

## Empathy in Patient Care among Undergraduate Nursing Students

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### ABSTRACT

**Introduction:** Empathy is a quality that is more cognitive than affective or emotional. It involves the cognitive ability to understand the patient's perspective, amount of suffering, and ability to communicate this understanding and a desire to assist in the patient's treatment. Hence, the study was conducted to assess the empathy in patient care among undergraduate nursing students of selected nursing colleges of Pokhara.

**Methods:** A cross-sectional study was undertaken using the paper-based version of the Jefferson Scale of Empathy. A purposive sampling technique was used for selecting colleges. Seventy-nine students participated in the research study. Statistical Package for the Social Sciences was used to generate descriptive statistics, t-test and one-way analysis of variance (ANOVA) tests were used to assess differences in empathy mean scores according to Demographic and previous work-related variables.

**Results:** A total of 79 students participated in this study. Overall, respondents reported a good empathy score (i.e. mean±SD 111.076±13.29) as measured by the JSE-HPS. The difference in empathy mean scores according to demographic and previous work-related variables i.e. age group (P= 0.373), academic year of study (P= 0.37), relationship status (P= 0.059), religion (P= 0.241), ethnicity (P= 0.486) and years of experience (P= 0.691) were not statistically significant.

**Conclusion:** The undergraduate nursing students' level of empathy tends to be satisfactory. The study also concludes that none of the demographic and previous work-related variables tends to influence the empathy among undergraduate nursing students.

**Keywords:** *Empathy; Empathy among nursing students, Bachelor of Nursing Science students*

### INTRODUCTION

Empathy is a quality that is mostly cognitive and involves understanding the patient's experiences, worries, and viewpoints, as well as having the ability to express this understanding and the desire to help.<sup>1,2</sup>

Patients are more at peace, motivated, and eager to collaborate when they are treated with empathy, according to a focused group study with patients conducted in the Netherlands in 2017. Conversely, when patients are treated without empathy, they get frustrated and reluctant to return to the facility.<sup>3</sup> Furthermore, Women have been revealed to have better indicators in neurological tests that relate to empathy, according to studies done on the general public.<sup>4</sup> Total empathy is associated with better well-being and higher volunteer rates<sup>5</sup> and culture also appear to play a role in the empathic reaction to

patients, according to studies with nursing students in Peru in 2020.<sup>6</sup>

In the same way, a survey was conducted in Nepal in 2017, where the average empathy score of Nepali medical undergraduate students was found to be lower than that of medical students from industrialized nations, but it was roughly comparable to that of medical students from other Asian countries.<sup>7</sup> A healthy nurse-patient connection is made possible in large part through empathy. A study carried out in Australia revealed poor and stigmatizing attitudes as well as a lack of empathy as areas of concern in the delivery of health care.<sup>8</sup>

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In the healthcare sector, empathy is thought to boost patient satisfaction, improve patient involvement and motivation, and promote adherence to therapy. As a result, fewer patients will complain. Similar to this, it is believed that more empathy results in a more precise diagnosis.<sup>9</sup> Empathy is the foundation of the nurse-patient relationship. A brief encounter between a patient and an empathic nurse can also be advantageous to the patient, as empathy can improve the relationship between the nurse and the patient, allowing for more efficient care.<sup>10</sup>

Despite the fact that research has been conducted in a number of countries to investigate the idea of empathy among nursing students, the researcher was unable to find studies in Nepal regarding the level of empathy among Nepalese undergraduate nursing students. As a result, this study was done to collect data from a diverse group of undergraduate nursing students in order to assess their empathy on different subgroups and investigate the relationship of various demographic and previous work-related variables with their empathy scores.

## METHODS

A cross-sectional study design was employed to determine the level of empathy among undergraduate bachelor of Nursing Science students of selected nursing colleges in Pokhara. Two colleges Pokhara Nursing Campus (PNC) and Gandaki Medical College (GMC) were purposively selected for the data collection. The research population consisted of first year and third year students of GMC and first year students of PNC. A complete enumeration sampling technique was used to include in the study all first year and third-year students of GMC and first-year students of PNC willing to participate in the study.

The Jefferson Scale of Empathy-Health Profession Student Version (JSE-HPS), a widely recognized tool for assessing empathy, with a Cronbach's alpha internal consistency coefficient of 0.75 was employed in this study. The JSPE-HPS version is a 20-item, 7-point Likert scale (1 = strongly disagree, 7 = strongly agree) that can be completed without time limits. Ten of the items are worded favorably, while the other ten are worded negatively. The possible score range is 20–140, with the higher the mean

score indicating a higher amount of self-reported empathy.<sup>1</sup> As independent variables, we used demographic data like age, sex, academic year of study, marital status, religion, and ethnicity as well as previous work-related data like past experience, years of previous work experience, previously served health service delivery institution, and working unit.

Ethical approval for the study was obtained from the institutional review committee at Pokhara University. Data were collected after getting approval from the authorities of the concerned campuses and informed consent from the respondents. The data were collected using a self-administered questionnaire after ensuring them the anonymity of information by requesting them not to include their names in the questionnaire.

The collected data were entered in Epi-Data version 3.1 and were exported to the statistical package for social science (SPSS16) for analysis. Mean, frequency, and percentage were used to analyze descriptive data and t-tests, and one-way analysis of variance (ANOVA) tests were used to explore the difference in empathy scores according to the selected demographic and previous work-related variables.

## RESULTS

All respondents in this study were female. Table 1 shows that nearly half of the respondents (49.4%) were under the age of 25. The mean±SD of the age of respondents was 24.58±2.644. The respondents' maximum age was 40, with a minimum age as 21. Among them, the majority of respondents (89.9%) were in their first year. More than two-thirds of the respondents (70.9%) were single. (89.9%) were in their first year. Nearly two-thirds of the respondents (70.9%) were single (Table 1).

Table 1: Socio-demographic characteristics of respondents (n=79)

Demographic	Variables	Number	Percent
<b>Age Group in completed years</b>			
<25	39	49.4	
25-30	38	48.1	
>30	2	2.5	
<b>Academic year of study</b>			
1st year	71	89.9	
3rd year	8	10.1	

**Marital status**

Single	56	70.9
Married	23	29.1

**Ethnicity**

Dalit(hill/terai)	3	3.8
Madhesi	3	3.8
Brahmin/Chhetri	55	69.6
Janajati (Hill/Terai)	17	21.5
Thakuri	1	1.3

**Religion**

Hinduism	77	97.5
Buddhism	2	2.5

Mean age 24.58, SD 2.644, minimum 21 years, maximum 40 years

Table 2 indicates that the most of the students (89.9%) had less than 5 years of working experience in a healthcare setting. Among them, more than half of the respondents (62%) had experience of working in government health institutions and nearly one-fourth of the respondents (22.78%) had experience of working in the intensive care units.

Table 2: Previous Work-related Variables of the Respondents (n=79)

Variables	Number	Percent
<b>Duration of previous Work experience</b>		
≤ 5 years	71	89.9
>5 years	8	10.1
<b>Served Health Service Delivery Institution</b>		
Government	49	62.0
Non- Government	24	30.4
Both	6	7.6
<b>Working Unit</b>		
Intensive	18	22.8
Non- intensive	61	77.2

The respondents' overall mean empathy score was 111.0759. It also shows that the empathy in terms of the JSE item subgroups where the perspective taking of respondents had a Mean±SD score of 57.96±7.74 with a minimum score of 37 and a maximum score of 70. Similarly, compassionate care had a Mean±SD score of 45.64±7.9 with a maximum score of 56 and a minimum score of 21, and walking in patient's shoes had a mean±SD score of 7.42±2.39 with a maximum score of 14 and a minimum score of 2 (Table 3).

Table 3: Respondents' Empathy in terms of JSE Item Subgroups (n=79)

Subgroups of Jefferson Scale of Empathy	Number of Item	Minimum score	Maximum Score	(Mean±SD)
Perspective Taking	10	37	70	57.96±7.74
Compassionate Care	8	21	56	45.64±7.9
Walking in patient's shoes	2	2	14	7.47±2.39
Total	20	70	140	111.076±13.29

The mean empathy score for respondents over the age of 25 was somewhat higher than for respondents under or equal to the age of 25, but this difference was not statistically significant. Married respondents scored more than unmarried respondents

though it was not statistically significant. Participants were distributed very unevenly by academic year, religion and ethnicity and were also not statistically significant (Table 4).

Table 4: Association of the level of empathy with demographic variables (n=79)

Variable	Frequency	Mean	SD	p-value
<b>Age of respondents</b>				
At most 25	59	110.50	13.29	
Greater than 25	20	112.75	13.47	0.523

**Academic year of study**

1st year	71	111.98	13.00	
3rd year	8	103	13.93	0.118

**Relationship status**

Single	56	109.96	12.83	
Married	23	113.78	14.27	0.273

**Religion**

Hinduism	77	110.80	13.33	
Buddhism	2	121.50	6.36	0.226

**Ethnicity**

Brahmin/chhetri and Janajatis	72	111.09	1.57	
Others	7	110.85	5.087	0.965

\*T-test and ANOVA test done to determine the value of p, p value <0.05 is considered statistically significant

Table 5 shows that the empathy scores of respondents in terms of previous years of experience, previously served health service delivery institutions, and working unit were all similar. Differences in Empathy scores according to these variables were not statistically significant.

Table 5: Association of the level of empathy with work-related variables (n=79)

Variable	Number	Mean	SD	p-value
<b>Previous Work experience</b>				
At most 5 years	71	109.958	1.689	
More than 5 years	8	107.125	6.65	0.691
<b>Previously served health service delivery institution</b>				
Government	48	111.833	12.79	
Non- Government	25	110.04	14.65	
Both	6	109.667	13.92	0.834#
<b>Working Unit</b>				
Intensive	18	111.111	12.75	
Non-intensive	61	111.098	13.61	0.997

# p value based on ANOVA test; *p-value* <0.05 was considered statistically significant

**DISCUSSION**

This study was conducted with the aim of assessing the empathy among undergraduate nursing students. First and third-year undergraduate nursing students of selected colleges of Pokhara have participated in the study.

The present study showed that the overall participants had a good empathy score as measured by JSE-HPS with an overall mean score of 111.0759 and a standard deviation of 13.29. In this study, there was no statistically significant difference in empathy scores according to age groups, the academic year of study, relationship status, religion, ethnicity, and work experience. A similar study was conducted in Australia which reported a good empathy among the student nurses with an empathy score of 107.34. This study also had no statistically significant difference among age groups and academic years of study.<sup>8</sup> Another study conducted among undergraduate nursing students in Jordan had a mean empathy score of 92.9 with a significant association of the academic year of study with the empathy score and no association of the age group with the empathy scores.<sup>11</sup> The reason behind this difference might be the religious and cultural variances in behavior and expression among people living in a Muslim country like Jordan and people living in a Hindu country like Nepal. Also, the study conducted in India, showed a lower empathy score of 72. The study had a significant association of the level of empathy with age whereas there was no association between religion with the level of empathy.<sup>12</sup> In a systematic review conducted in Brazil, socio-demographic characteristics like being married, older, and being a woman were found to be associated with higher levels of empathy. Work experience and being in the last years of the course also had an impact on higher levels of empathy.<sup>13</sup>



The reason behind no significant difference in empathy scores with the demographic and previous work related variables such as the age of respondents, academic year of study, religion, ethnicity, and work experience might be due to the uneven number in the comparison group. Additionally, the respondents' similar characteristics may also be a contributing factor.

## CONCLUSION

The findings of the current study concluded that the empathy among undergraduate nursing students is satisfactory although there is always room for improvement. We can improve the empathy among students by incorporating classes that will help students communicate better, especially when it comes to building empathy between nursing students and patients. Innovative and creative approaches, such as simulation and role-playing, storytelling, reflective discussion, and direct patient listening, may be effective methods of teaching empathy skills in the nursing curriculum.

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