

COPING AND FAMILY ADAPTATION OF UNDERGRADUATE STUDENTS OF A HIGHER EDUCATION INSTITUTION, IN TIMES OF PANDEMIC

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Abstract

Introduction: *The SARS-CoV2 pandemic declared by the World Health Organization in March 2020 as COVID-19 brought with it drastic measures of health, economic and social control, which fell on the family structure and, differentially, on each of its members, who were isolated to the space of the home. In education, remote communication processes were reinvented that forced families and institutions to appropriate the multiple technological alternatives existing in educational informatics for continuous learning. Understanding family dynamics as the set of relationships that develop within the family organization, where the forms of authority and exercise of power, norms, affects, generation of values, systems of collaboration and exchange, beliefs, conflict management, participation and collaboration activities, and in synthesis the various ways of relating to the community and social-educational environment are reflected, It is necessary to know to what extent the pandemic could influence the family dynamics of nursing students and, therefore, their academic process.*

Objective: *To identify the characteristics of family dynamics in terms of cohesion, adaptability, communication, coping capacity and adaptation, of nursing students of the University Foundation of the Andean Area, within the framework of the COVID-19 pandemic.*

Materials and methods. *Cross-sectional descriptive study. Random sample stratified by academic semester, with an NC=95% and precision error=5%, corresponding to 416 nursing students, who participated voluntarily. Instruments: Sociodemographic characterization survey, Olson et al. communication scale, FACES III scale to assess family cohesion and flexibility, and Calixta Roy's CAPS scale to assess coping and adaptation capacity. Self-completed information collection. Database in Excel. Statistical analysis with proportions, means, Chi-square test and logistic regression, using SPSS v.26.*

Results. *Female predominance (78.4%), ages between 21 and 30 years old (57.5%), urban area (90.6%), single (66.3%). Coping capacity was average and adaptation was compensatory. Significant relationships were found with age, gender, academic day, and occupation.*

Conclusions. *The ability to cope and adapt during the pandemic was aided by good communication and was negatively affected by family aggregation and flexibility regarding boundaries, leadership, roles, and rules.*

Keywords. *Family health, functionality, adaptation, communication, cohesion, flexibility.*

INTRODUCTION

As a result of the constant social transfer resulting from the globalization of the economy, customs, forms and models of organization have been incorporated into most social formations that have transformed the traditional notion of the family. From its origins, conceived as a social cell made up of people with some degree of kinship, as the primordial place where the social risks of its members are shared and managed, the idea of family has gone through different moments, in accordance with the historical-social development of peoples, and in each one, the concept has been configured from the different disciplines, From the established hegemonic patterns, to being read today as a diverse, complex, dynamic reality, which is mobilized to the rhythm of the social order, with the conflicts and tensions of spiritual, emotional, cultural, social and legal order that constitute it.

In this sense, it should be considered that each family has its own dynamics and functionality, since, as María Cristina Palacio points out, there are five issues that cross it, that are knotted in the intimate



space of the family and make its identification complex: sexuality, procreation, cohabitation, survival and coexistence; these issues, analysed in numerous manuscripts in the context of the COVID-19 pandemic. They require a conception of the family that is as flexible as the institution itself. In order to respond to the conditions of complexity described, for the purposes of this study, the interdisciplinary conception of family proposed by Oliva and Villa will be used:

"The family is the group of two or more people who coexist as a spiritual, cultural and socioeconomic unit, who even without living together physically, share psycho-emotional and material needs, common objectives and interests of development, from different aspects whose priority and dynamics belong to their free will: psychological, social, cultural, biological, economic and legal." (p.17)

The capacities of cohabitation, coexistence and subsistence of families around the world were widely exposed in the context of the COVID-19 Pandemic; anxiety, fear, uncertainty, pain and all the feelings found in the reduced spaces of physical confinement, shook, stripped bare and made visible the intimacy of coexistence to the external world; the private space became the public arena of agreements and disputes; Family strengths and weaknesses came to the fore.

Numerous authors have characterized families in times of pandemic. Córdoba and Zamudio, from a qualitative perspective, externalized four analytical categories: 1. Adjustments in the family, which include changes in routines, delegation of functions; 2. Living together in the family: taking care of health and family interactions; 3. Support Network: Family and Spirituality Support and 4. Affective communication: management of emotions, expression of affection.

Family flexibility/adaptability during the pandemic was explored by Aponte et al., who observed that family members engaged with decision-making and household maintenance obligations in a functional way. Both Lebow's study and Wang's study highlighted the stable cohabitation of the couple as a protective factor for the control of stress in the family group.

Family health is one of the pillars of the Nursing Profession's performance; There is an ethical, legal and social commitment to the integral care of the family. Several nursing theorists have addressed the family as a subject of care. To assess the ability of families to cope and adapt to the crisis unleashed by the COVID-19 pandemic, elements of Sister Calixta Roy's Adaptation Model were appropriated. According to this model, the human system is a set of interdependent and connected parts based on a whole, and adaptation is a process and result by which these human systems, capable of thinking, feeling and interacting, choose to integrate with their environment.

To understand and make the Model operational, Roy considers that people are in permanent interaction with their environment; The human adaptive system is dynamically influenced by all kinds of focal, residual, and contextual stimuli that trigger two central coping processes: the regulatory process (controls internal processes related to physical-physiological needs) and the cognator (regulates self-concept, role function, and interdependence). These coping processes can be adaptive or ineffective. Depending on the responses triggered, the level of adaptation achieved is assessed: integrated, compensatory or committed.

To be more specific about individual nursing intervention needs, Roy differentiates five coping factors: F1: Recursive-centered; F2: Focused physical reactions; F3: Alert process; F4: Systematic processing and F5: Knowing and relating; Coping capacity can be categorized as high, medium or low in each factor consistent with Roy's approach, in this study, the assessment of the coping and adaptation capacity of nursing students in the face of the crisis derived from the COVID-19 pandemic is the starting point to facilitate higher levels of adaptation, through the strengthening of family coping mechanisms. This ability will depend on the processing of stimuli from the environment, one of which is family functionality.

Family functionality from Olson's perspective can be studied using a Circumflex Model, which focuses on the three main dimensions of the family system: communication, cohesion and flexibility. For Olson, balanced family systems tend to be more functional compared to unbalanced systems. Family communication is defined as the process of interrelation that occurs between the members of a household, likewise, it is where the development of each of the stages takes place. Family cohesion refers to the support that family members provide to each other, as well as the sense of



involvement and closeness between them, and family flexibility is defined as the potential, willingness to change in the face of stimuli from the external environment.

As a working hypothesis, it is proposed that the participants in this study received focal stimuli from their environment such as permanent reports on the expansion and lethality of the virus: death of thousands of people, some close or known, use of protective measures, forced confinement, forced transition to the use of virtual learning environments and others. related in the literature; They also received contextual stimuli framed in their family dynamics and functionality, in terms of communication, cohesion and flexibility; In addition, they brought with them residual stimuli such as age, gender, marital status, socioeconomic status, ethnicity, occupation, residence, and others; that all these stimuli were processed by the regulatory and cognator subsystems of the human adaptive system and their results are expressed in their ability to cope and adapt to the crisis derived from the COVID-19 pandemic. The intention of the proposed analysis is to explore the strength of the relationship between the stimuli and the coping and adaptation capacity of the participating students.

OBJECTIVES

General Objective

To relate the coping and adaptation capacity of university nursing students with their sociodemographic characteristics and family functionality, in the context of the COVID-19 pandemic.

Specific objectives

To develop a social, demographic and cultural profile of the families of the students of the Nursing program of the University Foundation of the Andean Area.

To describe the levels of family functioning of students in the Nursing program.

To identify the coping and adaptation capacity of the students of the Nursing program in the face of the Covid-19 pandemic.

MATERIALS AND METHODS

Cross-sectional descriptive study. Population: 1360 nursing students. Random sample stratified by academic semester, with an NC=95% and Precision error=5%, corresponding to 420 students. Four incomplete records were excluded and the sample was left with 416 records.

Instruments:

1. Sociodemographic characterization survey: age, gender, semester studied, academic day, marital status, children, housing status, occupation, origin and residence.
2. Olson et al. communication scale.¹ It consists of 10 items on a Likert scale from 1 to 5 formulated positively. The higher the score, the greater the communication.
3. FACES III scale to assess family cohesion and flexibility.² It consists of 20 items on a Likert scale from 1 to 5. Even items value cohesion and odd items value flexibility. The higher the score, the greater the cohesion or flexibility. Proportions make it possible to identify intervention needs.
4. Calixta Roy's CAPS scale³ to assess coping and adaptation capacity. It consists of 33 questions that assess five coping factors and three levels of adaptation. The questions are reversed. The higher the score, the greater the adaptation; Averages by factor allow us to identify intervention needs.

For the collection of information, the selected students were informed about each scale, were given an explanation of informed consent and were given tools for self-completion. Anonymity and the right to withdraw from the process were preserved.

Database in Excel. Statistical analysis with proportions, means and Chi-square test.

RESULTS



Sociodemographic characteristics: A total of 416 students from the Nursing Program of a Higher Education Institution participated. The following prevailed: ages between 21 and 30 years, female gender, mestizo ethnicity, students who also work, urban residence, without children, live with their nuclear family, are single, of academic day B that takes place on Fridays and Saturdays, from Valle del Cauca and Risaralda, from economic strata 2 and 3.

Table 1. Levels of Functionality and Family Typologies in Nursing Students, According to the Circumflex Model for FACESIII by Olson, Portner & Lavee-2005

Levels of Functionality	Family typologies	Frequency	Percentage
Functional	Separate/Flexible	35	8,4
	United/Flexible	61	14,7
	Separate/Structured	38	9,1
	United/Structured	38	9,1
	Total	172	41,3
Mid-Range	Detached / Structured	12	2,9
	Detached / Flexible	2	0,5
	Separate/Rigid	6	1,4
	Bonded / Rigid	4	1,0
	Tangled/Flexible	57	13,7
	Tangled/Structured	19	4,6
	United / Chaotic	47	11,3
	Separate/chaotic	9	2,2
Total	156	37,5	
Extreme dysfunctionality	Tangled/Chaotic	80	19,2
	Detached/Chaotic	3	0,7
	Detached / Rigid	5	1,2
	Tangled/Rigid	0	0,0
	Total	88	21,2

Source: Authors. Proportional distribution of applied survey results

It can be seen that the highest score obtained is in the category of balanced functionality with 172 of the participants. It is also important to note that an item alone obtains the highest percentage of 19.2% belonging to the category of extreme dysfunction.

COPING AND ADAPTATION

The recorded responses showed ineffective coping in 127 (69.5%) students and adaptive coping in 286 (30.5%); Adaptation processes show the predominance of a compensatory level (53.8%). Table 2 presents the coping factors and the levels of adaptation achieved. Factors 1 and 4 stand out: Focused Recursive and Systematic Processing, where high proportions of high coping were obtained; A quarter of the students scored at the level of committed adaptation.

Table 2. Coping factors and levels of family adaptation in university nursing students.

Coping Factors	Coping skills						Total
	Loud		Middle		Baja California		
	Freq	Percentage	Freq	Percentage	Freq	Percentage	
Factor 1. Recursive Centered	165	39,7	245	58,9	6	1,4	416



Factor 2. Physical & Focused Reactions	93	22,2	301	72,5	22	5,3	416
Factor 3. Alert Process	78	18,8	274	65,9	64	15,4	416
Factor 4. Systematic processing	160	38,5	243	58,4	13	3,1	416
Factor 5. Knowing and relating	150	36,1	257	61,7	9	2,2	416

	Integrated		Compensatory		Engaged		
	Freq	Percentage	Freq	Percentage	Freq	Percentage	
Level of adaptation	87	20,9	224	53,8	105	25,3	416

Source: Authors' Calculation

DISCUSSION

The levels of functionality and family typologies is marked by the degree of interaction between each of the members who inhabit the same place is evidenced as tangled/chaotic.

From the results obtained in relation to the 416 participants, it can be identified that in the aspect of coping the factors with high capacity are 1 and 4, recursive centered and systematic processing, although it is also important to mention that the vast majority of the participants have a medium coping capacity, being factor 2 and 3, Physical and focused reactions and alerting process.

For authors such as Lazarus and Folkman (1986) who presented a theory where they argue that coping arises from people's interactions with and in the various circumstances of their lives in different sociocultural contexts, which demonstrates the multicausality of the phenomenon. Such interactions have mutual effects on personal and situational variables in a specific social context. These effects include beliefs, social norms, customs, assimilation of rights and duties, patterns of behavior, meanings, etc., which characterize the various groups to which a person belongs.

CONCLUSIONS

The ability to cope and adapt during the pandemic was aided by good communication and was negatively affected by family aggregation and flexibility regarding boundaries, leadership, roles, and rules. Family functionality indicates tangled/chaotic, which is a high figure where family dynamics were affected during the Covid-19 pandemic in extreme dysfunction. All this can be manifested in the fact that each of the students was in an unknown and uncertain situation, whether personal, work and/or academic, and it is also worth pointing out that each of the people is influenced by different factors of communication with societies.

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