

An Exploratory Study of Factors Influencing Student Nurses' Empathy

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Abstract

Background: Healthcare providers' empathetic attitude towards patient care significantly plays a role in the success of patient-centered outcome. However, across the empathy literature, there have been numerous studies which indicate that there had been a significant change in the level of empathy among nursing students in line with the length of their clinical exposure. Considering these studies, little is known on the factors affecting empathy. Hence, this study has purported to explore the factors influencing nursing students' level of empathy.

Methods: A descriptive-correlational research design was utilized. This study employed factor analysis to explore the factors which influence student nurses' level of empathy. Data was analyzed through SPSS Version 21. Inclusion criteria are regular nursing students with at least 18 years of age, on their 15th week of RLE and are currently enrolled in the academic year 2017-2018. A total of 255 nursing students were purposively selected from a tertiary institution in Manila.

Results: Nine factor dimensions identified namely: Engaging, Efficiency, Emic, Erratic, Encumbering, Enduing, Emotive, Embracing, and Enervating Factors. Out of the nine variables that were identified, only four have been identified to have a direct effect on empathy which are: Engaging, Efficiency, Erratic and Encumbering Factors. Moreover, Engaging and Efficiency Factors positively affect empathy while Erratic and Encumbering Factors negatively affect empathy. Notably, Engaging factors had the most impact among the student nurses' level of empathy.

Conclusion: Several factors affecting the nursing students' empathy are combination of personal, patient and environmental. Since it was revealed that some factors can cause decrease in empathy among the nursing students, selection of educators who will serve as positive role models should be considered. Likewise, empathy trainings may be conducted such as self-awareness and reflective listening among the nursing students before they face their patients.

Keywords: Empathy Student Nurses

Introduction

Nurses equipped with empathy help in understanding more of the patient's feelings in the aspect of caring. Empathy is a subjective response which may vary from individual to another, some may be naturally empathic than the others. Empathy is the capacity to participate vicariously and understand the experience and emotions of others [1]. It has key elements: moral, emotive, cognitive, and behavioral. According to Yu and Kirk (2009), the cognitive element shows the ability to identify and understand others' perspective and depict their thoughts, the emotive element reflects the ability to experience and share in others' psychological state or intrinsic feelings, the moral aspect relates to an internal altruistic drive that motivates the practice of empathy, and the behavioral element shows the ability to communicate empathetic understanding and concerns [2].

The nurse and patient's perspective of healthcare help in coming up with an effective and therapeutic relationship. The success of the relationship and in many cases of the clinical outcome itself, are largely dependent on the empathetic responsiveness of the practitioner, who may be influenced by specific attachment needs and fears [3]. There is general support that nurses' empathetic attitude is important for patient's adherence to treatment [4]. Empathy influences the therapeutic relationship of the nurse and the patient, being more responsible in attending to the needs of the patient.

Over the last 3 decades, there has been growing interest of exploring the concepts of empathy in relation to patient care. Moreover, there was a study from another country where nursing students have personal experience of decrease in their level of empathy in terms of their patient care [5]. The researchers find this alarming.

Immersing one's self to the feelings of the patient becomes an eye opener in providing a holistic care to the patients. According to Ward, Cody, Schaal and Hojat (2012), there was a statistically significant decline of empathy among nursing students as they are more exposed to clinical setting or patient interaction [6]. Ironically, more clinical exposure supposedly enhances or strengthens empathetic attitude but it turned out that it has contributed to the decreased level of empathy among the students due to several factors identified by Ward (2012): difficult patient assignments, exposure to negative staff, pressure to complete tasks within limited time frame, and fear of committing mistakes. Furthermore, student nurses possibly also experience a risk of not having an empathetic attitude because of too much workload in school and negative criticisms from clinical instructors [6]. Not all nurses consistently could emphasize the importance of respect and empathy to the service they give to their patients. Hence, the researchers conducted the study to explore the factors affecting level of empathy among student nurses.

Literature Review

Empathy

Empathy is an important attribute in the nurse-patient interaction because it reflects the hallmark of the care given by the nurse. It can be defined as the ability to perceive the feelings of another and to communicate that understanding to the other person, helping the other to feel understood and less alone [7, 8]. Absence of it may affect the attainment of desired patient outcomes. There is a misconception that compassion and empathy in nursing are no longer portrayed in the quality care that is provided [9, 10]. In the study of Doyle, Hungerford and Cruickshank (2014), there were tribunal cases reviewed due to raised complaints against nurses for their callousness or lack of empathy [11]. Further, Eing and Mergency (2015) found in their study that emergency nurses appear to have low levels of empathy. Similarly, Williams, Brown, McKenny, Beovich, and Etherington (2016), presented low empathy scores among nurses [5]. Such findings raise an alarm and awareness on nurse educators to reinforce support on compassionate nurses in the making and to prevent recurrence of such findings.

A study by Guru and Gheena (2016) about empathy involving students from medical, nursing, physiotherapy and dental students found in their study that empathy increased towards their final years [12]. However, dental students have better empathy than nursing students followed by physiotherapy and medical students. Wilson, Prescott and Becket (2012) found that among health and non-health professionals the levels of empathy of dental and pharmacy students is significantly higher than nursing students whom are more engaged on patient interaction [10]. Penprase, Oakley, Ternes, and Driscoll (2013) stated in their study that many studies were conducted to intervene with the decreasing level of empathy of students with the use of tools although produced results were inconsistent [13]. The authors importantly found out that as nursing students advance their knowledge from first to the final semester, their systemizing characteristics increase with an accompanying slight boost in empathizing attributes. Contrariwise, another study yielded results showing higher mean score for empathy among nursing students using the Jefferson Scale of Empathy Health Professional Students version [14].

The concept of empathy is multidimensional and there are many factors affecting it [1]. Factors that could influence student nurses' empathy level are personal, patient and external factors.

It is interesting to note that the aforementioned studies were carried out in American, British and Australian, empathy remains to be a blind spot in the Philippine context.

Personal Factors

Personal factors are factors affecting empathy within a student nurse. These include traits, talents, descent and so forth, either inherent or acquired. A non-practicing M.D. and a teacher, James, concerned about human beings' inner lives and how our inner lives affect our treatment of each other [15]. An important aspect of developing empathy is increasing one's self-awareness of cognitive and emotional processes [8].

Fear of committing mistakes [6] could result to student nurses' erosion of empathy while student nurses who personally chose nursing as a program exhibited increased level of empathy [1]. A study by Levett-Jones, Lapkin, Govind, Pich, Hoffman, Jeong, Norton, Noble, Maclellan, Robinson-Reilly and Eversonn (2017) was conducted with an approach aligning with theoretical constructs of empathy by taking on the patient's role, learners are enabled to reflect on the patient's perspective, feelings, needs and concerns [16]. The results appeared to support the stance of "point of view" disability simulation and had a measurable impact on participants' empathy scores. It is demonstrated in the study that the emotions of the participants have an effect on their empathy scores from the simulation activity. Several authors described factors that impeded nurses' empathic behaviors, which included lack of time, personality style, and anxiety toward patients [6, 17-19]. It should also be considered that group of nurses simultaneously display a high level of psychological distress together with a lower level of psychological well-being. Additionally, during the past few years, numerous studies have documented the strong prevalence of psychological distress, depression, and burnout among health professionals, including nurses.

Patient Factors

Patient factors are factors from student nurses' encounter, relationship or interaction with their patients throughout the course of nursing care which have an impact to their empathy level. There is an increase chance that a student nurse may exhibit negativity towards a patient if he/she is unfamiliar with the patient's case. Nursing students who cared for an HIV patient in the past consistently had better attitudes than those who had not provided care [20].

According to Williams and his associates (2016), differences in the demographic variables between the nurses and their patients – age within family, gender, disability within family, year level – were found to be not significant [5].

On one hand, a study in Australia examined the relationship between critical care nurses' empathy and variables as such gender, years of practice in critical care, level of education and occupational position. Female had slightly higher scores than males. On the other hand, no relationship between empathy and attitudes towards patients from ethnic minority group was founded in the descriptive study conducted in the United States. Meanwhile in Canada, the relationship between nurses' empathy levels and patients' pain intensity and analgesic administration after surgery was examined. Empathy was related to nurses' knowledge and beliefs about pain management. Moreover, nursing students tend to adopt an imagine-other perspective to a greater extent than the objective perspective,

and that they felt higher empathy and distress when observing a sick child [21].

External Factors

External factors include factors that come from the outside of the student nurses exempting those under patient factors that can affect their extent of empathy. Hui-Chen, Hsiu-Hung and Wei-Che (2012) stated in their study that negative criticisms to the nursing profession can serve as a barrier for students to enter the nursing career [22]. They identified that the reward a nurse gets in relation to its working efforts despite the number of patients handled are unjust.

Rebeiro, Edward, Chapman, Evans (2015)'s study determined the factors that contributes on the relationship between student nurses and registered nurses [23]. The results were clustered into 5 themes: getting to know the student; developing trust which aids in the student nurses' capability of achieving quality of care, letting go which allows students to develop autonomy, importance of connecting, and obtaining feedback from SNs.

Ouzouni and Nakakis (2012) identified that clinical instructors contribute to the level of empathy [1]. The emotional understanding portrayed by clinical instructors while performing care to patients would give rise to student nurses' level of empathy. Nurse educators must likewise be aware that the students' focus is often limited to memorizing facts for the next exam in order to achieve high grades. Acquiring hands-on skills and passing tests are essential to a nursing education, but achieving these goals does not necessarily create a well-rounded nurse [24]. Also, if nurse educators understand the attachment style of students, they may subsequently encourage improvement of empathic behaviors among nursing students. The relationship of empathy between the nurse and the patient is more like demonstrated and increased using a secure attachment style [25].

Winseman, Malik, Morison and Balkoski (2009) founded 165 factors that influence empathy which they clustered into 4: personal experiences, connection and beliefs; negative feelings and attitude toward patients; mentoring and clinical experiences that promote professional growth; and school and work experiences that undermine development of empathy [26]. School and work experiences that undermine development of empathy was the least important and mentoring and clinical experiences that promote professional growth rated the most important.

As early as being student nurses, they are exposed and taught to practice empathy during class lectures and in every interaction with their patients during Related Learning Experience (RLE). Moreover, acquired empathy can be taught as a skill and developed with practice and experience based from the study of Spiro (1992) [27]. However, there is debate in the literature about whether empathy can be taught or not [7, 24, 28-34].

Research Hypotheses

Factors such as engaging, efficiency, encumbering, and ending factors impact student nurses' empathy.

Operational Definitions

Empathy - this is the subjective understanding of patient's feelings by the nursing students and be able to share with those feelings.

Senior nursing students - they are the currently enrolled 4th year college nursing students. They are the eldest in the year levels of Bachelor in Science of Nursing in the Philippines. They are believed to be the most experienced among the four levels in nursing undergraduate.

Methods

Research Design

Descriptive-correlational design was utilized in the study to explore the factors influencing student nurses' empathy and to determine the relationship of the student nurses' empathy with their demographic profile: age, gender, religion, and reason for taking up nursing. All Level IV student nurses possessing the inclusion criteria were purposively invited as the sampling group.

Subjects and Setting

This study was conducted in a tertiary institution in Manila, Philippines. Sample size was determined using power analysis. The recommended sample size for multivariate analysis is 5-10 observations per research variable [35]. Hence, at least 250 nursing students were selected to account for power = 0.8 at alpha level = 0.05. Part of the inclusion criteria include: at least 18 yrs. old, regular student, enrolled in the academic year 2017-2018 and on their 15th RLE week of senior nursing experience. It is the time wherein the nursing students have already engaged themselves in the senior RLE activities.

Research Instruments

The questionnaire is composed of 3 parts. First part contains a respondent's robotfoto. Secondly, tool of measurement used to determine the level of empathy of the nursing students is the Jefferson Scale of Empathy Health Profession-Student version (JSE-HPS). The JSE-HPS is a 20-item questionnaire with 7-point Likert scale that would reflect the respondent's personal level of concurrence. 10 items positively worded and 10 items negatively worded to maintain a balance. The positively worded items will be directly scored (1=Strongly disagree, ..., 7= Strongly agree), whereas the negatively worded items will be reversely scored (1=Strongly agree, ..., 7=Strongly disagree). The sum of all the items' score will be the total score. The higher the total score, the more empathetic the behavior is. The scale's possible score can range from a minimum of 20 to a maximum of 140. The scale can be completed from 5-10 minutes.

Lastly, a tool developed by the researchers composed of 51 statements indicating factors that could influence the students' level of empathy was attached. These statements were collated from empirical observation, interview and related literatures. The instrument showed Cronbachs alpha of >0.6 which indicates reliability score of the instrument.

Data Collection Procedure

Ethics Review Committee (ERC) and Research Board approved and validated the research tool and proposal. Then, an informed consent was obtained from the eligible participants. The data was gathered respectively in the students' classrooms. The respondents were given 15 to 20 minutes to answer the tool.

Results gathered for assessment of the senior nursing students' empathy were submitted to the administration of the university which would raise awareness to students and nurse educators as well as a

guide in developing interventions for those with decreased empathy.

Data Analysis

To identify the dimensions of factors affecting empathy, data was analyzed using factor analysis through SPSS version 21. Respondents were dichotomized in low or high empathy through median split.

Factor analysis reduces data into clusters or dimensions according to responses. This technique extracts maximum common variance from all variables and puts them into a common score. Guidelines used for retaining and/or discarding factors include factor loading greater than 0.4, Eigenvalue >1.0, percent variance >4.0, Cronbachs alpha > 0.6 [36]. Factor dimensions identified were then entered as predictors in a regression model explaining empathy. Multiple linear regression was employed to determine causal relationships between variables. This was used to examine the relationship between several independent variables and a dependent variable.

Ethical Considerations

A consent form and a cover letter explaining briefly the purpose of the study and the rationale behind respondent's participation was provided. Likewise, appropriate channels were observed in the conduct of the study.

Results

Demographic Profile of the Respondents

The demographic profile of the respondents was indicated in Table 1. Majority of the students were female (82.9%), within 20-22 years old (54.7%), are Roman Catholic (85.2%) and were mainly influenced by their family (69.7%) to take up nursing. Among the 255 respondents, 52.5% exhibited low level of empathy.

Table 2 presents the result of the factor analysis of the factors influencing student nurses' empathy. Results of Kaiser-Meyer-Olkin measure of sampling adequacy indicates that factor analysis may proceed. Thus, generating 9 factor dimensions. Firstly, *Engaging Factors*, the tag under which the ten variables loaded in Factor 1 pertains to instances wherein patients, relatives, clinical instructors and staff nurses engage the student nurses throughout the treatment and other procedures. Secondly, *Efficiency Factors* had five variables under Factor 2 which typifies the ability of the student nurses to perform nursing skills with competence and therapeutic communication techniques. Five variables under Factor 3 tagged *Emic Factors* are closely associated with the existing cultural phenomena or beliefs of nursing students and their patients. The *Erratic Factors* had six variables under Factor 4, depicting the alienating situations that the student nurses experience from

Table 1: Demographic profile of the respondents (n=255)

Profile	Frequency	%
Gender		
Male	42	17.1
Female	204	82.9
Age		
17-19	108	44.4
20-22	133	54.7
>22	2	.8
Religion		
Roman Catholic	202	85.2
Born Again	20	8.4
Islam	5	2.1
Methodist	1	.4
Baptist	7	3.0
Mormon	2	.8
Reason for choosing nursing		
Personal choice	55	24.1
Family	159	69.7
Friends	4	1.8
God	9	3.9
Pre-med course	1	.4
Empathy		
High	121	47.5
Low	134	52.5

Factor Analysis of the Factors Influencing Student Nurses' Level of Empathy

their patients and other healthcare professionals in the clinical setting. Factor 5 tagged *Encumbering Factors* had five variables describing instances when student nurses feel pity, awkward and overly-familiar towards the patient. The four variables in Factor 6 named *Enduing*, characterize instances where student nurses feel greater pressure and responsibility to attend to patients who are underprivileged. The four variables under Factor 7 are highlighted by the *Emotive Factors* which typify the emotional states that the student nurses feel while providing patient care. *Embracing Factors*, the name ascribed to Factor 8, had two variables that embodies circumstances where student nurses feel a sense of belongingness in their working environment. Finally, two variables under Factor 9 named *Enervating Factors* pertain to the point where the student nurses experience distress in view of the patient's anguish.

Table 2: Factor analysis of the factors influencing student nurses' level of empathy

<i>Factors dimensions</i>	<i>Factor loading</i>	<i>Eigen value</i>	<i>% variance explained</i>	<i>Reliability</i>
<i>Engaging Factor</i>		4.314	10.331	.885
My patient's relatives are cooperative.	.835			
My patient's relatives are appreciative.	.826			
My patient trusts student nurses.	.688			
I feel emphatic the more I am exposed to clinical setting.	.679			
My patient's relatives are inquisitive.	.622			
My patient has positive outlook in life.	.613			
My patient participates in the plan of care.	.611			
My clinical instructor shows caring behavior	.601			
The staff nurses are emphatic to my patient.	.554			
My patient is cooperative.	.444			
<i>Efficiency</i>		2.479	7.955	.834
I am good in communicating with my patients.	.768			
I am knowledgeable of my patient's condition.	.767			
I am able to establish rapport with my patient.	.713			
I am confident in performing a nursing procedure.	.637			
I am given more time to interact with my patient.	.622			
<i>Emic</i>		3.126	7.755	.890
My patient and I share the same religion.	.884			
My patient and I have the same faith.	.864			
My patient and I have the same ethnicity.	.855			
My patient and I share the same beliefs.	.764			
My patient is of the same gender.	.532			
<i>Erratic</i>		2.784	7.325	.835
My patient is rude.	.826			
My patient is arrogant.	.814			
My patient's relatives are rude.	.710			
I am in uncondusive workplace.	.620			
I am dealing with difficult clinical situations.	.572			
I am overwhelmed by the number of patients.	.472			
<i>Encumbering</i>		2.497	7.182	.864
My patient is of my same age group.	.820			
My patient is 18-year-old and below (pediatric).	.813			
My patient is a family/relative/friend of mine.	.676			
My patient is 60-year-old and above (geriatric).	.670			
My patient is financially-challenged.	.507			
<i>Enduing</i>		2.183	5.890	.798
My patient has lower educational attainment than me.	.814			
My patient looks untidy.	.810			
My patient has unpleasant smell.	.742			
My patient has no companion.	.558			
<i>Emotive</i>		1.715	4.733	.686
I am stressed.	.713			
I am feeling down.	.703			

I am feeling happy.	.639			
I am motivated.	.551			
Embracing Factors		1.362	4.281	.930
I am in good working relationship with other health care providers.	.829			
I am in good working relationship with staff nurses.	.821			
Enervating Factors		1.134	4.028	.867
My patient is in pain.	.754			
My patient is in severe illness	.751			
Total variance explained: 59.479				
Kaiser-Meyer-Olkin Measure of Sampling Adequacy= .835				

Regression of Factors Predicting Empathy

Table 3 presents the regression of factors predicting empathy. Notably, four out of the nine factors significantly affect the level of empathy among nursing students while the remaining five are insignificant. Specifically, engaging ($\beta = 0.330, p < 0.01$) and efficiency ($\beta = 0.208, p < 0.01$) factors positively influence empathy. In contrast, encumbering ($\beta = -0.156, p < 0.05$) and ending ($\beta = -0.154, p < 0.05$) factors negatively impact empathy. By and large, these factors combined to explain 19.1% variance of student nurses' empathy. In addition, the demographic profile of student nurses namely age ($\beta = 0.045, p > 0.05$), gender ($\beta = 0.062, p > 0.05$), religion ($\beta = -0.047, p > 0.05$) and reason ($\beta = 0.103, p > 0.05$) for choosing nursing, were noted to be insignificant predictors of empathy level.

Table 3: Regression of factors predicting empathy

Variable	β	t	p-value
Engaging Factors	.330	4.476	.000
Efficiency Factors	.208	3.189	.002
Emic Factors	.800	.017	.732
Erratic Factors	.126	-.102	.839
Encumbering	-.156	-2.039	.043
Ending Factors	-.154	-2.229	.027
Emotive Factors	.873	-.011	.852
Embracing Factors	.219	.082	.725
Enervating Factors	.189	-.088	.765
Age	.045	.713	.476
Gender	.062	.986	.325
Religion	-.047	-.742	.459
Reason for choosing nursing	.103	1.642	.102

f-ratio= 13.717 p-value=.000
R=.402
R²=.161

Discussion

Engaging Factors

Engaging Factors pertain to situations where student nurses' involvement in patient care is advanced. Similarly, Ouzouni and Nakakis (2012) and Ward (2017) posited that clinical instructors' ineffectiveness as role models in the presentation of emotional understanding to their patients cause erosion of empathy among student nurses [1, 6]. Students who witnessed situations where

patients are being attended by senior healthcare professionals with little empathic concern end up being relinquishing the virtue of unnecessary [37].

Efficiency Factors

These typify excellence in nursing skills and therapeutic communication fall under affecting empathy. Nurse educators concur that empathic communication skills need to be developed in students since it is important to nurses' humanistic connection with individuals, families or their clients [38-40]. Other factors inhibiting the empathy may be found in the clinical setting. This includes pressure to complete tasks within a limited time frame and fear of making mistakes [6]. Thus, adequate time to interact with the patient, being knowledgeable of the patient's case and being confident with nursing skills support the development of student nurses' empathy.

Emic Factors

Emic Factors involve patients' religion, faith, ethnicity, beliefs and gender. Empathic responses can be influenced by variables such as gender, culture, environment and communication skills [1, 30, 41]. In 1997, Jocano postulated that compassion for others is identified as an intrinsic value among Filipinos. In contrast, the finding of the study revealed only half of the respondents were empathic considering further that they are from a Catholic tertiary institution.

Erratic Factors

Erratic Factors are associated to circumstances where negative behaviors by patients as well as absence of positive environment affect student nurses' empathy level. In 2009, Hojat and colleagues posited that an intimidating environment and patient's negativity contribute to the erosion of empathy which is parallel to the findings of the study. Furthermore, the undergraduate nursing students are often faced with difficult clinical situations and an overwhelming number of patients which can estrange them from their patients, thus lowering their empathy. According to Nielsen and Tulinus (2009), compassion fatigue refers to 'being exhausted emotionally' due to frequent difficult patient encounters, associated with the need for great attention and empathic listening [42]. When faced with an overwhelmingly number of patients, the student nurses experience compassion fatigue resulting to a decrease in empathy. When faced with patients' and patients' relatives' negative attitudes, the nursing students feel unwanted and alienate themselves from them.

Encumbering Factors

Situations under *Encumbering Factors* are closely associated with characteristics such as age, relationship and financial capability. Pediatric nurses experienced an intrapersonal struggle in finding an appropriate level of involvement with families [43]. Working with seriously ill children triggered nurses' reflections about their personal assumptions and beliefs about self, life, death, past and unresolved losses. Nurses caring for older persons experience a low professional status and their work is physically and emotionally challenging [44, 45]. Older persons can replace even more pressure on nurses because they require more time and knowledge and their demands are unpredictable. This challenging behavior of older persons is stressful to the nurses and influences their health and work ability and may cause burnout [45]. Patients with complex health problems account for substantial healthcare spending. Many of these patients also experience adverse social conditions, such as poverty, low literacy, and homelessness that make it difficult to access and benefit from care. Formal experience with marginalized population can then positively influence nurses including student nurses' attitudes and alter stereotypes (Tear et al., 2012). Nursing students must be encouraged to exhibit understanding towards their patients in all situations. Thus, nurse educators should take into consideration number of patient assignments among students to ensure effective delivery of care.

Enduing Factors

Enduing Factors characterize instances where student nurses feel increased pressure in patient care in relation to the situation of their patients. The work of health professional touches patient's lives at times of basic human need, when care and compassion are what matter most. Caring is often associated with aspects of nurse patient interactions, such as having sympathetic presence and person-centeredness (McCance et al., 2009). It is seen as intrinsic to the core of nursing, shaping the nurse's therapeutic drive and is activated when patient-centered care is delivered by developing a therapeutic relationship. Although empathy is an integral component of professional practice and patient-centered care [7], a body of research has identified that vulnerable patient groups, such as people with disability, frequently experience healthcare that is less than optimal and lacking in empathy. Healthcare professionals sometimes have limited understanding of the perspectives, concerns, needs and healthcare preferences of people with incapacity [46, 47].

Emotive Factors

These factors include the emotional state of the student nurses. In congruence with the study of Vahey, Aiken, Sloane, Clarke and Vargas (2004), the study also illustrated that nurses' burnout measured by feelings of emotional exhaustion and lack of accomplishment is a significant factor in influencing how satisfied patients are with their care [48]. Notably, there are conflicts that may arise within the student nurses' working environment. One of those is the so-called intrapersonal conflict which occurs within the individual involving thoughts, values, principles and emotions. These intrapersonal conflicts can affect student nurses' collaboration with staff nurses and physicians in creating healthier and more productive work environment which further affects the quality of nursing care. Student nurses, before facing their patients, should undergo self-awareness and emotional understanding to facilitate a more patient-centered care.

Embracing Factors

Embracing Factors refer to nursing students' description of their working relationship with staff nurses and other healthcare providers. The belongingness receive by nursing students from their group helps in developing empathy. The finding of the study is parallel to Ward's (2017) study which identified that exposure to negative staff or the importance of having good working relationship with other health care providers affects emphatic behavior of the nursing students. Notably, students' problem in working with other health care professionals makes fostering connection with their patient more challenging. Hence, other healthcare providers must be oriented about the role student nurses play in patient care to build a harmonious and trusting relationship between them.

Enervating Factors

Enervating Factors are negative experiences with their patient's suffering. Students in the study [49] described feeling "shattered into pieces" especially witnessing painful procedures. It is because they feel uncertain about how they could even begin to help patients and their families to cope with unrelenting heartache and grief. In addition, Mirlashari, Warnock and Jahanbani (2017) found out that the students feel that way for the reason that they have little preparation for the realities of human experience during their clinical practicum [50]. The students' perception of pain and suffering is affected by how much their patients and their patients' relatives express it.

Conclusion

Evidently, several factors affecting the nursing students' empathy are combination of personal, patient and environmental, namely: *Engaging, Efficiency, Emic, Erratic, Encumbering, Enduing, Emotive, Embracing* and *Enervating Factors*. Only four of these variables namely *Engaging, Efficiency, Erratic* and *Encumbering*, were found to have a direct effect on empathy. Moreover, *Engaging* and *Efficiency* factors positively affect empathy while *Erratic* and *Encumbering* factors negatively affect empathy. Notably, *Engaging* factors had the most impact on empathy of the student nurses.

Limitations

The researchers developed a questionnaire which was used to collect data. Therefore, the reported factors may be limited and needs further research. Additionally, the study was conducted at a single academic institution in Manila. Hence, the findings lack generalizability.

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