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Family Functionality in Tuberculosis Patients Tended in Health Facility of Los Olivos, 2019

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ABSTRACT

Introduction: Tuberculosis represents one of the chronic diseases, considered a global public health problem due to its mortality rates. Many types of research works mention the different factors that trigger the spread of the virus to the host, which stand out, economic level, inadequate knowledge of the treatment, motivation by the family, leading to the subsequent abandonment of the bacterial resistance of the drug treatment.

Objective: The objective of this research work is to determine the family functionality in people affected by tuberculosis in Health facilities.

Method: This is non-experimental, descriptive research with a quantitative approach, in which a selective, non-probabilistic and transversal associative strategy was used; evaluating 192 families that have relatives with Tuberculosis, between 18 and 65 years old. The collection data technique is the survey and the instrument used Family Adaptability and Cohesion Evaluation Scales (FACES IV) by Olson to assess family composition.

Results: As a result, the leading role played by the family in patients diagnosed with Tuberculosis was obtained, reflecting a high percentage, in the Cohesion dimension, it shows the highest score with 99 (52%) being very connected, in the Flexibility dimension with the highest score with 136 (71%) being the High level, in the Communication dimension High Level with 95 (49%) and in the Family Satisfaction dimension where the Low level predominated with 67 (35%).

Conclusion: We concluded that preventive, and promotional measures should be included in the first level of medical care to provide psychological support to relatives and patients diagnosed with tuberculosis.

Key Words: Family, Family Functionality, Health Center, Survey, Treatment, Tuberculosis

INTRODUCTION

Family functionality is the establishment of bonds and affective ties.¹ The family as a nucleus experiences numerous situations, which can unbalance and cause the breakdown of its integrity, if they do not find a solution so, it can trigger a crisis.

According to the World Health Organization (WHO), tuberculosis (TB) is one of the 10 leading causes of death in the world. In 2018, 10 million people became ill with TB, of which 1.5 million died from the disease.² It is considered a highly contagious and even lethal disease if the family does not propose preventive and promotional measures, going to the nearest Health Center.

According to the Pan American Health Organization (PAHO), in its 2017 report, it indicates that Peru is the sec-

ond country with the highest TB burden, being the Lima and Callao departments where 64% of the cases are concentrated respectively.^{3,4}

According to the Ministerio de Salud (MINSA), in its 2016 report, a total of 30.260 positive symptoms were recorded between the ranges 30 - 59 years old.⁵

The spread of tuberculosis is through expectoration, maintaining a dialogue from an infected person to a healthy person, by which the bacillary concentration is transported through the respiratory tract, reaching the lungs, in 79 to 87% and even locating in other body parts. The causes of tuberculosis are an intense cough that lasts 2 weeks, weakness when carrying out daily activities, become fatigued quickly, fever, night sweats.^{6,7}

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Patient with tuberculosis complies with protocols assigned by the health personnel, where it attends its treatments, one of the factors for which it is vulnerable falls to the psychological aspect with 32.9%, triggering in some cases the stigmatization of the patient at home with 8.5%, often causing internal discomfort, falling into initial stages of depression, loneliness and sadness.⁸

It presents research collected to reduce 90% of deaths from TB and 80% of the incidence of this disease compared to 2015, it is necessary to improve the provision of personnel and apply other strategies such as increasing the number of agent's community. Concluding that although the health services of DIRESA Callao have adequate infrastructure, there are serious limitations in personnel and the information system, regarding the management of TB cases at the first level of care.⁹

The authors present different studies at the Latin American level, one of them Cuba, they show that the patient who lives in nuclear family groups approximates a higher percentage of complying with their pharmacological treatment, which is complemented by the research study carried out in 68 families who represents 35% of the total, who comply with the health treatment.¹⁰

The objective of the study is to determine the family functionality in people affected by tuberculosis in Health Facility, belonging to the Los Olivos district, which it will allow providing relevant and important data about the role played by the family environment in their progressive recovery of the patient with tuberculosis.

The study applied the data collection instrument Family Functioning Assessment Scale (FFAS) was created by David H. Olson, which has been useful to assess family functionality in families of tuberculosis patients from the district of Los Olivos.

The data collection processing was done through the survey of patients affected with tuberculosis, the data to be entered were performed in a data matrix that was designed in the statistical program SPSS (Statistical Package for the Social Sciences) in version 23.0, which it allowed a better data processing for the realization of statistical tables and graphs, later they are described and interpreted in results and discussions, respectively.

The research work is structured as follows: In section II, the development of the data collection processing of tuberculosis patients will be presented and the guidelines to be considered so that they are within the research work. In section III, the results will show the family functionality of the patients treated in the Health establishments of Los Olivos, according to the specified dimensions of the variables measurement instruments. In section IV, it presents the research work discussions, in section V, the conclusions and in section VI the

recommendations as well as the future work that is intended to be achieved with the research work.

Methodology

In this part, the type and design of the research will be evidenced, as well as the population and sample that will be carried out in the research work, in addition to the inclusion and exclusion criteria, and finally, the data collection technique and instrument.

Research Type and Design

The present research work is non-experimental, descriptive with a quantitative approach, it is a cross-sectional correlational investigation.

Population and Sample

The population will be made up of 192 families from the Los Olivos Health Establishments, which have relatives with tuberculosis.

Inclusion Criteria

- People over 18 years old who have a diagnosis of tuberculosis.
- People with a diagnosis of tuberculosis undergo treatment in the centres of health establishments.
- People with a diagnosis of Extra-pulmonary, sensitive, multidrug-resistant, and extremely resistant tuberculosis who are registered in health establishments.
- People who have lived in the jurisdiction of Los Olivos district for 4-6 months.
- People affected by tuberculosis who wishes to participate and signs the informed consent.

Exclusion Criteria

- People under 18 years old who have a diagnosis of tuberculosis.
- The person with tuberculosis does not present alterations in their physical and/or mental capacity.
- People who have not lived in the jurisdiction of Los Olivos district for 4-6 months.
- People affected by tuberculosis who do not wish to participate or sign the informed consent called "CAR-TA N°011-2019-EPENF-UCH".

Technique and Instrument

The technique that was used is the survey, through the questionnaire or data collection instrument on Family Functionality, which aims to measure Family Functionality in patients with tuberculosis treated in Health establishments in the Los Olivos District.

The FACES IV Family Functionality scale was created by David H. Olson, in 1991, its application is given individually, with an approximate duration of 15 minutes, it is aimed at people who are older than 18 years old. The Family Func-

tionality Scale in its definitive version is composed of 42 items, distributed in 2 dimensions: Cohesion consisting of 3 sub-dimensions: Unbound, Balanced Cohesion, and entangled, consisting of 7 items each. The flexibility that groups 3 sub-dimensions: Rigid, Balanced Flexibility, Chaotic, which consist of 7 items each; it also consists of 5 response alternatives, from “very disagree”, “generally disagree”, “undecided”, “generally agree” and “totally agree”¹¹.

Place and Application of the Instrument

The survey carried out to measure Family Functionality in patients with Tuberculosis was carried out in health establishments in the Los Olivos District.

The survey was carried out in morning shifts, the questionnaire was carried out to the patients with an average time of 15 minutes to each selected (those who have more than 18 years old, according to the inclusion criteria) in the research work, it was concluded with regular satisfaction at the time of collecting the surveys, since, at the time of the interview with the patients, many were suspicious of providing their data, and refused to participate in the research work.

In Figure 1, the arrival of the patients is expected to comply with their respective treatment and at the same time survey with prior consent, on Family Functionality in patients with tuberculosis of the Juan Pablo II Health establishment, belonging to the Los Olivos District.

In Figure 2, the medical records and the first and second choice pharmacological treatments of patients with Multidrug-resistant Pulmonary Tuberculosis can be visualized.

Therefore, it is important to emphasize the presence of health professionals, which is of important mental health, the type of diet they follow according to the protocol, in order soon, to meet the objective of their restoration, the well-being of the patient and return to work activities.

RESULT

A summary table of the surveys carried out following the guidelines corresponding to the research work will be shown below:

In Figure 3, it can observe family functionality in its cohesion dimension, where 99 (52%) are very connected, 42 (22%) are connected, 35 (18%) are tangled, 11 (6%) are not very connected and 5 (3%) are unbound.

In Figure 4, it can observe family functionality is in its flexibility dimension, where 136 (71%) are flexible, 45 (23%) are not very flexible, 10 (5%) are very flexible and 1 (1%) is rigid.

In Figure 5, it can observe family functionality in its communication dimension, where the high level prevailed with 95 (49%) patients.

In Figure 6, it can observe family functionality in its satisfaction dimension, where the low level prevailed with 67 (35%) patients.

The management of the situations mentioned above can favour the incidence of tuberculosis in patients treated in the different First Level Health Establishments, which not only requires greater efforts in terms of economic, human, organizational, and operational resources.

Despite the constancy on the part of health personnel in different areas, our research shows that Family Health still needs to be addressed in its entirety, starting with working clearly with the family because this is vitally important support, due to person who has tuberculosis at all levels can achieve the completion of treatment and a speedy recovery.

DISCUSSION

In the present study, the topic of Family Functionality is raised, in the established dimensions, assessing the operation of families in people with tuberculosis assisted in the Los Olivos Health Establishments.

Applying the FACE IV Questionnaire, the Family Functionality variable was measured, being useful as a relational diagnosis and focused on the family system, in its three dimensions: Cohesion, Flexibility and Communication¹².

Regarding its Family Cohesion dimension, in people affected by tuberculosis assisted in Health Establishments in Los Olivos, the very connected Family Functionality predominated, followed by connected, tangled, not very connected and unbound, are those that determine in a general way.

For this it is important that, during the treatment stage of the disease in the patient, to adapt to this new situation, the family sets in motion self-regulation mechanisms that allow it to continue to function, in such a way that changes are generated in the family interactions leading to a balance or imbalance, putting the well-being and management of the sick patient at risk, as well as the functionality of the family system¹³. The results of Jiménez L, Lorence B and collaborators, concluded that its Family Cohesion dimension presented a good cohesion with 50%, compared to Table 1, where it shows 52%, a good connection of support and decisions throughout the family group¹².

Regarding Family Functionality according to the Family Flexibility dimension, in people with tuberculosis, flexibility prevailed, followed by not very flexible and very flexible, this dimension refers to the roles shared by each family member.

Different studies were obtained from Spleen J, Spleen O and collaborators, who mention in their study that the dimensions

of Family Flexibility showed good flexibility with 55%, representing docile flexible families¹⁴.

Regarding Family Functionality in its Family Communication dimension, in patients with tuberculosis, high levels prevailed followed by moderate levels, very high levels, very low levels and low levels. This dimension refers to the fact that there is communication in the family environment where they interact assertively.

Good communication is essential in the family environment, which leads to multiple benefits and can even achieve good relationship stability among their family group. According to studies by Julca F, Melgar C, in their research, they coincide with the fact that the family establishes continuous communication with the patient.¹⁵

Regarding Family Functionality in its Family Satisfaction dimension, in patients with tuberculosis in Los Olivos Health Establishments, low-level Family Functionality prevailed, followed by moderate level, very low level and very high-level Family Functionality.

According to the results reflected, it was low, because both the affected person as well as the family environment undergo changes in the emotional, from the patient in transmitting the disease to others, and in the family participants in being protected with biosecurity material at the time to establish a dialogue.¹⁶

CONCLUSIONS

Numerous preventive programs in Health Establishments at all levels are generally focused on avoiding infectious and chronic diseases, without considering mental health.

The frequency of family support in the patients with tuberculosis analyzed indicates that in our environment mental disorders can become a public health problem, since it is a condition that can be treated and, when recognized, it is possible to increase and raise awareness of family support and prevent new episodes of the disease.

Therefore, preventive, and promotional measures should be included in the first level of medical care to provide psychological support to relatives and patients diagnosed with tuberculosis; This is important if they come from extended families, as this can help reduce the prevalence of depression in these patients. In addition, if severe depression or persistent problems are found in the relationship between family members, the patient and their relatives should be referred to a systematic family therapist.

Recommendations

Compare the results with the leadership of the various Health Establishments of the First Level of Attention of the Los Olivos

District, considering and guiding the interdisciplinary and interdepartmental work, through strategies. In this field, nursing will direct and strengthen the care of affected patients and families, thus promoting the implementation of community and family health plans and reducing the lack of family support.

Implementation in first-level care facilities in the Los Olivos district with programs of sessions aimed at patients and families who were at high risk, being a vulnerable population.

To form family support groups for tuberculosis patients to achieve greater success in adherence to drug treatment. Also, we want to make consent to a family with the treat and care of a tuberculosis patient.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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Figure 1: Care area for taking medications.



Figure 2: Storage area for pharmacological treatments for each patient.

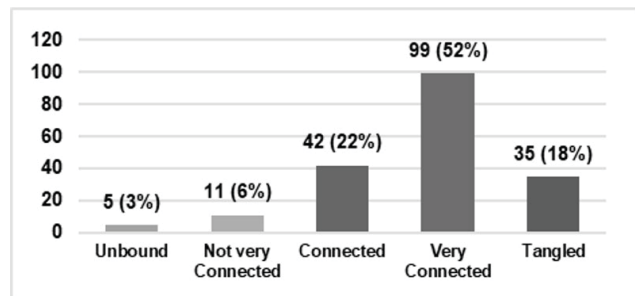


Figure 3: Family functionality in its cohesion dimension, in patients with tuberculosis in the health centers of Los Olivos, 2019 (N = 192).

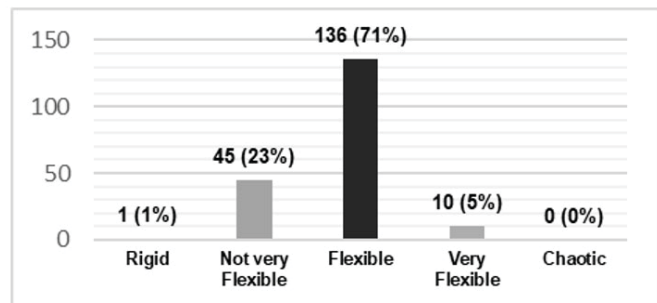


Figure 4: Family functionality in its flexibility dimension, in patients with tuberculosis treated in the health centers of Los Olivos, 2019 (N = 192).

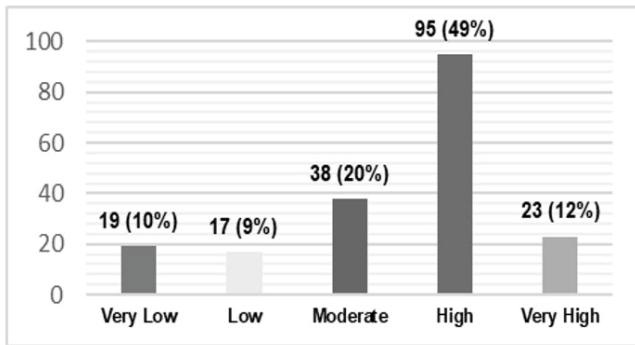


Figure 5: Family functionality in its communication dimension, in patients with tuberculosis treated in the health centers of Los Olivos (N = 192).

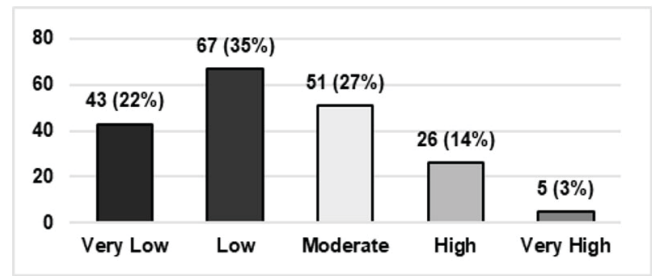


Figure 6: Family functionality in its satisfaction dimension, in patients with tuberculosis treated in the health centers of Los Olivos, 2019 (N = 192).