Original Article

TEXTO & CONTEXTO ENFERMAGEM
TEXT & CONTEXT NURSING TEXTO & CONTEXTO ENFERMERÍA

EMPATHY IN NURSING STUDENTS FROM THE METROPOLITANA UNIVERSITY OF BARRANQUILLA (COLOMBIA)

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ABSTRACT

Objective: to evaluate the Empathic Orientation in Nursing students of the Universidad Metropolitana of Barranquilla (Colombia).
Method: a descriptive, exploratory and transversal study in which the Jefferson Medical Empathy Scale in an anonymous and confidential manner was applied to 489 students from the first to fourth undergraduate year of the Nursing Program of the Universidad Metropolitana (Barranquilla, Colombia); the corresponding ethical and methodological rigor was kept.
Results: the ANOVA results were not significant in the Academic Year factor and in the interaction (p=0.261), but significant by Gender. It was observed that behavior was different in both genders. The masculine gender tends to descend between the first and third undergraduate year and female gender also descends between first and second undergraduate year to later reach the average levels of empathy of the male gender.
Conclusion: the results obtained show that the means of the variable studied do not show a great difference between the different undergraduate courses, nevertheless, a slight increase in the fourth undergraduate year is observed. There were significant differences between genders, the scores observed in men students were higher than those obtained from women students.

DESCRIPTORS: Empathy. Nursing. Nursing students. Nursing education.

HOW CITED: Castellón-Montenegro H, Barraza-Ospino D, Borré-Ortiz YM, Lastre-Amell G, Erazo-Coronado AM, Diaz-Narvaez VP. Empathy in nursing students from the Metropolitana University of Barranquilla (Colombia). Texto Contexto Enferm [Internet]. 2020 [cited YEAR MONTH DAY]; 29:e20180314. Available from: https://doi.org/10.1590/1980-265X-TCE-2018-0314

EMPATIA EM ALUNOS DE ENFERMAGEM DA UNIVERSIDADE METROPOLITANA DE BARRANQUILLA (COLÔMBIA)

RESUMO

Objetivo: avaliar a orientação empática em estudantes de enfermagem da Universidad Metropolitana de Barranquilla (Colombia).
Método: estudo descritivo, exploratório e transversal, no qual a Escala de Empatia Médica de Jefferson, de forma anônima e confidencial, foi aplicada a 489 alunos do primeiro ao quarto ano de graduação do Programa de Enfermagem da Universidad Metropolitana (Barranquilla, Colombia). o rigor ético e metodológico correspondente foi mantido.
Resultados: os resultados da ANOVA não foram significativos no fator Ano Acadêmico e na interação (p=0,261), mas significativos por Gênero. Observou-se que o comportamento foi diferente em ambos os sexos. O gênero masculino tende a descer entre o primeiro e o terceiro ano de graduação e o gênero feminino também desce entre o primeiro e o segundo ano de graduação para atingir posteriormente os níveis médios de empatia do gênero masculino.
Conclusão: os resultados obtidos mostram que as médias da variável estudada não apresentam grande diferença entre os diferentes cursos de graduação. no entanto, observa-se um ligeiro aumento no quarto ano de graduação. Houve diferenças significativas entre os sexos, os escores observados nos estudantes do sexo masculino foram superiores aos obtidos nas estudantes do sexo feminino.

DESCRITORES: Empatia. Enfermagem. Estudantes de enfermagem. Educação em enfermagem.

EMPATÍA EN ESTUDIANTES DE ENFERMERÍA DE LA UNIVERSIDAD METROPOLITANA DE BARRANQUILLA (COLOMBIA)

RESUMEN

Objetivo: evaluar la orientación empática en estudiantes de enfermería de la Universidad Metropolitana de Barranquilla (Colombia).
Método: un estudio descriptivo, exploratorio y transversal en el que se aplicó la Escala de Empatía Médica de Jefferson de forma anónima y confidencial a 489 estudiantes del primer a cuarto año de pregrado del Programa de Enfermería de la Universidad Metropolitana (Barranquilla, Colombia); guardando el rigor ético y metodológico correspondiente.
Resultados: los resultados de ANOVA no fueron significativos en el factor Año Académico y su interacción (p=0.261), pero significativos para género. Se observó que el comportamiento fue diferente en ambos géneros. El género masculino tiende a descender entre el primer y tercer año de pregrado, y el Género femenino también desciende entre el primer y segundo año de pregrado para luego alcanzar los niveles promedio de empatía del género masculino.
Conclusión: los resultados obtenidos muestran que las medias de la variable estudiada no muestran gran diferencia entre los diferentes cursos de pregrado, sin embargo, se observa un ligero aumento en el cuarto año de pregrado. Hubo diferencias significativas entre géneros, las puntuaciones observadas en los estudiantes hombres fueron más altas que las obtenidas en las mujeres estudiantes.

DESCRIPTORES: Empatía. Enfermería. Estudiantes de Enfermería. Educación en Enfermería.

INTRODUCTION

At the present time, the health care requires that the provision of the health services are provided with high quality standards, in order to achieve high health indicators and patient satisfaction.[1–4] Due to this, within the framework of the continuous improvement of health services, humanization and communication in the health care are important for the attainment of quality the health care.[2,5] Being empathy and the relationship between health professionals and patients framed within them.[4,6]

Literature shows that empathy is a process that has been approached from different multidisciplinary fields, such as the educational, social, psychological and clinical.[7] Empathy is defined as the set of constructs that includes the processes of placing yourself in the shoes of the other and affective and non-affective responses.[8] Many authors define it as a cognitive attribute that involves an understanding of the patient's experiences, concerns and perspectives as an individual, and combines it with the ability to communicate this understanding to the patient.[9–10]

Some studies indicate the benefits of empathy behavior in the relationship between health professional and patient.[6,11–13] In a study conducted in Chile, patients indicated that the most important thing was the empathy and the commitment capacity of the professional during the provision of the service.[14] In other words, due to a greater satisfaction with the care received, they provide more information about their symptoms and concerns, greater adherence to the treatment, and it increases the precision of the diagnosis.[15–16]

Empathy in the health care can be understood as a cognitive and behavioral attribute that constitutes as a basic skill in human relationships, which is expressed on voluntary basis.[17] In the field of Nursing, the empathy is defined as the ability of a nurse to recognize and share emotions and moods with the patient to understand the meaning of their behavior,[18] therefore, it is considered a fundamental aspect in the nurse-patient communication process, and it has a relevant place in the professional practice[19–22] due to the fact that is the articulating axis in nursing cares in its different areas of performance, being a substantial element to provide quality care.

Empathy, as a vital characteristic in a therapeutic relationship, is perceived more precarious, due to multiple factors, among them: great advancements in science and medical technology, the media, culture, beliefs, and individual aspects coming from the doctor, family and patient, previous experiences in a therapeutic relationship, and the modeling of teachers in the academic training process, among others. This phenomenon has been identified as "erosion of empathy".[23–24]

Caring is a fundamental part of being and is the most primitive act that a person performs to be a human being.[25] This is how nursing care starts from the communication and a humanized relationship between the professional and the human being who is being care for. In such a way that human care goes beyond a good treatment or patient satisfaction, it comprises deeper aspects because there is someone who needs to be care.[25] Given the risk of dehumanization in patient care, due to the great administrative restructuring of most health systems in the world, it is necessary to rescue the human, spiritual and transpersonal aspect,[26] which are fundamental components of empathy for an adequate development of nursing professional practice.

The relevance of this study lies in the possibility of showing scientific research that evidences the empathic behavior of the students as future nurses who will become the generational change, so that the training curricula can include this component as a substantial aspect for the practice of nursing care, thus improving the quality of health care services.

In Colombia, competent, comprehensive health professionals with high-quality training are required.[27] Therefore, the purpose of the Academic Programs in the Health-Care area should be aimed at strengthening the socio-humanistic training curriculum for the development of empathy and assertive communication. This study aimed to evaluate the empathic orientation in nursing students of a private university in Barranquilla.

METHODS

A quantitative study was carried out in a descriptive, exploratory and transversal design, with a sample of 489 students (91.9% of the population) enrolled in the Nursing Program of the Metropolitana University of Barranquilla, Colombia, of a population of 532 students (loss percentage 8%), to which the Jefferson Medical Empathy Scale (EEMJ), a Spanish version for medical students (version S), that was validated in Mexico and Chile,[28–29] and adapted for nursing students,[29] was applied. This instrument consists of 20 Likert-type questions on a scale of 7 points (1=strongly disagree, 7=strongly agree) and associates the 3 factors of empathy: a) perspective taking, b) compassionate attention and c) ability to "put yourself in the patient's shoes".[28–29]

The application of the scale was anonymous and confidential (neutral operator) during the second academic period of 2017. The students were recruited through census sampling in the classrooms and the information was collected for 4 months. Prior to its application, the EEMJ (Chilean version) was subjected to the criterion of experts (three academics of recognized professional trajectory and suitability) in order to verify the cultural and content validity. The students' understanding of the culturally adapted scale was performed through a pilot test. All the above, keeping the ethical characteristics emitted in the declaration of Helsinki and Resolution 008430 of 1993 for research with humans in Colombia. Additionally, this study was endorsed by the bioethics committee of the Metropolitan University and classified as a minimum risk investigation.

Data was submitted to tests for normality (Kolmogorov-Smirnov), and equality of variance (Levene's test). The internal reliability of the data as the values of this statistician were estimated using the general Cronbach's alpha whilst each of the elements was being eliminated (questions), intraclass correlation coefficient, Hotelling's T2 and Tukey's non-additivity test. Similarly, means and standard deviation were estimated. A bi-factorial analysis of variance (ANOVA), model III, was applied in order to find differences in the means between academic years, between genders and in the interaction of these two factors. The invariance of the empathy measurement models was analyzed considering each gender as a sample in order to measure the goodness of fit of the models used and for this purpose the chi-square statistic, the goodness-of-fit index (GFI) was estimated and the mean square approximation error (RMSEA) as absolute adjustment measures, the confirmatory adjustment index (CFI) and the Akaike information criterion (AIC)

The data was described by chart boxes and simple arithmetic, and processed through the statistical program SPSS version 20.0. The level of significance was $\alpha \leq 0.05$ and $\beta < 0.20$ in all cases.

RESULTS

The 489 students included in the study were distributed as follows: first academic year:91, second:137, third: 128 and fourth: 133. Of these, 428 were women and 61 were men. The Kolmogorov-Smirnov and Levene tests were not significant ($p > 0.05$), therefore, the data showed a normal distribution and equality variances. Cronbach's alpha values were satisfactory (non-typified=0.717 and typified=0.728), from which is inferred that the data has internal reliability.

The value of the total Cronbach's alpha, if an element were removed, fluctuated between values [0.684; 0.733] and it is inferred that the test maintains a high reliability, independently of the fact that one of them is eliminated in the estimation of this statistician. All of this is confirmed by the value found for the intraclass correlation coefficient ($F=8.54$, $p<0.005$). Hotelling's T2 test ($F=125.48$) and Tukey's non-additive ($F=71.22$) were highly significant ($p<0.005$). In the first case, it is inferred that the means of the questions are different from each other, which shows that not all questions contribute equally to the overall mean of the questions (mean=5.34) and, in the second case, it is inferred that it is necessary to raise the power of the tests to achieve the additive character of the data.

The estimated goodness-of-fit indices lead to the acceptance of the equivalence of the measurement models between the two genres. Although the value of chi squared in the model without estimated restriction leads to reject the hypothesis of invariance ($\chi 2$=256,123), the other indices estimated supported the unrestricted invariance model (GFI=.970, CFI=.983, RMSEA=.036, AIC=416,102).

The results of the estimation of means, standard deviation and sample size for each level of the two factors studied are shown in Table 1 and in Figures 1 and 2 respectively in both cases.

Table 1 – Results of the mean and standard deviation of the mean at each of the levels of the factors studied. Barranquilla, CO, Colombia, 2017. (n=489)

Academic Year	Gender	Media	Standard Deviation	n
	Female	104,67	14,874	85
First Year	Male	112,33	8,501	6
	Total	105,18	14,634	91
	Female	103,35	13,998	109
Second Year	Male	109,75	12,186	28
	Total	104,66	13,849	137
	Female	107,96	12,455	120
Third Year	Male	107,38	17,386	8
	Total	107,92	12,729	128
	Female	108,25	13,831	114
Fourth Year	Male	113,58	8,461	19
	Total	109,02	13,305	133
	Female	106,21	13,837	428
Total	Male	110,89	11,590	61
	Total	106,79	13,655	489

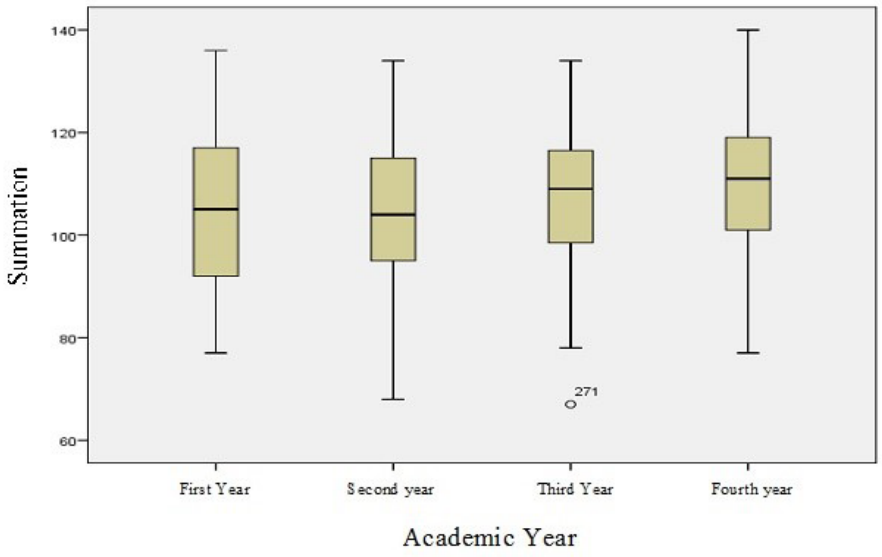

Figure 1 – Results of means and standard deviations in the levels of the Academic Year factor in box charts (including atypical data). Barranquilla, Co, Colombia, 2017.

The ANOVA results were not significant in the Academic Year factor and in the interaction (p=0.261), but significant in Gender (p=0.032) (Table 1). The eta square values were 0.008, 0.010 and 0.004 for both factors and their interaction respectively, and the power was 0.357; 0.576 and 0.171 respectively. From these results it can be inferred that it is necessary to increase the size of the sample to reach the value of the accepted power (0.80). The value of R2 corrected was 0.023, which means that the factors studied explain only 2.3% of all variation in empathy.

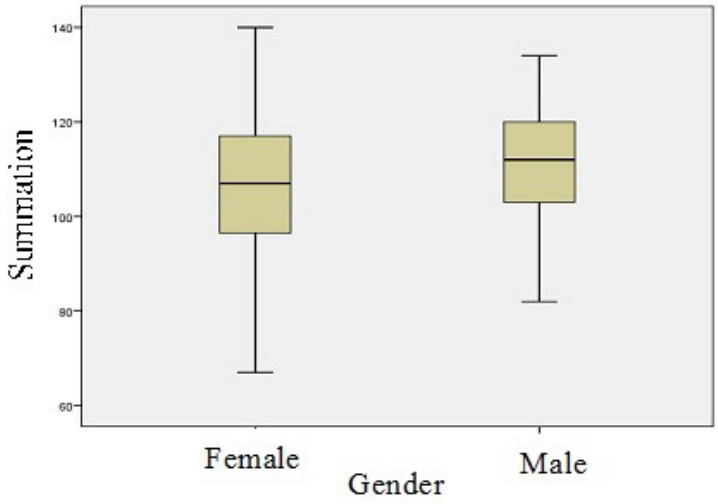

Figure 2 – Results of means and standard deviations in the levels of the Gender factor in box charts (including atypical data). Barranquilla, Co, Colombia, 2017.

Finally, Figure 3 shows the distribution of the averages of the genders in each of the Academic Years. It was observed that the behavior is different in both genders. The masculine gender tends to descend between the first and third year and the female gender also descends between the first and second year and then reaches the average levels of empathy of the male gender. Subsequently, the latter, increases more significantly than the average levels of the female.

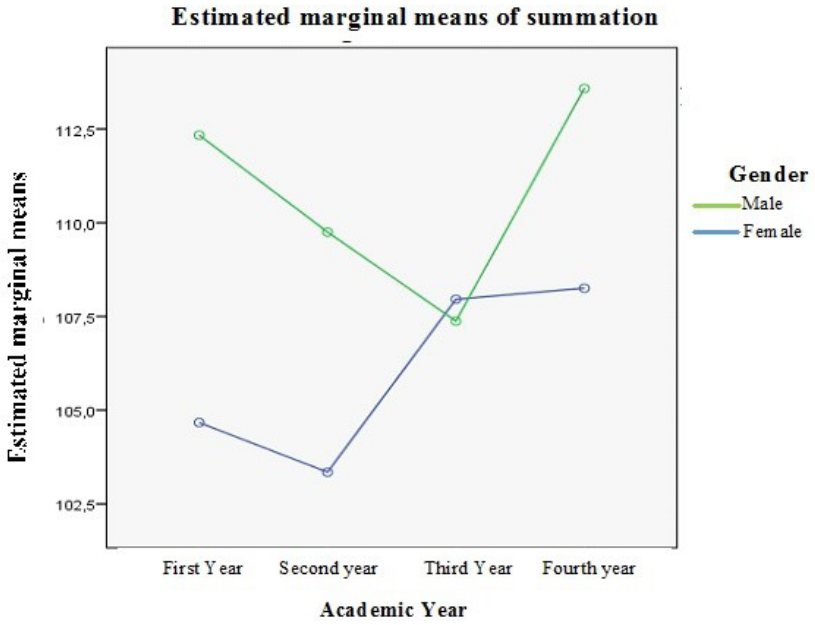

Figure 3 – Results of the means in the levels of the Factor Year Academic separated by each gender in simple arithmetic graphs. Barranquilla, Co, Colombia, 2017.

DISCUSSION

The results obtained in the present study show that the levels of empathy orientation were not significant within the Academic Year, despite a slight increase in the fourth undergraduate year. This behavior is contrary to the ones found in previous studies conducted in others countries[13,30–32] and similar to the ones found in other studies conducted in Colombia, Turkey and Peru,[29,33–35] in which is argued that as the Academic Year progresses, the level of empathy perception decreases.

This decrease in the most advanced years of undergraduate studies could be associated to the adaptive response to the stress of academic work, to economic issues, even to the abuse perceived by students with in the health system,[24,36] but it could also be related to a state of defense, along with fear and insecurity undergone by students when confronting patients for the first time. The authors infer that this result could be related to the fact that health institutions are more reluctant to provide students with direct care activities, due to current patient safety policies. These policies seek to minimize risks that may endanger the well-being and life of the patient.

Regarding gender, it was identified that the highest percentage was represented by the female gender and, to a lesser extent by the male gender, which is a feature related to the historical findings of the profession in which is known that nursing has been strongly influenced by the female inheritance. This is due to the fact that family care was taken up by women, given their close relationship with activities such as child rearing, housework and home care.[37] The same results were found in studies reviewed, showing that the female gender influence in the profession is still the majority.[30,34,38]

On the other hand, it was observed that nursing students of the male gender scored higher levels of empathy orientation than the female gender, similar to that found in dental studies, where the scores observed in men were higher than those obtained by women but not significant.[35]

These results point to the fact that in previous studies on empathy in Latin America, there are higher levels in the female gender, or similar between both genders.[4,30] In the context of this study, inferential statistics could probably include gender bias, considering the proportion of women who have traditionally integrated nursing programs (more women are enrolled in this program than men with a ratio of 7: 1); In this way, it is necessary to take into account, as a conditioner, this aspect at the moment of drawing conclusions regarding the empathy manifested by the individuals that conformed the sample.

The empathy is related to the capacity to understand the intimacy of the other, is necessary for to do the right thing and, sometimes, it is necessary for moral worth.[39–40] For this reason, empathic care should not be a label only for female nurses, should be a characteristic that should be encouraged from the curriculum to any student (male or female) who chooses nursing as a future professional and work.

With regard to the means in the levels of the Academic Year Factor separated in each gender, the results in the study are striking because, in principle, both genders would be expected to start undergraduate studies with equal levels of empathy, as the educational process increases concomitantly in the levels of said variable. However, the data show that the behavior is downward, that is, in the first and second year of the undergraduate studies empathy levels decrease in both groups, but in the following years increases significantly. Therefore, the increase is conditioned to the gender. Initially, women tend to show levels of empathy at the early years in relation to men, but men, although showing levels of empathy in a later stage, do so with a rapid and greater tendency.

These gender outcomes differ from those reported in others studies,[29,40–41] where women scored higher than men, but levels of empathy orientation were similar in students with more clinical care experience who scored higher than in those who did not have it, that is to say, the levels increase as university education progresses.

The decline in levels of empathy orientation in the first academic year could be sustained by the fact that students are not close to real intra- and extra-mural scenarios of training practices that limit personal experience with illness and death before beginning clinical rotations.[24] This aspect occurs due to the increase in clinical simulation as a pedagogical strategy that has been implemented by the nursing program for the teaching of clinical procedures in nursing; perhaps, this could be a strategy that instead of approaching and giving confidence to the students in their practice, will generate difficulties when it comes to caring for a real patient.

The increase in levels of empathy orientation in female students in the second undergraduate year and their increase in both genders in the third undergraduate year could be justified by the fact that the Nursing Program Curriculum of the second undergraduate year (beginning of the fourth semester) of the Metropolitana University is in transition, and therefore, some curricular modifications were made; Including disciplinary subjects with broad ethical and socio-humanistic content, at the same time students are incorporated into training scenarios where they interact directly with patients through nursing care.

On the other hand, the Nursing Curriculum is based on models and theories according to the applicability in a given context, taking into account the learning objectives of the subject in which the course of life of people is contemplated. The usefulness of these conceptual frameworks is necessary for the development of one's own disciplinary knowledge and the practice[42–43] due to they play a determining role in the empathy approach on the training of nursing students.

These models include Virginia Henderson's theory of 14 basic needs, Hildegard Peplau's theory of interpersonal relations, Jean Watson's theory of human care, and Madeleine Leininger's theory of diversity and universality of cultural care, among others, in which empathy is considered as a transversal axis to provide nursing care. Empathy plays an important role in the provision of care that is consistent with culture. In fact, the literature evidences the existence of scales of ethno-cultural empathy that have the purpose of measuring empathic competences in students of health sciences to adequately treat the health problems of people of different cultures and ethnicities.[44] Meanwhile, some authors affirm that nursing care is based on a set of altruistic universal humanistic values, within which empathy is found.[45]

Consequently, in the third academic year students have greater contact with patients and the rest of the health care team in the different clinical learning scenarios. Among the population groups that receive their care are: pregnant women, puerperium and newborns, couples and vulnerable groups at different stages of life. This is not far from what has been observed in countries such as Greece, where third year undergraduate students are trained at a theoretical and practical level to approach patients with medical, psychological or psychiatric problems in a clinical rotation.[46]

This study has some limitations, for example: the percentage of loss of students (8%) who could not participate in the study due to the following criteria: being on maternity leave or inability (1%), not being officially enrolled in the academic program (2%), and for not giving their voluntary consent (5%). However, even so, the sample size is significant to obtain a generalized picture regarding the behavior of empathy in nursing students.

Finally, it is important to mention that, although the methodology used allowed achieving the desired purpose to understand the behavior of the empathy phenomenon in nursing students, it is necessary that empathy be measured in the real practice scenario, where the student experiences situations of direct attention to patients.

CONCLUSION

This study did not show significant differences among academic years, but it did in gender. The above could be related to the fact that the curriculum of the Nursing Program of the Metropolitana University develops a methodology of theoretical-practical learning, so that students face the health care of patients from the beginning of their undergraduate studies; allowing them to learn in an experiential way. However, gender imbalance in sample size could somehow explain the difference between the two genders.

These findings show that empathy continues to be an issue that needs to be strengthened in nurse training, and that teachers have a responsibility to provide training aspects that generate more empathy orientation.

It is concluded that there is an imminent need to design and implement, in a concomitant way to the professional training, diverse educational strategies that promote the emotional development of nursing students, thus they strengthen their empathy capacity in face of a personal encounter with the patients along their academic training.

REFERENCES

1. Borré-Ortiz YM, Lenis-Victoria C, González-Ruíz G. Utilidad del cuestionario SERVQHOS-E para medir calidad percibida de la atención de enfermería. Rev CES Salud Pública [Internet] 2014 Dec [cited 2017 Oct 20]; 5(2):127-36. Available from: http://revistas.ces.edu.co/index.php/ces_salud_publica/article/view/3016/2234
2. Correa-Zambrano ML. Humanization of attention in health services: a matter of care. Rev Cuid. [Internet] 2016 June [cited 2017 Oct 20];7(1):1210-18. Available from: https://dx.doi.org/10.15649/cuidarte.v7i1.300
3. Borré-Ortiz YM, Vega-Vega Y. Calidad percibida de la atención de enfermería por pacientes hospitalizados. Cienc. Enferm. [Internet] 2014 Dec [cited 2017 Oct 20];20(3): 81-94. Available from: https://dx.doi.org/10.4067/S0717-95532014000300008
4. Madera-Amaya M, Tirado-Amador L, González-Martínez F. Factores relacionados con la empatía en estudiantes de Enfermería de la Universidad de Cartagena. Enferm Clin. [Internet] 2016 Oct [cited 2017 Oct 21];26(5):282-9. Available from: https://dx.doi.org/10.1016/j.enfcli.2016.06.004
5. Martin E, Sarmiento P, Ramírez A. Influencia de la comunicación del profesional de la salud en la calidad de la atención a largo plazo. Rev Cal Asist [Internet] 2014 June [cited 2017 Oct 21]; 29(3):135-42. Available from: https://dx.doi.org/10.1016/j.cali.2013.11.007
6. Donoso-Sabando CA. La empatía en la relación médico-paciente como manifestación del respeto por la dignidad de la persona. Una aportación de Edith Stein. Pers. Bioét. [Internet] 2014 Dec [cited 2017 Nov 10];18(2):184-93. Available from: https://dx.doi.org/10.5294/pebi.2014.18.2.8
7. Arenas CA, Jaramillo N. Concepciones de la empatía a nivel general, psicológico y a partir de sus instrumentos de medición. Rev Electr Psyconex [Internet] 2017 [cited 2019 May 25];9(15): Available from: https://aprendeenlinea.udea.edu.co/revistas/index.php/Psyconex/article/view/330991/20787259
8. Navarro-Saldaña G, Maluenda J, Varas-Contreras M. Diferencias en empatía según sexo y área disciplinar en estudiantes universitarios chilenos de la provincia de Concepción, Chile. Educación. [Internet] 2016 Sept [cited 2017 Nov 12];25(49): 63-82. Available from: https://dx.doi.org/10.18800/educacion.201602.004

9. Sulzer SH, Feinstein NW, Wendland C. Assessing Empathy Development in Medical Education: A Systematic Review. Med Educ. [Internet] 2016 Feb [cited 2017 Nov 15];50(3): 300-10. Available from: https://dx.doi.org/10.1111/medu.12806

10. Chen P, Wang G, Ma R, Jing F, Zhang Y, Wang Y, et al. Multidimensional assessment of empathic abilities in patients with insular glioma. Cogn Affect Behav Neurosci. [Internet] 2016 Jul [cited 2017 Nov 15]:16(5):962-75. Available from: https://link.springer.com/article/10.3758/s13415-016-0445-0

11. Riess H, Kraft-Todd G. Empathy: a tool to enhance nonverbal communication between clinicians and their patients. Academic Medicine [Internet] 2014 Aug [cited 2017 Nov 25]:89(8): 1108-12. Available from: https://journals.lww.com/academicmedicine/fulltext/2014/08000/e_m_p_a_t_h_y____a_tool_to_enhance_nonverbal.12.aspx

12. Duarte J, Pinto-Gouveia J, Cruz B. Relationships between nurses' empathy, self-compassion and dimensions of professional quality of life: A cross-sectional study. Int J Nurs Stud [Internet] 2016 Aug [cited 2017 Dec 05];60:1-11. Available from: https://dx.doi.org/10.1016/j.ijnurstu.2016.02.015

13. Dupuy LP, Salazar-Blanco OF. Concepciones sobre empatía: desarrollo de un instrumento para la evaluación formativa a partir de una experiencia docente con residentes de pediatría de la Universidad de Antioquia. FEM. 2017 Oct [cited 2017 Dec 08]; 20(5):227-33. Disponible en: http://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S2014-98322017000500005&lng=es

14. Landman C, Canales S, Garay V, García P, López C, Pérez J. et al. Cuidado humanizado desde la perspectiva del enfermero de emergencia en un hospital de Quillota, Chile. Enfermería (Montev.). [Internet] 2014 Oct [cited 2017 Dec 15]; 3(2):12-21. Available from: http://revistas.ucu.edu.uy/index.php/enfermeriacuidadoshumanizados/article/view/564

15. Decety J, Fotopoulou A. Why empathy has a beneficial impact on others in medicine: unifying theories. Front Behav Neurosci. [Internet] 2014 Dec [cited 2017 Dec 15];8: 457. Available from: https://dx.doi.org/10.3389/fnbeh.2014.00457

16. Mayer SD, Peterfy E, Crossman SH, Phipps LB, Vanderbilt AA. Patient-centeredness and empathy in a bilingual interprofessional primary care teaching clinic: a pilot study. J Multidiscip Healthc. [Internet] 2016 Aug [cited 2017 Dec 20]; 9:395-400. Available from: https://dx.doi.org/10.2147/jmdh.s107851

17. Tafazoli M, Ezzati R, Mazlom SR, Asgharipour N. The Effect of Empathy Training on Empathic Skills of Midwifery Students of Mashhad University of Medical Sciences, Mashhad, Iran. J Midwifery Reprod Health. 2018; 6(2):1236-43. Available from: https://dx.doi.org/10.22038/JMRH.2018.10214

18. Triana-Restrepo MC. La empatía en la relación enfermera-paciente. Av. Enferm. [Internet] 2017 Aug [cited 2018 Feb 05];35(2):121-2. Available from: https://dx.doi.org/10.15446/av.enferm.v35n2.66941

19. Ramírez P, Müggenburg C. Relaciones personales entre la enfermera y el paciente. Enfermería universitaria [Internet] 2015 Sept [cited 2017 Dec 25];12(3):134-43. Available from: https://dx.doi.org/10.1016/j.reu.2015.07.004

20. Marcysiak M, Dabrowska O, Marcysiak MB. Understanding the concept of empathy in relation to nursing. Prog Health Sci [Internet] 2014 Dec [cited 2017 Sept 25];4(2): 75-81. Available from: https://pdfs.semanticscholar.org/e59b/d36d6af7ac44fe9b712ccd0b7d36094ea6d6.pdf

21. Bramhall E. Effective communication skills in nursing practice. Nursing Standard [Internet] 2014 Dec [cited 2018 Jan 16]; 29(14):53-9. Available from: https://dx.doi.org/10.7748/ns.29.14.53.e9355

22. Borré-Ortiz YM, Sánchez D, Márquez Y, Lobo L, Polo M, Rodríguez V. Evaluación de la atención de enfermería por gestantes que asisten a un programa de control prenatal de Malambo-Atlántico (Colombia). Horiz Enferm. 2019 [cited 2019 May 18];30(1):36-48. Available from: https://dx.doi.org/10.7764/horiz_enferm.30.1.36-48

23. Moreto G, González-Blasco P, Pessini L, Craice-de Benedetto MA. La erosión de la empatía en estudiantes de Medicina: reporte de un estudio realizado en una universidad en São Paulo, Brasil. Atención Familiar [Internet] 2014 Mar [cited 2017 Nov 19];21(1):16-9. Available from: http://www.medigraphic.com/cgi-bin/new/resumen.cgi?idarticulo=47249

24. Galán González-Serna JM, Romero R, Morillo MS, Alarcón JM. Descenso de empatía en estudiantes de enfermería y análisis de posibles factores implicados. Psicología Educativa [Internet] 2014 Jun [cited 2017 Dec 20];20(1):53-60. Available from: https://dx.doi.org/10.1016/j.pse.2014.05.007

25. Herrera-Zuleta I, Bautista-Perdomo L, López-Reina M, Ordoñez-Correa M, Rojas-Rivera J, Suarez-Riascos H, et al. Percepciones de las gestantes en torno al cuidado humanizado por enfermería. Rev. cienc. cuidad. [Internet] 2016 Dec [cited 2018 Jan 10]; 13(2):58-72. Available from: https://dx.doi.org/10.22463/17949831.763

26. Triffauxa JM, Tisseronc S, Nasello JÁ. Decline of empathy among medical students: Dehumanization or useful coping process?. L'Encéphale 2019 Feb [cited 2019 May 10]; 45(1):3-8. Available from: https://dx.doi.org/10.1016/j.encep.2018.05.003

27. Borré-Ortiz YM, Pabón Y, Henao L, Amaya K, Polo K. Caracterización de los programas de Enfermería en Colombia. Invest. Andina [Internet] 2015 Dec [cited 2017 Sept 20];17(31):1418-32. Available from: http://revia.areandina.edu.co/ojs/index.php/IA/article/view/551/553

28. Parra-Ramírez GJ, Cámara-Vallejos RM. Nivel de empatía médica y factores asociados en estudiantes de medicina. Investigación Educ. Médica. [Internet] 2017 Dec [cited 2018 Feb 05];6(24): 221-7. Available from: https://dx.doi.org/10.1016/j.riem.2016.11.001

29. Díaz-Narváez V, Muñoz-Gámbaro G, Duarte-Gómez N, Reyes-Martínez M, Caro S, Calzadilla-Núñez A, et al. Empatía en estudiantes de enfermería de la Universidad Mayor, sede Temuco, IX región, Chile. Aquichan [Internet] 2014 Sep [cited 2017 Oct 12];14(3):388-402. Available from: https://dx.doi.org/10.5294/aqui.2014.14.3.9

30. Montilva M, García M, Torres A, Puertas M, Zapata E. Empatía según la escala de Jefferson en estudiantes de Medicina y Enfermería en Venezuela. Investigación Educ. Médica [Internet] 2015 Dec [cited 2017 Oct 02];4(16):223-8. Available from: https://dx.doi.org/10.1016/j.riem.2015.04.006

31. Saeidi S, Reza-Masouleh S, Chehrzad MM, Kazem Nejad LE. Empathy with Patients Compared between First and Final Year Nursing Students. J Holist Nurs Midwifery. 2017 [cited 2018 Dec 12];27(1):79-85. Available from: https://dx.doi.org/10.18869/acadpub.hnmj.27.1.79

32. Williams B, Boyle M, Tozer-Jones J, Devenish S, Hartley P, McCall M, et al. Undergraduate paramedic students' empathy levels: A two-year longitudinal study. J Nurs Educ Pract. [Internet] 2015 Jan [cited 2017 Nov 11];5(1): 58-64. Available from: https://dx.doi.org/10.5430/jnep.v5n1p58

33. Pazar B, Demiralp M, Erer I. The communication skills and the empathic tendency levels of nursing students: a cross-sectional study. Contemp Nurse. 2017 Jun [cited 2019 Jan 10]; 53(3):368-77. Available from: https://dx.doi.org/10.1080/10376178.2017.1359101

34. Condori YA. Empatía en los estudiantes de enfermería de la Universidad Nacional del Altiplano Puno 2016 [thesis]. Puno (PE): Universidad Nacional del Altiplano; 2018 [cited 2019 Jan 22]. Available from: http://repositorio.unap.edu.pe/bitstream/handle/unap/7440/condori_gomez_yessica_anahy.pdf?sequence=1&isallowed=y

35. Salcedo-Rioja M, Díaz-Narváez VP. Empatía en estudiantes de odontología de la Universidad Nacional Mayor de San Marcos (Perú). Salud Uninorte [Internet] 2015 Dec [cited 2018 Jan 10]; 31(3):565-74. Available from: https://dx.doi.org/10.14482/sun.31.3.6801

36. Calzadilla-Núñez A, Díaz-Narváez VP, Dávila-Pontón Y, Aguilera-Muñoz J, Fortich-Mesa N, Aparicio-Marenco D, et al. Erosión empática durante la formación médica según el género: Estudio transversal. Arch. Argent. Pediatr. [Internet] 2017 Dec [cited 2018 Feb 05];115(6):556-61. Available from: https://dx.doi.org/10.5546/aap.2017.556

37. Vicente MC, Acuña-Delgado A. Influencia de la feminización de la enfermería en su desarrollo profesional. Antropología Experimental [Internet] 2014 [cited 2017 Dec 05];9(9):119-36. Available from: http://revista.ujaen.es/huesped/rae/articulos2009/09celma09.pdf

38. Bernalte-Martí V. Minoría de hombres en la profesión de enfermería: reflexiones sobre su historia, imagen y evolución en España. Enferm. Global [Internet] 2015 Jan [cited 2017 Dec 10];14(37):328-34. Available from: http://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S1695-61412015000100014

39. Masto M. Empathy and its role in morality. South J Philos. 2015;53(1):74-96. Available from: https://dx.doi.org/10.1111/sjp.12097

40. Williams B, Brown T, Boyle M, McKenna L, Palermo C, Etherington J. Levels of empathy in undergraduate emergency health, nursing, and midwifery students: a longitudinal study. Adv Med Educ Pract. 2014 Sept [cited 2018 Aug 28];11(5):299-306. Available from: http://dx.doi.org/10.2147/amep.s66681.

41. Williams B, Brown T, McKenna L, Boyle MJ, Palermo C, Nestel D, Brightwell R, McCall L, Russo V. Empathy levels among health professional students: a cross-sectional study at two universities in Australia. Adv Med Educ Pract. 2014 May [cited 2017 Aug 28]; 3(5):107-13. Available from: https://dx.doi.org/10.2147/AMEP.S57569

42. Morales-Aguilar RS, Lastre-Amell GE, Pardo-Vásquez AC. Application of theoretical and methodological components of nursing care. Rev. Cienc. Cuidad. [Internet] 2016 Aug [cited 2018 Jan 15];13(2):107-20. Available from: https://dx.doi.org/10.22463/17949831.766

43. Borré-Ortiz YM, Lenis-Victoria C, Suárez-Villa M, Tafur-Castillo J. Disciplinary Knowledge in Nursing Curriculum: A Vital Need to Transform Practice. Rev Cienc Salud. [Internet] 2015 Dec [cited 2017 Dec 15];13(3):481-91. Available from: https://dx.doi.org/10.12804/revsalud13.03.2015.12

44. Albar MJ, García-Ramírez M, Pérez P, Luque-Ribelles V, Garrido R, Bocchino A. Adaptation to spanish of an ethnocultural empathy scale. Texto Contexto Enferm. [Internet] 2015 Feb [cited 2017 Dec 15];24(3):621-8. Available from: https://dx.doi.org/10.1590/0104-07072015001270014

45. Lopera-Betancur MA. Significado atribuido por las enfermeras a la educación para cuidar del paciente moribundo. Enfermería universitaria [Internet] 2015 June [cited 2018 Feb 05];12(2):73-79. Available from: https://dx.doi.org/10.1016/j.reu.2015.04.002

46. Ouzouni C, Nakakis K. An exploratory study of student nurses' empathy. Health Sci. J. [Internet] 2012 [cited 2017 Dec 25];6(3):534-52. Available from: http://hypatia.teiath.gr/xmlui/bitstream/handle/11400/1370/6313.pdf?sequence=1

NOTES

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ACKNOWLEDGMENTS

The authors thank the students for their participation in the research.

FUNDING INFORMATION

Financed by the Metropolitan University

ETHICS COMMITTEE IN RESEARCH

Approved by the Ethics Committee in Research of the Metropolitana University of Barranquilla, Colombia. Agreement 023-2016.

CONFLICT OF INTEREST

There is no conflict of interest

HISTORICAL

Received: September 15, 2018.
Approved: June 24, 2019.

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