Empathy in the Curriculum for Patient Care

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Abstract

Introduction: Empathy on nursing education is an important element in therapeutic communication and in the type of humanized care provided, due the strengthening of the nurse-patient relationship depends on this.

Objective: To evaluate the levels of empathy on nursing students of a Higher Education Institution. Cartagena de Indias/Colombia.

Material and Methods: Cross-sectional exploratory study. A sample of 320 nursing students from first to fourth year of training, to whom the Jefferson Medical Empathy Scale (JMES) was applied in the Spanish version.

Results: Levels of empathy are reflected more in women than in men in general. However, some values vary with respect to the average at 3.14 levels in relation to the first year of schooling.

Conclusion: The need for a curricular redesign and favoring empathic actions by professors worthy of being imitated by students as a way of encouraging empathy when caring for patients.

Keywords: Empathy, communication, humanized care, Nursing (DeCS)

1. Introduction

Empathy can be looked at from two different approaches: the cognitive and the affective. With regard to the cognitive, try to understand what goes through the minds of others, and the affective, defined as the emotional reaction of an observer who perceives what the other person is experiencing or will experience (Fernández-Pinto, López-Pérez, & Márquez, 2008; Hoffman, 1981; Stotland, 1969). Likewise, in the context of health care, empathy plays an important role as a cognitive attribute, which involves an understanding of the patient's experiences, concerns and perspectives, constituting the basis of the nurse-patient relationship from which prosocial and altruistic behaviors emerge, such as: social skills, sympathy, flexibility, tolerance, emotional intelligence, moral judgment, sense of humor, conscientiousness, kindness, among others (Hojat, 2016).

Empathy in practice is complex and multidimensional, represented in the brain on specific areas that have a relationship with the theory of mind or moral, as well as, in the areas related to cognition, emotion and behavior (Stotland, 1969; Van der Graaff, Carlo, Crocetti, Koot, & Branje, 2017). Although some studies consider that empathy has more a relation with the feelings, since these are products of social aspects that contribute to design strategies that benefit the group and stimulate supportive behaviors and collaboration that are reflected in specific brain areas (Álvaro-González, 2014; Bernhardt & Singer, 2012). (Figure 1)

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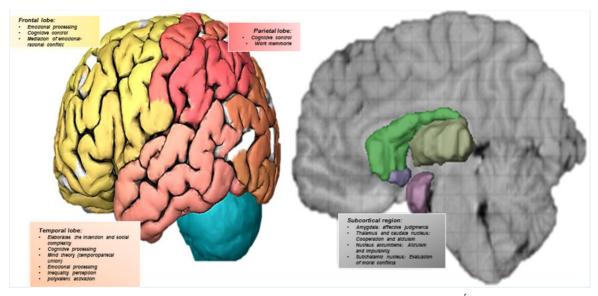


Figure 1. Brain areas related to empathy and moral decision making (modified from (Álvaro-González, 2014))

The moral aspects such as solidarity, compassion, altruism, are elements that define a language, but above all, a process of affective and therapeutic communication (Díaz Pérez, 2015), which justifies its incorporation in the training of health care professionals (Nunes, Williams, Sa, & Stevenson, 2011), and especially in the training of nurses, since they contribute to the strengthening of the patient's social relations with other professionals and also with their families, which favors the psychological, spiritual and physical improvement of the patient. Therefore, empathic and emotionally competent nurses are required to articulate theory with practice and connecting emotion, reason and experience (Furstenberg, 2015; Hojat et al., 2002; Williams & Stickley, 2010).

As has been proposed, one of the forms of relationship that defines the degree of communication is empathy, perceived by the patient and his family as humanized care, that is to say; the need to understand the patient's distress and provide supportive therapeutic and interpersonal communication (Reynolds & Scott, 1999), since patient and his family demand from the nurse or health care professional, to put themselves in their place, in order to understand their affective and non-affective responses (Davis, 1983; Fernández-Pinto et al., 2008).

Empathic practices are evident in solidarity as a need for training, which means learning based on the example as virtuous action related to the coherence between what is thought and done, transverse by altruism, with the attitude of putting oneself in the place of the other (Boehm, 2012; Slote, 1997). One way to encourage imitation in the training of nursing students or health professionals, is what is called "reading of intentions", which represents how human actions should have a high emotional content that the observer [nurse or teacher] must infer and interpret from a correct analysis of the information provided by the [observed] student or the patient, this must trigger solidarity activities where mirror neurons play an important role which are connected to the theory of mind, which determines the interaction factor to improve understanding, learning and culture in this case of humanized care, establishing dominant models of moral functioning with respect to the care of the other (Álvaro-González, 2014; Ayca, 2017; Furstenberg, 2015).

It is clear that it is important to determine the levels of empathy within the training of nurses whose professional task is humanized care, which is the basis of the nurse-patient relationship. The objective is to evaluate the levels of empathy in nursing students of a Higher Education Institution from the city of Cartagena de Indias (Colombia).

2. Material and Methods

A cross-sectional descriptive exploratory study was designed, evaluated by the ethics committee of the Rafael Núñez University Corporation, in which the instruments were applied, determining that the research is in accordance with the provisions of the Declaration of Helsinki and Resolution 008430 of 1993 of Colombia.

The population was comprised by first to fourth year students of academic training in the Nursing program: (N = 468 / n = 320, 68.38%) of the total number of students). A simple stratified sampling was carried out: during the first year, 51 students were taken; second year: 82 students; third year of training: 103 students and the fourth year: 84 students. Regarding the sex variable, the population was comprised by: feminine = 292 and masculine = 28.

Participants were evaluated using the Jefferson Medical Empathy Scale (JMES) in the Spanish version for medical

students (S version), validated in Mexico and Chile (Alcorta-Garza, González-Guerrero, Tavitas-Herrera, Rodríguez-Lara, & Hojat, 2005; Díaz-Narváez et al., 2014), and adapted for nursing students. The application was anonymous and confidential (neutral operator). Also, before being applied, the JMES was subjected to a validation process using the criteria of judges (three relevant academic professionals) in order to verify the cultural validity and content. Students' understanding of the culturally adapted scale was carried out through a pilot test. The data were described by simple box and arithmetic charts and processed by the statistical software SPSS 20 ®.

3. Results

In relation to the levels of empathy emitted by the Jefferson Medical Empathy Scale (JMES), there is a general average of 97.30, which includes men and women of the nursing program; the score range ranged between 83.86 and 106.40 in men, and in women between 95.16 and 99.88. (Table 1)

Table 1. Results of the estimation of means and standard deviation of the mean in each of the levels of the factors studied.

Academic year	Sex	Mean	Standard deviation	n	%
First year	Female	95,89	12,035	47	82.46
	Male	92,75	15,987	4	17.54
	Total	95,65	12,219	51	100
Second year	Female	99,81	17,011	77	93.9
	Male	106,40	17,558	5	6.1
	Total	100,21	17,007	82	100
Third year	Female	95,16	15,686	91	88.35
	Male	91,83	19,201	12	11.65
	Total	94,78	16,063	103	100
Fourth year	Female	99,88	15,960	77	91.7
	Male	83,86	3,436	7	8.3
	Total	98,55	15,935	84	100
Total	Female	97,75	15,686	292	91.25
	Male	92,57	16,800	28	8.75
	Total	97,30	15,827	320	100

For a better understanding of these data, it should be taken into account that the JMES scores can range from a minimum of 20 to a maximum of 140, the higher the score, the more empathetic the individual's orientation. A greater empathy is observed in men than women during the second year; however, throughout the training there are significant differences by academic year and by sex (Figures 2 and 3).

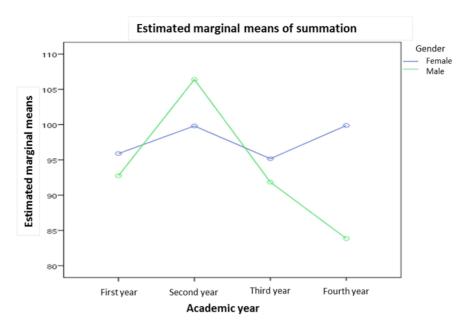


Figure 2. Results of the means in the levels of the academic year factor separated by sex in simple arithmetic graphs

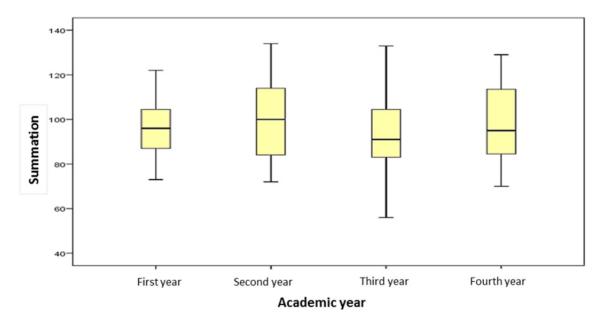


Figure 3. Results of the estimation of means and standard deviation of the mean in each of the levels of the studied factors

For the first year levels of empathy not so different between men and women were found, obtaining 92.75 and 95.89 respectively; in the second year of training the levels of empathy in men rose to 106.40, surpassing the level of women who have a 99.81. Despite the increase in men of the levels of empathy for the second year, there is a large decrease in the third year, obtaining levels of 91.83, as well as women who also obtained a decrease in 95.16; On the other hand, in the fourth year of training, there was a great decrease in the levels of empathy in men, reaching 83.86 and in women a not so significant increase, reaching 99.88. In spite of this variability of scores per academic year and by sex, an average was observed in the not so distant scores, obtaining the male group an average of 92.57 and the female group 97.75 (Figure 4).

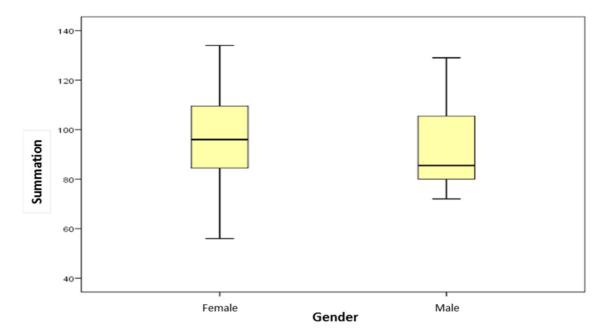


Figure 4. Results of the means and standard deviations in the levels of the sex factor in chart boxes

4. Discussion

In the context of Nursing, empathy allows to have clarity in the need to understand the patient's anguish and pain, with the ability of the nurse to offer adequate support and reflect it in the nurse-patient relationship (Díaz-Narváez et al., 2014).

Regarding the level of empathy of the nursing students in their training process, it was found that for the first year the levels of empathy in women is higher in relation to men with a difference of 3.14 above the average. Nevertheless; it is necessary to understand that the students are in a process of adaptation and expectation of their university education and therefore the possible variation of the levels of empathy (Extremera Pacheco & Fernández Berrocal, 2004). However, it could be mentioned that there is no evidence on the curriculum in the first year of nursing career training that directly promotes the theory of communication and the theory of the mind, which contribute to the development of ethical and humanization skills, from the therapeutic component of communication (Bullen, Salazar, & Díaz Narváez, 2015; Palencia, 2006).

For the second year of training, there was an increase in levels of empathy in men, surpassing the level of women; this agrees with González et al, who found a progressive decrease in the average empathy score according to the academic year in nursing students, which express that this finding may be related to the fact that during the second year of nursing training, the students initiate a personal contact with patients in their clinical practices that last to third and fourth the years, the consequence of which is a decline in empathy when the clinical experience has been lived with the disease, pain and suffering of the other (González-Serna, Serrano, Martín, & Fernández, 2014), which is paradoxical, since it would be expected that empathy would increase. What has been said so far assumes that there may be a lack of organization in the curricular design in the first year, which does not happen in the second year where there is an emphasis on the biological, but also about the anthropological, psychological and sociological, which provides the student with a multidimensional vision of the needs of the patient and the family.

In relation to the third year, researches such as the one performed by Hojat et al, shows a notable decrease in this ability in medicine, nursing and dentistry students, especially when they start their clinical practice (Hojat et al., 2005). Accordingly, there was a decrease in the levels of empathy in the third and fourth year of training compared to the first and second year, where the levels were higher as mentioned in previous paragraphs. This result is of great importance for the institution on the training of the nurse, because during these last two years of training the students perform clinical practices and are in permanent contact with patients. It should be noted that a study proposed by Esquerda et al, describes that independent of the intervention or curricular redesign, men tend to maintain lower levels of empathy, that is, they are less modifiable by experience (Esquerda, Yuguero, Viñas, & Pifarré, 2016).

5. Conclusions

The findings establish a basis in the development of the nursing discipline that deserves special attention, mainly for the welfare of the patient, who is the one who receives the product of the nursing professional's training.

It is clear, the need to rescue the appreciation of the empathy approach in the training of health professionals.

Finally, it is pointed out the need to ensure the curricular design, but above all for the virtuous, supportive and compassionate actions given by the teacher, which are imitated by the students [hidden curriculum], to increase the levels of empathy in the nursing students.

Competing Interests Statement

The authors declare that there are no competing or potential conflicts of interest.

References

- Alcorta-Garza, A., González-Guerrero, J. F., Tavitas-Herrera, S. E., Rodríguez-Lara, F. J., & Hojat, M. (2005). Validación de la Escala de Empatía Médica de Jefferson en estudiantes de medicina mexicanos. *Salud mental*, 28(5), 57-63
- Álvaro-González, L. C. (2014). Neuroética (I). Circuitos morales en el cerebro normal. *Rev Neurol*, 58(5), 225-233.
- Ayca, M. V. M. (2017). La neuroeducación en el aula: neuronas espejo y la empatía docente. *La Vida y la Historia*, (3), 1-87.
- Bernhardt, B. C., & Singer, T. (2012). The neural basis of empathy. *Annual review of neuroscience*, *35*, 1-23. https://doi.org/10.1146/annurev-neuro-062111-150536
- Boehm, C. (2012). Moral Origins: The Evolution of Virtue, Altruism, and Shame. Hachette UK.
- Bullen, M., Salazar, L., & Díaz Narváez, V. P. (2015). Orientación empática en estudiantes de odontología de la Universidad de Panamá (República de Panamá). *Revista Salud Uninorte*, *31*(2), 266-275. https://doi.org/10.14482/sun.30.1.4309
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of personality and social psychology*, 44(1), 113-126. https://doi.org/10.1037/0022-3514.44.1.113
- Díaz Pérez, A. (2015). Cuidado y comunicación por parte de enfermeros a familiares de pacientes hospitalizados en una unidad de cuidados intensivos. *Revista Cultural del Cuidado*, 11(2), 17-31
- Díaz-Narváez, V. P., Mu-oz-Gámbaro, G., Duarte-Gómez, N., Reyes-Martínez, M. C., Elvira Caro, S., Calzadilla-Nú-ez, A., & Alonso-Palacio, L. M. (2014). Empatía en estudiantes de enfermería de la Universidad Mayor, Sede Temuco, ix región, Chile. *Aquichan*, *14*(3), 388-402. https://doi.org/10.5294/aqui.2014.14.3.9
- Esquerda, M., Yuguero, O., Vi-as, J., & Pifarré, J. (2016). La empatía médica,?` nace o se hace? Evolución de la empatía en estudiantes de medicina. *Atención Primaria*, 48(1), 8-14. https://doi.org/10.1016/j.aprim.2014.12.012
- Extremera Pacheco, N., & Fernández Berrocal, P. (2004). Inteligencia emocional, calidad de las relaciones interpersonales y empatía en estudiantes universitarios. *Clínica y salud*, 15(2), 117-137
- Fernández-Pinto, I., López-Pérez, B., & Márquez, M. (2008). Empatía: Medidas, teorías y aplicaciones en revisión. Anales de psicología, 24(2), 284-298
- Furstenberg, C. (2015). La empatía a la luz de la fenomenología: perspectivas en el contexto del cuidado. *Revista Latinoamericana de Bioética*, 15(2), 26-41. https://doi.org/10.18359/rlbi.533
- González-Serna, J. M. G., Serrano, R. R., Martín, M. S. M., & Fernández, J. M. A. (2014). Descenso de empatía en estudiantes de enfermería y análisis de posibles factores implicados. *Psicología Educativa*, 20(1), 53-60. https://doi.org/10.1016/j.pse.2014.05.007
- Hoffman, M. L. (1981). Is altruism part of human nature? *Journal of Personality and social Psychology, 40*(1), 121. https://doi.org/10.1037/0022-3514.40.1.121
- Hojat, M. (2016). Empathy as Related to Personal Qualities, Career Choice, Acquisition of Knowledge, and Clinical Competence. *En Empathy in Health Professions Education and Patient Care* (pp. 151-167). Springer. https://doi.org/10.1007/978-3-319-27625-0_9

- Hojat, M., Gonnella, J. S., Mangione, S., Nasca, T. J., Veloski, J. J., Erdmann, J. B., ... Magee, M. (2002). Empathy in medical students as related to academic performance, clinical competence and gender. *Medical education*, 36(6), 522–527. https://doi.org/10.1046/j.1365-2923.2002.01234.x
- Hojat, M., Zuckerman, M., Magee, M., Mangione, S., Nasca, T., Vergare, M., & Gonnella, J. S. (2005). Empathy in medical students as related to specialty interest, personality, and perceptions of mother and father. *Personality and Individual Differences*, 39(7), 1205-1215. https://doi.org/10.1016/j.paid.2005.04.007
- Nunes, P., Williams, S., Sa, B., & Stevenson, K. (2011). A study of empathy decline in students from five health disciplines during their first year of training. *International Journal of Medical Education*, 2, 12-14. https://doi.org/10.5116/ijme.4d47.ddb0
- Palencia, E. (2006). Reflexión sobre el ejercicio docente de enfermería en nuestros días. *Investigación y Educación en Enfermería*, 24(2), 130-134.
- Reynolds, W. J., & Scott, B. (1999). Empathy: a crucial component of the helping relationship. *Journal of Psychiatric and Mental Health Nursing*, 6(5), 363-370. https://doi.org/10.1046/j.1365-2850.1999.00228.x
- Slote, M. (1997). Virtue ethics. Wiley Online Library.
- Stotland, E. (1969). Exploratory investigations of empathy. *Advances in experimental social psychology, 4*, 271-314. https://doi.org/10.1016/S0065-2601(08)60080-5
- Van der Graaff, J., Carlo, G., Crocetti, E., Koot, H. M., & Branje, S. (2017). Prosocial behavior in adolescence: gender differences in development and links with empathy. *Journal of youth and adolescence*, 1-14. https://doi.org/10.1007/s10964-017-0786-1
- Williams, J., & Stickley, T. (2010). Empathy and nurse education. *Nurse Education Today*, 30(8), 752-755. https://doi.org/10.1016/j.nedt.2010.01.018

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