



## THE PERFORMANCE OF NURSING IN WOMAN ALOPECIA WITH BREAST CANCER: INTEGRATIVE REVIEW

### A ATUAÇÃO DA ENFERMAGEM NA ALOPECIA DA MULHER COM CÂNCER DE MAMA: REVISÃO INTEGRATIVA

### LA ACTUACIÓN DE LA ENFERMERÍA EN LA ALOPECIA DE LA MUJER CON CÁNCER DE MAMA: REVISIÓN INTEGRADORA

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#### ABSTRACT

**Objective:** to characterize the scientific production from 2004 to 2013 about the evidence related to the performance of nursing to alopecia in breast cancer. **Method:** it is integrative literature review that used the LILACS, MEDLINE, SCOPUS and CINAHL with the following guiding question << *What is the perception of nursing on women with alopecia in breast cancer?* >>. The inclusion criteria were: articles indexed in such databases; published in Portuguese, English and Spanish; available in its entirety. Bibliographical survey conducted from July to October 2013. **Results:** the final sample were five articles. The role of nursing before the woman with alopecia in breast cancer is not focused on its multiple dimensions and in its consequences. The nurse is concerned with the chemotherapy drug and vomiting. **Conclusion:** the performance of nursing must be supported as it is the side effect with greater difficulty in patient handling. **Descriptors:** Alopecia; Breast Cancer; Nursing.

#### RESUMO

**Objetivo:** caracterizar a produção científica no período de 2004 a 2013 acerca das evidências relacionadas à atuação da enfermagem em relação à alopecia no câncer de mama. **Método:** revisão integrativa da literatura que utilizou as bases LILACS, MEDLINE, SCOPUS e CINAHL, tendo a seguinte questão norteadora << *Qual a percepção da enfermagem sobre a mulher com alopecia no câncer de mama?* >>. Os critérios de inclusão foram: artigos indexados nas referidas bases; publicados em língua portuguesa, inglesa e espanhola; disponíveis na íntegra. O levantamento bibliográfico foi realizado no período de julho a outubro de 2013. **Resultados:** cinco artigos compuseram a amostra final. A atuação da enfermagem perante a mulher com alopecia no câncer de mama não está focada em suas múltiplas dimensões e em suas consequências. O enfermeiro se preocupa com a droga quimioterápica e com o vômito. **Conclusão:** a atuação da enfermagem necessita ser estimulada, visto ser o efeito colateral com maior dificuldade de a paciente lidar. **Descritores:** Alopecia; Câncer de Mama; Enfermagem.

#### RESUMEN

**Objetivo:** caracterizar la producción científica en el período de 2004 a 2013 acerca de las evidencias relacionadas a la actuación de la enfermería en relación a la alopecia en el cáncer de mama. **Método:** revisión integradora de la literatura que utilizo las bases LILACS, MEDLINE, SCOPUS y CINAHL teniendo la siguiente pregunta guiadora << *¿Cuál es la percepción de la enfermería sobre la mujer con alopecia en el cáncer de mama?* >> Los criterios de inclusión fueron: artículos indexados en las referidas bases; publicados en las lenguas portuguesa, inglesa y española; disponible en su íntegra. Levantamiento bibliográfico realizado en el período de julio a octubre de 2013. **Resultados:** cinco artículos compusieron la muestra final. La actuación de la enfermera en la mujer con alopecia en el cáncer de mama no está enfocada en sus múltiples dimensiones y en sus consecuencias. El enfermero se preocupa con la droga de quimioterapia y con el vómito. **Conclusión:** la actuación de la enfermería necesita ser estimulada, visto ser el efecto colateral con mayor dificultad de la paciente lidiar. **Descriptores:** Alopecia; Cáncer de Mama; Enfermería.

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## INTRODUCTION

Cancer is originated from a cellular disorder due to abnormal growth of cells divided uncontrollably in an aggressive and rapidly way, forming tumors or malignant neoplasms invading tissues and organs.<sup>1,2</sup>

In 2014, it was estimated a total of 190,000 new cases of cancer in women, highlighting the highest incidence of breast, colon and rectum, cervix, lung and thyroid gland cancer.<sup>2</sup> Despite its high incidence, breast cancer has a good prognosis when diagnosed and treated early, especially with the technological evolution of the diagnosis and the effectiveness of treatments.<sup>3,2</sup>

Treatment for cancer depends on the combination of different therapeutic modalities, being divided into local and systemic treatment.<sup>4,5</sup> The choice of treatment modality should be performed on an individual basis, considering the disease stage and risk of relapse<sup>4,1</sup>. Cancer chemotherapy is the treatment of malignancies through the application of chemicals, separately or in combination to eliminate cancer cells, fight and prevent metastasis.<sup>5-6</sup> Although it is effective, antineoplastic chemotherapy results in several side effects since chemotherapy does not have specificity with regard to target cells, and also affect normal cells, once the medicine identifies a vital biochemical function which is rapid cell proliferation.<sup>5-6</sup>

These drugs often cause side effects that can be severe or mild. The most common side effects are nausea and vomiting; fever; fatigue; malaise; suppression of menstruation; early menopause; hair loss and alopecia; leukopenia; thrombocytopenia; diarrhea; phlebitis; hyperuricemia; kidney failure; anemia; lung fibrosis and liver cell injury.<sup>7</sup>

These complications can show that among the several side effects produced by chemotherapy, alopecia is responsible for the restlessness and anxiety of women to treatment, since it shows the patient as ill.<sup>8-9</sup> Thus, alopecia is highlighted for being one of the most difficult emotional issues to be faced by women. Hair loss occurs by total or partial atrophy of the hair follicle, making the hair shaft plummet. It appears early beginning approximately two to three weeks after treatment and may last as long as the treatment continues. The hair grows back within two months from stopping treatment, and may acquire differences in texture and color.<sup>7</sup>

Hair loss for women represents a mischaracterization of female identity, as the long hair is seen as a symbol of femininity and sexuality as a reflection of society. Thus, alopecia can act negatively in daily life, in the development of body image and sexual life of women.<sup>3,10</sup> Thus, breast cancer, associated with alopecia, can produce a mix of different feelings and emotions, resulting in numerous difficulties that may decrease adherence to treatment, since this is one of the steps to confront starting at the time of diagnosis.<sup>11</sup>

Non-adherence to treatment can be attributed to the consequences that alopecia can bring to the everyday woman, being necessary and essential that at that moment the woman creates alternatives to improve adaptation to treatment.<sup>8-9</sup> In this sense, the woman tries to camouflage the physical changes in order to preserve her privacy in social life, or to restore appearance to an ideal of beauty and femininity present in society, as well alopecia shows to the society that woman is undergoing a disease process.<sup>12</sup>

In this context of confrontation that nursing care need and fundamental part of health care in the whole approach of the disease process. The need for information about the consequences of cancer treatment, guidance on the new condition, and emotional support during their period of occurrence, in order to preserve the health status of women is a key role in nursing practice.<sup>8,12</sup>

During the period of chemotherapy, nursing having direct contact with the woman, must be attentive to the feelings reported that she reports about the side effects and guide her over the care of the hair with respect to alopecia. This is because hair loss usually occurs after the first session and is very fast, that is, it does not fall slowly and, yes, from one day to the next.<sup>13</sup> This leads the woman to feel naked before the other, which comes to interfere in their self-esteem and how to position themselves against the disease. When the coping is positive, the woman creates alternatively, for example, the use of wipes, wigs, etc., but if not, she tends to cover not to show her illness. This rejection affects the immune system, leading to face a dismal cycle in each session of chemotherapy and often leading to quit treatment.<sup>8-9</sup>

The role of nursing before the woman with alopecia in breast cancer will be effective only from the time when the nursing faces the completeness, valuing the emotional and individual aspects and not be focused only on the disease. This comprehensive view allows a woman to get security to treatment, increasing her adherence, and thus directly

reflected in increased survival and allowing spend this time with confidence, seeking alternatives and support in nursing or support groups.<sup>13-2</sup>

OBJECTIVE

- To characterize the scientific production from 2004 to 2013 about the evidence related to the performance of nursing with alopecia breast cancer.

METHOD

This is an integrative review, method that consists in carrying out the synthesis of knowledge and incorporating the applicability of results of significant studies in practice.<sup>14</sup> This type of study has extreme applicability to nursing, due to there is a large number of publications on a particular topic. The theoretical reference underlying this study is the Evidence-Based Practice (PBE), for assisting the professional in the decision-making process, because it is the judicious use of valid and relevant evidence.<sup>15</sup>

After reading the articles, they were analyzed using a validated instrument<sup>16</sup> that classifies studies in six phases: 1 - topic or question identification of the integrative review; 2 - sampling or literature search; 3 - categorization of studies; 4 - Evaluation of the studies included in the integrative review; 5 - interpretation of results; 6 - synthesis of knowledge evidenced in the analyzed articles or presentation of integrative review.<sup>16</sup>

The guiding question for the search of articles was: What is the perception of nursing on women with alopecia in breast cancer? The keywords used were “alopecia” AND “breast cancer” AND “oncology nursing”. The databases used were: American Latino and Caribbean Health Sciences (LILACS) and the Medical Literature Analysis and Retrieval System Online (MEDLINE) through/VHL (Virtual Health Library) and the Library of Medicine National US national Institutes of Health (PubMed), SciVerse Scopus to (SCOPUS); the Cumulative Index to Nursing & Allied Health Literature (CINAHL). The search for articles in the databases occurred in the months of July to October 2013.

The sample was selected through some criteria: articles published in full in the last ten years (2004-2013), in Portuguese, English and Spanish, addressing the theme “the role of nursing on women with alopecia in cancer mama”; including all articles, regardless of the screening method used.

First, a careful reading of the titles, summaries and keywords, and then it was

checked if the articles answered the guiding question of the study. After that, the search and reading of the article in full was carried out, and finally, the articles were evaluated according to the instrument proposed by Ursi.<sup>16</sup>

For better visualization and data exposure, a table that summarizes the articles located in the databases by categories: databases; located articles; eligible articles; duplicate articles and selected articles.

To better critical evaluation of the production of scientific knowledge in nursing was used the following evidence ranking system<sup>17</sup>:

Level 1, multi-controlled studies meta-analysis; Level 2, individual study with experimental design; Level 3, study of nearly experimental design; Level 4, study with non-experimental design; Level 5, report cases or data obtained systematically; Level 6, opinion of respected authorities based on clinical expertise or opinion of expert committees, including information not interpretations based on research<sup>17</sup>.

After reading the article in depth, it was raised the objective and the conclusion of it and for best viewing, the results are presented in a summary table. This table presents a summary of selected articles through the inclusion criteria with the following: title of the article/year of publication; author/country; professional category; objective of the study; results and conclusion and level of evidence.

The data discussion was done descriptively, allowing the reader to evaluate the applicability of the developed integrative review, in order to achieve the objective of this research.

RESULTS

A coleta de dados se deu por meio de duas etapas. A primeira constou de uma busca avançada nas bases de dados sendo identificados 62 artigos nos diferentes periódicos. Destes, 53 eram da língua inglesa, sete, da portuguesa e dois, da espanhola e seis eram duplicados. No período proposto, de 2004 a 2013 foram levantados 49 publicações.

The data collection was carried out by two steps. The first consisted of an advanced search in databases and identified 62 articles in different journals. Of these, 53 were of English, seven, and two of the Portuguese, the Spanish and six were duplicated. In the proposed period, from 2004 to 2013 were raised 49 publications.

In the first stage, there was a careful reading of the titles, abstracts and keywords, resulting in the exclusion of 36 articles, not answering the main question, since they did not explore the role of nursing in woman alopecia. Two articles were not able to access them in full, thus leaving 11 eligible articles.

In the second stage, after reading the 11 articles in full and the application of the

inclusion criteria, there were six articles excluded for not answering the guiding question, as they aimed at the care in the application of chemotherapy. Five articles were selected to compose the final sample of the study (Figure 1).

Databases	Located articles	Elegible articles	Duplicated articles	Selected articles
MEDLINE	20	03	07*	03
CINAHL	07	07	00	00
LILACS	21	04	06*	01
SCOPUS	14	02	06*	01
Total	62	16	06	05

Figure 1. Distribution of the articles obtained in databeses by refinement, 2013.  
Note: The total sum of duplicate articles was six because there was an article duplicated in three databases.

After the emergence of these two stages, there was the categorization of the articles according to their topics. It was found that during the study period (2004-2013) there was a small contingent of articles that have addressed the topic of nursing perception of alopecia in women with breast cancer.

It was observed that there are many studies on chemotherapy for breast cancer, with alopecia as a side effect. However, when nursing is inserted, the topic becomes increasingly scarce. This may be seen as only five articles were found among the four databases studied over the decade.

The selected studies have a total of 17 (100%) authors; of these, 13 (76.47%) were nurses and two were psychologists (11.76%), one academic nursing (5.88%) and one doctor (5.88%).

The five articles selected were published in different journals, such as: Revista Brasileira de Enfermagem (A2); European Journal of Oncology Nursing (A1); Cancer Nursing: An

International Jornal for Cancer Care (A1); Escola Anna Nery Revista de Enfermagem (B1) e Patient Education and Counseling (A2). It was observed that in the year of publication, they occurred in different years, and the oldest is from 2003 and the most recent in from 2012; not finding studies on this topic in 2012.

According to the theoretical reference used to evaluate the evidence level<sup>17</sup>: four studies presented evidence level 04 (80%) and one (20%) study showed evidence of level 05, because it is a literature research. Therefore, the studies included in this study demonstrated for most of them, weak evidence levels, which can be seen in Figure 2.

Title of the article/year of publication	Author/country	Objective of the study	Result/ Conclusion	Level of Evidence
1 Identifying the concerns of women undergoing chemotherapy 2003.	Farrell C, Céu C, Beaver K, Maquire P. Inglaterra	Identify key concerns of cancer patients receiving chemotherapy, and assess if nurses could identify patients' concerns.	The nurses did not identify the alopecia as concern over chemotherapy.	4
2 Symptom, symptom experiences, and symptom distress encountered by women with breast cancer undergoing current treatment modalities 2005.	Boehmke SS, Dickerson M M. Estados Unidos	Identify the symptoms, experiences of symptoms, and resulting symptom distress encountered by women with breast cancer undergoing chemotherapy.	The main concern foun for chemotherapy was alopecia.	4



3 Experiences of care in women with mastectomies: a literature search 2006	Pereira SG, Rosenhein DPN, Bulhosa MS, Lunardi VL. Brasil	Knowing the scientific literature on strategies, difficulties and nursing care.	Alopecia was one of the main difficulties found in the treatment. But the nursing staff does not value or observe this side effect.	5
4 The impact of cancer and chemotherapy: Perceptual similarities and differences between cancer patients, nurses and physicians 2008	Mulders M, Vingerhoets AD, Breed W. Holanda	To assess and compare perceptions about the impact of cancer and chemotherapy of health-care providers and patients.	Alopecia is one of the top five concerns of women with breast cancer. However, doctors and nurses do not value this feeling.	4
5 Analysis of behavioral responses to breast cancer Using the adaptive model of Roy 2012	Santos LR, Tavares GB, Reis PED. Brasil	Analyzing the perceptions of women with breast cancer about their sexuality from the adaptive model of Roy.	Alopecia was highlighted as an important adverse effect. Roy's theory may help in the planning of individualized care.	4

Figure 1. Distribution of references included in the integrative review, according to title of the article/year of publication; author/country; objective of the study; result/conclusion and level of evidence.

As for the thematic approach, it could be observed in all selected articles that alopecia was seen as the main side effect responsible for the concern of women regarding chemotherapy.

Thus, alopecia has a representation that goes beyond the physical consequences, also affecting emotional and social aspects. The study by Pereira et al.<sup>11</sup> shows that alopecia generates significantly greater distress than the mastectomy.

Alopecia, as a side effect of chemotherapy, compared to the perception of nursing, was regarded as invisible. The feelings and concerns of women on alopecia were not considered as relevant, and underestimated by nurses.

This fact is evident since in over half (60%) of selected studies, alopecia was not even identified among the side effects of therapy, or nurses were unable to visualize what alopecia is to woman.<sup>18-20</sup>

Studies have shown that nurses valued the physical side effects of cancer chemotherapy, pointing vomiting as responsible for the anxiety and restlessness of women regarding to treatment.<sup>20</sup>

DISCUSSION

It was noted that the topic related to the perception of nursing on women's alopecia with breast cancer is little explored. The number of articles selected among the four databases studied over the decade, from 2004 to 2013, has been reduced, highlighting the presence of gaps regarding the nursing research on the subject, besides the fact that from 2012 were no published studies on the subject.

From the review, it was realized that the topic of the perception of nursing in women's alopecia with breast cancer is scarce and that studies raised the nursing cannot identify the alopecia as a side effect that interferes in the treatment of woman.<sup>18-20</sup>

Different studies address the impacts of physical side effects related to chemotherapy in women with breast cancer. Alopecia is seen a false impression of abundance, but it was observed that nursing does not value the representativeness of alopecia for women. Despite the major change occurred in the Brazilian educational system of nurses training, which offers an education of humanized and holistic care, basing on the new curriculum guidelines, adopted in accordance with the Law of Guidelines and Bases of National Education (LDB) No 9394/96 nursing education is still centered in the biomedical model. This model in which care is characterized by the study of the disease, by learning and reproduction techniques and tasks, which was observed in the analysis of the articles.<sup>22</sup>

Treatment of alopecia in women with breast cancer creates emotional, physical and social changes, or affects them in their multiple dimensions, which demonstrates the need to develop more research on these topics.<sup>23</sup>

Among the studies surveyed, 90% had authors' nurses that published in journals of nursing or oncology. Regarding the journals according to SICAPES (Integrated System CAPES), 40% have Qualis A1; 40% have Qualis A2 and 20% have Qualis B1.<sup>24</sup>

Most of the studies included in this review have weak evidence levels, due to the descriptive and qualitative approach, since from the total number of selected articles,

four are descriptive-qualitative studies and one article is a literature research.<sup>17</sup>

The qualitative approaches are the deepening and understanding of the phenomena studied, that is, the actions of individuals, groups or organizations in their environment and social contexts, interpreting them from the perspective of the participants focused situation; and thus exploring and interpreting the perception of nursing with respect to women's alopecia with breast cancer.<sup>25</sup>

Qualitative studies, despite their importance and relevance to the study of phenomena surrounding human beings, are still stigmatized to the health care process.<sup>26</sup>

Nursing, as a health profession has focused on the assistance of human beings, being responsible for caring for human beings in their multiple dimensions, that is, the performance of nursing must pervade the entire period of illness.<sup>27</sup>

Nursing professionals have influence on the results of the care received by the patient because every patient who seeks health care has direct or indirect contact with nursing.<sup>27</sup>

In this context, the perception of nursing to woman alopecia with breast cancer is not focused on their multiple dimensions and all the consequences and changes it causes to women regarding chemotherapy. Even the nurse and the professional who has direct contact with the woman throughout the chemotherapy process, the articles have shown that there is greater concern with vomiting.

This can be proved that in three of the selected articles, the nurse cannot identify the main side effects that afflict women during the treatment period. Thus, it is considered that nursing is not paying a focused assistance in the whole of the disease process.<sup>11,18,20</sup>

The quality of care is only effective when the nurse is prepared to exercise care geared to the needs and the concerns of women about the disease, about the treatment and about the side effects such as alopecia.

The thematic study is of great importance and relevance to the work of the nursing professional in practice as in all articles selected, alopecia is demonstrated to be the main concern when it comes to treatment. However alopecia, while side effect of chemotherapy, does not receive the necessary attention from nurses, and this feeling is undervalued.

This feeling is not only underestimated by nurses. In one study the doctor also

underestimated the alopecia as a side effect of chemotherapy, which shows that often the health care team may also is weak about the assistance to holistic health.<sup>20</sup>

CONCLUSION

Alopecia is considered by women with breast cancer, one of the most difficult aspects of being faced with respect to chemotherapy. However, despite their importance and relevance to the woman, the nurse could not identify this side effect as representative for the patient, underestimating the alopecia as a side effect of chemotherapy.

The role of nursing must be supported as it is the side effect with greater difficulty of women to cope, and there are only alternatives to disguise the hair loss practices. In this sense, nurses can contribute to the acceptance of this effect when focused on the comprehensiveness of the health and disease. A more holistic view at these patients and practice more effective guidelines in order to promote a new way to confront this reality beyond the awareness and professional reflection on their conduct in the care of these women is required.

Although this review did not provide scientific evidence considered strong, the study allowed the identification of gaps that deserve further exploration, such as the proposed clinical studies that may contribute to the hair loss may be less adversely affected by chemotherapy drugs, such as how to care for the hair during chemotherapy can influence its fall; the influence of the use of scarves and wigs can influence the hair growth. Therefore, it turns out that there is no synchronization between the care provided by the nursing professional and the feelings and side effects experienced by women with alopecia in breast cancer, hindering the rehabilitation and resocialization of it.

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