# Empathy level among the Nursing Workforce in the selected Health Institutes in Kathmandu consuming Toronto Empathy Scale

Pramila Thapa<sup>1\*</sup>, Rajesh G Konnur<sup>2</sup>, Purna Devi Maharajan<sup>3</sup>, Namu Koirala<sup>4</sup>

<sup>1</sup>Advisior, Yeti Health Science Academy/ CEO Life Skill Education, Kathmandu, Nepal

<sup>2</sup>Professor, Kurji Holy Family Hospital College of Nursing Patna Bihar India

<sup>3</sup>Assistant Professor, NAMS, Bir Hospital Nursing Campus, Nepal

<sup>4</sup>Assistant Professor, Purbanchal University School of Health Sciences, Gothgaon, Nepal

\*Email: pbrt426@gmail.com

## ABSTRACT

**Introduction:** Empathy is an essential ingredient of the nurse-patient relationship. The current study's goal is to investigate empathy levels and associated demographic variables among the nursing workforce in Kathmandu's selected health institutions.

Materials and Methods: cross-sectional study and purposive sampling technique; a total of 89 nursing workforce attained in this study; and online through the Google form was used to collect primary information. TEQ is made up of 16 items that are scored on a 5-point Likert scale as well as sociodemographic data (such as age, qualification, experience, and training). There are a total of 64. A score of >45 shows that the person has a high level of empathy. The data was analyzed using descriptive and multiple regression techniques.

**Results**: The descriptive analysis revealed that mostly 65.2% of the nursing workforce had below-average (<45) empathy scores. In the regression analysis model, beta age had a value of 0.357 and beta education had a value of 0.028. It was discovered that education level and age have a significant impact on empathy.

**Conclusion**: The study found that most of the nursing workforce had below-average empathy scores. However, it is an essential attribute for developing nurse-patient relationships at work. It can be learned and acquired.

Key words: Empathy, Nursing Workforce, Toronto Empathy Scale

# INTRODUCTION

High-quality services and nurse-patient relationships are constantly needed in healthcare. Finding a high level of empathy is one of a nurse's crucial skills; it might be the best way to acquire the aptitude to foster positive relationships (Ghaedi, Ashouri, Soheili, & Sahragerd, 2020). Empathy is the skill to put oneself in another person's shoes and envisions and understand their experiences from that perspective (Terezam, Reis-Queiroz, & Hoga, 2017), Empathy is a multidimensional concept that varies among individuals and can be measured (Hojat et al., 2002). "Empathy improves compassion and a non-judgmental attitude, as well as reduces dishonest behavior, increases satisfaction, and builds trust between nurses and patients" (Hojat, 2016). However, a lack of empathy causes feelings of frustration and disappointment (Derksen et al., 2017) and anxiety. Anxiety is very widespread, according to a study, about 40% of nurses had a high level of burnout (Ramirez-Baena et al., 2019). It is essential and needs to improve their ability to handle anxiety (Ayuso-Murillo et al., 2020). Evidence suggested that; high levels of empathy are associated with a good attitude toward patients and well-being (RománSánchez et al., 2022). Moreover, empathy skills are required in health care in order to feel, understand, and see things from the perspective of the clients (Terezam et al., 2017), and good relationships (Derksen, Bensing, & Lagro-Janssen, 2013). Socio-demographics and other controlling factors such as age, gender, work experience, education level, and empathy training may also play a big part in encouraging high levels of empathy. There is a study suggesting that; older people can experience stronger interpersonal relationships and demonstrate better emotional empathy skills (Beadle & De La Vega, 2019; Pérez-Fuentes et al., 2020). Education level also contributed crucial components to raising empathy levels (Hkansson Eklund et al., 2019). The authors suggest that the capacity for empathy differs between males and females (Christov-Moore et al., 2016). The study found that empathic intervention was successful for the nursing personnel (Mirzaei Maghsud, Abazari, Miri, & Sadat Nematollahi, 2020). According to evidence, empathy is a crucial trait to improve the quality of performance. Though few studies are being done on it in Nepal, it is significant for the country's healthcare sector (Ghimire, Dixit, Roy, Dhital, & Dahal, 2020). One study found in Nepal, that there is a moderate amount of burnout among healthcare workers, which can be attributed to a variety of factors like time constraints, administrative work, and interactions with patients' families (Shrestha, Manandhar, & Joshi, 2021). Patient care could be greatly impacted by the health of the workforce (Hall, Johnson, Watt, Tsipa, & O'Connor, 2016). However, empathy is a prerequisite for excellent nursing care (Mirzaei Maghsud, Abazari, Miri, & Sadat Nematollahi, 2020). Therefore, researchers

made the decision to gauge the level of empathy among nursing personnel at the selected Kathmandu health institutions.

## MATERIALS AND METHODS

Data were collected using a quantitative, cross-sectional study method. A total of 89 nurses from selected health institutes took part in this study, which was conducted using purposive sampling approache. Researchers used Toronto Empathy Questionnaire (TEQ) Scale, which was developed by (Spreng et al., 2009); before the tool was administered, the researcher's written consent was sought from the original researchers. While socio-demographic variables such as age, experience, training, and qualification were used in the first section. In the second section (TEQ), there were 16 items and a total score of 64 on a 5-point Likert scale (0 = never, 4 = always). On a scale of 0 to 64, a score of 45 to 64 indicates a higher level (>45) of empathy, while scores below 45 score suggested below-average (<45) empathy levels (Spreng et al., 2009). The Cronbach's alpha coefficient was determined to be satisfactory at 0.72 in a study with 3955 Greek teachers to assess the internal consistency and reliability, and subsequent investigations have confirmed that there is reliability. A TEQ-16 (Kourmousi et al., 2017). According to another study, this instrument's Cronbach's alpha coefficient was 0.85 (Sathaporn & Pitanupong, 2022). The study was conducted in selected health institutions, including a college and a hospital. The necessary permission was obtained prior to administering the instrument, as well as ethical approval was obtained from the institutional review board committee of Yeti Health Science Academy, Kathmandu. The IRC (YHSA) is approved by the national ERB of the Nepal Health Research Council (NHRC).

### RESULTS

The main objective of this research was to assess empathy among nursing workforce and associated socio- demographic factors. However, to accomplished objectives and test the hypothesis, descriptive statistics and regression analysis models were used. According to Table 1, of the descriptive study, the majority, 61.8 percent, of the participants were between the ages of 20 and 30. However, 94.4% of the participants were female, making up the majority of the group. Mo st participants (43.8%) had less than five years of work experience, while 43.8% obtained a bachelo r's degree in nursing.

Table 1. Socio-demographic variables of the nursing workforce

Variables	Frequency	Percent	
Age			
20- 30 years	55	61.8	
30- 40 years	14	15.7	
Above 40 years	20	22.5	
Gender			
male	5	5.6	
female	84	94.4	
Work experiences			
below 5 years	39	43.8	
5- 10 years	24 27		
above 10 years	26	29.2	
Education level			
Certificate Nursing	28 31.5		
Bachelor Nursing	39	43.8	
Master Nursing	22	24.7	

According to the descriptive frequencies table 2. Mostly 65.2 % of nurses have a below-average level of empathy (<45), 34.8 % have high level (>45) of empathy. According to the findings of this study, most of the nursing workforces scored below- average level of empathy.

Table 2. Empathy Level among Nursing Workforce

Level of Empathy	Frequency	Percent
<45	58	65.2
>45	31	34.8
Total	89	100.0

In this study, a regression analysis model was used to examine the impact of socio-demographic variables such as age, gender, work experiences, education level, and empathy training on empathy level. Table 3's summary of the regression analysis model showed that Standardized

Coefficients Beta age is 0.357, Standardized Coefficients Beta gender is -0.078, Standardized Coefficients Beta experiences is -0.026, Standardized Coefficients Beta training is -0.074, and Standardized Coefficients Beta qualification is 0.028. This study has demonstrated that Standardized Coefficients Beta age has shown that positive effect as well as Standardized Coefficients Beta level of education also have shown a positive effect, however, there were Standardized Coefficients Beta experiences, and Standardized Coefficients training demonstrated negative effect, therefore, in this study nursing workforce age as well as, educational level has shown positive indicators to enhance empathy at work. Age and education level were revealed to be important factors in the outcome. However, in this study, neither gender, work experiences nor empathy training were significant.

Table 3. Summary the socio-demographic characteristics studied in the regression model

Model	Unstandardized		Standardized	Т	Sig.
	Coefficients		Coefficients		
	В	Std. Error	Beta		
(Constant)	1.818	0.467		3.893	0.000
Age	0.162	0.075	0.357	2.149	0.035
Gender	-0.128	0.176	-0.078	-0.726	0.470
Work	-0.012	0.073	-0.026	-0.162	0.872
experiences					
Training	-0.097	0.147	-0.074	-0.663	0.509
(Empathy)	0.077	0.117	0.071	0.005	0.507
Education	0.014	0.065	0.028	0.218	0.828
Level	0.011	0.003	0.020	0.210	0.020

a. Dependent Variable: Mean Empathy

#### DISCUSSION

The major objective of this study is to evaluate the level of empathy and associated demographic variables among the nursing workforces in selected health institutes in Kathmandu. To accomplish the goals of the current study, researchers used the SPSS-20 version, descriptive statistics, and multiple regression models. The finding revealed that most of the nursing workforce has a below-average level (<45) of empathy. However, empathy is an essential and vital soft skill/life skill in the

healthcare profession (Akgün, Akdeniz, Kavukcu, & Avcı, 2020), especially nursing profession as it serves to understand the perspectives of others and, as a result, benefits in providing effective care (Iqbal et al., 2020). However, a prior report also showed that more than half of the clinical year medical students reported below-average (<45) empathy levels (Sathaporn & Pitanupong, 2022). Even another study showed a significant relationship between empathy and patient care (Moreno-Poyato & Rodrguez-Nogueira, 2021). Additionally, researchers examined at how sociodemographic factors like age, gender, work experience, education level, and empathy training affected levels of empathy using a regression analysis model. Sociodemographic factors were independent and empathy was the dependent variable. The findings reveled that age and educational level demonstrated significantly associated with empathy level. Although many researchers have suggested that there is an age-one component that promotes the development of positive empathy (Beadle & De La Vega, 2019; Beadle, Sheehan, Dahlben & Gutchess, 2015). However, present study shown that education level positive impact on empathy level. In this regards, previous report also suggested that education may provide a chance to get insight from different viewpoints as well as a chance for aged people (Beadle & De La Vega, 2019) to learn from and exhibit a positive attitude. The current study showed that there was no association between empathy level and different socio-demographic variables such as gender, work experience, and empathy training. Previous study also suggested that there isn't a relationship between gender and empathy level (Meshkat & Nejati, 2017); however, there is another report suggests that it is not clear whether empathy is more important to forgiveness for men or for women (Toussaint & Webb, 2005). Along with gender, employment experiences and empathy training attainment don't appear to have any significant positive relationships in this current study.

# **CONCLUSION**

Researchers have found that this study's level of empathy is below average. But providing empathetic services is essential and important to the nursing field. In addition to nursing, it is important and relevant to other medical fields, and prior research revealed a favorable relationship between doctor-patient interaction and better patient outcomes (Iqbal et al., 2020). Age and education level were important factors in this study, while gender, work experience, and empathic training were not. This could be a significant conclusion in a future study using a large sample, qualitative research, and other regions of Kathmandu.

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**Conflicts of Interest**: The authors declare no conflict of interest

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# თანაგრძნობის დონე საექთნო კონტიგენტს შორის კატმანდუს შერჩეულ ჯანდაცვით ინსტიტუტებში, რომლებიც იყენებენ ემპათიის ტორონტოს სკალას

პრამილა ტაპა $^{\scriptscriptstyle 1}$ , რაჯეშ ჯი კონურ $^{\scriptscriptstyle 2}$ , პურნა დევი მაჰარაჯანი $^{\scriptscriptstyle 3}$ , ნამუ კოირალა $^{\scriptscriptstyle 4}$ 

¹მრჩეველი, იეტის ჯანმრთელობის მეცნიერების აკადემია/ აღმასრულებელი დირექტორი ცხოვრებისეული უნარების განათლებაში, კატმანდუ, ნეპალი

<sup>2</sup>პროფესორი, კურჯის წმინდა ოჯახის საავადმყოფოს საექთნო კოლეჯი პატნა ბიჰარ ინდოეთი

<sup>3</sup>ასისტენტ პროფესორი, NAMS, Bir საავადმყოფოს საექთნო კამპუსი, ნეპალი

<sup>4</sup>ასისტენტ პროფესორი, პურბანჩალის უნივერსიტეტის ჯანდაცვის მეცნიერებათა სკოლა, გოთგაონი, ნეპალი

\*ელფოსტა: <u>pbrt426@gmail.com</u>

# აბსტრაქტი

შესავალი: ემპათია მედდა-პაციენტის ურთიერთობის არსებითი კომპონენტია. მიმდინარე კვლევის მიზანს წარმოადგენს გამოიკვლიოს თანაგრძნობის დონეები და მასთან დაკავშირებული დემოგრაფიული ცვლადები საექთნო მუშაკთა შორის კატმანდუს შერჩეულ ჯანდაცვით დაწესებულებებში.

მასალები და მეთოდები: ჯვარედინი კვლევა და მიზნობრივი შერჩევის ტექნიკა; სულ 89 საექთნო მუშახელი განვიხილეთ ამ კვლევაში და, Google-ის ფორმის მეშვეობით, ონლაინ საშუალებები გამოიყენებოდა პირველადი ინფორმაციის შესაგროვებლად. TEQ შედგება 16 ელემენტისგან, რომლებიც ფასდება ლიკერტის 5-ბალიან სკალაზე, ასევე, სოციოდემოგრაფიულ მონაცემებზე (როგორიცაა ასაკი, კვალიფიკაცია, გამოცდილება და ტრენინგი). ჯამურად განიხილება 64-ქულიანი შედეგი. >45 ქულა აჩვენებს, რომ ადამიანს აქვს თანაგრძნობის მაღალი დონე. მონაცემები გაანალიზებულია აღწერილობითი და მრავალჯერადი რეგრესიის ტექნიკით.

შედეგები: აღწერილობითმა ანალიზმა აჩვენა, რომ მედდა მუშახელის უმეტესად 65.2%-ს ჰქონდა საშუალოზე დაბალი (<45) თანაგრძნობის ქულები. რეგრესიული ანალიზის მოდელში, ბეტა ასაკს ჰქონდა მნიშვნელობა 0.357 და ბეტა განათლებას ჰქონდა მნიშვნელობა 0.028. გაირკვა, რომ განათლების დონე და ასაკი მნიშვნელოვან გავლენას ახდენს თანაგრძნობაზე.

დასკვნა: კვლევამ აჩვენა, რომ საექთნო კონტიგენტის უმეტესობას ჰქონდა საშუალოზე დაბალი თანაგრძნობის ქულები. თუმცა, ის არსებითი ატრიბუტია მედდა-პაციენტის ურთიერთობის განვითარებისთვის. მისი შესწავლა და შეძენა შესაძლებელია.

საკვანძო სიტყვები: თანაგრძნობა, საექთნო კონტიგენტი, ტორონტოს თანაგრძნობის სკალა.