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## INTEGRATIVE REVIEW ARTICLE

### BODY IMAGE AND SEXUALITY OF WOMEN WHO UNDERWENT A RADICAL MASTECTOMY: INTEGRATIVE REVIEW

#### IMAGEM CORPORAL E SEXUALIDADE DE MULHERES SUBMETIDAS À MASTECTOMIA RADICAL: REVISÃO INTEGRATIVA

#### IMAGEN CORPORAL Y SEXUALIDAD EN LAS MUJERES SOMETIDAS A MASTECTOMÍA RADICAL: REVISIÓN INTEGRADORA

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#### ABSTRACT

**Objective:** to analyze the scientific production of national and international journals about body image and sexuality of women who underwent radical mastectomy for breast cancer. **Method:** an integrative review, held at Virtual Health Library, Public Medline, CINAHL, Cochrane, and Scopus. The following research question was formulated << *What is the scientific production on existing national and international level on the perception of women who underwent radical mastectomy for breast cancer diagnosis about their body image and sexuality?* >>. Included were articles in English, Portuguese or Spanish in full, free and published between 2005 and 2011. **Results:** three categories were identified: 1) no change in body image, 2) Change in body image due to mastectomy, 3) Sexual dysfunction due to mastectomy. The level of evidence B was observed in half of the studies found. **Conclusion:** Most women undergoing radical mastectomy tend to show changes in body image and sexuality. **Descriptors:** Breast Cancer; Mastectomy; Body Image; Sexuality.

#### RESUMO

**Objetivo:** analisar a produção científica de periódicos nacionais e internacionais acerca da imagem corporal e sexualidade de mulheres submetidas à mastectomia radical por câncer de mama. **Método:** revisão integrativa, realizada na Biblioteca Virtual em Saúde, Public Medline, CINAHL, Cochrane e Scopus. A seguinte questão de pesquisa foi formulada << *Qual a produção científica existente em nível nacional e internacional sobre a percepção das mulheres submetidas à mastectomia radical por diagnóstico de câncer de mama acerca de sua imagem corporal e sexualidade?* >>. Incluíram-se artigos em português, inglês ou espanhol na íntegra, gratuitamente e publicados entre 2005 e 2011. **Resultados:** três categorias foram identificadas: 1) Não alteração na imagem corporal, 2) Alteração na imagem corporal devido à mastectomia, 3) Disfunções sexuais devido a mastectomia. O nível de evidência B foi observado na metade dos estudos encontrados. **Conclusão:** a maioria das mulheres submetidas a mastectomia radical tendem a apresentar modificações na imagem corporal e sexualidade. **Descritores:** Câncer de Mama; Mastectomia; Imagem Corporal; Sexualidade.

#### RESUMEN

**Objetivo:** analizar la producción científica de las revistas nacionales e internacionales sobre la imagen corporal y la sexualidad de las mujeres que se sometieron a una mastectomía radical para el cáncer de mama. **Método:** revisión integradora, que tuvo lugar en la Biblioteca Virtual en Salud, Public Medline, CINAHL, Cochrane, y Scopus. La pregunta de investigación se formuló la siguiente << *¿Qué es la producción científica a nivel nacional e internacional vigente sobre la percepción de las mujeres que se sometieron a una mastectomía radical para el diagnóstico de cáncer de mama sobre su imagen corporal y la sexualidad?* >>. Se incluyeron artículos en Inglés, portugués o español en su totalidad, libres y publicados entre 2005 y 2011. **Resultados:** Se identificaron tres categorías: 1) no hay cambio en la imagen corporal, 2) el cambio en la imagen corporal debido a una mastectomía, 3) La disfunción sexual debido a una mastectomía. El nivel de evidencia B se observó en el medio de los estudios encontrados. **Conclusión:** La mayoría de las mujeres sometidas a mastectomía radical tienden a mostrar cambios en la imagen corporal y la sexualidad. **Descriptores:** Cáncer de Mama; Mastectomía; La Imagen Corporal; La Sexualidad.

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## INTRODUCTION

Scientific advances enable today the diagnosis is made early and treatment of many cancers, which has progressively changed the behavior of doctors and health professionals about the disease.<sup>1</sup>

The diagnosis of breast cancer, like other cancers, causes a devastating effect on the lives of a woman and her family.<sup>2</sup> This is because breast cancer can cause disturbances in the organization of everyday life, in the distribution of roles within the family and among partners.<sup>3,4</sup>

This type of cancer is the leading cause of cancer death in women in Brazil and one of the top in the world.<sup>5</sup> Moreover, studies conducted in the United States showed that there has been a significant decrease in mortality rates of up to 2.3% per year,<sup>6</sup> accompanying the evolution of methods of early diagnosis and treatment. Thus, a woman facing a diagnosis of breast cancer does not necessarily have a shortened life expectancy. However, these promising statistics should not suggest that the experience of breast cancer (diagnosis and treatment) is not difficult. This diagnosis can be accompanied by fatigue, early menopause, sexual disorders, cognitive, psychological and body image that significantly affect the quality of life (QOL) of these women.<sup>7,8</sup>

Among the possible treatments for breast cancer aimed at curing the disease,<sup>9</sup> is the partial or total mastectomy, which in turn, causes extensive body modifications in women.

Thus, adaptation to a new body image due to this procedure, reintegration into family life and rehabilitation work are part of a long history that can be experienced many difficulties.<sup>10</sup> Causing so great psychosocial impact for women, a factor that has been the focus of several studies, especially in relation to specific aspects of quality of life, once neglected, as body image and sexuality.<sup>11-4</sup>

Based on these, this study aims to analyze the scientific production of national and international journals about body image and sexuality of women who underwent radical mastectomy for breast cancer.

## METHOD

This is a descriptive study, a literature review, the type integrative review. This method consists of the union of systematic scientific papers on a certain topic or issue that favors a deeper knowledge about the phenomenon under investigation.<sup>15</sup>

This review was done by following these steps: defining the research question, establishing inclusion and exclusion criteria, selection of articles in the literature, categorizing studies, evaluation of publications included, results interpretation and synthesis of knowledge. To guide the present study was formulated the research question << *What scientific production on existing national and international level on the perception of women who underwent radical mastectomy for breast cancer diagnosis about their body image and sexuality?* >>

Data collection was carried out from 13 to 17 January 2012, in electronic databases: Virtual Health Library (VHL), Public Medline (PubMed), Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane and Scopus; being accessed each database in a single day by two researchers simultaneously on different computers, in order to guarantee greater reliability in the selection of publications.

In the search we used the following words in Health Sciences (DECS) and their synonyms in English: "Breast Cancer / Breast Neoplasm", "Radical Mastectomy / Mastectomy, Radical", "Body Image / Body Image" and "Sexuality / Sexuality" and the Boolean operator "AND" to perform crosses between the descriptors.

For the selection of articles, the inclusion criteria used were: articles available in selected databases, which were available in Portuguese, English or Spanish, in full and free; discusses on that theme and that had been published between the years 2005 and 2011. Exclusion criteria were: editorials, letters to the editor and articles that did not cover the topic relevant to the achievement of the objective of the review.

Initially we selected the articles whose titles and summaries matched the inclusion criteria previously established. The studies were evaluated by careful reading and identifying passages that responded to the research objective. Articles that did not meet this phase were excluded and those selected were synthesized through the use of an assessment tool that allows characterization publications as identification, institution headquartered in the study, type of magazine, methodological characteristics of the study and assessment of methodological rigor. Moreover, thematic categories were created from the grouping of similar data as the object of study previously identified in the sections of the research. Finally, studies were critically analyzed through literature.

It is noteworthy that the selected articles were analyzed for trace objective, research question, methodology and results.

To analyze the quality of evidence was considered the classification A, B, C, D.<sup>16</sup> The grade it is experimental or observational studies better consistency (meta-analysis or randomized controlled trials), grade B or experimental studies observational less consistency (other nonrandomized trials or observational studies or case-control studies), C grade reports or case series (uncontrolled studies) and grade D of opinion without critical evaluation, based on consensus, physiological studies or animal models.

The identification of the level of evidence of the studies analyzed is important because it suggests the establishment of a relationship between quality of publications and grade of recommendation for making clinical decision professionals, and stimulates the search for evidence of greater strength to the practices.<sup>16</sup>

RESULTS

A total of 36 articles were found by summing the results of all crosses performed the search in databases, including articles in languages pre-established, they were full and free and that had been published between the years 2005 and 2011.

At the end of nine articles were selected to compose the study for meeting all inclusion criteria. Among the selected studies, a base VHL was one of Cinahl, three of the Pubmed, Cochrane and two of two from Scopus. After further reading, an article database Cocharane was excluded for not directly address the topic of research. Thus, eight articles were included in this review at the end. Of the articles analyzed, one was published in Spanish, seven in English and none in Portuguese. (Figure 1).

Articles	Database	Body image and/or sexuality
Shoma, A. M. et al., 2009	BVS	Differences in body image pre and postoperative radical mastectomy.
Skrzypulec, V. et al., 2008	CINAHL	The increase in problems related to private life and sexual activity in women after mastectomy.
Lostumbo, L. et al., 2008	COCHRANE	Some studies report no change in the pattern of sexual activity and pleasure after bilateral profilatica other mastectomies report negative effects on sex and other describe feelings of less sexual attraction.
Dahl, C.A.F. et al., 2010	PUBMED	A larger proportion of women after mastectomy who had a more negative body image, wanted to go through reconstructive surgery.
Pandey, M. et al., 2006	PUBMED	The significant deterioration of physical well-being was observed in women who have undergone mastectomy. There was difficulty in obtaining data on sexuality due to large amount of subjects who have not responded to questions related to this thematic.
McCready, D. et al., 2005	PUBMED	Two years after surgery, the Group of women who have breast-conserving surgery had a better body image and were more satisfied with the treatment of the mastectomized. In another study, no significant differences were found in 7 tests related to marital and sexual adjustment or body self-image.
McGaughey, A. et al., 2006	SCOPUS	The loss of her breasts was directly related to the pre-existing capacity of the individual construction of femininity and the importance and physical attractiveness.
Arndt, V. et al., 2008	SCOPUS	Differences due to the dissatisfaction of body image were higher in the first year, but this difference has decreased over time. The better performance of breast-conserving therapy on mastectomy with respect to body image can be observed.

Figure 1. Summary of Articles as authors, year of publication, database and according to the results plotted on body image and sexuality.

Table 1 brings a summary of the articles, by country of publication, the year the survey area and the scenario study.

**Table 1.** Distribution of researched articles in the databases Scopus, CINAHL, PubMed, Lilacs and Cochrane by country, year of publication, and research area scenario.

Variables	n	%
<b>Country</b>		
Egypt	1	12,5
Poland	1	12,5
England	1	12,5
Norway	1	12,5
Japan	1	12,5
Canada	1	12,5
United States	1	12,5
Germany	1	12,5
<b>Total</b>	8	100
<b>Year of publication</b>		
2005	1	12,5
2006	2	25
2008	3	37,5
2009	1	12,5
2010	1	12,5
<b>Total</b>	8	100
<b>Area of research</b>		
Medica	2	25
Nursing	2	25
Multi-professional	2	25
Oncology	2	25
<b>Total</b>	8	100
<b>Scenario</b>		
Hospital	3	37,5
Multiple institutions	1	12,5
Scientific Magazine	1	12,5
Local was not identified	2	25
University	1	12,5
<b>Total</b>	8	100

As seen in the Table 2, the distribution of the studies found in the literature were in global dimensions. Also there was a uniform distribution with respect to the area of research, which demonstrates the importance of the publication of thematic extensions distinct professional.

As for the scenario where the studies were developed, it was realized a deficit of clarification in this regard, since 25% of the studies was not possible to identify the

location of its development, which suggests a lack of clarity regarding the methodological approach.

Of the eight articles included in this study, three dealt to revisions, an it was a prospective randomized study,<sup>19</sup> two studies were case-control and two were cohort studies.<sup>23-4</sup>

**Table 2.** Distribution of researched articles in the databases Scopus, CINAHL, PubMed, Lilacs and Cochrane, ranked according to levels of evidence and design.

Evidence Force	Delineation	n	%
<b>A</b>	Randomized Controlled clinical trial <sup>20</sup>	1	12,5
<b>B</b>	Cohort studies <sup>23-4</sup>	2	25
	Studies of well-designed case-control <sup>21,22</sup>	2	25
<b>C</b>	A systematic review of qualitative and descriptive studies <sup>179</sup>	3	37,5
<b>D</b>		0	0
<b>Total</b>		8	100

As noted in this table, studies of evidence level B (cohort studies and case-control) corresponded to half of the studies found, while studies of evidence level A appears in only one study.

DISCUSSION

The distribution of the studies found in the literature worldwide demonstrates that several scholars from different countries were concerned to assess body image and sexuality for women with breast cancer undergoing radical mastectomy. It is believed that this distribution facilitated the global analysis of the issue, since, with this reality will be able

to make a comparison and have a representation of that impact overall.

The principle has been possible to observe the grace and the need for development of new studies showing higher levels of evidence regarding the assessment of body image and sexuality of women who underwent radical mastectomy for breast cancer.

Based on strong evidence of the unique study found of degree A,<sup>20</sup> it can be said that women undergoing mastectomy have moderate to severe distress regarding body image postoperatively, whereas women undergoing breast conservation therapy, had mild distress. In this study we did not find

statistically significant differences between groups with respect to body image preoperatively.

For analysis of studies obtained with this review, they will be described in the following three themes as the results presented. The first category refers to no change in body image; category 2 the change in body image due to radical mastectomy; category 3 due to a sex change surgery.

#### ◆ No change in body image

Among the articles analyzed in a research review, some studies have brought results for no change in body image and satisfaction with appearance in over 50% of the study population. In the same study, women who possessed positive body image before surgery, showed no changes in body image postoperatively.<sup>18</sup>

Breast-conserving therapy is presented as a major factor in not changed body image.<sup>17,19</sup> People undergoing this procedure tend to report better physical and psychological conditioning, seeking for example, work, leisure and other daily activities, and also more sexually active and more satisfied with their body image.<sup>23</sup> Furthermore, this approach offers an advantage over mastectomy for a better body image and social adjustment. Moreover, both surgeries, as seem to be equivalent to the overall relationship adjustment or the fear of recurrence.<sup>19</sup>

The best performance of breast-conserving therapy on mastectomy with respect to body image can also be observed when performed some analysis of measures that assess treatment time and their interaction. Women and women after mastectomy after breast-conserving therapy have major differences regarding body image in the first year after the surgical procedure, but this difference decreases over time.<sup>23</sup>

Despite this advantage, in a review study, it was found even though more than half of women surveyed said they did not feel that their new breasts are part of her body.<sup>17</sup>

#### ◆ Changes in body image due to mastectomy

Studies found that body image and feelings of femininity were more adversely affected with mastectomy. One study found that women reported changes in your breasts, such as loss of sensation of the breasts. This study describes results in which 94.1% of women who underwent mastectomy had a reduction in breast sensitivity and 82.3% significantly lost touch sensation in her breasts.<sup>18</sup>

In general, the loss of breasts was directly related to the individual's existing capacity building of femininity and physical attractiveness. Most women worried about losing their nipples.<sup>18</sup>

Although most women experience negative feelings toward their breasts in particular, this alone does not necessarily affect sexual functioning.<sup>18</sup>

In review found that the majority of studies report that up to half of all women suffer a negative effect on body image after performing prophylactic mastectomy. Some women also reported a negative influence on gaze and touch your breasts and your physical well-being and social. In addition, younger women had more negative feelings related to the changes in their bodies due to mastectomy.<sup>18</sup>

Because this procedure is more disfiguring than breast conservation therapy, it is observed that most of the women who had undergone mastectomy had severe degrees of anxiety about situations to see your scar or let others see.<sup>20</sup>

Significant deterioration was observed in body image among women under 40 years of age who possessed tumor stage T2, N1 or N2, low-income women, Hindus, Muslims, who were in stages II, III or IV disease and among women who have undergone mastectomy. However, these data are contrasted in another study, in which no significant differences in body image as related to the stage of the tumor, number of lymph nodes removed, the presence of lymphedema, treatment with chemotherapy, hormone, age at disease diagnosis.<sup>24</sup>

Women who had a more negative body image often had developed fibrosis in the treatment area and his clothes had changed considerably. Moreover, there was also a higher proportion of women who received radiotherapy had worse body image.<sup>24</sup>

A significantly higher number of breast cancer survivors with poor body image also reported poorer health, use of analgesics and psychotropic drugs, diagnoses of anxiety or depression and chronic fatigue, compared with survivors who have better body image. These differences reached clinical significance, except for the use of medication. Among the survivors, it was noticed that 91% possessed a better body image over time. However, it was still a considerable number of women who had persistent negative body image over three years.<sup>24</sup>



### ♦ Sexual dysfunction due to mastectomy

It is evident in this review that the higher the level of life satisfaction, better sexual satisfaction and higher levels of depression and anxiety, the worse this review. Moreover, there is a direct relationship between marital status and sexual satisfaction. It was noted that the highest level of satisfaction with sex life in women after total mastectomy was experienced by patients divorced and independent, followed by patients married, single and widowed, respectively.<sup>21</sup>

Some women who underwent mastectomy did not want her breasts were touched and a husband did not want to touch the woman's breasts. Couples experimented different sexual problems, which were linked to a general loss of a sense of femininity of women after the surgical procedure.<sup>18</sup> Moreover, some women report feeling less sexual attraction after mastectomy.<sup>17</sup>

In a particular study, it was difficult to obtain data depicting sexuality and body image in interviews preoperatively and / or postoperatively because a significant number of patients failing some variables these themes, especially about sexuality. By examining them there was an absence of responses on three items in particular: I feel closer to my partner, I am satisfied with my sex life and I feel sexually attractive, which were not met by a substantial number of patients preoperatively and postoperatively or both (10%, 33% and 14%, respectively).<sup>22</sup>

We believe that by dealing with people who have undergone a surgical procedure that caused direct changes in organs considered symbols of femininity, they could have an emotional disorder that did not allow the description of these variables at the time until the non-recognition of a new body identity.

Mastectomy has a character that resonates about mutilating and self-image, sexuality and performance of roles of women in society, thereby causing a painful reality for women. For this reason, it is essential to include measures of quality of life in care and recovery process to women with mastectomies in order to enhance the promotion of life and self-care.<sup>25</sup>

### CONCLUSION

Encountered during the search of scientific articles about the difficulty of finding studies that addressed the topic of sexuality. Perhaps because there is some barrier to the adoption of this context with studies or taboo for establishing dialogue about sexuality.

Moreover, it was not possible to identify the articles, the perception of the partners of women who underwent radical mastectomy facing changes in body image and how these changes affected the couple's sexuality. Something that can be directly related to the establishment of good physical, social, emotional and sexual abuse of women diagnosed with breast cancer. Still, it was noticed that although the majority of women who underwent radical mastectomy submit changes in body image and sexuality, breast conservation therapy becomes an alternative to mitigate these changes.

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