QUALITY OF LIFE AND SEXUALITY OF HISTERECTOMIZED WOMEN IN A PUBLIC MATERNITY IN THE BRAZILIAN AMAZON

ABSTRACT

Objective: to describe the quality of life and sexuality of hysterectomized women who underwent surgery at the Hospital da Mulher - HMML in Macapá-Amapá. Method: exploratory descriptive study, with a cross-sectional design and quantitative approach, carried out with women from a maternity hospital in Macapá, state of Amapá, who underwent total hysterectomy in the years 2006 to 2016. They were used as instruments to assess quality of life and sexuality of women undergoing total hysterectomy at individual interview and WHOQOL-bref and QS-F tests. Results: the sample included 41 hysterectomized women aged between 24 and 60 years. Most of them consider their QOL to be good (53.7%). As for satisfaction with health, just over half said they were satisfied (36.5%). Regarding the characterization of sexual performance, 13 (31.7%) reported unfavorable to regular sexual performance. Conclusion: the analysis of the mean scores of each dimension shows a better quality of life in the psychological domain. However, the correlations between the sexual quotient and the quality of life domains are all positive and significant.

Keywords: Hysterectomy; Quality of Life; Sexuality.

RESUMO

Objetivo: descrever a qualidade de vida e sexualidade de mulheres histerectomizadas que se submeteram à cirurgia no Hospital da Mulher - HMML de Macapá-Amapá. Método: estudo do tipo descritivo exploratório, com delineamento transversal e abordagem quantitativa, realizado com mulheres de uma maternidade de Macapá, estado do Amapá, que se submeteram à histerectomia total nos anos de 2006 a 2016. Utilizaram-se como instrumentos para avaliar a qualidade de vida e a sexualidade de mulheres submetidas à histerectomia total a entrevista individual e os testes WHOQOL-bref e QS-F. Resultados: a amostra incluiu 41 mulheres histerectomizadas com idades entre 24 e 60 anos. A maioria delas considera que a sua QV é boa (53,7%). Quant à satisfação com a saúde, pouco mais da metade referiu estar satisfeita (36,5%). No tocante à caracterização do desempenho sexual, 13 (31,7%) relataram desempenho sexual desfavorável a regular. Conclusão: a análise das médias dos escores de cada dimensão mostra melhor qualidade de vida no domínio psicológico. No entanto, as correlações do quociente sexual com os domínios da qualidade de vida são todas positivas e significativas.

Palavras-chave: Histerectomia; Qualidade de Vida; Sexualidade.

RESUMEN

Objetivo: descriptir la calidad de vida y la sexualidad de mujeres hysterectomizadas sometidas a cirugía en el Hospital da Mulher - HMML de Macapá-Amapá. Método: estudio descriptivo exploratorio, de diseño transversal y enfoque cuantitativo, realizado en una maternidad de Macapá, estado de Amapá, con mujeres sometidas a hysterectomia total entre 2006 y 2016. Los instrumentos utilizados para evaluar la calidad de vida y la sexualidad de dichas mujeres fueron entrevistas individuales y pruebas de WHOQOL-bref y QS-F. Resultados: la muestra incluyó a 41 mujeres hysterectomizadas de entre 24 y 60 años. La mayoría de ellas consideraba que su CV era
INTRODUCTION

Hysterectomy consists of irreversible surgical removal of the uterus and can be performed through the abdominal or vaginal route. In Brazil, each year, about 300,000 women have an indication for hysterectomy and need surgery. In 2016, in hospitals of Amapá State that perform this type of surgery, 299 hysterectomies were performed, of which 115 were total hysterectomy. Among the indications for hysterectomy surgery are malignant and premalignant diseases, uterine leiomyomas, pelvic pain or infection and abnormal uterine bleeding. These lead to possible short- and long-term complications, such as hemorrhage, urinary incontinence, pelvic organ prolapse and abdominal distension, and can result in discomfort and insecurity for women.

In this sense, the removal of the uterus is responsible for significant changes in the emotional, psychological and social spheres of the woman and causes anatomical changes in the pelvis. These can lead to changes in the size and/or shape of the genitals, difficulty in vaginal penetration, dyspareunia, interruption of the anatomical supports of the sexual response and a decrease in the sexual impulse and the degree of attractiveness due to the reduction of circulating hormonal levels, resulting from circulatory alterations, ultimately causing sexual dysfunction.

This context warns of an association between hysterectomy and psychological conflicts, which cause important changes in the woman’s behavior, sexual desire and quality of life. The impact of hysterectomy on sexual function is not clear in the literature, and the prevalence of female sexual dysfunction varies widely, mainly due to the methodological differences of the surgery. The study of the implications and the evaluation of the quality of life (QOL) resulting from this procedure are extremely important and essential for women, as they can determine new treatment techniques and analyze the functional responses of different clinical interventions from the perspective of patients.

The rationale for this study is based on the social relevance of the possibility of women after the hysterectomy surgical procedure expressing their perception of QOL. This can contribute to better care conditions in their uniqueness, in the search for care anchored in the comprehensive care of this population and in the health policy for the care of women after hysterectomy.

It is important, however, to highlight that, for some women, hysterectomy is seen as a solution to the disease, providing relief from symptoms caused by pre-existing diseases. Considering this assumption, the following research questions were outlined: how is the quality of life of hysterectomized women represented on the WHOQOL-bref scale? And how do the quality of life and sexuality of these women meet according to the QS-F? This study aimed to assess the quality of life and sexuality of women undergoing total hysterectomy in a public maternity hospital in Macapá, using the instruments WHOQOL-bref and QS-F.

METHOD

Descriptive exploratory study, with cross-sectional design and quantitative approach. The research took place at the Hospital da Mulher Mãe Luzia (HMML), specialized in Women’s Health, Neonatology and Obstetrics, located in the state of Amapá.

The study population consisted of women who underwent total hysterectomy at that hospital, from 2006 to 2016, and 205 hysterectomies were identified during that period. To define the sample, women aged ≥18 and ≤70 years were included; who underwent total hysterectomy between the years 2006 and 2016; who understood the arguments made by the researcher and who agreed to participate in the study. Women who underwent partial, subtotal and vaginal hysterectomy were excluded; with confirmed medical diagnosis of mental disorder; and those who, at the time of data collection, were absent from their homes.

The sample was census, totaling 41 women who met the selection criteria. For data collection, which took place from June to August 2017, the addresses registered at the institution were identified and a home visit was carried out. The participation of women was voluntary, after reading and signing the informed consent form.

WHOQOL-bref and QS-F questionnaires were used as an instrument for data collection. The WHOQOL - abbreviated consists of 26 questions, two of which are general QOL and the others represent each of the facets that make up the original instrument. It consists of the domains: physical, psychological, social relations and the environment. The female sexual quotient (QS-F) assesses female sexual function and other domains, in addition to the various stages of the sexual response cycle.
Statistical analysis was performed using the Statistical Package for Social Sciences (SPSS), version 22 for Windows. For the descriptive analysis of qualitative variables, absolute and relative frequencies (in %) were used, and for quantitative variables, the mean and standard deviation were used. The normality of the data was studied using the Shapiro-Wilk test, as it is suitable for small samples. The data did not present a normal distribution (p<0.05). For this reason and because it is a small sample, non-parametric tests were used to answer the objectives of the research. Thus, the Mann-Whitney test was used to analyze the significance of the differences between two independent groups regarding quantitative variables. Spearman's correlation coefficient was also used to study the correlation between quantitative variables. For the evaluation of internal consistency (or reliability), the Cronbach's alpha indicator (α) was used, five of which values above 0.70 and acceptable values above 0.60 were recommended.

Differences and correlations were considered statistically significant when the significance value was less than 0.05 (p<0.05), that is, a significance level of 5% was considered. Thus, in the results of inferential statistical tests, a significance level of 5% was considered.

The research was submitted to Plataforma Brasil and approved according to the Certificate of Presentation for Ethical Appreciation (CAAE) Nr. 61964016.1.0000.0003, as well as to the Research Ethics Committee (CEP) of the Universidade Federal do Amapá (UNIFAP) and approved under Opinion Report Nr. 1885436.

RESULTS AND DISCUSSION

The sample included 41 hysterectomized women, aged between 24 and 60 years. For the results of the WHOQOL-bref scale, the score for each domain was converted into a score from zero to 100, following the instructions in the WHOQOL-bref manual. Thus, the score of each domain of the WHOQOL-bref can vary from zero to 100 points, corresponding to high values of each domain to the best quality of life. Questions Q1 (general perception of quality of life) and Q2 (general health satisfaction) were assessed separately, keeping the response scales from one to five points.

Table 1 shows values of Cronbach's alpha of the dimensions of the WHOQOL-bref scale varying between 0.615 and 0.803, being considered with good internal consistency. The analysis of the mean scores of each dimension shows a better quality of life in the psychological domain (M = 66.95; SD = 14.63), followed by the social relations domain (M = 64.51; SD = 19.65). The women in the sample report a worse quality of life in the environmental (M = 58.34; SD = 15.02) and physical (M = 61.71; SD = 19.61) domains.

As for the general Q1-QOL, most women considered their quality of life to be good (53.7%) or very good (17.1%). Only 4.9% answered “bad” and none answered “very bad”. The average answer to this question was 3.83 (SD = 0.77). About health satisfaction (Q2), just over half said they were satisfied (36.5%) or very satisfied (17.1%) and 14.6% of the participants said they were dissatisfied and 2.4% very dissatisfied. The average answer to this question was 3.51 (SD = 1.01).

In the dimension psychological domain and personal relationships domain, averages considered relatively high were obtained, showing a better quality of life in these aspects after hysterectomy. A study also carried out on hysterectomized patients at a university hospital in São Paulo corroborates this finding, showing that, after the procedure, women have the hope that their lives will improve, demonstrate optimism and associate the resumption of their lives in all areas, returning to play their social and sexual roles.6

A study carried out in Southern Brazil also demonstrated a positive impact on body perceptions and feelings associated with the procedure, in which the majority of women interviewed stated that they did not feel harmed or diminished by the removal of the uterus.7 The cessation of symptoms resulting from uterine diseases creates in these women expectations of restoring social and marital well-being, previously compromised.6 This reinforces the impact and the change process caused by hysterectomy in different areas of women's lives, as it is believed that the manifestations arising from uterine diseases can limit the daily activities; therefore, the organ withdrawal can be seen as the beginning of a new life.7

However, for some women, the experience of this process may be more fragile due to the uterus being an organ closely linked to the definition of the female role in society, attributing different meanings, especially with regard to maternal function and sexual capacity.8

The dimensions of the physical and environmental domains obtained lower results in relation to the others, which demonstrates a decrease in the quality of life of the interviewees in these dimensions. With regard to physical aspects, they reinforce the repercussion of surgery in the work process, both domestic and outside the home, due to the fact that it is a large procedure and result in the removal of such activities for a significant period, requiring rest and imposing limitations of some habits and other cares peculiar to surgical procedures.9 Therefore, it can also be related to the association that women submitted to hysterectomy make between the removal of the uterus and the alteration of the social position before the female group, proven in the
relations with her social world, suffering and, consequently, quality of life.\textsuperscript{11}

With regard to the facets related to the environment domain, more specifically to health care, health system and information, it was found that, in most cases, women were not given the possibility to decide on the most appropriate time to the performance of hysterectomy, nor about the time necessary for the reorganization of their daily personal and professional activities. Such conduct reflects the planning and occurrence of the procedure according to the routines of the health service, disregarding the dimensions involved in the female living process.\textsuperscript{12}

Therefore, when assessing the responses attributed to the scale, the need for more access to information and health services is emphasized, which corroborates the results of a survey, by emphasizing that it is extremely important that these women are informed about its limitations and restrictions, alleviating the insecurity, fear and anguish possibly caused by the loss of the organ. IT should be offered to these women should better interpretation of the reasons and consequences of the process to which they were exposed.\textsuperscript{13,14}

Considering the QS-F, the scores of the 41 women in the sample ranged from a minimum of zero to a maximum of 94 points. The mean score was 55.5 points, with a SD of 26.3 points (Table 2). The analysis of the classification of sexual performance (Table 2) shows that seven, that is, 17.1% of women, have zero to poor sexual performance; three (7.3%) have poor to unfavorable performance; and 13 (31.7%), unfavorable to regular; nine (22.0%) women with regular to good sexual performance; and nine (22.0%) with good to excellent performance.

The sexual performance of women undergoing the procedure is widely discussed in the literature, characterized by different opinions and approaches, which are often controversial. Therefore, because it is an organ that is associated with reproductive capacity, it brings discussions about the impairment to the quality of women’s sexual life. From this perspective, it is shown that the consequences of performing hysterectomy on the quality of sexual life are controversial, being directly associated with pre-surgical symptoms, emotional, psychological and physiological conditions involved in the reality of each woman.\textsuperscript{15}

The impact of hysterectomy on sexual function is still unclear, and the prevalence of sexual dysfunction varies widely, mainly due to methodological differences in surgery.\textsuperscript{8} The complexity of the process is also associated with the interaction of psychological, social, religious, cultural and educational in the woman’s view of the womb and of herself.\textsuperscript{8}

Thus, analyzing the responses of the QS-F, it was observed that, in the present study, a significant part of the interviewees reported unsatisfactory to regular sexual performance, possibly caused by the impact of the surgical procedure.\textsuperscript{11} This can be explained by the representation of biological and social function and of the uterus in sexuality, since this, when removed, can cause changes that negatively interfere in the quality of life of these women.\textsuperscript{15}

This repercussion does not focus only on emotional aspects. Anatomical changes in the pelvis, which can lead to changes in the size and/or shape of the genital organs, difficulty in vaginal penetration, dyspareunia, disruption of the anatomical supports of the sexual response, lowering of the sexual impulse and the degree of attractiveness by reducing hormone levels, arising from circulatory changes, causing, in some cases, sexual dysfunctions, are also mentioned as possible consequences of hysterectomy, with direct repercussion on the quality of sexual life.\textsuperscript{4}

It is worth remembering that such repercussions of hysterectomy on performance and sexual perception are influenced by several aspects, such as the woman’s age, desire or not for future pregnancies, quality of the relationship with the partner, benefits and harms of the removal of the uterus. Each woman interprets and experiences hysterectomy in a particular way. For some, surgery has a connotation of healing, relief and problem solving; and for others, the procedure brings with it conflicts and insecurity.\textsuperscript{14}

The results in Table 3 show that the correlations between the sexual quotient and the QOL domains were, in their entirety, positive and significant. Correlations are particularly regular, tending to be strong, with the physical (R = 0.386; p = 0.013), psychological (R = 0.437; p = 0.004) and social relations (R = 0.483; p = 0.001) domains, indicating that women with high quality of life in these domains have high sexual quotient. In relation to these domains, the literature addresses that this sexual response depends on non-organic factors, such as cultural, psychological and sexual formation.\textsuperscript{16} Therefore, the positive repercussion of these domains, mentioned by the interviewees, reflects a good level of quality of life, directly proportional to the high sexual quotient, which leads one to believe that no losses were obtained in these facets.

There is a significant positive correlation between the sexual quotient and general health satisfaction (R = 0.447; p = 0.003). The correlation with the general perception of QOL was not significant (R = 0.218; p = 0.172). In the correlation of the sexual quotient with the environment domain, a positive, but not significant, response was obtained (R = 0.283; p = 0.073). This reveals a discreet association of the sexual quotient with the following factors: physical security, home environment, financial resources, health care, information, recreation and leisure, physical environment and transportation.
The correlations revealed that the QOL of hysterectomized women did not affect the sexual quotient, diverging from a study that highlighted the negative repercussions such as the decrease or absence of sexual desire, reduced libido, pain during the sexual act, vaginal dryness or burning and an experience of fear during sexual intercourse, which impairs their sexuality.\(^6\)

Recent research addresses this new face of surgery, characterized by the process of demystifying the negative impacts linked to the procedure. They reveal that women in the postoperative period have a different view, allowing the return to sexual life after hysterectomy, maintaining or increasing sexual satisfaction.\(^6\)

In view of the analysis of responses regarding satisfaction and general perception of health, a significant positive correlation was found between the sexual quotient and overall health satisfaction (\(R = 0.447; \ p = 0.003\)). It was found that women who declared more satisfaction with health had a higher sexual quotient.

These data converge with what is discussed by the authors when emphasizing that general well-being is associated with satisfactory sexual health. Similarly, a woman’s sexuality is linked to the way she communicates in her daily life, in her environment and in her way of living.\(^8\)

However, in this study, the correlation with the general perception of QOL was not significant (\(R = 0.218; \ p = 0.172\)). There was a low association between the way these women assess their quality of life and its implications for the sexual quotient.

Table 4 shows that there are no significant differences in this study between women who use hormones and those who do not use hormones (\(p>0.05\)) in relation to quality of life or sexual quotient.

The use of hormone replacement therapy (HRT) has been widely discussed in the literature and is sometimes associated with improved quality of life. However, there is still no consensus on this issue. In a study conducted with 250 Brazilian women using and not using HRT, a result similar to this was found, in which it was found that the use of this form of treatment did not imply a significant difference in quality of life between the two groups evaluated.\(^7\)

HRT in hysterectomized women can be performed with naturally occurring and conjugated estrogens, orally, topically, subcutaneously, intranasally, among others.\(^8\) The adoption of this hormonal method provides an improvement in quality of life due to the decrease in vasomotor symptoms, insomnia and lability of mood in symptomatic women. However, despite being characterized as a therapeutic option to improve the quality of life, the possibility of risks must be considered. This often leads women who undergo hysterectomy to seek forms of non-hormonal treatment.\(^9\)

In the sexual sphere, some research has shown benefits related to sexual dysfunction with the use of HRT. However, in a recent systematic review involving 27 studies with 16,393 women, it was found that therapy was not a variable that significantly interfered in the prevention or solution of sexual dysfunction.\(^10\) There are also no significant differences between hypertensive and non-hypertensive and alcoholic women (\(p>0.05\)) neither in terms of QOL nor in terms of sexual quotient (quotient) (\(p>0.05\)) (Table 5).

Despite this, it is known that systemic arterial hypertension significantly influences changes in QOL, since it acts on physical, emotional, social interaction, intellectual activity, professional exercise and other daily activities. From this perspective, it is reiterated that the decrease in QOL is possibly linked to more severe cases of the disease, so it is of paramount importance to maintain good lifestyle habits so that these complications do not affect the QOL of people affected by it.\(^11\)

The results in Table 5 show that diabetic women have a worse sexual quotient and a worse quality of life in all domains, compared to non-diabetics. However, the differences between the two groups are only statistically significant in the social relations domain of QOL (\(p = 0.048\)).

This pathology represents a public health problem, as it is a chronic, progressive, prevalent and frequent disease. Diabetes has effects in several areas of a person’s life, acting negatively on their quality of life, especially for those who have late complications and uncontrolled blood glucose levels.\(^12\)

Thus, it is extremely important that the patient is committed to adherence to treatment, requiring careful adoption of a therapeutic regime and almost total co-participation in daily care for adequate metabolic control. This includes regular use of medication, physical exercise, healthy eating and the adoption of healthy habits. Such behaviors reflect changes in the patient’s lifestyle, which, consequently, can interfere with quality of life.\(^13\)

In a study developed in Europe with 116 diabetic patients in order to assess the relationship and differences in sexual functioning, metabolic control and quality of life in patients with type 1 and type 2 diabetes, it was found that, among women, there is a significant relationship between satisfaction with treatment and sexual activity. Such result shows that, regarding the sexual quotient, there are biological, psychological and social factors that compete over the course of diabetes to cause changes in the sexual response.\(^14\)

In the present study, it was found that, regarding alcohol consumption, there are no significant differences between alcoholic and non-alcoholic women (\(p>0.05\)) neither in terms...
### Table 1 - Internal consistency of WHOQOL-bref dimensions (N = 41)

| Domains                        | Cronbach's alpha | Mean (SD)     | Shapiro-Wilk Test |
|--------------------------------|------------------|---------------|-------------------|
| Physical Domain (7 itens)      | 0.803            | 61.71 (19,61) | p = 0.184         |
| Psychological Domain (6 itens) | 0.633            | 66.95 (14,63) | p = 0.028         |
| Social Relations Domain (3 itens) | 0.615            | 64.51 (19,65) | p = 0.003         |
| Environment Domain (8 itens)   | 0.7170           | 58.34 (15,02) | p = 0.040         |

Source: research data, 2017.

### Table 2 - Characterization of sexual performance (N = 41)

| Variable                   | Classification         | n    | %    |
|----------------------------|------------------------|------|------|
| Sexual performance         | Null to poor           | 7    | 17.1%|
| Minimum - maximum: 0-94    | Poor to unfavorable    | 3    | 7.3% |
| Mean (SD): 55.5 (26.3)     | Unfavorable to regular| 13   | 31.7%|
|                            | Regular to good        | 9    | 22.0%|
|                            | Good to excellent      | 9    | 22.0%|

Source: research data.

### Table 3 - Correlation of the sexual quotient (QS-F) with quality of life (WHOQOL-bref) (N = 41)

| WHOQOL-bref Domains          | Female Sexual Quotient | Spearman's Coefficient | p-value |
|------------------------------|-------------------------|------------------------|---------|
| Physical Domain              |                         | 0.386                  | 0.013   |
| Psychological Domain         |                         | 0.437                  | 0.004   |
| Social relations Domain      |                         | 0.483                  | 0.001   |
| Environment Domain           |                         | 0.283                  | 0.073   |
| General perception of QOL (Q1)|                         | 0.218                  | 0.172   |
| General health satisfaction (Q2) |                       | 0.447                  | 0.003   |

Source: research data, 2019.

### Table 4 - Comparison of quality of life (WHOQOL-bref) and sexual quotient (QS-F) regarding the use of hormone (N = 41)

| Test                        | Use of hormone | Mann-Whitney Test |
|-----------------------------|----------------|-------------------|
| QOL – Physical Domain       | No (n = 31)    | Yes (n = 10)      | p = 0.823 |
|                             | Mean (SD)      | Mean (SD)         |         |
|                             | 61.03 (19.57)  | 63.80 (20.67)     |         |
| QOL – Psychological Domain  | No (n = 31)    | Yes (n = 10)      | p = 0.893 |
|                             | Mean (SD)      | Mean (SD)         |         |
|                             | 66.55 (14.79)  | 68.20 (14.82)     |         |
| QOL – Social relations Domain| No (n = 31)    | Yes (n = 10)      | p = 0.300 |
|                             | Mean (SD)      | Mean (SD)         |         |
|                             | 62.13 (19.66)  | 71.90 (18.67)     |         |
| QOL – Environment Domain    | No (n = 31)    | Yes (n = 10)      | p = 0.940 |
|                             | Mean (SD)      | Mean (SD)         |         |
|                             | 57.77 (14.87)  | 60.10 (16.19)     |         |
| QOL – General perception of QOL (Q1) | No (n = 31)  | Yes (n = 10)      | p = 0.665 |
|                             | Mean (SD)      | Mean (SD)         |         |
|                             | 3.87 (0.76)    | 3.70 (0.82)       |         |
| QOL – General health satisfaction (Q2) | No (n = 31) | Yes (n = 10)      | p = 0.247 |
|                             | Mean (SD)      | Mean (SD)         |         |
|                             | 3.39 (1.05)    | 3.90 (0.88)       |         |
| Female Sexual Quotient (QS-F) | No (n = 31) | Yes (n = 10)      | p = 0.081 |
|                             | Mean (SD)      | Mean (SD)         |         |
|                             | 51.55 (25.67)  | 67.60 (25.75)     |         |

Source: research data.
of QOL nor in terms of sexual quotient (p>0.05) (Table 5). It is emphasized that the relationship between QOL in the scope of alcoholism is still insufficient, emphasizing the need for investment in research on the subject. Therefore, despite the results of this study, the authors reinforce the chronicity of the disease, emphasizing that clinical conditions have detrimental effects on well-being and QOL.25

The effect of alcohol on sexuality was also discussed in another study, which stated that small doses of alcohol can inhibit a woman’s physiological response to sexual stimuli, influencing both the organic and the aesthetic aspect.8

Additionally, the present investigation has some limitations inherent to cross-sectional studies, which are prone to generalization of results. It is based on the complexity of the data collection at a given moment, it does not assess the individual’s follow-up, the sample size may not have been sufficient, as there was no qualitative analysis of QOL and the variety of collection instruments, as well as the way of application. However, these limitations did not compromise the results obtained, considering that the methodological procedures used were enough for the objective of the study to be achieved.

### FINAL CONSIDERATIONS

The quality of life of hysterectomized women, investigated through the WHOQOL-bref, was considered good, as well as the participants declared themselves satisfied with their health. The analysis of the mean scores of each dimension shows a better quality of life in the psychological domain. Sexual performance was considered unfavorable to be regulated by the QS-F. The correlations between the female sexual quotient and the quality of life domains were statistically significant. It is also understood that hysterectomy was considered a form of “self-care”, as well as a way to rescue the woman’s self-esteem, which gives the procedure a new meaning, since most women after the procedure obtained better QOL score, with improvement of symptoms.

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### Table 5 - Comparison of quality of life (WHOQOL-bref) and sexual quotient (QS-F) regarding hypertension, diabetes and elitism (N = 41)

|                     | Hypertensive |                      | Diabetic |                      | Ecitism |                      |                      |
|---------------------|--------------|----------------------|----------|----------------------|---------|----------------------|----------------------|
|                     | No Mean (SD) | Yes Mean (SD)        |          | No Mean (SD)         | Yes Mean (SD) | No Mean (SD) | Yes Mean (SD) |
|                     | n=28         | n=13                 |          | n=37                 | n=14     | n=28                 | n=13                 |
| QOL-FD              | 61.04 (20.3) | 63.15 (18.7)          | p = 0.730| 62.14 (19.7)         | 57.75 (20.7)| p = 0.398          | 59.79 (21.23)        |
| QOL-PD              | 66.07 (16.5) | 68.85 (9.7)           | p = 0.793| 67.43 (14.9)         | 62.50 (11.5)| p = 0.533          | 65.89 (15.80)        |
| QOL-SRD             | 63.43 (21)   | 66.85 (16.5)          | p = 0.750| 65.89 (19.9)         | 51.75 (11) | p = 0.552          | 63.21 (22.26)        |
| QOL-ED              | 57.89 (16)   | 59.31 (13.2)          | p = 0.648| 58.57 (14.6)         | 56.25 (21)| p = 0.688          | 57.68 (16.61)        |
| QOL-GPQOL           | 3.75 (0.7)   | 4.00 (0.8)            | p = 0.298| 3.89 (0.7)           | 3.25 (0.5) | p = 0.709          | 3.79 (0.83)          |
| QOL-SGQOL           | 3.36 (0.9)   | 3.85 (1)              | p = 0.168| 3.57 (1)             | 3.00 (0.8) | p = 0.226          | 3.36 (1.10)          |
| QS-F                | 51.86 (25)   | 63.23 (27.5)          | p = 0.128| 56.39 (26.9)         | 45.00 (18) | p = 0.814          | 55.07 (28.54)        |

Source: research data.

FD: physical domain; PD: psychological domain; SRD: social relations domain; ED: environment domain; GPQOL: general perception about QOL; GSQOL: general satisfaction with QOL; QS-F: female sexual quotient.
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