

Empathy in Nursing Students that do the Non-Medical Internship in Three Universities in Lima, 2019

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ABSTRACT

Empathy is an attribute of importance between the nursing professional and the patient, where it influences the recovery of their health. Several studies carried out have shown worrying results where they reflect a great decrease in empathy during the formative academic years. The objective of the study is to determine empathy in nursing interns from three university institutions in Lima, 2019. The study is a quantitative approach, with a non-experimental, prospective, descriptive and cross-sectional design. The application of the Jefferson Medical Empathic Scale instrument for students in Spanish version S is proposed, where the data was entered into a matrix in the Microsoft Excel 2013 program, then the IBM SPSS Statistics version 24.0 is subsequently analyzed obtaining the percentage of empathy of the internal, also take actions to improve these variables. 216 nursing interns from three universities in Lima participated. 51.4% are from Universidad Norbert Wiener, 89.4% (n = 193) were women, 56.4% (n = 123) are from the ninth cycle, 42.4% (n = 91) they study and work, 58 nursing interns from Universidad Norbert Wiener representing 52.3% have a medium level, 34 nursing interns from the Universidad de Ciencias y Humanidades, representing 30.6% have a medium level and finally 19 nursing interns from the Universidad Privada del Norte representing 17.1% have a medium level. Universidad Norbert Wiener obtained a higher score prevailing the medium level.

1. Introduction

The definition of empathy over time has been modified and expanded, coming to recognize it more than a static trait, also a state or ability that flows, being susceptible to change according to personal experiences and cultural interventions [1]. Empathy in the nurse-patient relationship should be used on a day-to-day basis, since it may affect their work of caring for patients, the decrease of it may lead to the loss of ability that allows better communication in the opinion of the patient since this is considered a relevant factor in the recovery process [2].

The comparison of the three universities is very important since it is going to differ in the type of teaching that each university offers to nursing interns, in turn the ability of nursing interns to function in the clinical field, where His training will

stand out depending on each intern willing to improve and be a successful professional.

These circumstances may be due to the educational system because it must be oriented to the service of society and the individual, which should be based on the needs and demands that are important for development and competent from the professional point of view [3].

To carry out a relationship between nurse and patient, health personnel provide empathetic treatment to the patient to not worsen the situation of the patient's disease, thereby also giving the staff the development of attitudes, capacities and skills, giving a care of quality, that's why, different causes of the deficit are visualized in its application.

The health personnel with the longest service time and high hierarchy level are those that present the greatest decrease in the level of empathy [4].

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In a study on health students, "Evaluation of empathy in human medicine students from the private university of Peru" [5], they found that those students who think that their specialty is linked to Patient Care presented greater empathy with 66.9%, the same as those who reported having a professional model in patient contact with 72%.

In a research work [6] studies carried out in nursing and medical students, indicate that students have found variations in empathy in terms of specialty and clinical competence, being worrying because some of them reflect a decrease in empathy over the years of training, the score is from 0.0 to 140.0; the women with 118.7 obtained a higher level of empathy score than the men with 110.4 points, differences that were statistically significant.

In the research work "Concepts on empathy: development of an instrument for formative evaluation based on a teaching experience with pediatric residents of the Universidad de Antioquia" [7], indicates that a deficit in student training on the basis and practice of empathy, because the participants had misconceptions about empathy, where they adopted universal criteria for all their patients, believing that they had to make the patient's wishes come true, make the patient or family feel that are important in the decisions of health personnel, among others.

Currently, professionals who can work normally in the socio-labor context that allows them to function interpersonally are required, the variable empathy is essential in the deployment of a professional in different medicine and social fields that its performs, its importance is appreciated in the development of professional skills [8].

The objective of the research work is to determine empathy in nursing interns from three University Institutions in Lima, 2019 according to their three dimensions of compassionate care, perspective taking and putting themselves in the other's place. The implementation of empathy on a daily basis will help, also the mental state of the patient and the health personnel, to recognize and identify mental problems that could be going unnoticed, being a national research priority 2015-2021 established by the Instituto Nacional de Salud [9].

The technique to be used is the survey that will be through the questionnaire and data collection instrument the Jefferson Scale of Empathy (JSE) for students in Spanish version S, created by the Jefferson group, led by Mohammadreza Hojat, consisting of 20 evaluated questions on a 7-point Likert-type scale, the score ranges from a minimum of 20 to a maximum of 140 points, there are 10 items written in a positive sense and 10 in a negative sense, whose items explore the dimensions of perspective taking, compassionate care and ability to put yourself in the other's place. Permission has been offered to use the Jefferson Empathy Scale in 85 countries. The JSE has been translated into 56 languages [10]. After this, the data will be entered into a matrix in Microsoft Excel 2010, and then exported to the IBM SPSS Statistics Base 22 statistical package, in which it will be analyzed.

The following research work is structured as follows: In section II, the development of the used data processing will be presented. In section III, the results of the tables and figures of sociodemographic agreement, institution and dimensions will be shown. In section IV, it will present the discussions of the research work and finally in section V, the conclusions, as well as the future work that is intended to be wanted with the research work.

2. Methodology

2.1. Research type and design

The present research is of a quantitative approach because the variables were measured, statistical data was used generalizing the hypothesis, the methodological design is a non-experimental, prospective research because according to the planning of data collection, they are primary, cross-sectional because the measure is non-experimental, it was for a single occasion, descriptive because it consists of a single variable.

2.2. Population and sample

The study population is made up of 216 nursing interns from three private universities in Lima, enrolled in 9th and 10th semesters, who carry out their pre-professional practices and are in contact with the patient, during the period of 2019, according to the Population type are non-probabilistic type, selected according to the inclusion and exclusion criteria.

Inclusion criteria

University students of both sexes who are studying nursing at the time of data collection, nursing interns enrolled during the academic semester 2019 who are taking the 9th and 10th semesters who voluntarily participate in the interview or fill out the data collection questionnaire, nursing students who agree to sign the informed consent.

Exclusion criteria

Nursing students who are from the 1st semester to the 8th semester and nursing interns who have not signed the informed consent to carry out the study.

2.3. Technique and instruments

The technique used was the survey, in the form of the Jefferson Scale of Empathy in Spanish for students, containing general student data such as: sex, age and year of training that will be used to obtain information of the students who participate in the survey, specially designed to measure empathy in the context of patient care, whose items consist of 3 dimensions of perspective taking, compassionate care and ability to put yourself in the patient's place. It consists of 20 items which are evaluated on a 7-point Likert-type scale ranging from: Strongly Agree (7 points) to Strongly Disagree (1 point). The score is from a minimum of 20 points to a maximum of 140 points, the highest scores correspond to a high level of empathy. There are 10 items written in a positive sense and 10 in a negative sense (inverted score) [10].

"Jefferson Scale of Empathy" has been validated in many countries around the world, including Latin American countries and previously applied in Peru, it has construct validity; convergent, parts that comprise are related to each other; and discriminating, its parts are not related to topics different to empathy. In addition, it has the Chi X² that is 0.5 in its various versions and translations, which is a reliable measurement scale and each of the questions are correlated with each other and with the entire instrument [11].

2.4. Data collection procedure

- An authorization was presented to the Nursing faculty for the execution of the project in order to obtain the respective permission.
- Subsequently, the nursing faculty provided facilities for the execution of this research, also will provide a cover letter.
- Once obtained, it was presented to teachers and delegates of the ninth and tenth semesters informing the objectives of the project and the informed consent, in order to obtain their acceptance, support and collaboration in the application of the instrument.
- The evaluators met teachers and delegates of ninth and tenth semester to discuss the date and time of application of the instrument.

2.5. Application of data collection instruments

- The evaluators attended the classrooms of each semester, ninth and tenth, on coordinated dates and times.
- The students were informed of the importance of their participation, a brief explanation about the instrument.
- The informed consent form was distributed to be signed for the student and then the questionnaire.
- The questionnaire development lasted approximately 10 to 15 minutes.
- Then the instrument was collected, verifying that all questions are answered.
- In closing, the students were thanked for their participation and collaboration in the research.

As shown in Figure 1, nursing interns were presented and explained how to carry out the survey. The protection aspects of the research participants and bioethical principles were taken into account, likewise informed consent was applied after clear information given to the participants, the application of the instrument is important, it will help especially in the mental state of the patient and the health personnel themselves, to recognize and identify mental problems that could be going unnoticed, being a national priority, which asks them to collaborate in providing with certain data that will allow to get the study objective .



Figure 1: Teacher permission and approval to apply the survey to students.

After obtaining the approval of the teacher of the classroom, the survey was applied, where advice was given before and during the application because questions were raised by the students, most of them were just to clarify questions, as shown in Figure 2.



Figure 2: Advice before and during the survey application

2.6. Data analysis and processing techniques

The data collection process was carried out during May 2020, the data was initially entered into a data matrix designed in the Microsoft Excel 2010 program, then exported to the IBM SPSS Statistics version 22.0 program. There, they were analyzed, obtaining tables and graphs that were later described and interpreted in the results and discussion sections, respectively.

For the statistical analysis of each main variable involved in the study, descriptive statistical tests such as absolute frequencies, relative frequencies, and measures of central tendency were applied, in addition to some correlational tests to verify the study hypothesis.

3. Results

A summary table of the surveys carried out following the guidelines corresponding to the research work will be shown, in the study participants were 216 nursing interns of 9th and 10th semester from the three University Institutions, in the following table, it will present results of the sociodemographic data of the study participants.

Table 1: Sociodemographic data of empathy in nursing interns from three University Institutions in Lima, 2019 (N = 216)

Participant Information	Total	
	N	%
Total	216	100
University		
Universidad de Ciencias y Humanidades	64	29,6
Universidad Norbert Wiener	111	51,4
Universidad Privada del Norte	41	19,0
Gender		
Female	193	89,4
Male	23	10,6
Study semester		
9 th Semester	123	56,9
10 th Semester	93	43,1
Occupation Status		
Study	61	28,2
Study and eventually work	64	29,6
Study and work	91	42,1

Regarding the university, 111 nursing interns representing 51.4% are from Universidad Norbert Wiener, 64 nursing interns representing 29.6% are from the Universidad de Ciencias y Humanidades, and finally 41 nursing interns representing 19% are from the Universidad Privada del Norte.

Regarding gender, the female sex predominated with 193 students representing 89.4%, followed by the male with 23 students representing 10.6%.

Regarding the study semester of nursing interns, the ninth semester is 123 representing 56.9%, and the tenth semester, 93, representing 43.1%.

Regarding the occupation status of nursing students, 91 with (42.1%) cases study and work, followed by 64 with (29.6%) cases study and eventually work and 61 with (28.2%) cases only study.

Table 2: Empathy in nursing interns from three University Institutions in Lima, 2019 (N = 216)

			Univers idad de Ciencia s y Human idades	Unive rsidad Norbe rt Wiene r	Univer sidad Privada del Norte
Empat hy	Low	N	0	0	1
		%	0,0	0,0	100,0
	Medium	N	34	58	19
		%	30,6	52,3	17,1
	High	N	30	53	21
		%	28,8	51,0	21,2

In Table 2, it can see Empathy in nursing interns from three University Institutions in Lima, 58 nursing interns from Universidad Norbert Wiener representing 52.3% have a medium level, 34 nursing interns from the Universidad de Ciencias y Humanidades, representing 30.6% have a medium level and finally 19 nursing interns from the Universidad Privada del Norte representing 17.1% have a medium level. Universidad Norbert Wiener obtained a higher score prevailing the medium level.

Table 3: Empathy in relation to gender of nursing interns from three universities in Lima, 2019 (N = 216)

		Empathy			Total
		Low	Medium	High	
Student gender	Female	Count	0	98	95
		%	0,0%	50,8%	49,2%
		within Student's gender	100,0%		

Table 4: Empathy in its perspective-taking dimension in nursing interns from three universities in Lima, 2019 (N = 216)

		Institution				
		Universidad de Ciencias y Humanidades	Universidad Nolbert Wiener	Universidad Privada del Norte	Total	
Perspective taking	Low	Count	1	3	1	5
		% within Institution	1,5%	2,7%	2,5%	2,3%
	Medium	Count	19	20	8	47
		% within Institution	29,7%	18,0%	19,5%	21,8%
	High	Count	44	88	32	164
		% within Institution	68,8%	79,3%	78,0%	75,9%
Total	Count	64	111	41	216	
	% within Institution	100,0%	100,0%	100,0%	100,0%	

Chi-square tests

Male	Count	1	13	9	23
	% within Student's gender	4,3%	56,5%	39,1%	100,0%
Total	Count	1	111	104	216
	% within Student's gender	0,5%	51,4%	48,1%	100,0%

Chi-square tests

	Value	df	Asymptotic significance (bilateral)
Pearson's Chi-square	8,958 ^a	2	,011
Likelihood ratio	5,069	2	,079
Linear by linear association	1,649	1	,199
N of valid cases	216		

a. 2 cells (33.3%) have expected a count less than 5. The minimum expected count is ,11.

In Table 3, empathy is related according to sex, where women present a higher level of empathy (49.2%) than in men (39.1%), in which it was determined with the chi-square test of Pearson (X²). The level of significance of the test obtained a value of 0.11 (p> 0.05) (X² = 8.958; d.f = 2). Therefore, an association hypothesis is not rejected, for which there are statistical data that verify the relationship between empathy and the sex of nursing interns from three universities in Lima.

In Table 4, we can observe the relationship between the dimension of perspective taking with the Universities of the nursing interns, in which it was determined with Pearson's chi-square test (X²). The level of significance of the test obtained a value of 0.95 (p> 0.05) (X² = 3.512; d.f = 4). Therefore, an association hypothesis is not rejected, for which there are statistical data that verify the relationship between the perspective taking dimension and the universities of the nursing interns in the research. By which, we can interpret that the interns of the Universidad Nolbert Wiener have a high perspective taking (79.3%).

	Value	df	Asymptotic significance (bilateral)
Pearson's Chi-square	3,512 ^a	4	,476
Likelihood ratio	3,398	4	,494
Linear by linear association	,981	1	,322
N of valid cases	216		

a. 3 cells (33,3%) have expected a count less than 5. The minimum expected count is ,95.

Table 5: Empathy in its compassionate care dimension in nursing interns from three universities in Lima, 2019 (N = 216)

		Institution				
		Universidad de Ciencias y Humanidades	Universidad Nolbert Wiener	Universidad Privada del Norte	Total	
Beware with compassion	Low	Count	8	16	6	30
		% within Institution	12,5%	14,5%	14,6%	13,9%
	Medium	Count	26	54	16	96
		% within Institution	40,6%	48,6%	39,0%	44,4%
	High	Count	30	41	19	90
		% within Institution	46,9%	36,9%	46,4%	41,7%
Total	Count	64	111	41	216	
	% within Institution	100,0%	100,0%	100,0%	100,0%	

Chi-square tests

	Value	df	Asymptotic significance (bilateral)
Pearson's Chi-square	2,278 ^a	4	,685
Likelihood ratio	2,285	4	,684
Linear by linear association	,138	1	,710
N of valid cases	216		

a. 0 cells (0,0%) have expected a count less than 5. The minimum expected count is 5,69.

In Table 5, we can observe the relationship between the dimension of compassionate care with the Universities of nursing interns, in which it was determined with Pearson's chi-square test (X^2). The level of significance of the test obtained a value of 5.69 ($p > 0.05$) ($X^2 = 2.278$; $d.f = 4$). Therefore, it is not possible to

reject an association hypothesis, in which there is no statistical evidence in a significant relationship in the compassionate care dimension with the universities of nursing interns. By which we can interpret that the interns of the Universidad de Ciencias y Humanidades have a high compassionate care (46.9%).

Table 6: Empathy in its dimension, ability to put oneself in the place of others in nursing interns from three universities in Lima, 2019 (N = 216)

		Institution				
		Universidad de Ciencias y Humanidades	Universidad Nolbert Wiener	Universidad Privada del Norte	Total	
Ability to put oneself in the place of others.	Low	Count	17	41	12	70
		% within Institution	26,5%	36,9%	29,2%	32,4%
	Medium	Count	41	54	25	120
		% within Institution	64,1%	48,6%	61,0%	55,6%
	High	Count	6	16	4	26
		% within Institution	9,4%	14,5%	9,8%	12,0%
Total	Count	64	111	41	216	
	% within Institution	100,0%	100,0%	100,0%	100,0%	

Chi-square tests

	Value	df	Asymptotic significance (bilateral)
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Pearson's Chi-square	4,581 ^a	4	,333
Likelihood ratio	4,607	4	,330
Linear by linear association	,068	1	,794
N of valid cases	216		

a. 1 cells (11,1%) have expected a count less than 5. The minimum expected count is 4,94.

In Table 6, we can observe the relationship between the dimension ability to put oneself in the place of others with the Universities of nursing interns, in which it was determined with Pearson's chi-square test (X^2). The level of significance of the test obtained a value of 4.94 ($p > 0.05$) ($X^2 = 4.581$; $d.f = 4$). Therefore, an association hypothesis cannot be rejected. In which, there is no statistical evidence in a significant relationship in the compassionate care dimension with the universities of nursing interns. By which it can be interpreted that the interns of the Universidad de Ciencias y Humanidades have a medium level of empathy (64.1%).

This dimension was the most affected, it makes understand that being nursing interns where the work of a professional is being carried out having a great responsibility, the first thing the hospital prioritize is the technological or the material and forget the emotional, the feelings; this makes understand that during academic training, it does not have a good empathetic training where it must be emotionally prepared and not as professional competitiveness among University institutions.

These results will be used as antecedents for future researchers to give greater emphasis to humanized treatment and improve the level of empathy at first base that are the students.

4. Discussion

In the present study, an increase in medium empathy was found in nursing students where the level of empathy occurred more in women than in men, this is because women, because they are more emotionally sensitive, feel a more empathic concern, personal discomfort where concern for the care of the child, adult and older adults perceive themselves based on their understandings and at the same time on non-verbal language. Our findings are similar to the results of the authors M. Montilva and her collaborators in their study "Empathy according to the Jefferson scale in students of Medicine and Nursing in Venezuela", the average score of the EMed was 120.3, and the EEnf was 117.9; found a non-significant difference in the score with a higher level of empathy in women than in men [6]. The presence of empathy in the Peruvian population of three universities was 111, also have a medium empathy.

According to the study, empathy in nursing students according to their compassionate care dimension, it found with a high frequency, regarding the author M. Mejía and her collaborators in their study "Empathic behavior in science students of the health from Universidad de los Andes", it is observed that there is not as much relationship since the students of the Universidad de los Andes are less compassionate [12].

In the found findings, it can observe that empathy in nursing students who carry out the non-medical internship, in its dimension perspective taking is high, which is related to the study of the author R. Lorch and his collaborators "a phenomenological study of nature of empathy", which leads to the importance of developing empathy as an aspect of emotional competence, this

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study is related to the understanding that nursing students perceive and experience [13].

Another findings of empathy in health students, elaborated by J. Huancaya and his collaborators in their study "Evaluation of empathy in human medicine students of the private university of Peru", they found that those students who think their specialty was linked to patient care, they showed greater empathy, like those who reported having a professional role in patient contact, a higher percentage of the level of empathy in women was also found [5].

In the study by J. Blanco and collaborators in their study "Medical empathy in residents and medicine tutors of family and community. The vision of the professional and the patient" found that the health personnel, who have the longest service time, presented low levels of empathy compared to other professionals [14]. Regarding nursing students, it is observed that the majority have medium empathy, comparing with the mentioned study, the difference between them was that in the non-medical internship, there is a decrease in empathy.

It can be seen that there is a similar relationship in terms of gender, empathic levels in women are high, which indicates that women are superior to men.

5. Conclusions

It is concluded that empathy in nursing interns from three university institutions in Lima, 2019, medium empathy predominates. Regarding the dimensions of the three universities, the most affected dimension was putting themselves in the place of others the low level predominates, according to their compassionate care dimension, the medium level empathy predominates and, in the perspective, taking dimension the high level predominates.

In the bibliographic reviews of the national and international scientific databases, it was determined that there is not an adequate number of national scientific articles that involve this type of subject: Empathy in nursing interns and the comparison between different universities. Knowing that these students of the new generation must be prepared not only with scientific aspects but also with the human part. For this reason, the present research wants to complete this research gap.

The study contributes to the development and consolidation of the topic of research in empathy, and also introduces the concept of empathy in nursing interns through an instrument, which its new version is adapted to the field of nursing-patient. The results will contribute to the improvement of the humanized treatment of the patient.

Conflicts of Interest

The authors declare no conflict of interest

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