Perception of social support and quality of life in cancer patients with tuberculosis who attend INEN outpatient clinics

[Percepción del apoyo social y calidad de vida en pacientes oncológicos con tuberculosis que acuden a consultorios externos INEN]

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Resumen
Objetivo: Determinar la percepción del apoyo social y calidad de vida en pacientes oncológicos con tuberculosis que acuden a consultorios externos del Instituto Nacional de Enfermedades Neoplásicas en el 2021. Metodología: El estudio fue de enfoque cuantitativo, correlacional de corte transversal y de diseño no experimental. La población estuvo conformada aproximadamente por 80 pacientes oncológicos con tuberculosis que asisten al Programa de prevención y control de tuberculosis del INEN. Se utilizaron 2 instrumentos; el cuestionario de cuestionario MOS de Apoyo Social en Atención Primaria (De la Revilla et al., 2005), para medir apoyo social con 4 dimensiones: Emocional, interacción social positivo, instrumental y afectivo con 14 ítems y la escala de calidad de vida WHOQOL-BREF, que evaluó 4 dimensiones: salud física, salud psicológica, relaciones sociales y ambiente, con 26 ítemos ambos instrumentos con una escala de Likert que fueron validados mediante el juicio de expertos y se realizó una prueba piloto para obtener el alfa de Cronbach. Los resultados obtenidos fueron que existe correlación de Spearman, indica que existe moderada relación entre la percepción del apoyo social y la calidad de vida en pacientes oncológicos con tuberculosis (Rho= 0,582), lo que significa que ambas variables son significativas (p= .000 < 0,05).

Palabras clave: Percepción del apoyo social, calidad de vida, pacientes oncológicos con tuberculosis.

Abstract
Objectives: To determine the perception of social support and quality of life in cancer patients with tuberculosis attending outpatient clinics of the national institute of neoplastic diseases in 2021. Methodology: The study had a quantitative, correlational, cross-sectional, non-experimental design. The population consisted of approximately 80 oncology patients with tuberculosis attending the INEN tuberculosis prevention and control program. Two instruments were used; the MOS questionnaire of Social Support in Primary Care (De la Revilla et al., 2005), to measure social support with 4 dimensions: Emotional, positive social interaction, instrumental and affective with 14 items and the WHOQOL-BREF quality of life scale, which evaluates 4 dimensions: physical health, psychological health, social relationships and environment, with 26 items both instruments with a Likert scale that were validated by expert judgment and a pilot test was performed to obtain Cronbach's alpha. The results obtained were that there is a Spearman correlation indicating that there is a moderate relationship between perception social support and
the quality of life in oncology patients with tuberculosis (Rho = .582), which means that both variables are significant (p = .000 < .05).

Keywords: Perception of social support, quality of life, cancer patients with tuberculosis.

1. Introduction
Globally, tuberculosis is a disease that prevails to the present day since ancient times, and constitutes an important cause of morbimortality, caused by an infectious agent known as Mycobacterium tuberculosis, which is spread by infected people who expel bacilli into the air by coughing, which usually affects the lung (pulmonary tuberculosis), but can also affect other susceptible organs (extra pulmonary tuberculosis). In 2018 the World Health Organization (WHO), reports that approximately 10 million people became ill with tuberculosis, this disease affects both sexes in all age groups, 57% in men and 32% in women and 11% in children under 15 years; of all cases 8.6% affected people with HIV (WHO, 2020).

Likewise, cancer is a condition that is ranked as the second leading cause of death in the Americas, which during 2018 reported 1.3 million deaths and 3.7 million new cases diagnosed, and it is estimated that the number of cases will increase exceeding 5 million by 2030. (WHO, 2018) Both tuberculosis and cancer may be associated with pictures of chronic systemic inflammation and alterations in the immune response, for such reason some studies suggest that the administration of chemotherapy may develop tuberculosis or reactivate this infection that was latent for many years in the individual, it should be emphasized that the association of tuberculosis and cancer is more common in people who suffer from lung cancer, head and neck cancer and lymphoproliferative malignancies such as oncohematological malignancies. (Cuéllar et al., 2015).

To provide care to the patient with cancer and develops tuberculosis it is necessary to take into account the cultural aspects of the population, to know their limitations such as conditions of poverty exclusion, overcrowding and difficult access to basic services both physical, economic and cultural, to provide comprehensive care, in addition to disseminating adequate information for the understanding of tuberculosis and individual consequences by which the treatment will be more accepted by the patient (Muñoz et al, 2019).

At the National Institute of Neoplastic Diseases, according to statistics from the Annual Tuberculosis Plan Report, in 2018 143 patients were diagnosed with tuberculosis (91 cases of pulmonary TB and 52 cases of extra pulmonary TB), while during 2019 122 cases of tuberculosis were diagnosed, of which 68 were pulmonary tuberculosis and 55 extra pulmonary tuberculosis. Patients affected by tuberculosis amount to 38 new cases, which not only have onco logical comorbidity, but among others such as: HIV, asthma, CKD, Diabetes, etc. (INEN, 2019).

In the outpatient service, Tuberculosis Prevention and Control Program area of the National Institute of Neoplastic Diseases, there is a multidisciplinary team in the management of patients with tuberculosis and cancer, where an average of 10 patients with a diagnosis of tuberculosis in all its forms are seen daily, in addition, nursing counseling, education and follow-up of the diagnosed cases are performed on a daily basis through the use of digital systems such as SIGTB Data (Tuberculosis Management Information System) and NetLab (Laboratory Information System of the National Health Institute) and SISINEN 2. 0, among other strategies that are adapted so that the patient can adhere to the treatment and continue his therapeutic management at the Institute, not only the initial accompaniment through the interview but also the continuity of his treatment processes such as surgery, radiotherapy or chemotherapy that sometimes go hand in hand with the anti-tuberculosis treatment and require the support of the family members.
Social support is a set of human and material resources available to an individual or family to overcome a particular crisis such as an illness, poor economic conditions, family breakdown, etc. Depending on the social support systems, they can constitute a form of interconnected organization, which will favor their effectiveness and profitability, among the main social support networks. Galván (2009). As for social support, it is provided by the most important primary groups for the individual. It is essential that informational processes as a fundamental component in support relationships. According to Cobb, he considers that social support is that information that leads the subject to believe that he is loved and cared for and that he is a member of a network of communication and mutual obligations.

Subsequently, the role of social support in social and community intervention, with emphasis on the formal and informal support systems surrounding the person. Thus, the patient's ties to his or her primary group and use of the social resources available in the community. Support systems provide people with psychosocial provisions to maintain their psychological and emotional health. For which it is necessary to foster supportive links between citizens through a set of activities driven by professionals, the role of the professional as educator and transmitter of information. Historically, in 1982, social support was defined as social activity and availability of friends and family, while Thoits, in the same year, considered social support as "the degree to which basic social needs such as affiliation, affection, belonging, identity, security and approval were satisfied through interaction with other people". (Aranda & Pando, 2013)

For this reason, social support represents a set of helping relationships that can be emotional or material given to a person or group of people. As defined by several studies over the years, social support will facilitate adaptation to different stressful events or demands of the individual, through its support network where family, groups, organizations, communities, etc. are found. That become their support in different situations. There are natural social support networks where the advantage is that the help provided is immediate, and by affinity they usually offer emotional support and solidarity, which is very positive for the patient. The disadvantage is that these networks are improvised, they depend on the closeness of their members and the type of previous affective relationship. Among them are: Family, friends, close relatives, co-workers, Neighbors and spiritual companions (if it belongs to a region-parish) There are other organized social support Networks these groups of people have as an advantage the solidity of their structures and functioning, they will not depend on previous affective relationships. And they are accessible to everyone. The disadvantage is that the help is not so fast since it will require previous studies, bureaucratic procedures, the relationship with people outside the patient's environment, and in several occasions the scarce development of such resources. Among them we have: Organizations to help the patient (clubs, programs), Social Security, Company for which the patient works: some of them have an employee assistance system, Shelter institutions and volunteer organizations. (Ortego et al, 2011).

In terms of social support we have: Structural or quantitative support. This is the number of social relationships or the number of people to whom the patient turns to in order to find solutions to problems, such as family, friends, marital status or belonging to a peer group. And the interconnection between these networks. Functional or qualitative support. These are the perceptions of availability of support, i.e. how the patient perceives or believes that he/she is cared for, loved, esteemed and valued, that he/she belongs to a network of mutual communications and obligations; its most important dimensions are: Emotional support; which is related to the affection and empathy that another person offers them considering it as the most important support. Informational support; it is the information offered to people who are used to face problematic situations. Instrumental support; it is all material help directed to those who need it. Affective support; expressions of affection and love from the person's closest group. Positive social interaction: it is spending time with others and their willingness to be distracted, have fun, etc. (Moyano & Orozco, 2017); (Pedrero et al., 2018).
Social support and health. According to Cohen, the association between social support and health is given by a process, as social support protects people from the potentially negative effects of stressors. Support plays several roles in determining individual responses to stressful events, for example, it prevents adverse health responses to stressful events, strengthens perceived coping capacity, can reduce intrusive thoughts, can also alleviate the impact of negative appraisal by reducing physiological reactivity to stress, and facilitates healthy behavior in patients. (Moreno, 2018).

With regard to the variable quality of life, since 1966 the WHO, during the World Health Forum, defined quality of life as “the perception that an individual has of his place in existence, in the context of the culture and value system in which he lives and in relation to his goals, expectations, norms and concerns. All of this is nuanced by his or her physical health, psychological state, degree of dependence, social relationships, environmental factors and personal beliefs” (Robles et al., 2016).

It is important to highlight that the measurement of quality of life in oncology patients is required to assess some aspects which are: Evaluate the patient's functioning in the different areas of quality of life (psychological, physical, social), and doing it from the patient's perspective, Help to decide the treatments that should be offered to each patient, and also to improve the intervention that is administered. Help to evaluate patient preferences, as patients can assess the effects on their quality of life of the different treatments they might receive. Help in clinical practice to achieve a more in-depth assessment of those areas that are usually not considered, or not enough. The nurse, social support and quality of life. The nurse provides autonomous care for people of all ages, families, groups and communities, sick or not, and in all circumstances and settings, from health promotion, disease prevention and care for the sick, disabled and terminally ill. The nurse has an important role in the health of the oncology patient with tuberculosis, because it accompanies the patient's experience through its dynamic care, and flows around their needs whether emotional or informational, which not only involves him, but also his environment such as family or caregivers, this link will be formed thanks to the empathy of the professional, which aims to build with the patient a conceptual field of understanding that promotes a positive coping change to the disease and improve the quality of life. (WHO, 2018)

For Zhang et al. (2020), in China, states that the patients involved in the study have a low quality of life, as stigma was significant and negatively associated with quality of life, while hope and perceived social support were positively associated with quality of life. On the other hand, Shrestha, et al. (2019) in Nepal that internalized stigma moderates the mediating effect of problem-focused coping on the relationship between perceived social support and quality of life. De Souza et al. (2018), in Brazil, refers that the positive association between quality of life and social support, also determining that the quality of life found in the study considered low and intermediate are fed back by a clinical manifestation and fear burden of stigma related to the two diseases, implying alterations in social relationships.

Poblete et al. (2018), in Chile, that when high levels of social support are obtained, and there was a significant correlation between social support and self-perception of health. Similarly, Moreno et al. (2018), in Colombia that patients with better perception of social support reported better health-related quality of life. Mendoza (2018), that patients with MDR tuberculosis in the health center mostly present medium perceived social support and quality of life in regular level, determining that there is no significant relationship between both variables. Likewise, Gonzalez (2018) that, during the recent diagnosis phase, the relationship between perceived social support and emotion-focused strategies prevails; patients make use of various strategies; and that social support has an impact on the use of strategies considered as adaptive. Chira (2016), that there
is a significant relationship between perceived social support and quality of life in patients with pulmonary tuberculosis.

Finally, social support and quality of life in oncology patients need to be evaluated to provide well-being and comfort to the patient and family during the disease.

2. Materials and methods
The study had a quantitative, cross-sectional, correlational, non-experimental design. The study was carried out in the outpatient service of the National Institute of Neoplastic Diseases (INEN), where the tuberculosis prevention and control program is developed to provide care and attention to oncologic patients with tuberculosis. Study population: The population consisted of all oncology patients with tuberculosis who have been treated and who receive treatment in the Tuberculosis Prevention and Control Program of the National Institute of Neoplastic Diseases, from different departments of Peru and who maintain good communication with nursing for follow-up and controls in the institution. Sampling frame: The sample consisted of a total of 81 oncology patients with tuberculosis attending the INEN's tuberculosis prevention and control program according to the service’s admission register. Therefore, the sample was of a census type and a non-probabilistic convenience sampling was used, where the sample units were chosen taking into account the selection criteria. First, each patient's file and SIGTB Data record were reviewed; if there was no updated data, the health center where each patient was referred was contacted, then each patient was called to explain the objective of the research using information and communication technologies (telephone call, video call or whatsapp survey), and finally, the study instruments were applied.

The instruments used were the Social Support Questionnaire (MOS) was validated in his study on the Reliability and validity of the social support questionnaire in cancer patients in Trujillo, (Baca, 2016). This instrument was originally developed by Medical Outcomes Study-Social Support Survey in the United States in 1991. Questionnaire that consists of 20 items, the first item refers to the size of the social network and the remaining 19 items are related to four dimensions of functional social support: emotional / informational, instrumental, positive social interaction and affective support, evaluated according to the Likert scale 1(never) to 5 (always). The distribution of the items is presented in: Emotional support (items 3,4,8,9,13,16,17 and 19); Instrumental support (items 2,3,12,15); Positive social interaction support (items 7,11,14, and 18); Affective support (items 6,10 and 20). The interpretation is: high social support (58 - 95 points), medium social support (20 - 57 points), low social support (0-19 points).

Likewise The WHOQOL-BREF quality of life scale, was validated by Pedredo et al. (2018) in their study on Quality of life in patients treated with methadone: in WHOQOL-BREF, psychometric study and application results. (Pedredo et al, 2018) This instrument assesses the subjective opinion about the individual's quality of life. It consists of 100 items, 6 dimensions (physical health, psychological, levels of independence, social relationships, environment and spirituality/religion/personal beliefs); and 24 facets, represented by 4 questions. This study will use the brief version, which is the WHOQOL-BREF, consisting of 26 questions, each item is composed of five Likert-type response options and all form a profile of 4 dimensions: Physical Health, Psychological, Social Relations and Environment. having as interpretation: Good quality of life (66-100 points), Fair quality of life (52-65 points) and Poor quality of life (0-51 points).

For the execution of the study, the necessary administrative procedures were carried out. After obtaining the permits, coordination was made with the area and environment within the permitted timetable for the application of the questionnaires, taking into account the state of world emergency, the instrument was applied by telephone and/or video call, since there is a database of all patients diagnosed with tuberculosis in the INEN tuberculosis program. At the beginning of
the communication, the researcher explained the objectives of the study and requested free and voluntary informed consent, then the questionnaire was applied with an average duration of 30 minutes, being at all times the researcher attentive to resolve or clarify any doubts that may arise, reiterating that their participation will be anonymous to ensure the confidentiality of the information.

The data obtained from both instruments were "emptied" in the SPSS v23 program, where the correlation analysis between both variables was carried out, as well as the description of the results obtained for each variable and its dimensions. Subsequently, the results were presented in graphs and tables.

3. Results

Descriptive

Table 1: Perceived level of social support in oncology patients with tuberculosis in the outpatient service of the National Institute of Neoplastic Diseases, 2021.

| Perceived level of social support | Frequency | Percentage |
|----------------------------------|-----------|------------|
| Medium                           | 16        | 20.0       |
| High                             | 64        | 80.0       |
| Total                            | 80        | 100.0      |

It was found that 20% of the patients perceived a medium level of support and 80% of the patients perceived a high level of support; these results are evidenced by the support of the family member or primary caregiver.

Table 2: Perceived level of social support, according to its emotional dimension in oncology patients with tuberculosis in the outpatient service of INEN.

| Emotional dimension | Frequency | Percentage |
|---------------------|-----------|------------|
| High                | 51        | 64%        |
| Medium              | 16        | 20%        |
| Low                 | 13        | 16%        |
| Total               | 80        | 100.0      |

It was found that 64% of the patients perceived a high level of emotional support, 20% a medium level of support and only 16% a low level of support.

Table 3: Perceived level of social support, according to its instrumental dimension in oncology patients with tuberculosis in the outpatient department of INEN.

| Instrumental dimension | Frequency | Percentage |
|------------------------|-----------|------------|
| High                   | 8         | 10%        |
| Medium                 | 45        | 56%        |
| Low                    | 27        | 34%        |
| Total                  | 80        | 100.0      |

It was shown that 56% of the patients perceived a medium level of instrumental support and 34% perceived a low level of support and only 10% perceived a high level of support.
Table 4: Perceived level of social support, according to the dimension of positive social interaction in oncology patients with tuberculosis in the outpatient department of INEN.

| Positive social dimension | Frequency | Percentage |
|---------------------------|-----------|------------|
| High                      | 44        | 55%        |
| Medium                    | 16        | 20%        |
| Low                       | 20        | 25%        |
| Total                     | 80        | 100,0      |

It was shown that 55% of the patients perceived a high level of positive social interaction support and 25% perceived a low level of support and only 20% perceived a medium level of support.

Table 5: Perceived level of social support, according to its affective dimension in oncology patients with tuberculosis in the outpatient department of INEN.

| Affective dimension | Frequency | Percentage |
|---------------------|-----------|------------|
| High                | 64        | 80%        |
| Medium              | 16        | 20%        |
| Low                 | 0         | 0%         |
| Total               | 80        | 100,0      |

It was shown that 80% of the patients perceived a high level of affective support and 20% the medium level of support.

Table 6: Level of quality of life of oncology patients with tuberculosis in the outpatient department of the National Institute of Neoplastic Diseases, 2021.

| Quality of life level | Frequency | Percentage |
|-----------------------|-----------|------------|
| Bad                   | 3         | 3,7        |
| Fair                  | 64        | 80,0       |
| Good                  | 13        | 16,3       |
| Total                 | 80        | 100,0      |

It was shown that 80% of the quality of life of oncology patients with tuberculosis is fair, 16.3% is good and 3.7% is poor.

Table 7: Quality of life level according to its dimension: physical health in oncology patients with tuberculosis in the outpatient department of INEN.

| Physical health | Frequency | Percentage |
|-----------------|-----------|------------|
| Low             | 4         | 5,0        |
| Medium          | 71        | 88,8       |
| High            | 5         | 6,3        |
| Total           | 80        | 100,0      |

It was found that 88.8% of the quality of life in the physical health dimension of oncology patients with tuberculosis is at a regular level, 6.3% is at a high level and 3.7% is low.
Table 8: Level of quality of life according to the psychological dimension in oncology patients with tuberculosis in the outpatient department of INEN.

| Psychological | Frequency | Percentage |
|---------------|-----------|------------|
| Low           | 9         | 11.3       |
| Medium        | 53        | 66.3       |
| High          | 18        | 22.5       |
| Total         | 80        | 100.0      |

It was found that 66.3% of the quality of life in the psychological dimension of oncology patients with tuberculosis is of regular level, 22.5% is of high level and 11.3% is low.

Table 9: Level of quality of life according to the social dimension in oncology patients with tuberculosis in the outpatient department of INEN.

| Social | Frequency | Percentage |
|--------|-----------|------------|
| Low    | 22        | 27.5       |
| Medium | 46        | 57.5       |
| High   | 12        | 15.0       |
| Total  | 80        | 100.0      |

It was found that 57.5% of the quality of life in the social dimension of oncology patients with tuberculosis is at a regular level, 27.5% is at a low level and 15% is high.

Table 10: Level of quality of life according to dimension: ENVIRONMENT in oncology patients with tuberculosis in the outpatient department of INEN.

| Environment | Frequency | Percentage |
|-------------|-----------|------------|
| Low         | 13        | 3.8        |
| Medium      | 55        | 81.3       |
| High        | 12        | 15.0       |
| Total       | 80        | 100.0      |

It was found that 81.3% of oncology patients with tuberculosis have a fair quality of life in the environment dimension, 15% have a high level, and 3.8% have a low level.

Table 11: Perceived social support and quality of life in oncology patients with tuberculosis in the outpatient department of the National Institute of Neoplastic Diseases, 2021.

| Perceived Social Support | Perceived Social Support Correlation Coefficient | Quality of life Correlation Coefficient |
|--------------------------|-------------------------------------------------|----------------------------------------|
| Spearman's Rho           | 1.00                                            | .582**                                 |
| Sig. (2-tailed)          | .000                                            | .000                                   |
| N                        | 100                                             | 100                                    |

**. Correlation is significant at the 0.01 level (2-tailed).

The Spearman correlation indicates that there is a moderate relationship between perception social support and the quality of life in oncology patients with tuberculosis (Rho= .582), which
means that both variables are significant ($p = .000 < .05$). In other words, there is a high relationship between perceived social support and quality of life in oncology patients with tuberculosis in the outpatient department of the National Institute of Neoplastic Diseases, 2021.

4. Discussion

The main objective of the present research is to determine the relationship between the perception of social support and quality of life of patients diagnosed with pulmonary tuberculosis; in this regard, the results show that there is moderate correlation relationship between the perception and expectations of quality of care of nurses ($Rho = .582$), with which the alternate hypothesis is accepted and the null hypothesis is rejected, which shows that there is a high relationship between the perception of social support and the perception of quality of life. Likewise, De Souza et al. (2018) found that there is positive association between quality of life and social support, also determining that the quality of life found in the study considered low and intermediate are fed back by a clinical manifestation and fear burden of stigma related to the two diseases, implying alterations in social relationships.

Regarding specific objective 1 it was found that 20% of patients perceived a medium level of support and 80% the level of support is high these results are evidenced by the support of the family member or primary caregiver. These results are similar by Moyano & Orozco (2017), who found that presents high level of social support (72.4%), medium level of social support (27.6%), and no patient have low social support, likewise in terms of quality of life patients present very high level (48.8%), 23.6% high level, 15% low level and 12.6% was average level. This confirms the need to work on promotional preventive activities that favor self-care in the oncology patient with tuberculosis to improve their quality of life.

Regarding specific objective 2 the results show that 64% of the patients perceived a high level of emotional support and 20% the average level of support and low level of support in only 16%. Likewise, Ponciano (2017), argues that the type of coping they use most frequently is Emotion-oriented coping (69.3%), where the subtype of coping, 76.9% always use the strategy of "Religion". On the other hand, Gonzalez (2018), concludes that, during the recent diagnosis phase, the relationship between perceived social support and emotion-focused strategies prevails; patients make use of various strategies; and that social support has an impact on the use of strategies considered as adaptive.

Regarding specific objective 3, the results showed that 56% of the patients perceived a medium level of instrumental support and 34% perceived a low level of support and high level of support in only 10%.

Regarding specific objective 4, the results show that 55% of the patients perceived a high level of positive social interaction support and 25% perceived a low level of support and medium level of support in only 20%. These results are congruent with what was found by Chira (2016) indicates that the perception of total social support was 67% indicates normal support and 33% presents low social support, as for its dimensions affective support was 84%, indicates normal support and 16% indicates low support; on the other hand, confidential support was 61% indicates low support and 39% indicates having normal support, the total perception of quality of life was 44.9% regular quality of life, 32.75% poor quality of life and 22.4% good quality of life.

Regarding specific objective 5 the results show that it was demonstrated that 80% of the patients perceived a high level of affective support and 20% the medium level of support. Chira (2016), argues that the dimension of affective support was 84%, indicating normal support and 16% indicated low support; on the other hand, confidential support was 61% indicating low support and 39% indicated having normal support. In this sense, affective support is the expressions of
affection and love from the person's closest group. Positive social interaction; it is spending time with others and their willingness to be distracted, have fun, etc. (Moyano & Orozco, 2017).

Regarding specific objective 6 the results show that it was demonstrated that 80% is of regular level the quality of life of oncology patients with tuberculosis, 16.3% is of good level and 3.7% is bad. It is important to emphasize that the measurement of quality of life in oncology patients requires assessing some aspects which are: Assessing the patient's functioning in the different areas of quality of life (psychological, physical, social), and doing so from the patient's perspective, Helping to decide the treatments that should be offered to each patient, and also to improve the intervention that is administered. Help to evaluate patient preferences, as patients can assess the effects on their quality of life of the different treatments they might receive. Help in clinical practice to achieve a deeper assessment of those areas that are usually not considered, or not enough. To guide the interventions that various professionals can offer to oncology patients, since these interventions can improve their quality of life.

Regarding specific objective 7, the results show that 88.8% of the quality of life in the physical health dimension of oncology patients with tuberculosis is of regular level, 6.3% is of high level and 3.7% is low. In this sense, Ponciano (2017), it was found to be regular in 59.7% of the study population. The results coincide with Artega et al. (2017), who found that 60% of oncology patients had unhealthy quality of life (QOL).

Regarding specific objective 8, the results show that 66.3% of the quality of life in the psychological dimension of cancer patients with tuberculosis is regular, 22.5% is high and 11.3% is low. In this sense, Ponciano (2017), it was found to be regular in 59.7% of the study population. The results coincide with Artega et al. (2017), who found that 45% of oncology patients had quality of life (QOL) in the psychological dimension of regular level.

Regarding specific objective 9 it was evidenced that 57.5% is of regular level the quality of life in the social dimension of oncology patients with tuberculosis, 27.5% is of low level and 15% is high. Artega et al. (2017), who found that 36% of oncology patients had quality of life (QOL) in the social dimension of regular level.

Regarding the specific objective 10 It was evidenced that 81.3% is of regular level quality of life in the environment dimension of oncology patients with tuberculosis, 15% is of high level and 3.8% is low. Artega et al. (2017), who found that 36% of oncology patients had quality of life (QOL) in the environment dimension of regular level.

Finally, cancer is a disease that requires a process of highly complex treatments in which the individual needs the staff involved in their care to have the necessary knowledge, skills and competence capacity to be able to provide comprehensive and quality care (Caycho et al., 2014). Therefore, the role of the nurse focuses on the diagnosis and treatment of those humanistic responses in relation to physical and emotional problems, real or potential; through health education, health advice and the provision of health services with the aim of maintaining or restoring the life and well-being of the person until reaching the patient's self-care and adequate coping without causing further damage to their health; fighting for their ideals and the right to lead a full and quality life throughout the process of their disease.
References

Aranda B. & Pando M. 2013. Conceptualización del apoyo social y las redes de apoyo social. Revista de investigación en Psicología, 16(1), 233-245. DOI: https://doi.org/10.15381/rinvp.v16i1.3929

Arteaga, A., Cogollo, R., & Muñoz, D. 2017. Apoyo social y control metabólico en la diabetes mellitus tipo 2. Revista Cuidarte, 8(2), 1668-76. https://doi.org/10.15649/cuidarte.v8i2.405

Baca R., 2016. Confiabilidad y validez del cuestionario de apoyo social en pacientes con cáncer de Trujillo. Revista de Investigación en Psicología, 19(1), 177–190. https://doi.org/10.15381/rinvp.v19i1.12452

Caycho, T., Domínguez, S., Villegas, G., Sotelo, N., & Carbajal, C. 2014. Análisis psicométrico del Cuestionario de Apoyo Social Funcional DUKE-UNK-11 en inmigrantes peruanos en Italia. Pensamiento Psicológico, 12(2), 25-35. http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S1657-89612014000200002&lng=en&tlng=es

Chira, F. 2016. Percepción del apoyo social y calidad de vida en pacientes con diagnóstico de tuberculosis pulmonar del Centro Médico Naval. Lima: Universidad César Vallejo. https://repositorio.ucv.edu.pe/handle/20.500.12692/8791

Cuéllar, L., Castañeda, C. A., Rojas, K., Flores, C., Dolores-Cerna, K., Castillo, M., & Vicente, W. 2015. Características clínicas y toxicidad del tratamiento de tuberculosis en pacientes con cáncer. Revista Peruana de Medicina Experimental y Salud Publica, 32(2), 272-277. https://doi.org/10.17843/rpmesp.2015.322.1619

De la Revilla, L., Luna, J., Bailón, E., & Medina, I. (2005). Validación del cuestionario MOS de apoyo social en Atención Primaria. Revista Medicina de Familia, 6, 10-18. https://comunidad.semefyc.es/el-cuestionario-medical-outcomes-study-mos/

De Souza, L, De Castro, C., Reis, R., da Silvaa Canini, S. R., & Gir, E. 2018. Apoyo social y calidad de vida de las personas con coinfección de tuberculosis/VIH. Enfermería Global, 17(50), 1-29. https://dx.doi.org/10.6018/eglobal.17.2.276351

Galván-Flores, G. 2009. La enfermera en la red social de apoyo. Revista de Enfermería del Instituto Mexicano del Seguro Social, 17(2), 61-62. https://www.medigraphic.com/cgi-bin/new/resumen.cgi?IDARTICULO=24963

Gonzalez, G. 2018. Afrontamiento y apoyo social ante el diagnóstico reciente de cáncer de mama. thesis, Pontificia Universidad Católica del Perú, Lima. http://hdl.handle.net/20.500.12404/12242

INEN, Instituto Nacional de Enfermedades Neoplásicas. 2019. Informe del Plan Operativo Anual de la Estrategia Sanitaria de Prevención y control de la tuberculosis 2019. Lima.

Mendoza, M. 2018. Apoyo social percibido y calidad de vida en pacientes con tuberculosis MDR del Centro Materno Infantil El Progreso. Carabayllo. Lima: Universidad César Vallejo. https://hdl.handle.net/20.500.12692/18100

Moreno-Montoya, J., Barraján, A., Martínez, M., Rodríguez, A., & Gonzáles, Á. 2018. Calidad de vida y percepción de apoyo social en personas con VIH en Bogotá, Colombia. Revista Biomédica, 38(4), 577-585. https://doi.org/10.7705/biomedica.v38i4.3819

Moyano, C., and Orozco, M. 2017. Apoyo social y calidad de vida relacionada a la salud en mujeres con cáncer de mama que acuden al consultorio de oncología del Hospital Edgardo Rebagliati Martins. thesis, Universidad Privada Norbert Wiener, Lima. : http://repositorio.uwiener.edu.pe/handle/123456789/1745

Muñoz, A., Sanchez-Pérez, H., Vergés de Lópeu, C., Sotomayor- Saavedra, M., López-Davila, L., Sorokin, P. 2019. Tuberculosis en América Latina y el Caribe: Reflexiones desde la Bioética. Persona y Bioética, 22(2), 331-357. https://doi.org/10.5294/pebi.2018.22.2.10

Ortego M., López, S., Álvarez, M. 2011. Universidad de Cantabria. (O. c. ware, Ed.) https://ocw.unican.es/pluginfile.php/1420/course/section/1836/tema_13.pdf

Pedroso-Pérez, E. & Grupo MethaQoL. 2018. Calidad de vida en pacientes tratados con metadona: el WHOQOL-BREF, estudio psicométrico y resultados de aplicación. Anales de
Psicología / Annals of Psychology, 34(2), 251–257. https://doi.org/10.6018/analesps.34.2.282971

Poblete, F., Barticevic, N., Sapag, J. C., Tapia, P., Bastías, G., Quevedo, D., Valdés C., Bustamante C., Alcayaga C., Pérez G., 2018. Apoyo social percibido en pacientes con Hipertensión Arterial y Diabetes Mellitus tipo II en Atención Primaria y su relación con autopercepción de salud. Revista médica de Chile, 146(10), 1135-1142. https://dx.doi.org/10.4067/S0034-98872018001001135

Ponciano, C. 2017. Calidad de vida y afrontamiento en pacientes adultos oncológicos de una Clínica de Lima-Perú. Rev. Ciencia y Arte de enfermería, 2(1), 52-58. https://doi.org/10.24314/rcae.2017.v2n1.10

Robles-Espinoza, A., Rubio-Jurado, D., Rosa-Galván, E. V., & Nava-Zavala, A. H. 2016. Generalidades y conceptos de calidad de vida en relación con los cuidados de salud. El residente, 11(3), 120-125. https://www.medigraphic.com/cgi-bin/new/resumen.cgi?IDARTICULO=68589

Shrestha, S., Shibanuma, A., Poudel, K. C., Nanishi, K., Abe, M. K., Shakya, S. K., Jimba M., 2019. Perceived social support, coping, and stigma on the quality of life of people living with HIV in Nepal: a moderated mediation analysis. AIDS Care, 31(4), 413-420. https://doi.org/10.1080/09540121.2018.1497136

WHO, World Health Organization. 2018. https://www.paho.org/hq/index.php?option=com_content&view=article&id=292&Itemid=3904&lang=es

WHO, World Health Organization, 2020. Informe mundial sobre la tuberculosis. https://www.paho.org/es/documentos/informe-mundial-tuberculosis-2020-oms

Zhang, Y., Cui, C., Wang, Y., & Wang, L. 2020. Effects of stigma, hope and social support on quality of life among Chinese patients diagnosed with oral cancer: a cross-sectional study. Health and quality of life outcomes, 18(1), 112. https://doi.org/10.1186/s12955-020-01353-9