

## Research Article

# Family Functionality after Covid-19

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## Abstract

**General Objective:** To evaluate family functionality after the health emergency at the first level of care.

**Material and Methods:** A prospective, non-comparative cross-sectional study was carried out through studies of family functionality with the ff-sil instrument and evaluation of the marital subsystem with the Chavez-Velasco marital subsystem instrument applied to the families assigned to the unit of family medicine No. 32 of the IMSS of Guadalupe, Nuevo León. Through non-probabilistic convenience sampling.

**Results:** 609 participants were included, of which 30.24% had some degree of family dysfunction, this was identified as 19.58% of dysfunction at the marital subsystem level. A 32.73% of family functionality alterations were found in the families that had Home office X2:13 and a p of 0.01.

**Conclusion:** The health contingency is a watershed of the need to interact more as a family, due to social isolation the family lives more, however there is the presence of family dysfunction and it is important to identify it for its timely management.

**Keywords:** Coronavirus infection; Social isolation; Family relationships; Housing

## Introduction

The isolation generated by the health contingency by SARS-CoV-2 has disproportionately affected family functionality, where families of first level of care are located. Coronaviruses are important human and animal pathogens. In late 2019, a new coronavirus was identified as the cause of a cluster of pneumonia cases in Wuhan, China. It spread rapidly, causing a global pandemic, and the start of the contingency. In February 2020, the WHO designated the disease Covid-19, which stands for coronavirus disease 2019 [1]. The pathology came to Mexico, by people from Italy. The first case of Covid-19 in Mexico was on February 27, 2020 [2]. On March 30, 2020, the plenary session of the General Health Council (CSG) was held, headed by the President of the Republic, Andrés Manuel López Obrador. Where a health emergency and suspension of non-essential activities were declared [3]. The Government of Mexico reiterated to citizens the need to refrain from carrying out activities outside the home, maintain a healthy distance and basic hygiene measures, in order to avoid a greater number of infections [4]. The "health emergency" is: a situation of real danger, already existing, caused by epidemics, pandemics, invasion of communicable diseases or accidents, which force the government apparatus of a country, state or municipality, to take immediate action to preserve health of its inhabitants [5]. Confinement is an intervention applied at the community level when the measures mentioned above have been insufficient to contain the spread of a disease. It consists of combining strategies to reduce social interactions such as social distancing, the mandatory use of masks, restriction of circulation hours, suspension of transport, closure of borders, etc. [6].

The appearance and development of the pandemic brought with it a series of changes in most sectors, one of the most challenged has

been that of education, considering from virtuality, an imminent global pedagogical blackout in the framework of the transition between third and fourth industrial revolution [7,8]. The health emergency came suddenly and the teaching staff had to adjust and adapt their daily pedagogical actions, previously planned to innovate in the attention to the student body in a virtual way, with the use of technologies simultaneously [9].

In the case of basic education, the participation of mothers and fathers has been required to attend to academic problems [10]. Information and Communication Technologies (ICT) can complement, enrich and transform education, to work from home [11]. This distance education of proven quality and effectiveness has created a multitude of organizational, technological, and pedagogical models for teaching and learning based on ubiquitous, instantaneous, and sustained real-time communication and collaboration [12,13].

On the other hand, the confinement has multiplied the tasks of daily life, and with it the efforts to maintain sanity to face the uncertainty that a pandemic brings. Household chores are examples of activities that are added to women, in addition to the so-called home office and homeschooling [14].

The family is a system that in turn is made up of subsystems, every family has characteristics that can make them appear different or similar to others, but there are other characteristics that are essential to know since, according to Satir, they are useful to determine the degree of family functionality, forces to know the Hierarchy understanding it as the level of authority that governs in the family organization, the Limits that represent the rules that delimit the hierarchies. Family roles refer to the way of acting, expectations and norms that an individual has in a specific family situation in which other people or objects are involved [15-19].

Social isolation requires families to remain in their homes, resulting in intense and restless contact and exhaustion affecting the entire family system [20]. A functional family is healthy when it faces crises consistently and seeks stability, support systems influence the appropriate response to crises [21]. Urie Bronfenbrenner's Ecological Theory of Systems consists of an environmental approach to the development of the individual through the different environments in which he develops and which influence change and his cognitive, moral and relational development. The systems from less to greater globality, names four systems that surround the primary nucleus understood as the same individual. To these spatial areas must be added the chronosystem, which introduces the temporal dimension into the scheme. The cultural evolution and the living conditions of the environment are included here [22,23].

The FF-SIL Family Functioning Questionnaire prepared by Ortega (1999). This instrument consists of 14 situations that may or may not occur to a given family. For each situation there is a scale of 5 qualitative responses, which in turn have a scale of points: Almost never 1 point, Rarely 2 points, Sometimes 3 points, often 4 points, almost always 5 points. Once the questionnaire has been completed, the points will be added, which will determine the category of family functioning: Functional Family or Dysfunctional Family [24,25].

## Material and Methods

The general objective of the present investigation is: To evaluate the family functionality after isolation due to the health contingency by SARS-COV-2 in the families of the first level of care. The specific objectives are:

- Evaluate the family functionality of the conjugal subsystem through the instrument of Chávez-Velasco.

- To determine the family typology in the first level of care of families of productive age.

- Identify the presence of comorbidities in family members.

### Design

A prospective, non-comparative cross-sectional study was carried out through studies of family functionality with the ff-sil instrument and evaluation of the marital subsystem with the Chavez-Velasco marital subsystem instrument applied to families assigned to the family medicine unit. No. 32 of the IMSS of Guadalupe, Nuevo León. Through non-probabilistic convenience sampling.

### Population

There were 609 participants, of which 5 were discarded due to incomplete completion of the questionnaire, out of 604 participants who met the selection criteria of this research. All were beneficiaries of the family medicine unit No. 32 of Guadalupe, Nuevo León.

### Selection Criteria

**Inclusion Criteria:** Families attached to UMF No. 32 with 2 or more members who are doing home office and/or home schooling work.

**Exclusion Criteria Patients Without Family:** Families who are going through bereavement. Patients who do not agree to participate in the study.

**Elimination Criteria:** Incomplete surveys.

## The Calculation of the Sample Size and Sampling Technique

Non-probabilistic sampling for consecutive cases from July 1, 2021 to August 31, 2021. A sample of 600 research participants was obtained.

## Results

The sample obtained was 609 participants, of which 5 were discarded due to incomplete completion of the questionnaire, to 604 participants who met the selection criteria of the present investigation. According to the corresponding variables of the sociodemographic study, it was obtained that, with respect to sex, gender predominates, with a predominance in women with 75.53% (n = 455) and in the male gender with a percentage of 24.67% (149).

In the quantitative variable, average age was 44.29 years; the measures of central tendency obtained for this variable were Mean 44.29 years, median 44 years and mode 33 years SD (13.4), with a range between 17 and 73 years.

The marital status variable was studied, the highest percentage corresponds to the married category (53.5%), of which the majority of the families the occupation of the head of the family is employed in 40.06%, followed by 34.15% professional family heads.

In the analysis of the variable corresponding to Family Typology, the following frequency distribution is observed, where there is a clear predominance of nuclear families with 79.21% (N=480), compound families with 16.17% (N=98) and nuclear families in 4.62% (N=28).

In addition, the families in the study were asked about the Home office variable, which took into account families where at least one of the members carried out activities virtually in their home. A predominance was observed in the families that did have a home office with a frequency of 443 members of the study (Table 1).

Participants with relatives working from home office were compared with those who did not perform their family functionality from home office, finding that in the families of the participants who had a family member performing home office, 32.67% presented some family dysfunction, being broken down into moderately functional with a 16.93%, dysfunctional with 11.51% and severely functional with 3.15%. Finding a Chi2 9.84 and a p of 0.019 for which

**Table 1:** Home office.

HOME OFFICE	f	%	IC 95%	
NO	161	26.66%	23.28%	30.32%
SI	443	73.34%	69.68%	76.72%

Source: Epi info 7.2 version 7.2

**Table 2:** Family functionality and home office.

	I don't do home office	If I do home office
Functional	75.16%	67.27%
Moderately functional	17.39%	16.93%
Dysfunctional	7.45%	11.51%
Severelydys functional	0.00%	4.29%
<b>X2 9.84 with p 0.019</b>		

Source: Epi info 7.2 version 7.2

**Table 3:** Relationship of family functionality and presence of Covid-19.

	Functional	Moderately functional	Disfunctional	Severely dysfunctional
Didnothave COVID	76.12% (N=220)	19.96% (N=49)	6.23% (N=18)	0.69% (N=2)
Ifyouhad COVID	65.17% (N=199)	17.14% (N=54)	14.29% (N=45)	5.40% (N=17)

**Table 4:** Frequency of familiar functionality with FF-SIL.

DX FF-SIL	f	%	IC 95 %	
Functional	419	68.80%	64.28%	73.71%
Moderately Functional	103	16.91%	14.15%	20.10%
Disfunctional	63	10.34%	8.17%	13.02%
Severamente Disfuncional	24	3.94%	1.13%	6.83%

it is considered statistically significant (Table 2).

In the present study we carried out a search for the evaluation of family function using the FF-Sil instrument with the following results. Where we find that 30.24% have some degree of family dysfunction, with 16.91% with moderate dysfunction, 10.34% dysfunctional and 3.94% with severely dysfunctional functionality (Table 3,4).

Family functionality in the marital subsystem was also investigated, which was obtained with the Chavez-Velasco marital subsystem instrument, in which some family dysfunction was obtained. The participants with moderate dysfunction was 0.46%, while the participants with dysfunctional functionality was 9.79% and those who had severely dysfunctional functionality with 9.34% of the conjugal subsystem.

It was decided to make an association in the variables of participants with relatives who had COVID and their family functionality, finding a Chi2 23.63 and a p of 0.000, for which it is considered statistically significant.

## Discussion

As family physicians, we provide continuous and comprehensive medical care for the individual and the family. We are the medical staff who deeply integrate biological, clinical and behavioral sciences. Due to the Covid-19 pandemic and the needs to reduce infections, the alternative of social confinement was taken worldwide for several months with multiple stress-generating stimuli.

In a study carried out in Portugal by Fernandes, where they evaluated family functionality in social contingency due to the 2019 coronavirus pandemic. The sample consisted of 376 people. Although the mean value indicates a highly functional family, 18.9% of the present values of the participants were compatible with a family with moderate or severe dysfunction. Compared to this study, our results were from 604 families where family functionality was assessed in social contingency due to pandemic due to Covid-19, where we found that 30.24% had some degree of family dysfunction, with 16.91% moderate dysfunction, 10.34% dysfunctional and 3.94% with severely dysfunctional functionality.

According to the results obtained in the families of the UMF #32 in 352 families, at least 1 family member coursed with the Covid-19 disease, with a percentage of 52.15% of the families interviewed, according to the percentage of positive cases in new Leon corresponds to 4.7% of the state's population. In our analysis, the cases of Covid-19

by population were not assessed, we only analyzed whether any of the members of the household had presented Covid-19 since the start of the pandemic.

Other needs to meet the social contingency, was the need to work and continue with the studies was to participate online, according to the INEGI 33.6 million people between the ages of 3 and 29 were enrolled in the 2019- 2020 (62.0% of the total) who were attending their school activities virtually, meanwhile in an arenapublica.com article of the people who work in Mexico, only 45% report working from home or in a mixed format. According to the results obtained and the participants that were included, with a population performing home office of 73.34%, which participants were compared with relatives working home office with those who did not perform home office their family functionality, finding that in the families of the participants who had a family member doing home office, 32.67% presented some family dysfunction, being broken down into moderately functional with 16.93%, dysfunctional with 11.51% and severely functional with 3.15%.

The conjugal subsystem is of great importance together with family functionality. In a study by Mendoza, according to the evaluation of the conjugal subsystem, we found 52% of functional couples, 39% of moderately dysfunctional couples and 9% of severely dysfunctional couples. According to the study we carried out, we obtained that the participants with moderate dysfunction were 0.46%, while the participants with dysfunctional functionality were 9.79% and those who had severely dysfunctional functionality were 9.34% of the conjugal subsystem.

## Conclusion

Covid-19 and the ravages caused in the health sector worldwide, according to the preventive measures used through social confinement, exacerbated concerns due to ignorance of the disease such as fear, worry, anxiety, isolation, crisis, among others. Thus affecting the mental health of the population.

In this study, we analyze family functionality in the Covid-19 pandemic. Where it was obtained that at least 32% of the population course with some degree of family dysfunction in families that at least 1 family member course with home office and that of all the participants interviewed, 30.24% course with some degree of family dysfunction during the Covid-19 contingency.

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## Interest Conflict

The authors declare not to have any interest conflicts.

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