# Assessment of Self-efficacy among nursing and midwifery students and its relationship with quality of life

Javed Iqbal<sup>1</sup>, Fayaz Ahmed<sup>2</sup>, Aymen Rahat<sup>3</sup>, Sana Aziz<sup>4</sup>, Azum Farooq<sup>5</sup>, Bahadur Ali<sup>6</sup>, Amir Sultan<sup>7</sup>,

## Dr. Asfand yar Khalid<sup>8</sup>, NasirAli<sup>9</sup>

#### **ABSTRACT**

**Background:** Education is important for any nation not only for the development of their basic need but also to minimize poverty. While self-efficacy is the confidence of someone to meet challenges and complete tasks successfully and Quality education provide the student with a wide scope of skills and the opportunity to succeed in their future accomplishments in the society. The study was conducted with the aim to determine the level of self-efficacy and its impact on quality of life.

Method and Materials: The study was conducted in the nursing institutes of Khyber pukhtankhwa from April to July 2023 using cross-sectional descriptive design. The sample size was 650 students, using simple random sampling technique. A self-efficacy and quality of life questionnaire was used for data collection, while for analysis SPSS 20.0 Used.

**Results:** The total number of participants of the study was 640, Male were in majority (51.5%) compare to female students (48.5%). majority of the self-efficacy level was High (69.8%), followed by average level of self-efficacy (21.8%), while students with poor level of self-efficacy was very little (8.5%). The number of male students with good level of self-efficacy was (38.1%) compare to female students (31.5%).

Overall quality of life among the students was  $(3.6 \pm 0.57)$  that was good, while among the domains of quality of life the mean score of school environment was high  $(3.9 \pm 0.95)$ , with high domain score of physical sub-scale  $(3.6 \pm 0.83)$ .

Conclusion: The study concluded that majority of the students self-efficacy was, while the quality of life among the students was also good. Age is weak positive correlated with self-efficacy and Quality of life, on other hand QoL is negative weak correlated with self-efficacy.

#### **KEYWORDS:**

Quality of life, health competency, self-efficacy, nursing students,

#### INTRODUCTION

# **Background**

The nursing profession is the faster growing profession in Khyber pukhtankhwa province of Pakistan and took the attention peoples to be the part of this noble profession to be came the integral part of health care system in future. The Academic and regulatory authorities have welcome initiative and currently the single public sector medical university has affiliated 92 nursing college and 7 constituent

<sup>&</sup>lt;sup>1</sup> Nursing Department communicable disease center-Hamad Medical Corporation, Doha Qatar

<sup>&</sup>lt;sup>2</sup>Assisstant Professor: Saint James Institute of Nursing and Health Sciences Karachi

<sup>&</sup>lt;sup>3</sup>Registered Nurse at National Institute of Cardio Vascular disease Karachi.

<sup>&</sup>lt;sup>4</sup>Clinical Instructor at College of Nursing lyari Government of Sindh

<sup>&</sup>lt;sup>5</sup>Registered-Nurse at Sindh Govt Hospital Korangi # 5, Karachi

<sup>&</sup>lt;sup>6</sup>Assistant professor: Jesus and Mary institute of Nursing and Health sciences Karachi.

<sup>&</sup>lt;sup>7</sup>Prinicipal/Assistant professor: Tasleem College of Nursing and health sciences, Swat, KPK

<sup>&</sup>lt;sup>8</sup>Department of medical education, Hamad Medical Corporation, Doha Qatar

<sup>&</sup>lt;sup>9</sup>Monitoring and evaluation specialist, International committee of the Red Cross, Amman Jordan

institutes [1]. Education is important for any nation not only for the development of their basic need but also to minimize poverty [2]. In Pakistan trend toward the basic education has slowed due to three parallel educational systems in Pakistan: Urdu-medium, English-medium, and Madrassas [3]. Therefore, as the number of institutes increased most of the time, concern rise among the intellectuals and experiences individuals that either the quality will be maintained or compromised by quantity. Therefore every institute became a competitor for other college to provide quality education to their students, and represent their college an organization that provides quality education. Quality education means that to provide the student with a wide scope of skills and the opportunity to succeed in their future accomplishments in the society [4]. To assess institutes for their quality and operation the quality enhancement cell role in the present and in coming future is going more and more important. The health environment provides a fruitful environment for the students, but it is also necessary that the students have their own capability to overcome on minor issues.

Self-efficacy is the confidence of someone to meet challenges and complete tasks successfully [5]. It is consider a positive sign for the psychological wellbeing of people. Being broadly utilized in all fields, the level of self-efficacy influences the selection of responsibilities, their endeavors and the determination of exercises under difficult circumstances Individuals with a high level of self-efficacy can achieve predicted goals and tackle problems by putting in effort in developing the necessary abilities. In the event of failure, they accept it positively and blame it on insufficient effort. As a result, these people are less stressed than those who have low selfefficacy [7]. Nursing students face numerous obstacles as they work towards their learning objectives, including exposure unfamiliar to environments, finishing projects, handling personal duties, meeting deadlines, and fear of making mistakes, all of which can be stressful [8]. Senior nursing professionals are trained in undergraduate nursing programmes with an emphasis on practical application. While nursing students in their last year had to complete a thorough quality assessment of the employment unit, which has high demands for knowledge, abilities, and emotions for clinical nursing work, therefore Improving their self-efficacy is important for these students [9].

Nursing students, in particular, face greater obstacles in their academic motivation due to a variety of internal and external factors such as personal, family, social, educational, and professional issues. These problems can have an impact on nursing students' physical, psychological, and social health, as well as their Quality of Life [10]. As a result, assessing and improving nursing students' QoL may have an impact on their learning, socialization, and academic progress. Furthermore, policymakers in higher education might use QoL as an indication of educational quality [11].

## **Research Objective**

To determine the level of self-efficacy and its impact on the quality of life among nursing students, because there is dearth of literature in the context of Pakistan and nursing.

#### MATERIALS AND METHODS

## Study design, setting and participants

The study was conducted in the nursing institutes of Khyber pukhtankhwa from April to July 2023 using cross-sectional descriptive design. The nursing institutes having the program of nursing and lady health visitors were the study setting. So the total students of these institution was considered as the population, and using 95% confidence level, 5% margin of error and 80% prevalence the total sample size was 650 students, while due to missing some information of 10 students forms, they were excluded from analysis, using simple random sampling technique.

#### The inclusion and Exclusion criteria

Students who are currently enrolled in any nursing program recognized by Pakistan nursing council and Medical university or a lady health visitor program

recognized by the nursing board of the province, and are willing to participate was the inclusion criteria. Students, who were on clinical duties, perform preparation for exam, not-promoted students or not willing to participate voluntary were excluded from the study.

## **Data collection Procedure**

The data collection process were initiated after taking formal permission from the institutes, the data was collected in three parts. (i) Part was the demographic data of the participants; (ii) part was the self-efficacy level of the students through checklist, and (iii) part the quality of life Checklist.

The data was a collection in two portions, the first part contain the age, gender, semester, institute status, and living status of the institute while the second portion contain the student *self-efficacy* and *Quality of life questionnaires*.

## **Research Instrument**

## Perceived health competency / Self-efficacy

Two instrument used in this study, the first one was self-efficacy scale, in which we used the *smith perceived health competencies scale*, that contains 8 items questionnaire divided into behavioral and outcome domain which contains equal 4 items in both domains having a 6 point Likert scale having the reliability of 0.82 [12].

#### Quality of life questionnaire

The second checklist was the *Norwegian K-27 quality* of life checklist, that contain 5 domains and 27 items, using 1-never to 5-always Likert scale, while the chronbach alpha range from 0.73 to 0.83 [13].

#### Data analysis procedure

Through SPSS 20.0 the mean standard deviation were calculated for continuous variables while the frequency and percentages were calculated for categorical variables. To assess the association between self-efficacy and quality of life among the participants Pearson correlation was applied as inferential statistics.

#### **Ethical Consideration**

To start data collection, informed consent was taken from each participant, while formal permission was taken from the administration of the institute, while the study was approved by ethical review committee.

#### **RESULTS**

#### **Demographic data of the participants**

Male were in majority (51.5%) compare to female students (48.5%), while the total number of participants were 640. Students age group 18-22 years were in majority (59%) because majority of the students belong to 4 years BSN (Bachelor of Science in nursing) program which started after intermediate. The students belong to private institutes were higher (88.1%) than government nursing colleges (11.9%), which reflects that in the province new nursing institutes are entering the students to the health care industry that will contribute to the shortage of nurses in near future. (See table 1).

Table 1: Demographic data of the participants

participants					
Category		N-	Percentag		
		640	e		
Gender	Male	329	51.5%		
	Female	310	48.5%		
Age	18-22	377	59%		
	years				
	23 -27	196	30.7%		
	years				
	28 and	66	10.3%		
	above				
	years				
College	Private	563	88.1%		
status	Governm	76	11.9%		
	ent				
<b>Programs</b>	4 years	415	64.9%		
	BSN				
	2 Years	78	12.2%		
	Post-RN				
	MSN	24	3.8%		
	LHV	122	19.1%		

## **Self-Efficacy among the students**

Among the total number of students (640), majority of the self-efficacy level was High (69.8%), followed by average level of self-efficacy (21.8%), while students with poor level of self-efficacy was very little (8.5%).

The number of male students with good level of self-efficacy was (38.1%) compare to female students (31.5%). The maximum number of Students high self-efficacy was age 18-22 (40.9%), while in program majority of high self-efficacy was belong to 4 year BSN (47.6%). (See table 2)

Table 2:Level of self-efficacy among the students

Stutents							
	Low	Average	High				
Frequency	54	139	446				
(%)	(8.5%)	(21.8%)	(69.8%)				
Male	33	<b>53</b> (9.10/)	244				
	(5.1%)	52 (8.1%)	(38.1%)				
Female	21	97 (12 50/)	202				
	(3.2%)	87 (13.5%)	(31.5%)				
18-22	40	75 (11 70/)	262				
years	(6.2%)	75 (11.7%)	(40.9%)				
23-27	4 (0.6%)	60 (9.3%)	132				
years	4 (0.0%)	00 (9.3%)	(20.6%)				
28 and	10		52 (8.1%)				
above	(1.5%)	4 (0.6%)					
years BSN (4	39		305				
years)	(6.0%)	71 (11%)	(47.6%)				
Post-Rn	10.0%)		48 (7.5%)				
1 050 1411	(1.5%)	20 (3.1%)	40 (7.5%)				
MSN	(1.5%)	4 (0.6%)	20 (3.1%)				
LHV	U	+ (0.0%)	73				
,	5 (0.7%)	44 (6.8%)	(11.4%)				
			(11.7/0)				

## **Quality of life of the students**

Overall quality of life among the students was  $(3.6 \pm 0.57)$  that was good, while among the domains of quality of life the mean score of school environment was high  $(3.9 \pm 0.95)$ , follow by physical  $(3.6 \pm 0.83)$ , then social support and peer mean score  $(3.6 \pm 0.81)$ , while the autonomy and respect mean score was  $(3.5 \pm 0.81)$ 

 $\pm$  0.83), and psychological domain mean score was minimum with compare to other domains (3.2  $\pm$  0.56). (See table 3).

# Correlation of self-efficacy with quality of life

Program is negative weak correlated with age, self-efficacy and quality of life, while age is weak positive correlated with self-efficacy and Quality of life, on other hand QoL is negative weak correlated with self-efficacy (See table 4).

Table 4:Correlation of self-efficacy with Quality of life and selected variables

	1	2	3	4
1: Age	-	023	.039	.036
2: Program		-	041	096*
3: S.E			_	036
4: QOL				-

#### **Discussion**

Self-efficacy among the nursing students is very important because it defines how they will handle problems and make attempts to achieve their objective of becoming a competent health care provider in future, while QoL is a larger concept that examines persons' physical, psychological, and social aspects. In the current study the total number of participants was 640. Among the participant majority of the students were male (51.5%) because in the province of Khyber pukhtankhwa majority of the students in nursing colleges are male. A study conducted in Iraq support our ratio, where majority of the participants was male (60.9%) [14]. the selection was contradicted by other studies that reveals that female participant were higher in number, (79%), (100%) and (82.7%) compare to male respondents [15, 16, 17]. In the present study majority of the students selfefficacy level was good (69.8%), followed by average level (21.8%), and (8.5%) of the participant selfefficacy level was poor. A study conducted in United

Table 3: Quality of life among the study participants

Physical	Psychological	Autonomy and	Social support	School environment	Overall
		respect	and peer		
$3.6 \pm 0.83$	$3.2 \pm 0.56$	$3.5 \pm 0.83$	$3.6 \pm 0.81$	$3.9 \pm 0.95$	$3.6 \pm 0.57$

Arab Emirates report that the maximum number of students from BSN program level of self-efficacy was High (56.07), then moderate (35.5%), and (8.41%) of students self-efficacy was poor [17]. Another study conducted by Bodys-Cupak et al, (2021) conducted a study that was similar with our findings that majority of the students self-efficacy was high [18].

The study of Naeem et al, (2022) illustrates different finding from our study, where majority of the students self-efficacy was moderate (55.2%), followed by high level (43.7%), and low level (1.1%) [14], likely another study also report that majority of the participant self-efficacy were moderate [19].

In the transition from youth to adulthood, college students are more prone to mental health issues and deal with academic pressure, and exhibit high levels That leads to poor effect on academic achievement, social functioning, and QOL [20, 21]. In the current study the overall mean score of the participants was  $(3.6 \pm 0.57)$ , that are good quality of life score. The maximum mean score in the domains was school environment (3.9  $\pm$  0.95), followed by physical domain (3.6  $\pm$  0.83), while the minimum score was report of psychological domain (3.2 ± 0.56). The results are consistent with the research by Heng et al. from (2021), which found that South Asian students have higher QOL [22]. Our findings, which demonstrate a greater level of QOL among the study participants utilizing the K-27 OOL questionnaire, are supported by a Swedish study (Berman et al. 2016) [23]. A study conducted in Brazil also support our findings that (56.8%) of the study participants QOL was good. Furthermore the mean score of social domain and physical domain was high, while the mean score of environmental domain was the lowest [24]. Other studies also demonstrated that 85.4% in one study and 75% nursing students in other study consider their QOL as good [25, 26]. Labrague et al, 2018 reveal in their study that QOL of the participant is average  $(3.00 \pm 0.57)$  [27]. In the domains the high mean score belong to social domain, while the lower mean score belong to physical domain  $(2.57 \pm 1.11)$  [27]. Other studies reveal that the QoL of the participants was also average (Ali et al. 2015), which report moderate QOL among the participants [28]. There is a low QOL among the study participants, according to another study (Kyranou & Nicolaou 2021) [29].

In the current study QoL is negative weak correlated with self-efficacy. Results of a study demonstrated that lower self-efficacy was connected to lower quality of life, allowing researchers to examine the influence of self-efficacy while controlling for disease load [30].

#### Conclusion

The study concluded that self-efficacy and quality of life is important factor that are associated with academic performance, quality care, psychological well-being and, physical activity and social interaction. In the current study that majority of the students self-efficacy was high, and good quality of life. The study also concluded that self-efficacy is weakly negative correlated with quality of life, while weak positively with age.

**Funding:** No funding was obtained for this study.

Financial support and sponsorship: Nil.

Conflicts of interest: there are no conflicts of interest

#### References

- Bibi A, Ahmed F, Iqbal N, Sultan A. Factors That Affect the Performance of Undergraduate Nursing Students of Khyber Pukhtankhwa, Pakistan: Performance of Undergraduate Nursing Students. Pakistan Journal of Health Sciences. 2022 Aug 31:33-7.
- 2. Sivakumar, M., & Sarvalingam, A. (2010). *Human deprivation index: A measure of multidimensional poverty*. [Google Scholar]
- 3. Khan S, Ahmed F, Khan I, Sultan A. Perception of nursing students towards educational quality in Khyber Pukhtankhwa Pakistan: Perception of Nursing Students towards Educational Quality. Pakistan Journal of Health Sciences. 2022 Sep 30:188-92.
- Igbinakhase I and Naidoo V. Higher Education Quality Improvement Strategies Through Enriched Teaching and Learning. InQuality Management Principles and Policies in Higher Education 2020 (pp. 246-262). IGI Global.
- Abun D. Employees' self-efficacy and work performance of employees as mediated by work environment. Available at SSRN 3958247. 2021 Nov 7.

- Bandura A. Self-efficacy toward a unifying theory of behavioral change. Psycholo Rev. 1977, 84 (3):191-215.
- 7. Shorey S, Lopez V. Self-Efficacy in a nursing context. Health promotion in health care—Vital theories and research. 2021:145-58.
- 8. Aljohani W, Banakhar M, Sharif L, Alsaggaf F, Felemban O, Wright R. Sources of stress among Saudi Arabian nursing students: A cross-sectional study. International journal of environmental research and public health. 2021 Nov 14;18(22):11958.
- 9. Schwarzer R, Aristi B. Optimistic self belief s: Assessment of general perceived self efficacy in Thirteen cultures.Word Psychology. 1997,3 (1):177
- 10. Aboshaiqah AE, Cruz JP. Quality of life and its predictors among nursing students in Saudi Arabia. *J Holist Nurs*. 2019;37:200–8.
- 11. Mahdi R. Quality of university students' life (Case study: Tehran State Universities) *Iran Higher Educ.* 2016;7:1–26.
- Xie X, Du J, He J, Liu Y, Li Z. Perceived health competence and health education experience predict health promotion behaviors among rural older adults: A cross-sectional study. BMC Public Health. 2022 Sep 5;22(1):1679.
- Andersen JR, Natvig GK, Haraldstad K, Skrede T, Aadland E, Resaland GK. Psychometric properties of the Norwegian version of the Kidscreen-27 questionnaire. Health and Quality of Life Outcomes. 2016 Dec;14(1):1-6.
- 14. Naeem FS, Jasim AH. Self-efficacy for Critical Care Nurses in Al-Muthanna Governorate. Pakistan Journal of Medical & Health Sciences. 2022 Jul 2;16(05):812-.
- Mei XX, Wang HY, Wu XN, Wu JY, Lu YZ, Ye ZJ. Self-efficacy and professional identity among freshmen nursing students: a latent profile and moderated mediation analysis. Frontiers in Psychology. 2022 Mar 3;13:779986.
- 16. Dadipoor S, Alavi A, Ghaffari M, Safari-Moradabadi A. Association between self-efficacy and general health: a cross-sectional study of the nursing population. BMC nursing. 2021 Dec;20(1):1-6.
- Pitre S, Hanson VF, Kumardhas V. Self-efficacy among Nursing students at RAK Medical and Health Sciences University, United Arab Emirates [Internet]. Journal of Positive School Psychology; 2022 July (7) 1983-1988.
- 18. Iwona Bodys-Cupak , Anna Majda, Anna Kurowska, Ewa Ziarko and Joanna Zalewska-Puchała(2021) Psycho-social components determining the strategies of coping with stress in undergraduate Polish nursing students Bodys-BMC Nursing (2021) 20:129.
- Soudagar, S., Rambod, M., & Beheshtipour, N. (2015). Factors associated with nurses' self-efficacy in clinical setting in Iran, 2013. Iranian journal of nursing and midwifery research, 20(2), 226.
- 20. Dawson AF, Brown WW, Anderson J, Datta B, Donald JN, Hong K, et al. Mindfulness-based interventions for university students: a systematic review and meta-

- analysis of randomised controlled trials. AP:HWB. 2020;12(2):384–
- 410. https://doi.org/10.1111/aphw.12188.
- 21. Irie T, Yokomitsu K, Sakano Y. Relationship between cognitive behavioral variables and mental health status among university students: a meta-analysis. PLoS ONE. 2019;14(9):e0223310. <a href="https://doi.org/10.1371/journal.p">https://doi.org/10.1371/journal.p</a> one.0223310.
- 22. Heng P. H. Hutabarat F. & Lathiifah S. (2021 August). Relationship Between Spiritual Well-Being and Quality of Life Among Students in Southeast-Asia Countries. In International Conference on Economics Business Social and Humanities (ICEBSH 2021) (pp. 1097-1102). Atlantis Press. https://doi.org/10.2991/assehr.k.210805.172.
- 23. Berman A. H. Liu B. Ullman S. Jadbäck I. & Engström K. (2016). Children's quality of life based on the KIDSCREEN-27: child self-report parent ratings and child-parent agreement in a Swedish random population sample. PloS one 11(3) e0150545. https://doi.org/10.1371/journal.pone.0150545.
- 24. Moura IH, Nobre RD, Cortez RM, Campelo V, Macêdo SF, Silva AR. Quality of life of undergraduate nursing students. Revista gaucha de enfermagem. 2016 May 31:37.
- 25. Bampi LNS, Baraldi S, Guilhem D, Pompeu RB, Campos ACO. Percepção sobre qualidade de vida de estudantes de graduação em enfermagem. Rev Gaúcha Enferm. 2013; 4(1):125-32.
- 26. Sousa TF, Fonseca SA, Mororó José HP, Nanas MV. Validade e reprodutibilidade do questionário Indicadores de Saúde e Qualidade de Vida de Acadêmicos (Isaq-A). Arq Ciênc Esporte. 2013;1(1):21-30
- Labrague LJ, McEnroe-Petitte DM, Papathanasiou IV, Edet OB, Tsaras K, Christos KF, Fradelos EC, Rosales RA, Cruz JP, Leocadio M, Lucas KV. A cross-country comparative study on stress and quality of life in nursing students. Perspectives in psychiatric care. 2018 Oct;54(4):469-76.
- 28. Ali J. Marhemat F. Sara J. & Hamid H. (2015). The relationship between spiritual well-being and quality of life among elderly people. Holistic nursing practice 29(3) 128-135. DOI: 10.1097/HNP.0000000000000081.
- 29. Kyranou M, Nicolaou M. Associations between the spiritual well-being (EORTC QLQ-SWB32) and quality of life (EORTC QLQ-C30) of patients receiving palliative care for cancer in Cyprus. BMC palliative care. 2021 Dec;20(1):1-1.
- 30. Peters, M., Potter, C.M., Kelly, L. *et al.* Self-efficacy and health-related quality of life: a cross-sectional study of primary care patients with multi-morbidity. *Health Qual Life Outcomes* **17**, 37 (2019). https://doi.org/10.1186/s12955-019-1103-3