Research Article

Association between Emotional Intelligence and Family Functionality in Residents of Family Medicine in Tijuana, Mexico

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Abstract

Background: The family medicine resident stays in permanent contact with the primary care centers where acquire the knowledge of primary, integral and continuous care for the individual and their family. These future family doctors will be the head of the preventive and curative care and will frequently serve as counselors to family members.

Objective: To determine the relationship between emotional intelligence and family functionality in Family Medicine Resident Physicians in the family medicine unit #27 of Tijuana, Mexico.

Methods: Comparative cross-sectional study in family medicine resident physicians at FMU 27. Participants answered the family APGAR and TMMS-24 scale to determine the family functionality and emotional intelligence. Descriptive statistics were used, the qualitative variables were expressed in frequencies and percentages, and the quantitative variables in measures of central tendency and dispersion. The assumption of normality was made by the Kolmogorov-Smirnov test. The Chi-squared test was used to analyze differences in categorical variables, and the Odds ratio was used to calculate risk. The information obtained was analyzed in the statistical program SPSS version 25.

Results: 58 participants were included. 46 (79.3%) residents have a functional family, of which 14 (24.1%) pay little attention to their emotions and 4 (6.9%) pays too much attention. Of the total of residents, 35 (60.3%) present adequate attention.

Conclusions: Although most studies affirm that there is a relationship in family functionality and emotional intelligence, a significant relationship was not confirmed.

Keywords: Family Functionality; Emotional Intelligence; Family Medicine Residents

Introduction

The family medicine resident stays in permanent contact with the primary care centers where acquire the knowledge of primary, integral and continuous care for the individual and their family [1]. These future family doctors will be the head of the preventive and curative care and will frequently serve as counselors to family members. During residency there are stressful and interpersonal factors that can be associated with chronic fatigue, inefficiency and denial, compromising their psychological state [2]. In this situation the emotional intelligence and the family support are key tools to overcome adversity.

Emotional intelligence is defined as a characteristic that allows a person to relate to different stimuli, states or situations in the environment [3]. Another definition is the ability to demonstrate to the individual an awareness of their personal emotions to access and provide feelings that facilitate thinking to adopt an attitude that favors their emotional and intellectual growth; as well as to

access and generate feelings that facilitate thinking, understanding and regulation of emotions. In 1995, the one who popularized the concept was Goleman who commented that emotional intelligence allows academic and work success with greater accuracy than classic intelligence measures such as IQ [4]. With emotional intelligence, people can access to identify their emotions, as well as have a better result in their activities, distinguish which of them have the greatest strength to mark their personality [5].

In medicine, emotional intelligence is a key idea for structuring interpersonal and communication skills among medical personnel, adopting an empathic and social attitude, thereby demonstrating professionalism. According to this, it is said that emotional intelligence in medicine helps in the doctor-patient relationship, aspects related to the quality of care and patient satisfaction, the level of involvement, the professional satisfaction of doctors and, finally in the training and development of clinical communication skills [6].

Emotional intelligence generally born in the family core.

Functional family prepares the members to face the problems. In that way, family functionality has been defined by Mc Cubbin and Thompson (1987) as "the set of attributes that characterize the family as a system and that explain the regularities found in the way the family system operates, evaluates or behaves" [7]. Family functionality implies concepts such as: family cohesion, democratic parenting styles, emotional attachment and conflict resolution strategies and refers to the ability of the family to maintain its system despite events or threats that may generate changes in any of the its members [8].

A functional family can be differentiated in the levels of flexibility it develops to adapt and respond to everyday difficulties. While in dysfunctional systems, behavioral options are usually blocked and they lack resolutive alternatives. In other words, the inappropriate behavior of its members limits the healthy and peaceful coexistence of family members, since they do not have the necessary resources to face certain family problems [9]. Within the family there are general functions for the preservation and transmission of culture, the protection of all against internal and external dangers, of which there are five that are care, affection, expression of sexuality and regulation of fertility, socialization and lastly, status or social level [10]. The present study aims to determine the relationship between emotional intelligence and family functionality in Family Medicine Resident Physicians in the family medicine unit #27 of Tijuana, Mexico.

Material and Methods

Study design and population

A comparative cross-sectional study was carried out in Tijuana, Mexico, between August to September 2021. The research was developed in the family medicine unit number 27 (UMF 27) of the Mexican Institute of Social Security (IMSS); primary care unit in the region. All the family medicine residents were included in the study.

Variables

The collection of variables was done with a standardized data form. The variables collected were the following: age, sex, marital status, education, emotional intelligence and family functionality. The tools used were Trait Meta-Mood Scale (TMMS-24) to measure emotional intelligence, it was evaluated with the Spanish version which includes three dimensions: attention or perception, which is the identification of emotions and knowing how to express; clarity that is the understanding of emotions and; repair or regulation, which is the ability to manage emotions. The 3 dimensions have 8 items each one. The responses evaluated are 5-point Likert type. This test has an internal consistency of α=0.90 for perception, α=0.90 for understanding, and α=0.86 for emotional regulation or repair. The scale distinguishes between men and women. The total score was interpreted in each dimension in a particular way [11].

Family APGAR was used for family functionality, which is a screening tool that has the components of family function, which are adaptation, participation, gain or growth, affection and resources. Each question is expressed with a Likert-type response. In 1994, a proposal was made in Colombia for a validation, for adaptation to the Spanish language, it has a Cronbach's Alpha = 0.86. It was given to each patient and answered personally, except those who cannot read. Each response is scored from 0 to 4, with the following rating, 0: Never, 1: Almost never, 2: Sometimes, 3: Almost always, and 4:

Always. The score was interpreted as normal 17-20 points, mild dysfunction 16-13 points, moderate dysfunction 12-10 points, severe dysfunction less than or equal to 9 points [12].

Statistical analysis

Descriptive statistics were used, the qualitative variables were expressed in frequencies and percentages, and the quantitative variables in measures of central tendency and dispersion. The assumption of normality was made by the Kolmogorov-Smirnov test. The Chi-squared test was used to analyze differences in categorical variables, and the Odds ratio was used to calculate risk. The information obtained was analyzed in the statistical program SPSS version 25.
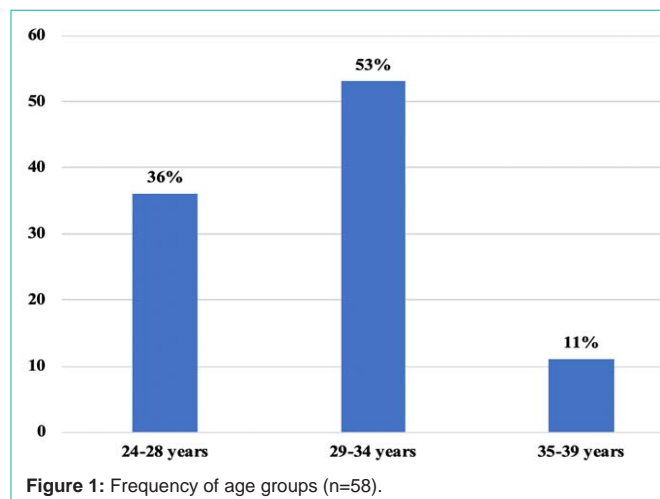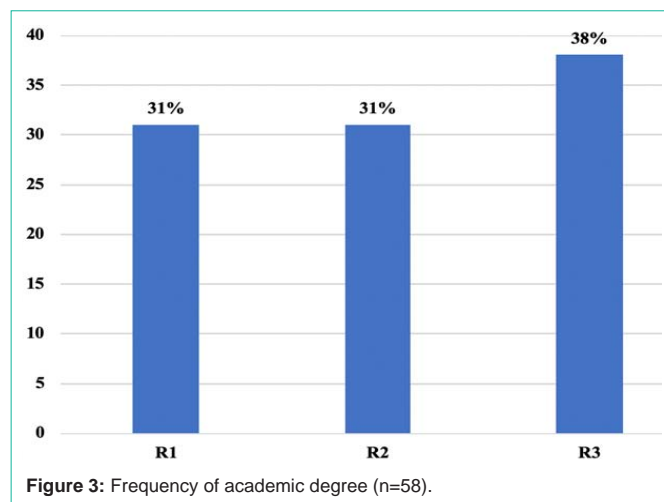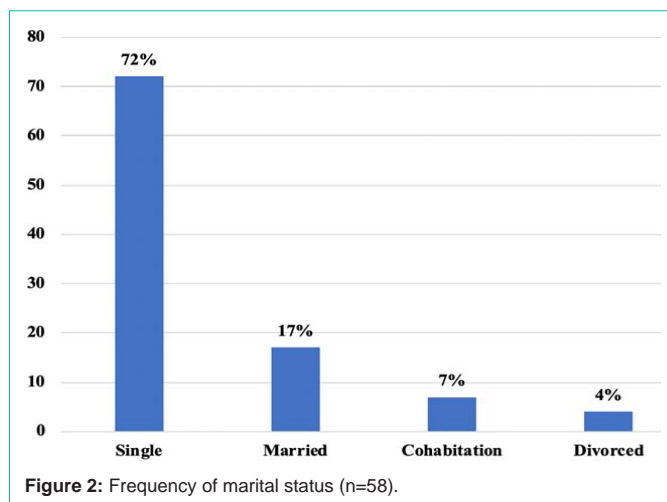
Ethics

The study was approved by the Local Committee for Ethics and Health Research number 204, with registration number R-2021-204-034. The research was conducted under the General Health Law on Health Research, the Declaration of Helsinki and bioethical principles.

Results

58 participants were included, of which the mean age was 29.7 years. The age range was: 24-28 years with 21 residents (36.2%), 29-34 years with 31 residents (53.4%) and over 34 years with 6 participants (10%). In sex, 37 (63.8%) were female and 21 (36.2%) male. Of the total number of participants included, 42 residents (72.4%) were single, 4 (6.9%) in cohabitation, 10 (17.2%) married and 2 (3.4%) divorced. In the grade of specialty, 31% belonged to the first grade, 31% to second grade and the third grade were 38%.

In the family functionality and emotional intelligence, 46 (79.3%) residents have a functional family, of which 14 (24.1%) pay little attention to their emotions and 4 (6.9%) pays too much attention. Only 1 (1.72) resident presented severe dysfunction which have little attention to their emotions. Of the total of residents, 35 (60.3%) present adequate attention. In the relationship between the clarity of emotions, 31 (53.45%) residents have adequate clarity in their emotions, of these 24 (41.38%) have a functional family. Of the residents who had an excellent understanding of their emotions, 100% had a functional family. According to the repair of emotional

Figure 1: Frequency of age groups (n=58).

Figure 2: Frequency of marital status (n=58).

Figure 3: Frequency of academic degree (n=58).

intelligence and family functionality of the residents, which should improve their regulation, there are 2 (3.45%) who have mild family dysfunction. There were 9 (15.5%) residents who have excellent emotion regulation (Figure 1-3).

To determine the relationship between attention in emotional intelligence and family functionality, the X2 Pearson test was used, which resulted in 2.4 with a value of p<0.659, so it was determined that there is no relationship between these variables. To determine the symmetry between both variables, the Kendall's Tau test was used, obtaining a value -0.043 with a p<0.40 which indicates that the direction between both variables is a null correlation.

According to the relationship between clarity in emotional intelligence and family functionality, the X^2 Pearson test was used, which resulted in 7.2 with a value of p<0.12, which indicates that there is no relationship between these variables. To determine the symmetry between both variables, the Kendall's Tau test was used, obtaining a value of -0.152 with a p<0.35 which indicates that the direction between both variables is a null correlation.

In the relationship between repair in emotional intelligence and family functionality, the plausibility test was used, which resulted in 5.8 with a value of p<0.213, there is no relationship between these variables, the symmetry between both variables has a value -0.043 with a p<0.4 which indicates a null correlation.

Discussion

An observational study was carried out in Colombia (2020), in a sample of 232 university students from medical schools who were in the 1st to 10th semester of medicine in search of the association between emotional intelligence and empathy in medical work Using the EQ-1 DE Bar-On questionnaire and medical empathy, it was found that emotional intelligence is an average of 60.38 for 65.5% of the population, which places it at a very low level. The value of medical empathy was 95.39, not finding a significant relationship between the variables [13].

In Italy in 2018 a cross-sectional study was carried out where emotional intelligence, sociodemographic and academic variables were evaluated in current and former master's degree students in nursing; women had higher scores (0.2 points more than men)

in emotional intelligence factors, and significant differences were also shown in academic performance. Emotional intelligence (EI) is strongly linked to the characteristics of the individual and their personalities and differs from technical and professional skills. EI is also an excellent predictor of career success [14].

In China, a cross-sectional study was carried out in three schools with the objective of examining the associations of emotional intelligence and gratitude with empathy in medical students, studying 1,392 participants, observing that emotional intelligence is positively related (r = 0.55, p <0.01) [15]. In order to describe the self-report of health and of the family support and functionality in a cohort of students who start medical-surgical specialties in Bogota (2016), it was found that of 89 students, 86 (96.6%) responded to the survey. 68.6% reported being single, 24.4% being married and 23.3% having children. 22.1% lived with their partner and 20.9% lived alone. Of 10 married residents who had to relocate, half did not live with their partner. 33.7% of the students had a family with some degree of dysfunction [16].

A descriptive study was carried out in which 76 medical students from the National University of Asunción in Paraguay were included in 2016, where the family APGAR and friendship APGAR scales were applied. Regarding the level of satisfaction with the support network, both family and friends, it was observed that 22.4% of the participants reported significant family dysfunction and that 17.1% did not feel supported by their friends [17]. Family functioning is a determining factor in emotional health of family members, as a dysfunctional response generates chronic emotional stress. In our research we found that 46 (79.31%) have normal family functionality and only 1 (1.72%) have severe dysfunction. According to Merchán-Clavellino (2018), one aspect to consider is gender differences, because both self-perceived capacities and affective states show different profiles between men and women, according to the repair of feelings is better in the male sex than in the female, which coincided with our results where male (80.9%) had an adequate to excellent regulation of their feelings [11].

Ortiz-Acosta (2016) observes that doctors have an assertive communication when interacting with the patients, which allows access to diagnostic, prognostic and therapeutic decisions that

transcend care of the patient. The results of our study reveal the importance of Emotional Intelligence in residents for their clinical practice and interactions with users. It was determined that in relation to the attention, clarity and regulation of emotional intelligence does not present a significant association with family functionality, which represent a better opportunity for new studies involving the rest of the members of the family core, concluding that the family functionality does not affect the emotional intelligence [18]. It was observed that most of the residents have normal family functionality, only 12 (20.69%) presented a degree of family dysfunction, therefore the results contrast with the literature found.

Conclusion

The objective of this research was to know the relationship of family functionality and emotional intelligence of family medicine residents. We believe that this study is transcendental since it allows us as next family doctors to have the ability to identify the factors that could influence emotional intelligence and thus be able to have a better result in our work activities. Although most studies affirm that there is a relationship in family functionality and emotional intelligence, a significant relationship was not confirmed.

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