

Perception of The Nursing Profession And Academic And Work-Related Stress Among Nursing Students In Bhutan

Ugyen Wangdi, MPH¹, Nidup Dorji, PhD¹

¹Department of Public Health and Allied Sciences, Faculty of Nursing and Public Health, Khesar Gyalpo University of Medical Sciences of Bhutan, Thimphu, Bhutan

Received Date: 08 October 2019

Revised Date: 01 November 2019

Accepted Date: 07 November 2019

Abstract

A. Introduction - Quality of healthcare is a concern for every government, service provider, and consumer of healthcare services. The attitude of healthcare professionals towards their profession and the prevalence of academic and work-related stress during training greatly influence the delivery of quality health care. However, there is paucity in the scientific study to assess perceptions towards the nursing profession, academic and work-related stress among nursing students in Bhutan.

B. Methods - A descriptive cross-sectional survey was conducted to assess the perception of nursing students towards the nursing profession, academic and work-related stress. A purposive sampling method was used. Two hundred nursing students participated in the survey with a return rate of 98.04%. Data were obtained through a self-administered structured questionnaire. Descriptive and bivariate analysis was performed using Statistical Package for Social Sciences (SPSS) version 21.0.

C. Results - The mean score for the perception towards the nursing profession was 71.59 (SD=5.37; Range: 55-84). Almost all (99%) perceived the nursing profession as an opportunity to serve humanity. Level of nursing training ($p<0.001$) and the experience of admission to hospital ($p<0.05$) influenced perception towards the nursing profession. The mean academic stress was 48.29 (SD=8.82; Range:22-75). Workload and preparation for examinations (92%) and assignments (90.5%) contributed to high academic stress. The mean work-related stress was 19.69 (SD=4.83; Range:7-30). Lack of professional knowledge and skills (81%), the uncertainty of patient treatment (80%), conflict in the workplace (79%), death, and dying (78%) added to high work-related stress. Ethnicity ($p<0.05$), parent's education level ($p<0.05$), and the experience of hospitalization ($p<0.01$) were associated with stress.

D. Conclusion - My perception of the nursing profession was positive. However, nursing students confronted high levels of academic and work-related stress during training. Nursing educators and clinical facilitators need to be

sensitive about the prevalence of stressors and facilitate effective coping strategies.

Keywords: perception, nursing profession, academic-related stress, work-related stress

I. INTRODUCTION

Quality healthcare is a concern for every government, service provider, and consumer of health care services. High-quality healthcare demand and its delivery are greatly influenced by the professional values [1] and attitudes of the healthcare professionals [2]. Personal goals, professional values, clinical experiences, systemic hierarchy, support from experienced staff, and experience of illnesses and hospitalization greatly influence perception towards the nursing profession [3].

Nursing is held as the most trusted profession for decades in the US [4] and is predominantly a female profession due to the idea of caring linked to the history of women [5]. Nursing is an opportunity to serve humanity, have secure jobs, growth, and development, and achieve economic stability [6-8]. However, studies have also revealed the perception of nursing as a low-status and doctor-dependent profession [9, 10].

Literature review from different countries showed nursing students experience stress [11], affecting productivity [12] and quality healthcare [13], poor academic outcomes, and reduced cognitive ability [14]. Although the experience of stress differed by the level of training [15-17], assignments, workload, fear of failure, lack of confidence, fear of unknown situations, mistakes in handling patients and equipment, criticism from healthcare staff, including physicians were commonly cited sources of stress for the nursing students [12, 16, 18].

To date, there is a scarcity of evidence on how Bhutanese nursing students perceive their profession and the experience of academic and work-related stress. This study aims to assess perception towards the nursing profession, presence of academic and work-related stress. Findings from this study will assist in strengthening the nursing curriculum, addressing stress, and promote students to pursue the nursing profession in Bhutan.



II. MATERIALS AND METHODS

This study adopted a cross-sectional survey design and used the purposive sampling technique. Two hundred nursing students enrolled at different levels of training from the colleges of FNPH, Thimphu, and RAHS, Phuntsholing, participated in this study.

The survey questionnaire was pilot tested among 49 nursing students. Items used to assess perception towards the nursing profession (Cronbach alpha =0.70), and academic and work-related stress (Cronbach alpha =0.93) achieved sufficient internal consistency score (19). Data were analyzed using Statistical Package for Social Sciences (SPSS) version 21.0. Count and percentage, mean and standard deviation, were estimated to describe data. Chi-

square, independent t-test, and one-way ANOVA assessed relationships between the variables. Research Ethics Board of Health (No. REBH/PO/2018/059) approved the conduct of this study.

III. FINDINGS

A. The socio-demographic characteristics

The study participants consisted of 65% females and 35 % males, with the majority (97%) in the age range 18 to 24 years. Most participants (90%) reported no family members involved in the nursing profession. The influence of the father and mother to take up nursing as their profession was 24.5% and 15.5%, respectively. While 13% suffered from chronic health conditions, and 30.1% experienced hospitalization (Table 1).

Table 1: Distribution of the socio-demographic characteristics

<i>Socio-demographic variables</i>	<i>n(%)</i>
Level of nursing training	
First-year	66 (33.0)
Second-year	62 (31.0)
Third-year	72 (36.0)
Age (in years)	
<18	3 (1.5)
18-24	194 (97.0)
≥25	3 (1.5)
Sex	
Male	70 (35.0)
Female	130 (65.0)
Religion	
Buddhist	158(79.0)
Hindu	34(17.0)
Christian	7(3.5)
Others	1(0.5)
Ethnicity	
Thangka	73(36.5)
Ngalop	35(17.5)
Kheng-Bumthang	18(9.0)
Lhotshampa	53(26.5)
Others	21(10.5)
Education of father	
No education	92(46.0)
Some form of education	108 (54.0)
Education of mother	
No education	144(72.0)
Some form of education	56 (28.0)
Occupation of father	
Farmer	116(58.0)
Others	84 (42.0)
Occupation of mother	
Farmer	178(89.0)
Others	22(11.0)
Family members in nursing	
Yes	20(10.0)
No	180(90.0)
Most influential person to take up nursing course	
Father	49(24.5)
Mother	31(15.5)
Others	120 (60.0)
Have you ever suffered from a chronic health condition	
Yes	26(13.0)

No	174(87.0)
Have you ever been admitted to hospital (n=133)	
Yes	40 (30.1)
No	93 (69.9)
Have anyone of your family members suffered from chronic health conditions	
Yes	100(50.0)
No	100(50.0)
Have you ever stayed in the hospital as a patient attendant	
Yes	102(51.0)
No	98(49.0)

B. Perception towards the nursing profession

The average score for perception towards the nursing profession in this study was 71.59. Almost all (99%) the participants agreed-strongly agreed nursing profession is an opportunity to serve humanity, caring profession (92%), and earn merits and virtues (93%). Approximately 78% and 31% of the participants agreed and strongly agreed, the nursing profession is doctor dependent and is a women's profession, respectively (Table 2).

Table 2: Feelings and perception towards nursing profession among the participants

S/ No.	Perceptions towards the nursing profession.	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
		n(%)	n(%)	n(%)	n(%)	n(%)
<i>Nursing (profession) is/has:</i>						
1	An opportunity to serve humanity	182 (91.0)	16 (8.0)	0(0.0)	0(0.0)	2(1.0)
2	An opportunity for personal growth	85 (42.5)	99 (49.5)	12 (6.0)	4 (2.0)	0(0.0)
3	A Caring profession	85(42.5)	99(49.5)	12(6.0)	4(2.0)	0(0.0)
4	A way to get recognition in the society	24(12.0)	87(43.5)	63(31.5)	19(9.5)	7(3.5)
5	A dignified and respectful profession	70(35.0)	83(41.5)	35(17.5)	10(5.0)	2(1.0)
6	A means to earn merit	127(63.5)	59(29.5)	13(6.5)	1(0.5)	0(0.0)
7	Equal recognition with other health care professions	19(9.5)	85(42.5)	53(26.5)	33(16.5)	10(5.0)
8	Women's profession	20(10.0)	42(21.0)	18(9.0)	82(41.0)	38(19.0)
9	Similar to a cleaner's job	9(4.5)	30(15.0)	45(22.5)	78(39.0)	38(19.0)
10	To assists medical doctors	46(23.0)	110(55.0)	17(8.5)	22(11.0)	5(2.5)
11	No appreciation from people, including patients/clients	9(4.5)	60(39.0)	66(33.0)	54(27.0)	11(5.5)
12	Not an independent profession because nurses don't make their own decision	47(23.5)	89(44.5)	30(10.5)	21(10.5)	13(6.5)
13	Not an important profession in patient care	5(2.5)	4(2.0)	7(3.5)	79(39.5)	105(52.5)
14	One of the professions I will not encourage my children to join it	15(7.5)	22(11.0)	42(21.0)	60(30.0)	61(30.5)
15	Profession I regret having joined it	5(2.5)	14(7.0)	28(14.0)	81(40.5)	72(36.0)
16	Profession I am satisfied and happy about it	60(30.0)	90(45.0)	34(17.0)	11(5.5)	5(2.5)
17	A tiring and a risky job	78(39.0)	93(46.5)	10(5.0)	16(8.0)	3(1.5)
18	After joining the nursing course, I had a negative image of the nursing profession	4(2.0)	27(13.5)	22(11.0)	89(44.5)	58(29.0)
19	Has a good career ladder/advancement	52(26.0)	92(46.0)	47(23.5)	8(4.0)	1(0.5)
Total perception score (n=200)		<i>Mean±Standard Deviation: 71.59±5.37; Min-max: 55-84</i>				

C. Academic and work-related stress

The average academic and work-related stress score was 48.29 and 19.69, respectively. Academically, about 92.0% perceived course workload stressful, as is the exam preparation. Death and dying (77%), uncertainty patient treatment (80.5%), and lack of professional knowledge and skills (81%) were perceived as moderate to severely stressful work-related stress (Table 3).

Table 3: Academic and work-related stress among the participants

S/No.	Potential stressors	Severe stress n(%)	Stressful n(%)	Moderate stress n(%)	A little stress n(%)	Never stress n(%)
<i>Stress related to academic includes:</i>						
1	The course work load	19(9.5)	118(59.0)	47(23.5)	15(7.5)	1(0.5)
2	The demand of writing assignments to the expected standard	14(7.0)	11(38.5)	81(40.5)	27(13.5)	1(0.5)
3	Preparing for the course examination	49(24.5)	97(48.5)	38(19.0)	14(7.0)	2(1.0)
4	Meeting personal needs while studying	16(8.0)	55(27.5)	77(38.5)	39(19.5)	13(6.5)
5	Meeting the academic demands of the program	28(14.0)	85(42.5)	59(29.5)	20(10.0)	8(4.0)
6	The theoretical level of content of the course	24(12.0)	85(42.5)	68(34.0)	18(9.0)	5(2.5)
7	My own standards of achievement	21(10.5)	54(27.0)	85(42.5)	35(17.5)	5(2.5)
8	Personal time management	19(9.5)	57(28.5)	66(33.0)	49(24.5)	9(4.5)
9	Academic writing required on the course	16(8.0)	73(36.5)	72(36.0)	32(16.0)	7(3.5)
10	Assignment and workload	36(18.0)	87(43.5)	58(29.0)	17(8.5)	2(1.0)
11	Perceived pressure to keep up with other students	12(6.0)	55(27.5)	72(36.0)	40(20.0)	21(10.5)
12	The teaching methodologies	14(7.0)	46(23.0)	78(39.0)	49(24.5)	13(6.5)
13	Lectures lasting more than one hour	37(18.5)	68(34.0)	50(25.0)	33(16.5)	12(6.0)
14	Attendance at classes	8(4.0)	20(10.0)	36(18.0)	40(20.0)	96(48.0)
15	Relationship with lecturer	21(10.5)	22(11.0)	28(14.0)	66(33.0)	63(31.5)
Total academic stress score		<i>Mean±Standard Deviation: 48.29±8.82; Min-max: 22-75</i>				
<i>Stress-related to work includes:</i>						
1	Stress with death and dying of patient	51(25.5)	67(33.5)	36(18.0)	31(15.5)	15(7.5)
2	Stress from uncertainty regarding patient treatment	30(15.0)	82(41.0)	49(24.5)	31(15.5)	8(4.0)
3	Stress from conflict	25(12.5)	81(40.5)	52(26.0)	34(17.0)	8(4.0)
4	Stress from lack of professional knowledge and skills	40(20.0)	67(33.5)	55(27.5)	32(16.0)	6(3.0)
5	Stress from taking care of patients	6(3.0)	41(20.5)	71(35.5)	56(28.0)	26(13.0)
6	Stress from the clinical environment	15(7.5)	65(32.5)	51(25.5)	48(24.0)	21(10.5)
Total work-related stress score		<i>Mean±Standard Deviation: 19.69±4.83; Min-max: 7-30</i>				

D. Relationship between socio-demographic, perception towards the nursing profession, academic, and work-related stress

Perception towards the nursing profession was significantly related to the level of nursing training ($p<0.001$). At the same time, the age of the participants was significantly related to work stress ($p<0.05$), ethnicity ($p<0.05$), parents with some form of education background ($p<0.01$), father's non-farming background ($p<0.05$) were significantly associated with academic-related stress. The experience of hospitalization was significant with perception towards nursing, academic, and work-related stress ($p<0.05$) (Table 4).

Table 4: Bivariate relationship between socio-demographic characteristics and perception towards the nursing profession, academic and work-related stress among the study participants

Socio-demographic variables	Total	Perception towards NP M±SD	p-value	AS M±SD	p-value	WS M±SD	p-value
Levels of nursing training			0.000***		0.127		0.053
First-year							
Second-year	66	74.15±4.08		47.80±7.92		20.73±4.41	
Third-year	62	69.37±5.36		50.13±9.21		19.68±5.07	
	72	71.15±5.49		47.14±9.14		18.74±4.87	
Age (in years)			0.673		0.358		0.014*
<18	3	68.67±7.64		51.67±9.50		20.00±3.00	
18-24 ^a	194	71.57±5.29		48.13±8.83		19.80±4.78 ^b	
≥25 ^b	3	75.67±8.39		54.67±7.77		11.67±4.16 ^a	
Ethnicity			0.757		0.023*		0.063
^a Tshangla	73	71.75±5.01		47.18±8.36 ^{bc}		20.55±5.02	
^b Ngalop	35	70.63±5.77		52.26±9.52 ^{ac}		20.77±3.93	
^c Kheng-Bumthab	18	71.00±6.33		48.11±6.90		18.39±4.22	
^d Lhotshampa	53	72.00±5.37		48.55±9.04		18.64±4.82	
^e Others	21	72.10±5.28		45.00±8.52 ^{ab}		18.62±5.44	
Education of father			0.232		0.028*		0.334
No formal education	92	71.10±5.48		46.80±8.75		19.33±4.94	
Some form of formal education	108	72.01±5.26		49.55±8.73		19.99±4.74	
Education of mother			0.711		0.007**		0.113
No formal education	144	71.51±5.56		47.24±9.13		19.35±4.92	
Some form of formal education	56	71.80±4.86		50.98±7.41		20.55±4.54	
Occupation of father			0.119		0.039*		0.469
Farmer	116	71.09±5.49		47.20±8.95		19.47±4.86	
Others	84	72.29±5.13		49.79±8.47		19.98±4.81	
Occupation of mother			0.223		0.463		0.303
Farmer	178	71.43±5.22		48.12±8.72		19.81±4.81	
Others	22	72.91±6.44		49.59±9.73		18.68±5.05	
Have you ever suffered from a chronic health condition			0.621		0.467		0.493
Yes	26	72.08±6.67		49.46±10.07		19.08±5.34	
No	174	71.52±5.16		48.11±8.64		19.78±4.76	
Have you ever been admitted to hospital (n=133)			0.041*		0.031*		0.025*
Yes	40	72.65±6.03		46.20±9.27		18.15±5.48	
No	93	70.53±5.19		49.81±8.48		20.40±4.33	
Have you ever stayed in the hospital as a patient attendant			0.736		0.292		0.319
Yes	102	71.72±5.24		48.93±8.52		20.02±4.97	
No	98	71.46±5.52		47.61±9.13		19.34±4.69	

Note: * $p < 0.05$; ** $p < 0.01$; ^{abcde} Multiple comparisons between the groups;

NP: Nursing profession; AS: Academic stress; WS: Work-related stress; M: Mean; SD: Standard deviation

IV. DISCUSSION

This study assessed the perception of pre-service nursing students towards the nursing profession. Similarly, in other studies [6, 20, 21], the study sample consisted mostly of females. The government of Bhutan also gives more preference to females than males while recruiting for the nursing courses [22].

The relationship between the level of nursing training and perception of the nursing profession was significant. Contrasting to a Korean study finding [9], first-year nursing students showed a more favorable perception towards the nursing profession compared to a higher level of nursing trainees. Bang, Kang [9] argued that the better perception might be due to a change in the perception of nursing service roles after the clinical posting.

Agreeing with the findings from other studies [7, 8, 23], almost all the participants perceived the nursing profession as a dignified, respectful, and recognized profession, opportunity to serve humanity, earn merits and virtues. Nursing students may have chosen a nursing course due to job security or because of easy entry, as reported in other studies [10, 21].

The relationship between the father's educational background and better perception of the nursing profession was significant. A similar finding was reported in a Turkish study [10]. In the Bhutanese context, parents often wish their children to join a secure profession and help family members at the time of illness.

A. Academic stress

The participants consistently rated high academic stress in most items, as reported in other studies [14, 24]. Brown, Anderson-Johnson [14] agrees that a high-demand course workload and program structure would contribute to higher stress. This may be true in the Bhutanese context as the nursing curriculum is loaded modules in a semester, consisting of theory classes, clinical posting, and practical requirements, course tests, and end semester examination.

Higher academic stress was associated with participants coming from parents with education and non-farming background. Most educated parents in Bhutan demand higher academic performance and excellence from their children, which could be a source of stress for the children. However, a study by Aslan and Akturk [15] showed stress scores of the nursing students decreased with the increase in the parental educational level.

B. Work-related stress

Consistent with studies elsewhere [15, 17], younger participants significantly reported higher work-related stress. Perceived inadequate knowledge and skills for practice could have been attributed to higher work-related stress. Some studies revealed a gradual increase in the stress level as students become senior in the nursing training [5].

Compared to participants with experience of hospitalization, those having no experience showed significantly greater work-related stress. This was consistent with the finding of Hoeve and Castelein [25], where nursing students with past work experience in

healthcare were more motivated to choose nursing as their career.

Work-related stress was associated with death and dying, the uncertainty of patient treatment, conflict in the workplace, lack of professional knowledge and skills concurrent with an Ethiopian study [13]. According to Aslan and Akturk [15], clinical practice is necessary for students to develop professional knowledge and skills. However, it may be an important source of anxiety and stress. Nursing students in Bhutan are required to work and practice in the clinical areas until they graduate. During clinical placement, Bhutanese nursing students are required to fulfill a number of clinical procedures. As recommended by Brown, Anderson-Johnson [14] and Pulido-Martos, Augusto-Landa [12], it is crucial to consider avoid work overload for the nursing students, remain sensitive to stressors, and provide effective coping strategies to students during the nursing training.

V. CONCLUSION

Bhutanese nursing students perceive the nursing profession as dignified, respectable, and an important profession for patient care. It is a profession with an opportunity to serve humanity and earn merits and virtues. However, nursing students experience various academic and work-related stresses during their nursing training. The nursing program may require revisits to reduce academic and work-related stress. Nurse educators should remain sensitive to stress and provide effective coping strategies to promote nursing studies in Bhutan.

ACKNOWLEDGMENT

The authors would like to thank FNPH management for funding and the nursing students of FNPH and RAHS for their participation in this study.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

REFERENCES

- [1] Horton, K., V. Tschudin, and A. Forget, The value of nursing: a literature review. *Nursing ethics.*, 14(6) (2007) p. 716-740.
- [2] Hind, M., et al., Interprofessional perceptions of health care students. *Journal of Interprofessional Care*, 17(1) (2003) 21-34.
- [3] Lai, H.-L. et al., Is the nursing profession my first choice? A follow-up survey in pre-registration student nurses, *Nurse Education Today*, 28(6) (2008) 768-776.
- [4] Stone, A., Nurses Ranked Most Trusted Profession in 2019. ONS Voice, <https://voice.ons.org/advocacy/nurses-ranked-most-trusted-profession-in-2019>, (2019) 295-309.
- [5] Cestari, V.R.F., et al., Stress in nursing students: a study on sociodemographic and academic vulnerabilities, *Acta Paulista de Enfermagem*, 30 (2017) 190-196.
- [6] Zulu, C. and C. Ngoma., A survey on the perception of the image of the nursing profession in Zambia by nursing students *Unified Journal of Nursing and Midwifery*, 1(1) (2015) 001-014.
- [7] Patidar, A.B., et al., Future nurses' perception towards profession and carrier plans: A cross-sectional survey in state Punjab. *Nursing and Midwifery Research Journal*, 7(4) (2011).
- [8] Marcinowicz, L., et al., Choice and perception of the nursing profession from the perspective of Polish nursing students: a focus group study. *BMC medical education*, 16(1) (2016) 243.
- [9] Bang, K.S., et al., Professional values in Korean undergraduate nursing students. *Nurse Educ Today*, 31(1) (2011) 72-5.

- [10] Başkale, H. and P. Serçekuş, Nursing as a career choice: perceptions of Turkish nursing students. *Contemporary Nurse*, 51(1) (2015) 5-15.
- [11] He, F.X. et al., Assessing stress, protective factors and psychological well-being among undergraduate nursing students. *Nurse Education Today*, 68 (2018) 4-12.
- [12] Pulido-Martos, M., J.M. Augusto-Landa, and E. Lopez-Zafra, Sources of stress in nursing students: a systematic review of quantitative studies. *International Nursing Review*, 59(1) (2012) 15-25.
- [13] Dagget, T., A. Molla, and T. Belachew, Job-related stress among nurses working in Jimma Zone public hospitals, South West Ethiopia: a cross-sectional study. *BMC nursing*, 15(1) (2016) 39.
- [14] Brown, K., P. Anderson-Johnson, and A.N. McPherson, Academic-related stress among graduate students in nursing in a Jamaican school of nursing. *Nurse education in practice*, 20 (2016) 117-124.
- [15] Aslan, H. and U. Akturk, Nursing education stress levels of nursing students and the associated factors *Annals of Medical Research*, 25(4) (2018) 660-6.
- [16] Graham, M.M. et al., Factors Associated With Stress Among Second Year Student Nurses During Clinical Training in Jamaica, *Journal of Professional Nursing*, 32(5) (2016) 383-391.
- [17] Aedh, A.I., N.K. Elfaki, and I.A. Mohamed, Factors associated with stress among nursing students (Najran University-Saudi Arabia). *IOSR J. Nursing Health Sci.*, 4(6) (2015) 33-38.
- [18] Hamaideh, S.H., H. Al-Omari, and H. Al-Modallal, Nursing students' perceived stress and coping behaviors in clinical training in Saudi Arabia. *Journal of Mental Health*, 26(3) (2017) 197-203.
- [19] Cho, E. and S. Kim, Cronbach's coefficient alpha: Well known but poorly understood. *Organizational Research Methods*, 18(2) (2015) 207-230.
- [20] Wu, J., O. Iroka, and B. Ohaeri., The professional image of nursing as perceived by nurses working in tertiary hospitals Enugu, Southeast Nigeria. *African Journal of Nursing and Midwifery ISSN*, (2016) 2198-4638.
- [21] Swarna, S., Nursing Students Perception towards Profession and Future Intentions, *IOSR, Journal of Nursing and Health Science (IOSR-JNHS)*, 4(5) (2015) 30-34.
- [22] Khesar Gyalpo University of Medical Sciences of Bhutan, Admission Criteria, (2018).
- [23] Al-Jarrah, I.A.T., Associate nursing student's perceptions toward a nursing profession in Jordan *European Scientific Journal*, 9(6) (2013).
- [24] Parveen, A. and S. Inayat., Evaluation of factors of stress among Nursing Students. *Advanced Practices in Nursing*, 2(2) (2017) 136.
- [25] Hoeve, T.Y., et al., Predicting factors of positive orientation and attitudes towards nursing: A quantitative cross-sectional study. *Nurse education today*, 40 (2016) 111-117.