



THYROIDECTOMY AND IMPACT ON QUALITY OF LIFE OF WOMEN

TIREOIDECTOMIA E O IMPACTO NA QUALIDADE DE VIDA DAS MULHERES

LA TIROIDECTOMÍA E EL IMPACTO EN LA CALIDAD DE VIDA DE LAS MUJERES

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ABSTRACT

Objective: to investigate the quality of life of women tireoidectomized. **Method:** a descriptive study of quantitative and qualitative approach, conducted with ten women from a semistructured interview guide. Quantitative data were submitted to descriptive measures and frequency distributions and qualitative variables worked with the technique of the Collective Subject Discourse. The research project was approved by the Research Ethics Committee, Protocol No. 054/11. **Results:** 90% of women had underlying pathology as cancer, which are based treatment of hormone replacement. Symptoms were present in a well diversified. In the discourse of the collective subject the central idea circumscribed in mood swings, irritability and depression. **Conclusion:** symptoms resulting from total thyroidectomy affect the quality of life for women, so it is suggested that continuous monitoring of health professionals and more accurate dosage of hormones to be administered. **Descriptors:** Thyroid; Thyroid Gland Diseases; Thyroidectomy; Quality of Life; Nursing.

RESUMO

Objetivo: investigar a qualidade de vida das mulheres tireoidectomizadas. **Método:** estudo descritivo, de abordagem quanti-qualitativa, realizado junto a dez mulheres, a partir de um roteiro de entrevista semiestruturado. Os dados quantitativos foram submetidos às medidas descritivas e distribuições de frequência e as variáveis qualitativas trabalhadas com a técnica do Discurso do Sujeito Coletivo. A pesquisa teve o projeto aprovado pelo Comitê de Ética em Pesquisa, Protocolo nº 054/11. **Resultados:** 90% das mulheres apresentaram como patologia de base o câncer, as quais fazem tratamento à base de reposição hormonal. Os sintomas se fizeram presentes de forma bem diversificada. No discurso do sujeito coletivo a idéia central circunscreveu nas alterações do humor, da irritabilidade e da depressão. **Conclusão:** os sintomas decorrentes da tireoidectomia total afetam a qualidade de vida das mulheres, logo, sugere-se o acompanhamento contínuo dos profissionais de saúde e mais precisão na dosagem de hormônios a serem administrados. **Descritores:** Tireóide; Doenças da Glândula Tireóide; Tireoidectomia; Qualidade de Vida; Cuidados de Enfermagem.

RESUMEN

Objetivo: investigar la calidad de vida de las mujeres tireoidectomizadas. **Método:** estudio descriptivo de abordaje cuantitativo y cualitativo, realizado con diez mujeres de una guía de entrevista semi-estructurada. Los datos cuantitativos fueron sometidos a medidas descriptivas y distribuciones de frecuencia y las variables cualitativas trabajadas con la técnica del Discurso del Sujeto Colectivo. El proyecto de investigación fue aprobado por el Comité de Ética de la Investigación, el Protocolo N ° 054/11. **Resultados:** 90% de las mujeres había patología subyacente como el cáncer, que se basa el tratamiento de reemplazo hormonal. Los síntomas se presentaron en un lugar bien diversificado. En el discurso del sujeto colectivo la idea central circunscribe en los cambios de humor, irritabilidad y depresión. **Conclusión:** los síntomas resultantes de la tiroidectomía total afectan la calidad de vida de las mujeres, por lo que se sugiere que la vigilancia continua de los profesionales de la salud y la dosificación más precisa de las hormonas que se administra. **Descriptor:** Tiroides; Enfermedades de las Glándulas; Tiroidectomía; La Calidad de Vida; Enfermería.

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INTRODUCTION

The thyroid is one of the largest endocrine glands in the human body, responsible for secreting hormones that cause the body biological functions of high importance in the control of cellular metabolism and the absorption of calcium in the bones. As in any gland, abnormal production of hormones causes changes in the functional behavior of the organism. Accordingly, thyroid diseases can be broadly classified as functional, morphological or autoimmune. These can cause hypothyroidism, result of suboptimal levels of thyroid hormone or hyperthyroidism characterized by excessive debt of hormones released by the adrenal gland.¹

Several factors can lead to hormonal imbalance in the gland from an abnormality in the pituitary gland, responsible for thyrotropin-releasing hormone, which is responsible for the control of thyroid hormones, inflammatory processes of chronic thyroiditis, Hashimoto's disease, Graves' disease or cancer.²

In hyperthyroidism in serious condition and in cases of thyroid cancer, it is necessary to remove the gland (thyroidectomy) or part. In these cases, it applies to the administration of drugs hormone replacement therapy. However, this removal does not prevent the patient has abnormal physiological behavior, even with frequent use of drugs. Initial symptoms are nonspecific for some cases, can be expressed from fatigue, dry skin, tachycardia, altered mental or neurological status.¹ In this context, it is clear that patients with thyroid disorder and who must undergo thyroidectomy, need to change lifestyle habits and adapt to this new reality, and may thus have modified their quality of life.

The concept of quality of life varies from author to author, being a subjective concept, dynamic and very broad sociocultural level dependent, the age and the personal aspirations of the individual.³⁻⁴ Therefore, quality of life is an eminently human notion, which has been approximated to the satisfaction found in family life, loving, social, environmental and existential own aesthetic. Presupposes the ability to make a cultural synthesis of all the elements that a given society considers their standard of comfort and well-being. In health, when viewed in the broad sense, it relies on the understanding of basic human needs, material and spiritual, as having the quality of life in health is having the ability to live without disease or overcome

the difficulties of states or conditions in general morbidity.⁵

Therefore, health professionals who work in this field, especially nurses, can directly influence the quality of life, relieving pain, malaise, intervening on the complications that can generate dependencies and discomforts.

Because it is still a controversial subject and considering the little existing literature and scant research study in greater depth the quality of life of patients who underwent thyroidectomy, we became interested in studying this topic. The choice is related to family experiences experienced by one of the authors, where during their academic training, it was observed that patients who withdrew the thyroid total for having cancer or other problems, the vast majority had successful treatment, but the quality Life was not the same.

So, asks yourself: How living patients after total thyroidectomy? What has changed in their lives? Thus, this study aims:

- To Investigate the quality of life of women thyroidectomized.

METHOD

Article compiled from the monograph << **Quality of life after total thyroidectomy** >> presented the Coordination of Nursing College of Santa Emilia-FASER Rodat. João Pessoa / PB, Brazil; in 2011.

Descriptive study using method quantitative and qualitative approach, accomplished through home visits to patients thyroidectomized residents in the city of João Pessoa, Paraíba. The identification was made by a survey conducted at a referral center for patients with thyroidectomy can identify phone numbers. Thus, the addresses of households were reported by the patients themselves. To start the data collection was maintained a preliminary contact with them. When they agreed to collaborate agendava up a meeting, when they were given the necessary information about the study and its purpose, emphasizing the importance of their involvement.

The population consisted of 26 patients enrolled in the referral service who underwent total thyroidectomy. The quantity of participants was defined as the availability and accessibility of the same. However, in this study, ten subjects who met the following inclusion criteria: having undergone total thyroidectomy and agree to participate in the study after signing the Informed Consent Form (ICF).

The construction of the data was performed from a structured interview, semi-structured in two parts: the first consisted of quantitative data regarding socio-demographic characterization of thyroid disorder, and biological factors that affect the quality of life; the second refers to the psychological factors that affect quality of life.

The research conformed to the principles contained in Resolution No. 196/96 of the National Health Ministry of Health, which is based in the main international documents emanating statements and guidelines on research involving beings humans.⁶ Just as established in Resolution nº COFEN 311/2007 establishing the Code of Ethics of Professional Nursing.⁷ This study was the research project referred to the Ethics Committee (CEP) of the Faculty of Santa Emília de Rodat (FASER) and approved under protocol nº 054/2011.

The interviews were conducted in the period October to December 2011, according to the following steps: prior contact with each participant where he explained the purpose of the study, the importance of their participation and presentation of IC. After reading the informed consent and agreement of the participants to record the interview, was also provided clarification regarding the guarantee of anonymity, the interview procedure for information about the transcription process, as he was offered the choice of pseudonym, necessary to ensure anonymity and identification.

The compilation of quantitative data was performed in Microsoft Excel. Quantitative

variables were subjected to descriptive measures and frequency distributions. For qualitative variables, the information obtained from this research were worked from the technique of the Collective Subject Discourse (CSD), which is a set of procedures that highlights the key terms of the speeches of the study participants, which enable thought fit synthesis and interpretation possible for reasons of results.⁸ This analysis process involved the following steps: selection of key terms of each particular discourse, these expressions reveal the essence of the contact discursive; identifying the main idea of each key phrase, this idea was separated into central ideas similar and complementary; meeting of key terms related to similar and complementary ideas in a speech synthesis is the DSC.

RESULTS

The study included ten subjects aged 20 to 40 years old with a mean age of 32 years old. Of the 08 participants (80%) are married and 02 (20%) widows as schooling 04 (40%) reported having higher education and other primary and secondary, with regard to family income 07 (70%) survive with more than minimum wage, and the main occupation of the participants was working from home 04 (40%), as shown by the data in Table 1.

Table 1. Distribution of socioeconomic characteristics of women thyroidectomized. João Pessoa, 2012.

Socioeconomic characteristics	n=10	%
Age		
20 to 25	01	10
26 to 30	02	20
31 to 35	05	50
36 to 40 years old	02	20
Marital Status		
Married	08	80
Widow	02	20
Schooling		
Full elementary school	03	30
Complete high school	03	30
Complete higher education	04	40
Family income		
Less than one minimum salary	03	30
More than one minimum salary	07	70
Profession/Occupation		
Housewife	04	40
Teacher	02	20
Business woman	02	20
Manager	01	10
Dentistry	01	10

Regarding the characteristics of thyroid disorders, Table 2 shows that 09 (90%) of women had a pathology-based cancer, 08 (80%) required to perform two operations to

remove the thyroid and 09 (90%) and did still make treatment based on iodine and hormone replacement after removal of the gland.

Table 2. Distribution characteristics of thyroid disorders thyroidectomized women. João Pessoa, 2012.

Characteristics of thyroid disorders	n=10	%
Thyroid pathology		
Benign Tumor	01	10
Cancer	09	90
Number of surgeries		
One surgery	02	20
Two surgeries	08	80
Types of treatment		
Iodine	01	10
Iodine + Hormone Replacement	09	90

Among the women surveyed, due to the pathological grade and because the answers that each presents to the treatment, the symptoms were present in a very diverse, 40%

complained of weakness, cardiac arrhythmia and weight gain, 30% had insomnia, 20% had weight loss and 10% had seizures and decreased calcium, as shown in Figure 1.

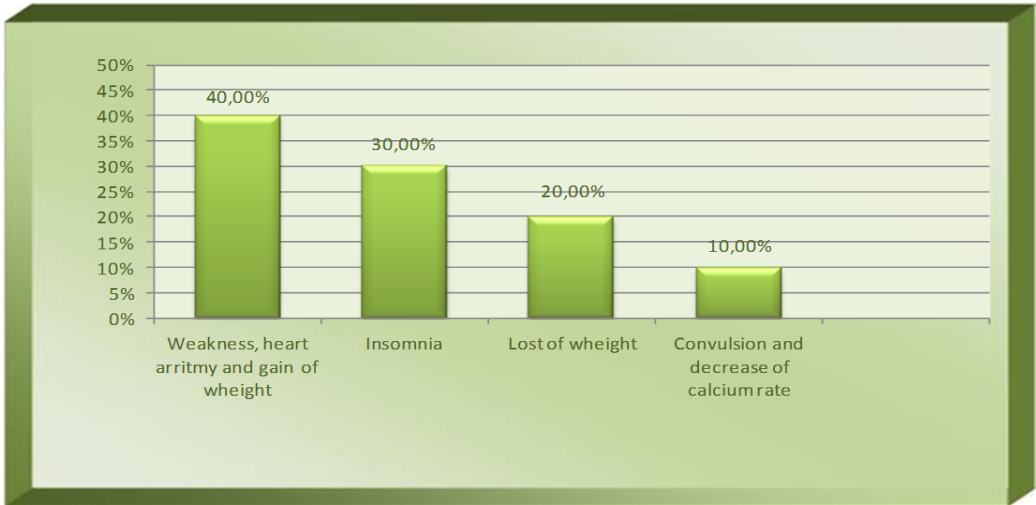


Figure 1. Distribution of biological and physiological factors that affect the quality of life of women thyroidectomized. João Pessoa, 2012.

Finally, psychological factors were investigated in women thyroidectomized present, as shown in Figures 2 and 3.

Central Idea	The collective subject discourse
Appearance of stomach pain, tiredness, weakness and depression	After removal of the thyroid normally appeared in the stomach pain as a result of the use of hormone replacement medication that is taken on an empty stomach for an indefinite period. In addition to this symptom, fatigue, weakness, physical impairment, were present, and sometimes arose as a result of the depression of hormonal changes. Thyroid removal caused insomnia arose as a result of the absence of the thyroid hormones, necessitating the use of tranquilizers to relax and sleep. The thyroidectomy reached the vocal cords. As a result of this fact, hoarseness and low resistance to sing or force the voice, leaving increasingly depressed.
Emergence of insomnia	
Onset of hoarseness	

Figure 2. Central Idea and the Collective Subject Discourse women thyroidectomized in response to the question: What has changed in your life after removal of the thyroid?

On the other hand, when inquired if there was any psychological change in behavior after the removal of the thyroid, the participants said notice a mood change and the emergence of anxiety symptoms as evidenced, as shown in Figure 3.

Central Idea	The collective subject discourse
Mood change	The mood has changed a lot, time in the present time, no mood for anything. This picture is associated with, especially, the way in which it is carried out the hormone replacement treatment. A higher dose may trigger a State of agitation and a smaller dose can lead to a State of sadness. The change of mood is present in most patients thyroidectomized in hormone replacement treatment, appearing as a consequence to anxiety that can be related to the emergence of psychiatric disorders.
Appearance of anxiety	

Figure 3. Central Idea and the Collective Subject Discourse women thyroidectomized in response to the question was psychological change after removal of the thyroid?

DISCUSSION

Regarding age, the survey data corroborate the data found in the literature, showing that cancer of the thyroid gland is the most common malignancy of the endocrine system, affecting women more often in most cases between the ages of 25-65 years old.⁹

Regarding education, the study demonstrated that because women possess a level of good education, facilitated the understanding and description of the pathology. Therefore, this event might be related to the perception of symptoms more carefully, targeting to conduct more resolving, mitigating the emotional state of patients. It can be seen that the influence of the onset of thyroid diseases are more related to physiological factors, regardless of social class, profession or per capita income of the individual.

The thyroid cancer contributes 90% of endocrine malignancies, this, papillary adenocarcinoma is the most common and less aggressive which can start in childhood or early adulthood. Therefore, the appearance of thyroid nodules does not imply the presence of cancer; however, the occurrence of thyroid nodules in patients with a family history is a strong indication of malignant tumors.¹

As for the number of surgeries performed, is common, by decision of the health team, doing more surgery, in order to reduce the consequences of a total thyroidectomy. Initially, removes only a part of the gland in the hopes of small fragment glandular performs their normal physiological role. However, when it does not, it becomes the decision to make a second surgery which consequently is the total removal of the gland.

Regarding treatment, all study participants underwent total thyroidectomy and therefore, require continuous treatment based on replacing the hormones produced by the thyroid, thyroxine (T3) and triiodothyronine (T4), since the absence of these hormones directly alter cellular metabolism, is a

physiological condition and mandatory for the rest of one's life.

Current treatment for thyroid cancer is equivalent to a combination of therapies through antithyroid agents, the use of radioactive iodine and surgery. The antithyroid drugs has the function of inhibiting hormone synthesis, after ingestion of the antithyroid drugs, iodine should be administered in order to block the release of thyroid hormones stored in the gland. This procedure is very common in the post-and pre-surgical diagnosis, however, in some cases after surgery this procedure can be used. In serious diseases using the radioactive iodine is the most common form of treatment is to destroy the remnants of hyperactive cells without damaging other organs thyroidectomy.¹⁰

The nurse can develop an important role in the treatment of these patients, guiding them over the control of symptoms related to treatment, especially on hormone replacement. These guidelines aim to enhance the benefits of therapeutic regimens and to propose well-being of these women. Importantly, the nurse should include the family in treatment guidelines, because it can help in promoting personalized assistance and adequately to the needs of these patients.

The weakness reported by patients is the lack of thyroid hormones, this is easily explained, because its presence interferes with the phenotypic expression of the transcription process in protein synthesis by interacting with specific genes.¹¹

High rates of these hormones into the blood stream activates a number of intracellular biochemical processes in whose location which stimulates ATPase activity, rather it leads to an increase in the size and number of mitochondria. By contrast, the absence of these hormones in the intracellular environment produces an opposite effect in the cell, extending in all tissues and organs of the human body which have cell receptors. Low rates of thyroid hormones do not allow the activation process of lipolysis adipose

tissue, which favors the accumulation of lipids and increasing the rate of blood lipids, particularly cholesterol and triglycerides, increases the weight.¹¹

Cardiac arrhythmia after thyroidectomy is somewhat antagonistic, because of the one responsible for heart rate, beyond the sinoatrial node, are thyroid hormones. However, it is important to note that the drug administration of hormones can be added to the existing amount of T3 and T4, when the patient's body there is still remnants of these producers cellular thyroid hormones or just the intake of the drug light, possibly in an overdose featuring a clinical hyperthyroidism.

This same premise can be used to explain insomnia referenced by some of the patients. Since the exhaustion of thyroid hormones cause changes in the synapses of the nervous system causing the lack of sleep. The eventual seizure may be a result of excessive action of hormones, due to the production of T3 and T4 residual cells after surgery, which generates a strong response of the muscles.¹¹

With the progression of treatment, some symptoms may become exacerbated and appropriate management is indispensable in the treatment being proposed, since the symptoms cause discomfort to the patient and also affect the family. Nursing interventions are needed so that we can provide appropriate care in a timely manner in order to promote maximum comfort and quality of life for these patients.

On being questioned about what has changed in my life after removal of the thyroid, the participants have referred the following symptoms: stomach pain, tiredness, weakness, depression, insomnia and hoarseness. Such symptoms are responsible for the appearance of physical and psychological changes that may affect the quality of life of these women.

The removal of the thyroid can lead to presence of hypothyroidism, which can range from medium to high intensity. The predominant symptoms in cases of medium intensity is characterized by a depression, which are associated with slowing of speech, decreased intellectual performance, fatigue, insomnia, decreased appetite and apathy. The most severe form of emotional changes caused by hypothyroidism is called madness mixedematosa (myxedema is a framework of general edema of thyroid origin), which is characterized by a framework truly psychotic, confusional type, delusional and hallucinatory or, if not, by a deep melancholy state, often with porosity.¹

The surgical treatment of diseases of the thyroid gland has developed in recent years and new technologies to improve hemostasis and perioperative monitoring of laryngeal nerves have turned Thyroid surgery safer and less risk of complications. However, in some cases through the handling of the gland during surgery can reach the vocal cords or laryngeal nerves, causing complications such as postoperative hoarseness in some patients.¹² This explains the speech when they said that some women have difficulty singing as a consequence of hoarseness and low resistance to use voice.

In general, physical and psychological signs, especially if hypothyroidism is diagnosed early, improve with substitutive hormonal treatment; however, many patients continue to experience residual neuropsychiatric symptoms. Thus, hormone replacement therapy for patients thyroidectomized is a mandatory requirement, it is necessary to replace the synthetic form of the hormones that the gland produced. Therefore, we cannot forget that, like all medications, hormone replacement also produces side effects, as noted in the report of patients.

Therefore, it has been observed that the absence of specific information during the treatment may be related to a lack of control of side effects produced by hormone replacement therapy and thus to the aggravation of symptoms. Thus, in order to minimize such occurrences, the information, whether oral or written, shall be given by health professionals, mainly by nurses to patients/families in a concise, easy to understand and specifically aimed at the control of side effects. Thus, the educational process must be developed in order to facilitate changes in ways of acting of these customers, through the acquisition of knowledge and skills to manage these events.¹³

Before the speeches, it is clear that the mood changes are mainly related to how the treatment is conducted. Accordingly, in some patients the drug dose to exceed the normal rate of thyroid hormones can lead to clinical status hypertireoidic. Thus, the presence of these hormones accelerates cellular metabolism by altering the behavior of the central nervous system causing irritation and anxiety, and excessive sweating, tachycardia, weight loss, skin hot, tremors and insomnia. Therefore, effects of thyroxine in the central nervous system have been interpreted as secondary to secretion of catecholamines or potentiation of its action at the receptor level.¹¹

Given this reality, we cannot forget that the nursing staff is responsible for the administration of medications to clients in all health institutions. Fact is that such activity is of great importance to practitioners and clients involved, as is the daily experience of legal responsibility of the nursing staff, and occupies a prominent role in the therapy applied to the client. 14 Therefore, the nurse is responsible for the guidelines for the administration of medications, in this case, hormone replacement, and shall strengthen the necessary precautions to prevent further health problems.

CONCLUSION

The study showed that thyroid cancer was the most responsible for thyroidectomy, which trigger symptoms varied among these stand out to irritability, anxiety, insomnia, physical fatigue, weight changes and for more severe cases depression. Therefore, the results of this study added to the knowledge acquired in the literature showed that women who underwent total thyroidectomy had impaired their quality of life.

We also conclude that hormone replacement for patients thyroidectomized is a mandatory requirement, it is necessary to replace the synthetic form of the thyroid hormones. Therefore, we cannot forget that, like all medications, hormone replacement also produces side effects, influencing the quality of life of these women. In this sense, it is necessary to comprehensive care professionals responsible to meet the needs arising in the daily lives of these women. Undoubtedly, the nurse is one of the professionals in the exercise of his powers can explain to patients the importance of thyroid hormones for proper functioning of the body, guiding the correct administration of hormone replacement in order to improve the quality of life of these women.

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