

EMPATHY, PROFESSIONAL VALUE AND PROFESSIONAL QUALITIES OF LIFE AMONG NURSING STUDENTS AT A PUBLIC UNIVERSITY IN SELANGOR

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Abstract

Work stress and burnout are common among healthcare workers, including nursing students, due to heavy workloads and long-term exposure to patient care. Adaptation of empathy and professional values can affect the quality of life among nursing students. This study aimed to determine the relationship between empathy, nursing professional value, and professional quality of life (ProQOL) among nursing students at a public university in Selangor. A cross-sectional study was done using purposive sampling, and 128 nursing students from UiTM Puncak Alam were recruited to participate in this study. Students completed a self-report online questionnaire that included the Jefferson Scale of Empathy, the Nursing Professional Values Scale, and the Professional Quality of Life Scale. The finding shows that students reported a higher level of nursing professional value, an average level of empathy, and a medium level of ProQOL. A fair, positive correlation exists between empathy and nursing professional value ($r = 0.309$, $p < 0.01$). Empathy and professional values are essential for fostering resilience and reducing burnout among nursing students in clinical settings. Self-awareness and a firm grasp of these values help mitigate compassion fatigue and negative workplace patterns, promoting emotional well-being and high-quality care.

Keywords: Nursing Student(s), Empathy, Nursing Professional Value(s), Professional, Quality of Life

Introduction

The workload is increasingly becoming a significant issue among healthcare workers, particularly nurses and nursing students. According to the World Health Organization (WHO) 2024, there is expected to be a shortage of 10 million healthcare workers worldwide by 2030. This shortage would significantly impact poor and lower-middle-income nations (1). A study relates to stress in the workplace with low job satisfaction, mental distress, and empathic attitudes. Nurses apply empathy to the patient and therapeutically aid patients or people in managing their emotions while conveying the needed and desired (2). Empathy is fundamental for a beneficial relationship between patients and nurses. Recognizing client demand and establishing proper care and treatment is necessary (3). Reduced mistakes, increased satisfaction, and patient well-being, including complications and treatment, had a more significant link or relationship with good empathic

capacity shown and adapted by the nurses (4). However, nurses were burdened with a lot of stressful workloads, death, and dying people. Thus, they will be experiencing less empathic concern towards the patients. A study found that empathy levels were significantly higher in participants reporting low-stress levels than those reporting high-stress levels, with a mean (SD) empathy score of 49.1 (6.7) and 74.7% of participants exceeding the high empathy threshold (5). Consequently, the stress and workload experienced by nurses can interfere with their positive feelings towards their job and their level of engagement. This can also disrupt their empathetic relationships with patients and their families. Thus, a lack of empathy can interfere with treatment, diagnosis, and care given to the patient (6). Research has highlighted a 'compassion crisis' in healthcare, marked by inconsistencies in delivering compassionate patient care. While the exact extent of its effects on health and healthcare remains unclear, early

hypotheses suggest that compassionate care positively impacts patient outcomes, reduces healthcare costs, and mitigates provider burnout (7). In nursing education and curriculum, the value of empathy has already been taught by basic theoretical knowledge, the arrangement of the hours spent during the clinical attachment in the different departments to understand patient experiences and communicate well with the patient (8). However, short-term observation has shown that evidence about student empathy skills is more likely to decrease over time. It will be challenging for the educator to teach the value of empathy as it comes from the nursing students themselves (9). Empathy education enhances nursing students' ability to connect with others, making empathy training a valuable component that should be integrated into the undergraduate nursing curriculum (2). Nevertheless, a lack of understanding of the value of clinical empathy leads to low professional quality of life (ProQOL) among nurses. The prolonged use of empathy will increase compassion fatigue in nurses and lower the ProQOL (10). Empathy is a significant value that should be implemented in healthcare because it impacts patients' and nurses' physical and emotional well-being (7). Professional values were essential to encourage nurses' ethical competencies in their working environment and help them deal with the changes of the present era and the globalization of technology (11). The previous study found that nursing values positively correlate with compassion satisfaction while negatively impacting burnout. This finding highlights the crucial role of professional values in fostering a supportive and fulfilling work environment. The substantial mediating effect of empathy on burnout (57.1%) is particularly noteworthy, suggesting that empathy significantly mitigates the negative consequences of burnout among nurses (12). Recently, concepts of ProQOL on hand, clinical competence, and clinical performances were closely related. Thus, many dimensions of ProQOL have been given extra consideration. As a result, nurses who have low levels of nursing professional values are more likely to experience secondary traumatic stress (STS). Previous studies have shown the indirect effect of nursing professional value on STS; a low level of nursing professional value can indirectly lead to a higher level of STS in clinical nurses (13). A low level of ProQOL among the nurses will affect patients' outcomes such as increased mortality rate, medical error, and poor quality of patient health service (14). Hence, fostering empathy, prioritizing professional principles, and addressing ProQOL are vital concerns for nursing students in Malaysia and globally. Educators can help students and patients achieve better outcomes by fostering empathy and building strong professional values. This study focuses primarily on nursing students, in contrast to prior literature which examined factors influencing ProQOL among practising nurses and healthcare professionals. This demographic represents an exceptional phase in nurses' professional growth since they are accumulating knowledge, skills, and values that will profoundly influence their future practice. Examining the relationship between empathy, nursing professional value,

and professional quality of life (ProQOL) among nursing students can offer valuable insights into early interventions and educational strategies designed to enhance well-being and professional satisfaction right from the beginning of their careers. In conclusion, ProQOL is beneficial in influencing job satisfaction and reducing absenteeism among nurses. Thus, this study aims to determine the relationship between empathy, nursing professional value, and professional quality of life among nursing students.

Materials and Methods

Study design

This study utilized a cross-sectional design to investigate the research objectives. This design was chosen because it allows researchers to determine the prevalence of a phenomenon, situation, problem, attitude, or issue by surveying a cross-section of the population (15). Additionally, cross-sectional studies are relatively quick and cost-effective to conduct. In this study, online survey questionnaires further enhanced cost efficiency and facilitated data collection from a large population sample within a short timeframe. The study population included 128 full-time undergraduate nursing students with clinical experience for at least one semester.

Study setting

This study was conducted from January 2021 to August 2021 at the Centre of Nursing Studies, part of the Faculty of Health Sciences at a public university in Selangor, Malaysia. Universiti Teknologi MARA (UiTM) is renowned for its comprehensive nursing program that equips students with theoretical knowledge and practical clinical experience. Nursing students at UiTM undergo clinical placements in a variety of healthcare settings, including 23 hospitals and 14 clinics. By conducting the study at UiTM, researchers can tap into the diverse experiences and perspectives gained by nursing students across these varied clinical environments.

Samples

This study utilized a purposive sampling method to recruit participants. This method was chosen to ensure that the selected participants met the study's specific inclusion criteria, providing relevant and meaningful data aligned with the research objectives (16). The process began by identifying the target population: full-time undergraduate nursing students with at least one semester of clinical experience. The researchers collaborated with the Faculty of Health Sciences administrative staff to compile a list of eligible students. Subsequently, all students who met the inclusion criteria were invited to participate. Invitations were disseminated, via WhatsApp. Posters that provided detailed information about the study were shared on student bulletin boards. The invitation included a link to the online survey, enabling participants to review the study details, provide voluntary consent, and complete the questionnaire. This approach ensured the recruitment

process was convenient, confidential, and easily accessible for the students.

The inclusion criteria were all full-time undergraduate nursing students and students with clinical experience for at least one semester. First-semester students were excluded from this study as they did not have enough clinical experience in the clinical setting. First-semester students were excluded because they lacked the clinical experience necessary to shape professional values, attitudes, and responses relevant to the study. At this stage, their focus is primarily on theoretical knowledge and basic skills, limiting their ability to provide meaningful insights based on real-world clinical exposure. Including them could introduce bias, as their perspectives would not reflect the practical realities encountered by more experienced students. Other than that, students on leave during a survey conducted in the setting and students with a chronic illness such as asthma or anaemia were considered exclusion criteria as it might affect the result of this study. They have been excluded because chronic illnesses may affect the students' professional values or responses to the questionnaire.

Sample size calculation

The target population for this study included all nursing students who were studying at the time of data collection, with approximately 156 students enrolled in nursing courses as full-time students at that time. The sample size was calculated using The Raosoft Sample Size Calculator software with a margin of 5%, a confidence level of 95%, and a response distribution of 50%; hence, the recommended sample size was 112 ($N = 112$). After considering a drop factor of 10%, a total of 128 nursing students were selected to participate in this study.

Instrument

A four-section questionnaire which included socio-demographic information, was used for data collection. The instruments used to measure variables in this study were the instruments about the Nursing Professional Values Scale (NPVS), Interpersonal Reactivity Index (IRI), and Professional Qualities of Life (ProQOL). Section A: The respondents were asked about socio-demographic data, including the age, gender, semester, and month of clinical experiences of the participants. Section B was about the IRI used to measure the level of empathy (17). This questionnaire consisted of 28 items with a 5-point Likert scale from A to E (A = did not describe me well to E = describe very well). There were nine items that have a symbol (-), which means they have a reversed scoring of A = 0, B = 1, C = 2, D = 3, E = 4, and the other 19 items have a standard scoring of A = 4, B = 3, C = 2, D = 1, E = 0. This measure has four subscales, each made up of 7 different items. These subscales are Perspective Taking (PT), Fantasy (F), Empathic Concern (EC), and Personal Distress (PD). The possible overall score ranges from 0 (very low level of empathy) to 112 (very high level of empathy), with a

mean score of 56. The higher points of the score indicate an increased level of practising empathy and wellness that describe the student for each subscale. The questionnaire in this study yielded a Cronbach's alpha coefficient of 0.740, attesting to its acceptable internal consistency.

For section C, the questions were about the NPVS, measures the students' level of professional nursing values (18). This questionnaire consists of 27 items with a 5-point Likert scale from 1 to 5 (1 = absolutely insufficient, 2 = insufficient, 3 = undecided, 4 = partially sufficient, 5 = absolutely sufficient). The score range was from a minimum of 27 to a maximum of 135. Higher points of score indicate an increased level of practising professional values. The questionnaire's Cronbach's alpha coefficient was determined to be 0.933, indicating an excellent level of internal consistency.

For section D, the questions were about ProQOL to measure the level of professional qualities of life (19). This instrument consists of 30 items with a 5-point Likert scale from 1 to 5 (1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = very often). The 30 questions of the ProQOL are divided into three domains. These domains are the Compassion Satisfaction (CS) Scale, Burnout (BO) Scale, and Secondary Traumatic Stress (STS) Scale. The CS scale consists of questions 3, 6, 12, 16, 18, 20, 22, 24, 27, and 30. The BO scale consists of questions 1, 4, 8, 10, 15, 17, 19, 21, 26, and 29. Finally, the STS scale consists of questions 2, 5, 7, 9, 11, 13, 14, 23, 25, and 28. A score of 22 or less for each subscale indicates low compassion satisfaction, burnout, or secondary traumatic stress; a score of 23 to 41 is deemed medium, while scores over 42 indicate high levels of compassion satisfaction, burnout, or secondary traumatic stress. The questionnaire demonstrated a Cronbach's alpha coefficient of 0.70, indicating acceptable internal consistency reliability.

Data collection

Permission was obtained from the UiTM Research Ethics Committee (REC) to conduct this study with approval code REC/01/2021 (UG/MR/18), and potential respondents were made based on the inclusion and exclusion criteria using purposive sampling. Once the eligible participants were identified, the researchers initiated the recruitment process. Invitations were disseminated via WhatsApp messages and posters were shared on student bulletin boards. The invitations included detailed information about the study, such as its purpose and voluntary nature, ensuring transparency and informed consent. A link to an online survey, created using a secure Google Form, was embedded within the WhatsApp messages and posters. Upon accessing the link, participants were directed to an introductory page outlining the study's objectives, ethical considerations, and instructions for completing the questionnaire. Participants were required to review this information and provide their consent electronically before proceeding to the survey questions. The survey was expected to take 15 to 20 minutes to complete.

The anonymity of participants was maintained by conducting the survey on an online platform that allowed participants to complete the questionnaire without providing identifying information, such as names, student IDs, or contact details. No personal data was collected, participants were identified only based on their eligibility criteria, and no identifying details were recorded during the data collection process.

Data analysis

The initial normality for the total mean score for empathy, nursing professional value, and professional quality of life complied with the normality requirement in which the Shapiro-Wilk statistics emerged as $p > 0.05$. Therefore, the assumption of normality between variables was met, and thus, parametric tests were eligible for use. Descriptive statistics were used to analyze the socio-demographic characteristic data, the level of empathy, the level of nursing professional values, and the level of professional quality of life. Meanwhile, Pearson’s correlation coefficient was used to identify the relationship between empathy, nursing professional value, and ProQOL among nursing students. Means and standard deviations were calculated for the continuous variable. Frequency and percentages were used for categorical data. The significance level was $p < 0.05$, and the confidence interval (CI) was 95%.

Results

Demographic data

Table 1 shows the distribution of demographic data of respondents. There were 27(21.1%) students aged 21 years, 44(34.4%) 22, 45(35.2%) 23 and 12(9.4%) 24 years old each. A majority of respondents were female 116 (90.6%). There were 30 (23.4%) nursing students in semesters three to four, 47(36.7%) in semesters five to six, and 51 (39.8%) students from semesters seven to eight. The number of nursing students that were clinically experienced for one to three months was 44 (34.4%), followed by four to six months at 41 (32.0%), and seven to ten months at 43 (33.6%).

Table 1: Demographic data

Characteristics	Frequency	%
Age		
21 years	27	21.1
22 years	44	34.4
23 years	45	35.2
24 years	12	9.4
Gender		
Male	9	7.0
Female	119	93.0

Table 1: Demographic data (continued)

Characteristics	Frequency	%
Semester		
1-2		
3-4	30	23.4
5-6	47	36.7
7-8	51	39.8
Months of clinical experiences		
1-3 months	45	35.2
4-6 months	40	31.3
7-10 months	43	33.6

Empathy Level of Nursing Students

Table 2 presents the findings of the Interpersonal Reactivity Index. From the table, it can be seen that the total mean (SD) score was 71.96 (8.08). The minimum score was 54, and the maximum score was 94. The highest mean (SD) scores for subscales are empathy concern 19.95 (3.30), followed by perspective taking 18.66 (3.13), then fantasy scale 17.08 (3.02), and lastly, perspective distress 16.26 (2.45).

Table 2: Descriptive Data for Interpersonal Reactivity Index (IRI) and Subscale Empathy Concern (EC), Perspective-Taking (PT), Fantasy Scale (FS) and Personal Distress (PD)

Variable	Mean (\pm SD)	Minimum	Maximum
IRI	71.94 (8.08)	54	94
EC	19.95 (3.30)	14	28
PT	18.66 (3.13)	9	27
FS	17.08 (3.02)	10	25
PD	16.26 (2.45)	11	27

Nursing Professional Value of Nursing Students

Based on the findings in Table 3, 128 respondents from nursing students indicated a minimum score of 81 scores and a maximum score of 135 on the NPVS questionnaire. The total mean (SD) score of the nursing professional value was 109.22 (11.89).

Table 3: Descriptive Data for Nursing Professional Value (NPV)

Variable	N	Mean	SD	Minimum	Maximum
Level of NPV	128	109.22	11.89	81	135

Professional Quality of Life among Nursing Students

Table 4 shows an overview of total mean scores for the subdomains of ProQOL, including compassion satisfaction, burnout, and secondary traumatic stress. The CS ranges from 27 to 50 with a mean (SD) score of 39.45(4.86); meanwhile, for BO, ranging from 14 to 35, the mean score is 24.82(4.30), and for STS domains, ranging from 15 to 40 with a mean score 27.89(6.02). All subdomains fall in the range of 23 to 41, indicating an average score of compassion satisfaction, burnout, and secondary traumatic stress that the students experienced through their clinical experiences in the context of professional quality of life.

Table 4: Mean for Compassion Satisfaction (CS), Burnout (BO), and Secondary Traumatic Syndrome (STS)

ProQOL	Mean (SD)	Minimum	Maximum	n (%)	Criteria
CS	39.45 (4.86)	27	50		Average
Low				0	
Average				85 (66.6)	
High				43 (33.3)	
BO	24.82 (4.30)	14	35		Average
Low				39 (30.5)	
Average				89 (69.5)	
High				0	
STS	27.89 (6.02)	15	40		Average
Low				26 (20.3)	
Average				102 (79.7)	
High				0	
Total ProQOL	92.15 (9.18)				

Scoring: ≤ 22 (low); 23–41 (average); ≥ 42 or more (high)

Relationship between Empathy, Professional Value and Professional Quality of Life

As illustrated in Table 5, there is a significantly fair correlation between Empathy and Nursing Professional Value ($r = 0.309, p < 0.001$). This positive correlation suggests that as empathy increases, nursing professionals

tend to value their work more. However, there is no correlation between Empathy and ProQOL, with $r = -0.012, p > 0.05$. There is a weak correlation between the Nursing Professional Value and ProQOL which is $r = 0.135, p > 0.05$, but it is not statistically significant.

Table 5: Person Correlation coefficient between Empathy, Nursing Professional Value, and Professional Quality of Life

Variables	Empathy (IRI)	Nursing Professional Value (NPVS)	ProQOL
1. Empathy (IRI)	1		
2. Nursing Professional Value (NPVS)	0.309**	1	
3. ProQOL	-0.012	0.135	1

ProQOL = Professional Quality of Life; IRI = Interpersonal Reactivity Index (empathy); NPV=Nursing Professional Value
The asterisk path * $p < 0.05$. ** $p < 0.01$ relationships are the significant.; 0.26 – 0.50 fair correlation.

The correlation between components of IRI, nursing professional value, and ProQOL was tested using Pearson’s coefficient correlation. The results presented in Table 6 showed that nursing professional value had a poor positive correlation with empathy concern ($r = 0.235, p < 0.010$), whereas fair significance correlated with perspective taking ($r = 0.374, p < 0.010$). Further analysis showed that nursing professional value was fairly positively associated with compassion satisfaction ($r = 0.439, p < 0.01$) but negatively correlated with burnout ($r = -0.262, p < 0.01$). For the subscales of ProQOL, compassion satisfaction presented a fair, positive correlation with two dimensions of the interpersonal reactivity index, which are an empathic concern and perspective-taking ($r = 0.270, p < 0.010, r = 0.340, p < 0.010$) independently, while poor significant correlation with fantasy scale ($r = 0.225, p < 0.050$). In contrast, burnout was negatively associated with empathic concern at $r = -0.393, p < 0.010$. For secondary traumatic syndrome, all components of the interpersonal reactivity index did not correlate with this subscale except for empathy concern, which has a fair negative association with the secondary traumatic syndrome at $r = -0.290, p < 0.010$.

Table 6: Person Correlation coefficient between Nursing Professional Value, Subdomain Empathy, and Subdomain Professional Quality of Life

Variables	Nursing Professional Value (NPVS)	Compassion Satisfaction (ProQOL)	Burnout (ProQOL)	Secondary Traumatic Stress (ProQOL)	Empathy Concern (IRI)	Perspective-Taking (IRI)	Fantasy Scale (IRI)	Personal Distress (IRI)
1. Nursing Professional Value (NPVS)	1							
2. Compassion Satisfaction (ProQOL)	0.439**	1						
3. Burnout (ProQOL)	-0.262**	-0.434**	1					
4. Secondary Traumatic Stress (ProQOL)	0.060	0.042	0.415**	1				
5. Empathy Concern (IRI)	0.235**	0.270**	-0.393**	-0.290**	1			
6. Perspective-Taking (IRI)	0.374**	0.340**	-0.167	-0.021	0.527**	1		
7. Fantasy Scale (IRI)	0.133	0.225*	-0.019	0.064	0.221*	0.260**	1	
8. Personal Distress (IRI)	0.090	0.029	-0.002	-0.051	0.267**	0.068	0.289**	1

ProQOL = Professional Quality of Life; IRI = Interpersonal Reactivity Index (empathy); NPV=Nursing Professional Value. The asterisk path *p < 0.05. **p < 0.01 relationships are significant. < 0.25 poor correlation; 0.26 – 0.50 fair correlation; 0.51 – 0.75 good correlation; 0.76 – 1 excellent.

Discussion

Empathy

Empathy among nursing students shows a relatively moderate level. The result of this research was in line with previous research in which the average level of empathy was found among nursing students (20, 21). The author claims that the result is due to the student having difficulty understanding or feeling what other people are experiencing. Other possible explanations for these results may be due to multiple factors such as a lack of understanding of what empathy is and a lack of experience where empathy is needed. Experience in dealing with different types of patients helps in exposing oneself to different situations other people have to face. This is important to build up the empathy level in nursing students. However, while the result of this study does not show a high level of empathy, it is also not considered low, which indicates that nursing students have the basic qualities of empathy and need to nurture it more for it to become an attribute that makes up a great nurse.

Nursing Professional Value

This study revealed that the level of nursing professional value among nursing students was good. The mean scores for nursing students indicated that their perspectives

toward professional values were at an important level. The findings highlight the need for values training during undergraduate education especially emphasizing professionalism and activism. By emphasizing these values, we can enhance patient care, ethical decision-making, and overall job satisfaction in the nursing profession. Thus, this situation will increase their job satisfaction as well. Therefore, all the nurses outside have to be aware of and apply professional values in dealing with ethical matters and decision-making (21). Nursing professional value scores among nursing students were different due to varying perceptions about nursing professional value itself. It might be different due to various social, economic, cultural, and religious differences. Aligning with prior research, the author agreed that professional values varied across different states, influenced by their unique religious contexts, economic conditions, social structures, and cultural norms (22). Furthermore, investigating nursing students' perspectives on the significance of nursing professional value in various cultures, environments, and religions will assist clinical instructors and lecturers in the future in providing and selecting appropriate clinical placements for them. Moreover, understanding the influence of cultural and religious contexts on nursing values can contribute to fostering inclusive learning environments and preparing students for international practice opportunities. Additionally, this determination

can shed light on factors influencing the quality of life and job satisfaction among nursing students.

Professional Quality of Life among Nursing Students

In this study, the mean score indicated an average quality of life, and nursing students expressed an average level of satisfaction with their roles as helpers. The result may differ from other studies as it may be affected by a few reasons, such as the length of clinical exposure at the workplace. Clinical exposure might be related to this satisfaction because it enhances clinical competence and confidence, which would, in turn, promote compassion satisfaction and reduce burnout (23). Nursing students also have to face stiff competition from students from the same field from various universities, resulting in limited quotas for clinical placements. Due to a lack of exposure in clinical settings, nursing students may experience practical concerns, fewer learning opportunities, and even fundamental doubts about their decision to become nurses to deliver safe care to patients (24). Thus, students' lack of clinical experience might affect compassion satisfaction. The result of burnout and secondary traumatic syndrome also showed an average level of burnout in nursing students. The results suggest that most students experience a moderate level of emotional exhaustion and work-related stress, but these feelings are not severe. The lack of high levels of burnout indicates that while students do feel some pressure, it is manageable and not overwhelming. Additionally, the study shows no reports of high burnout or secondary traumatic stress, which means that most students are handling the challenges they face effectively. While students may be affected by the emotional demands of patient care or trauma in clinical settings, the impact is moderate and does not lead to high levels of distress. A study found that nursing students experienced high levels of burnout, which was observed to be related to the time spent with patients, resulting in physical and emotional exhaustion (25).

Relationship between Empathy, Professional Value and Professional Quality of Life

In this study, a significant relationship was found between empathy and nursing professional values, with higher levels of empathy correlating to higher levels of nursing professional values. This study discovered a significant correlation between empathy and nursing professional values, where an increase in empathy levels corresponded to an increase in nursing professional values. This observation aligns with a prior study that also found a significant link between nursing professional values and empathy. However, variations in this relationship could potentially influence new approaches to the moral development of nurses and nursing students (26). This correlation suggests that nursing students who demonstrate higher levels of empathy tend to exhibit stronger professional values. Empathy is a critical component of nursing practice, influencing the ability to connect with patients, provide compassionate care, and

foster a supportive clinical environment. The positive relationship between empathy and professional values implies that nurturing empathy in nursing education may enhance students' commitment to these core professional values, which are essential for maintaining high standards of care. Empathy is realized as a part of quality care, so nursing students who have greater professional values are more likely to use empathic competency in their work or tasks. Nursing students with positive nursing professional values were more pleased and delighted performing their job. Thus, it can also straightaway increase occupational proficiency. The study discovered a significant relationship between nursing professional values and one of the ProQOL subscales, compassion satisfaction. The better the nursing professional value, the higher the compassion satisfaction. The findings of the current study align with those of a previous study, which concluded that professional values, especially compassion satisfaction, have a direct and effective impact on ProQOL (11). The evidence is further supported by findings from a previous study, which demonstrated a relationship between professional value and one of the subcategories of ProQOL (27). Adaptation of professional values in nursing careers will affect the success of client care success and increase pleasure and satisfaction when performing the task properly. When both of them correlate with each other, they can create a positive work environment as all the colleagues will contribute to each other in finishing the jobs as ordered. Promoting self-compassion and assisting in the delivery of sympathetic and tender care to nursing students and other primary healthcare teams may enhance the care experienced by clients and the excellent contribution and satisfaction of healthcare team members. Next, the study showed that empathy is negatively correlated with burnout. The outcome, which contrasts with a previous survey's findings, indicated a negative correlation between empathy and burnout, observing that burnout decreases as empathy levels increase (12). Burnout can cause chronic job-related stress, which weakens and declines interest in jobs and patient safety. The findings indicate that there is a moderately significant relationship between empathy and compassion satisfaction. These results are consistent with those of other studies and suggest a positive association between empathy and compassion satisfaction (12). Empathy will decrease when exposure to stressful events increases either in academic or curricular education and clinical environment. It is critical to plan ahead of time to increase empathy and resilience. To avoid compassion fatigue and promote compassion satisfaction during clinical attachment, nursing students must avoid passive coping, improve adaptive coping, and increase family and colleague support. According to the current findings, there is a negative relationship between empathy and secondary traumatic stress. The findings align with a previous study, which suggested that empathy is related to secondary traumatic stress (28). It was noted that secondary traumatic stress could be reduced when there is a complete adaptation of empathy value in the profession. On the one hand, a more empathic level will improve judgment and

better nursing care. Still, on the other hand, emotional implication threatens option objectivity and exposes nursing students to secondary traumatic stress. However, the vulnerability of secondary traumatic stress will be different for each student due to many factors. The factors are lack of support, amount of work, exposure to pain and trauma, economic problems, and work environments. This will result in trauma and endanger the students and need further investigation and relevant actions, including precautionary steps to protect them.

Conclusion

In conclusion, nursing students exhibit high professional values, especially empathic concern, and lower levels of stress, satisfaction, and burnout. The fair correlation between empathy and nursing professional value suggests that fostering empathy may positively impact nurses' perceived value in their profession. This study contributes to the field of nursing education by providing insights into the professional values and psychological aspects of nursing students. It reveals that nursing students exhibit a high level of professional value, especially in empathic concern. The study reveals that nursing students experience below-average levels of secondary traumatic stress, compassion satisfaction, and burnout, according to the ProQOL scale. This finding is valuable for developing interventions to improve students' psychological well-being. Nursing educators should incorporate practices such as stress management workshops and peer support systems to support students. Emphasizing empathy in nursing education is also crucial, as it strengthens resilience and improves patient care. Integrating these strategies into the curriculum will better prepare students for the emotional challenges of the profession and enhance their overall well-being. Potential areas for future research include the evaluation of additional variables such as insight, critical thinking, and self-compassion. By understanding these attributes, we can gain a more comprehensive perspective on the skills and qualities possessed by nursing students. The scope of this study is confined to one specific setting, utilizing a cross-sectional approach with non-probability sampling. It's crucial to acknowledge that the sample used may not accurately reflect the entire population. Hence, a more extensive study that includes nursing students from various universities is recommended for a broader understanding.

Acknowledgement

The authors would like to thank all participating students, lecturers, and faculty administrators involved.

Conflicting interests

The authors declare that there are no conflicts of interest.

Ethical Clearance

Approval was received from the Research Ethics Committee Universiti Teknologi MARA with approval code REC/01/2021 (UG/MR/18) and compiled with the Declaration of Helsinki.

Financial support

We declare that this research study was self-funded. No external funding or grants were received for this research.

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