occupational injury when grouped according to profile variables. It shows that null hypothesis 1 was accepted, there being no significant difference in the level of workplace security for occupational hazards when grouped according to age, sex, length of service, area of assignment, and highest educational attainment at p-values of more than 0.05 level of significance (0.719, 0.469, 0.905, 0.113, and 0.269, respectively). The result of the analysis implies that no matter which group of age, sex, length of service, area of assignment, or highest educational attainment the nurse clinical instructors belong to, their level of workplace security in case of occupational injury is low.

## Relationship between the respondents' level of health and safety encounter and their level of workplace security

Table 6 presents the relationship between level of health and safety encounter and level of workplace security as to occupational hazards. The result of the test conducted using Kendall's tau correlation coefficient to determine if there is a significant relationship between the respondents' dimensions on level of hazard exposure in terms of health and safety encounter and their level of workplace security. As revealed, no significant relationship between the level of health and safety encounter and level of workplace security in terms of hazard exposure was observed. The computed tau value is -0.188 with p-value of 0.073 tested at the degrees of freedom of 46 and at a

**Table 4.** Comparison of the level of the health and safety encounter of the nurse clinical instructors when grouped according to profile variables

Occupational hazards						
Profile	Age	Mean	F computed	p-value (Sig.)	Remarks	
	>50	2.63		0.557	Not Significant	
Age	41-50	2.51	0.593			
	<41	2.41	]			
Sex	Male	25.16	229.5*	0.678	Not Significant	
Sex	Female	23.4	229.5	0.076	Not Significant	
	Ward	2.43				
Area of assignment	Special area	2.58	0.761	0.473	Not Significant	
Area or assignment	Community/ Clinic/OPD	2.68	0.761	0.473	Not Significant	
	>10 years	2.39		0.229	Not Significant	
Laurette af aandaa	6-10 years	2.70	1 4 407			
Length of service	1-5 years	2.55	1.497			
	<1 year	2.24	]			
Highest educational	Master's degree	2.767	1.067**	0.292	Not Significant	
attainment	Doctorate degree	2.532	1.007			
Injury incidence						
	>50	2.65		0.559	Not Significant	
Age	41-50	2.53	0.590			
	<41	2.40				
Sex	Male	2.45	233*	0.736	Not Significant	
Sex	Female	2.58	233	0.730		
	Ward	2.41		0.763	Not Significant	
Area of assignment	Special area	2.52	0.272			
Alea oi assigninent	Community/ Clinic/OPD	2.65	0.272			
	>10 years	2.32		0.442	Not Significant	
Longth of contine	6-10 years	2.70	1 044			
Length of service	1-5 years	2.51	1.041			
	<1 year	2.22	]			
Highest educational	Master's degree	2.767	0.923**	0.361	Not Significant	
attainment	Doctorate degree	2.532	0.823	0.301	Not Significant	

<sup>\*</sup>Mann-Whitney U value

<sup>\*\*</sup>t-test value

**Table 5.** Comparison of level of workplace security when grouped according to profile variables

Occupational I	hazards				
Profile	Age	Mean	F computed	p-value (Sig.)	Interpretation
	>50	1.60			
Age	41-50	1.54	0.071	0.932	Not Significant
	<41	1.56			
Sex	Male	1.67	201*	0.228	Not Cianificant
Sex	Female	1.52	7 201	0.220	Not Significant
	Ward	1.64			
Area of	Special area	1.58	0.435	0.650	Not Cignificant
assignment	Community/ Clinic/OPD	1.47	0.435	0.000	Not Significant
	>10 years	1.43			
Length of	6-10 years	1.46	7 0.450	0.076	Not Cinnificant
service	1-5 years	1.72	2.452		Not Significant
	<1 year	2.00	1		
Highest	Master's degree	1.67		0.269	Not Significant
educational attainment	Doctorate degree	1.56	0.527**		
Injury incidend	ce				
Profile	Age	Mean	F computed	p-value (Sig.)	Interpretation
Age	>50	1.80		0.719	Not Significant
	41-50	1.94	0.332		
	<41	1.87	1		
Sex	Male	1.94	046*	0.469	Not Significant
	Female	1.83	216*		
Area of	Ward	1.81		0.905	Not Significant
assignment	Special area	1.90	0.100		
	Community/	1.86	7 0.100		
	Clinic/OPD				
Length of	>10 years	1.56		0.113	
service	6-10 years	1.81	2.111		Not Significant
	1-5 years	2.09	] 2.111		
	<1 year	2.10			
Highest	Master's degree	1.83			
educational attainment	Doctorate degree	2.10	1.119**	0.269	Not Significant

**Table 6.** Relationship between the respondents' level of health and safety encounter and their level of workplace security

Description	tau value	P value	Remarks
Level of health and safety encounter and level of workplace security in terms of hazard exposure	-0.188	0.073	Not Significant
Level of health and safety encounter and level of workplace security in terms of injury incidence	-0.134	0.208	Not Significant

level of significance ( $\alpha$ ) of 0.05. This implies that irrespective of the level of practice environment where there are health and safety encounters in terms of hazard exposure, the nurse clinical instructors manifest the same level of security for occupational hazards.

The same table also shows the relationship between level of health and safety encounter and level of workplace security as to occupational hazards. As revealed, there is no significant relationship in terms of injury incidence. The computed tau-value is -0.134 with two-tailed significance of 0.208 tested at the degrees of freedom of 46 and at 0.05 level of significance of ( $\alpha$  = 0.05). This suggests that regardless of the level of practice environment when it comes to health and safety encounters in terms of injury incidence, the nurse clinical instructors manifest the same level of security in case of occupational injury.

#### Issues/concerns on occupational health and safety

To validate the quantitative responses of the respondents, they were asked the question, "What other occupational health and safety issues and concerns are you faced with as a clinical instructor?" Their responses to the questions yielded to a better understanding of their perceptions on their concerns on occupational health and safety. The answers obtained from the nurse clinical instructors were categorized according to those concerning affiliating agencies, and the education institutions. Two sub themes emerged upon analysis, namely, physical environment and current practice. Protective equipment/gadgets, compensation, and programs also surfaced upon analysis.

#### Strengths and Limitations

Among the study's limitations is that data was gathered in 2016 during which the existing Policies, Standards, and Guidelines (PSG) for the BSN program were stipulated in CMO 14, 2009. Despite such timing, however, the findings in this study can still be considered relevant, as CMO 15, 2017, which specifies the current PSGs for the nursing curriculum in the country, states the same provisions on areas for RLEs to wit, "lying-in clinics, schools, industrial establishments, community, out-patient clinics and general and specialty hospitals." These are the same practice environments where both staff nurses and nurse educators perform their responsibilities as health workers and as academicians, respectively.

#### **Discussion**

The results of the study revealed that nurse clinical instructors have varied profiles and frequencies of encounters with certain hazards and injuries in their practice environment.

While previous studies support otherwise in terms of age (Javed & Yaqoob, 2011), sex (Zwart, 2001 as cited in Javed & Yaqoob, 2011) area of assignment (Pratt, et al., 2001, as cited in Pellowe, 2007), length of service (Javed & Yaqoob, 2011), and educational attainment (Muttarak & Lutz, 2014), the study showed lack of significant difference in the level of exposure when grouped according to profile variables. This implies that regardless of age, sex, area of assignment, length of service, and highest educational attainment, nurse clinical instructors encounter occupational hazards and injuries.

In terms of occupational injury, the results show that there is no significant difference when grouped according to profile variables. This finding is not in agreement with previous research works of Ndejjo (2015) and Gooch (2015) in terms of age, and Serna, et al., (2013) and Ndejjo's study (2015) in terms of sex. On the other hand, the studies of Ndejjo (2015) and Javed & Yaqoob (2011) support the results of the study in terms of areas of assignment and length of service, respectively.

The result of the comparison of the level of workplace security of nurse clinical instructors in case of occupational injury when grouped according to profile variables implies that no matter which group of age, sex, length of service, area of assignment, or highest educational attainment the nurse clinical instructors belong to, their level of workplace security in case of occupational injury is low. Alow level of security in the workplace is not favorable to the clinical instructor, the students, or the patients, as the same is true with practicing nurses. Trinkoff et al. (2008) stated that the safety of nurses from workplace-induced injuries and illnesses is important to nurses themselves, as well as, to the patients they serve. The presence of healthy and well-rested nurses is critical to providing vigilant monitoring, empathic patient care, and vigorous advocacy. As such, addressing hazards and injuries is essential.

The lack of significant relationship between level of health and safety encounter and level of workplace security as to occupational hazards implies that irrespective of level of practice environment health and safety encounters in terms of hazard exposure, the nurse clinical instructors manifest the same level of security for occupational hazards. In a survey on health and chemical exposures, Environmental Working Group (2007) wrote that nurses' exposures demonstrate that dramatic improvements will require measures that go beyond those that would protect nurses from hospital exposures. This means, according to the article, that far-reaching reform is needed to overhaul an outdated system of public health protections, and that it must be a priority for anyone devoted to protecting public health.

Given the very low level of workplace security of clinical instructors in terms of occupational injury, and the lack of

relationship between such exposure and their security, the nurse clinical instructors appear to be in need of protection. In an article on injured nurses, Zwerdling (2015) wrote that nursing employees in a typical hospital lift far heavier patients a dozen or more times every day, but officials and researchers throughout the health care industry say that most hospitals have not taken aggressive action to protect the nursing staff from lifting injuries. As this may be true in terms of other types of injuries, it also implies that the lack of workplace security is not exclusive among nurse clinical instructors.

Occupational health and safety issues and concerns of the nurse clinical instructors showed to include affiliating health institutions. Statements under physical environment are consistent with one finding from the study of Rhule (2012) stating that small space, combined with insufficient ventilation often generated heat and helped in the spread of airborne pathogens. CHED Memorandum Order No. 14, s. 2009 (CMO 14), Section 13.4 paragraph 7 specifies that "provision should be made for adequate physical facilities, supplies, and equipment for effective nursing care and learning experiences of students".

The apparent need for protective equipment implies that the nurse clinical instructors perceive that such devices and supplies are to be provided by the educational institution. In terms of compensation, a common concern that emerged is the lack of hazard pay for the nurse clinical instructors that added more to the burden of the lack of health insurance. It is stated in CMO 14 that nurse clinical instructors are required to undergo annual medical examinations. This is due to the need for clinical instructors to be physically, mentally and psychologically fit in order to be able to provide quality nursing education, specifically under clinical instruction. Moreover, the Magna Carta of Public Health Workers provides for the entitlement of public health workers to hazard pay, among other forms of compensation to address occupational hazards and injuries. The responses of the nurse clinical instructors suggest that the implementation of the Magna Carta of Public Health Workers does not include them. despite their being employed in government-run institutions, and their being exposed to the same hazards these public health workers face. Lastly, a number of the respondents included in their list of concerns the lack of stress management program by the school, the lack of hazard compensation scheme, and the lack of established occupational health and safety protocol for nurse clinical instructors. These responses suggest the need for an occupational health and safety program in clinical instruction, which should cover the aforementioned issues and concerns.

#### **Conclusions**

Despite the lack of significant differences found in the study, the nurse clinical instructors consistently have a low level of occupational security to protect them from the hazards and

injuries they are faced with. With no significant relationship found, it can be reflected that irrespective of level of occupational health and safety encounters, the nurse clinical instructors manifest the same level of security.

Given the issues concerning affiliating health institutions and educational institutions as problems emphasized by the respondents that they have encountered in their practice environment, it is apparent that actions need to be taken to augment the workplace security of nurse educators.

#### Inputs for policy formulation

As an output of this study, a Policy Position Paper on Occupational Health and Safety of Nurse Clinical Instructors was developed by the researcher, considering the items below two and fifty hundredths (2.50) interpreted as low and very low levels of workplace security. To support such needs for protection, the researcher also utilized the data on occupational health and safety encounters to emphasize that though in varying degrees, nurse clinical instructors encounter hazards and injury at their practice environment. From these, the specific points in which the nurse clinical instructors reported lack of protection were identified, and used as basis for the inputs for policy formulation in the form of a policy position paper, which is intended to (1) increase the awareness and sensitivity of the public to the occupational health and safety situation that nurse clinical instructors are confronted with during the exercise of their duties in their respective health institutions of assignment, and (2) urge legislators and appropriate authorities for the prevention of accidents and illness at the practice environment, and the protection of nurse clinical instructors' occupational health and safety through inclusion or policy formulation.

#### References

Civil Code of the Philippines, Republic Act No. 386. (1980). https://www.officialgazette.gov.ph/1949/06/18/republic-act-no-386/

Decano, A. G. (2004). *Notes on torts and damages*. Quezon City: Central Lawbook Publishing Co., Inc.

Golubic, R., Milosevic, M., Knezevic, B. and Mustajbegovic, J. (2009), Work-related stress, education and work ability among hospital nurses. *Journal of Advanced Nursing*, 65: 2056–2066. doi: 10.1111/j.1365-2648.2009.05057.x.

Javed, S. & Yaqoob, T. (2011). Gender based occupational health hazards among paramedical staff in public hospitals of Jhelum. *International Journal of Humanities and Social Science*. 1(3), 175-180.

- Mohammed, S. (2013). Evaluation of occupational risk factors for nurses and CNAs: Analysis of Florida workers' compensation claims database. Graduate Theses and Dissertations.
- Ndejjo, R., Musinguzi, G., Xiaozhong, Y., Buregyeya, E., Musoke, D., Wang, J., Halage, A., Whalen, C., Bazeyo, W., Williams, P. & Ssempebwa, J. (2015). Occupational hazards among healthcare workers in Kampala, Uganda. *Journal of Environmental and Public Health*. http://dx.doi.org/10.1155/2015/913741.
- Pellowe, C. (2007). Standard principles: hospital environmental hygiene and hand hygiene. *Nursing Times*. http://www.nursingtimes.net/clinical-subjects/infection-control/standard-principles-hospital-environmental-hygiene-and-hand-hygiene/291499.fullarticle.
- Philippine Nursing Act of 2002, Republic Act No. 9173. (2002). https://www.officialgazette.gov.ph/2002/10/21/republic-act-no-9173/
- Policies and standards for the Bachelor of Science in Nursing (BSN) program, CHED Memorandum Order No. 14 series of 2009. https://ched.gov.ph/cmo-14-s-2009/
- Policies and standards for the Bachelor of Science in Nursing (BSN) program, CHED Memorandum Order No. 15 series of 2017. https://ched.gov.ph/cmo-15-s-2017/
- Rhule, H. A. (2012). Health related risks of nursing practice at Effia-Nkwanta Regional Hospital, Sekondi. Kwame Nkrumah University of Science and Technology. (Thesis).
- Serna, J., Perez, E., Artazco, L., Moen, B. & Benavides, F. (2013). Gender inequalities in occupational health related to the unequal distribution of working and employment conditions: a systematic review. *International Journal for Equity in Research*. 12(57). http://doi.org/10.1186/1475-9276-12-57.

- The Magna Carta of Public Health Workers, Republic Act No. 7305. (1993). https://www.officialgazette.gov.ph/1992/03/26/republic-act-no-7305-s-1992/
- The Magna Carta for Public School Teachers. Republic Act No. 4670. (1966). https://www.lawphil.net/statutes/repacts/ra1966/ra 4670 1966.html
- Trinkoff, A., Brown, J., Caruso, C., Lipscomb, J., Johantgen, M., Nelson, A. Sattler, B. & Selby, V. (2008). *Personal Safety for Nurses*. Patient Safety and Quality: An Evidence-Based Handbook for Nurses. http://www.ncbi.nlm.nih.gov/books/NBK2661/.
- Wu, S., Zhu, W., Wang, Z., Wang, M. and Lan, Y. (2007), Relationship between burnout and occupational stress among nurses in China. *Journal of Advanced Nursing*, 59: 233–239. doi: 10.1111/j.1365-2648.2007.04301.x
- Zwerdling, D. (2015). *Hospitals fail to protect nursing staff from becoming patients*. http://www.npr.org/2015/02/04/382639199/hospitals-fail-to-protect-nursing-staff-from-becoming-patients.

#### **ABOUT THE AUTHOR**



Mary Pauline V. Saquing-Sellers, EdD, MSN, RN, is a Professorial Lecturer III at Trinity University of Asia - St. Luke's College of Nursing. She graduated with the degrees, Bachelor of Science in Nursing and Master of Science in Nursing at Saint Mary's University. She obtained Doctor of Education from

Pamantasan ng Lungsod ng Maynila and is currently pursuing Master of Science in Bioethics at the University of the Philippines Manila. Among her research interests are nursing education, gender and development, and health care ethics.

"Research is seeing what everybody else has seen and thinking what nobody else has thought."

– Szent-Györgyi, A.
(1937 Nobel Laureate in Physiology or Medicine)