



Coping strategies and the relationship with sociodemographic conditions of women with breast cancer*

Estratégias de enfrentamento e relação com condições sociodemográficas de mulheres com câncer de mama

Estrategias de enfrentamiento y relación con condiciones sociodemográficas de mujeres con cáncer de mama

Franciéle Marabotti Costa Leite¹, Maria Helena Costa Amorim², Denise Silveira de Castro², Cândida Caniçali Primo³

ABSTRACT

Objective: To examine the relationship among the coping strategies adopted by women with breast cancer using tamoxifen and sociodemographic conditions. **Methods:** A cross-sectional study, with a quantitative approach. Data were obtained in an interview conducted with 270 women, with a diagnosis of breast cancer using tamoxifen, users of the outpatient *Ylza Bianco* center, belonging to the Hospital Santa Rita de Cássia, in Vitória / ES (Brazil). The analysis was performed using SPSS - Version 13.0 - 2004. **Results:** Illiterate women faced the problem by prioritizing the search for religious practices ($p < 0.05$); and women with higher education, belonging to economic class B, with family income more than three times the minimum wage and who lived in urban areas employ more coping strategies that are focused on the problem ($p < 0.05$). **Conclusion:** The coping strategy adopted is associated with sociodemographic characteristics.

Keywords: Breast neoplasms; Tamoxifen/therapeutic use; Adaptation, psychological; Socioeconomic factors

RESUMO

Objetivo: Examinar a relação entre as estratégias de enfrentamento adotadas por mulheres com câncer de mama em uso de tamoxifeno e as condições sociodemográficas. **Métodos:** Estudo descritivo, transversal, com abordagem quantitativa. Os dados foram obtidos em entrevista realizada com 270 mulheres, com diagnóstico de câncer de mama em uso de tamoxifeno, usuárias do ambulatório *Ylza Bianco*, pertencente ao Hospital Santa Rita de Cássia, no Município de Vitória/ES. A análise foi realizada por meio SPSS – Versão 13,0 – 2004. **Resultados:** Mulheres não letradas enfrentam o problema priorizando a busca de práticas religiosas ($p < 0,05$); e mulheres com maior escolaridade, pertencentes à classe econômica B, com renda familiar superior a três salários mínimos e que vivem em área urbana empregam mais a estratégia de enfrentamento com foco no problema ($p < 0,05$). **Conclusão:** A estratégia de enfrentamento adotada está associada a aspectos sociodemográficos.

Descritores: Neoplasias da mama; Tamoxifeno/uso terapêutico; Adaptação psicológica; Fatores socioeconômicos

RESUMEN

Objetivo: Examinar la relación entre las estrategias de enfrentamiento adoptadas por mujeres con cáncer de mama que usan tamoxifeno y las condiciones sociodemográficas. **Métodos:** Estudio descriptivo, transversal, con abordaje cuantitativo. Los datos fueron obtenidos en entrevista realizada a 270 mujeres, con diagnóstico de cáncer de mama que usan tamoxifeno, usuarias del Consultorio Externo *Ylza Bianco*, perteneciente al Hospital Santa Rita de Cássia, en el Municipio de Vitória/ES. El análisis fue realizado por medio del SPSS – Versión 13,0 – 2004. **Resultados:** Las mujeres no letradas enfrentan el problema priorizando la búsqueda de prácticas religiosas ($p < 0,05$); y mujeres con mayor escolaridad, pertenecientes a la clase económica B, con ingreso familiar superior a tres salarios mínimos y que viven en área urbana emplean más la estrategia de enfrentamiento con foco en el problema ($p < 0,05$). **Conclusión:** La estrategia de enfrentamiento adoptada está asociada a aspectos sociodemográficos.

Descriptores: Neoplasias de la mama; Tamoxifeno/uso terapéutico; Adaptación psicológica; Factores socioeconómicos

* Research developed at the outpatient clinic *Ylza Bianco*, Hospital Santa Rita de Cássia (HSRC), Vitória/ES.

¹ M.Sc. in Collective Health. Faculty, Nursing Department, Universidade Federal do Espírito Santo - UFES – Vitória (ES), Brazil.

² Ph.D. in Nursing. Faculty at Centro de Ciências da Saúde, Universidade Federal do Espírito Santo - UFES – Vitória (ES), Brazil.

³ M.Sc. in Collective Health. Faculty, Centro de Ciências da Saúde, Universidade Federal do Espírito Santo - UFES – Vitória (ES), Brazil.

INTRODUCTION

The breast cancer diagnosis entails the stigma of pain, suffering and death, mainly because it is associated with losing one's breast, which is highly valued and significant in the Brazilian culture, representing a part of female identity⁽¹⁾.

Treatments in the fight against this tumor range from local procedures, such as surgery and radiotherapy, to systemic action, which is the case of chemotherapy and hormone therapy⁽²⁾. The latter has been frequently used in breast cancer, as about 80% of women with breast tumors present positive hormonal receptors⁽³⁾.

The main hormones used include tamoxifen. This drug is an anti-estrogen agent that connects with the estrogen receptors present in part of the breast tumors, blocking cell growth and proliferation⁽⁴⁾. Although it inhibits the growth of cancer cells and most women tolerate it well, depending on the target tissue, tamoxifen can trigger side effects like hot flashes, nausea, vomiting, menstrual alterations and nervousness⁽⁵⁾.

Both the breast cancer diagnosis and its treatment motivate changes in the woman's body image and are also responsible for distancing from their daily activities⁽⁶⁾. These generate insecurity, anguish and, consequently, stress, which can be mitigated through coping, defined as a mechanism individuals develop to deal with so-called "stressful" problems or situations⁽⁷⁾.

Coping comprises cognitive and behavioral efforts to manage the internal or external demands that emerge from individual interaction with the environment⁽⁸⁾. The coping strategies used to administer internal and external stimuli, according to individual assessment, can be joined in two foci: problem-centered coping and emotion-centered coping⁽⁹⁾.

In problem-centered coping, individuals attempt to solve the situation by seeking information about the stressful event, assessing their alternative actions so as to select what they believe to be the most feasible alternative. In emotion-centered coping, on the other hand, the strategies used come with a high emotional burden and result from the person's self-defense processes, triggering mechanisms of distancing, flight and avoidance that serve as a shield and avoid the individual's confrontation with the stressor⁽⁹⁾.

The goal of coping is to trigger a response that is generally oriented towards stress reduction. This is a dynamic process, with assessments and reassessments that allow people to change their conducts and conceptions, so as to allow them to face the stressor in the most adequate and effective way possible⁽¹⁰⁾.

It is highlighted, however, that sociodemographic conditions, in addition to the adversities of the clinical condition, can result in a larger number of stressors,

negatively affecting patients' psychological wellbeing⁽¹¹⁾. Thus, studies have been done to verify the association between the sociodemographic condition and coping modes. These reveal that variables like age and education are related to the adopted coping strategies⁽¹²⁻¹⁴⁾. Other studies reveal that older people with higher education levels use more coping based on religious practices and on emotion⁽¹²⁻¹⁴⁾.

In view of the above, considering that the breast cancer diagnosis and treatment generates changes in women's daily life, that this situation demands a coping response and that knowledge on this response is extremely valuable for nursing, as it allows nurses to plan individualized care delivery to these women, consequently achieving their better adaptation to treatment⁽¹⁵⁾, the following question emerged: are the coping strategies women with breast cancer undergoing tamoxifen treatment adopt related with their sociodemographic conditions?

Based on this question, the present study was elaborated to examine the relation between the coping strategies women with breast cancer using tamoxifen adopt and their sociodemographic conditions.

METHODS

This descriptive and cross-sectional research with a quantitative approach was developed at the Ylza Bianco outpatient clinic, which is affiliated with Hospital Santa Rita de Cássia (HSRC), Vitória/ES. The population consisted of 1,080 women with breast cancer taking tamoxifen, 270 of whom were invited to participate in the research, when they visited the service to pick up the tamoxifen, representing a convenience sample.

The following inclusion criteria were adopted: having been diagnosed with breast cancer and using tamoxifen. Data were collected between May and September 2008. After receiving orientations and specifications about the study aims and after signing the Informed Consent Term, the women were invited to individually participate in an interview, when a form was applied to collect the sociodemographic variables: education, housing, family income and economic class. For the latter, the classification of the Brazilian Association of Market Research Companies (ABEP) was adopted⁽¹⁶⁾. To identify the coping strategy, the Problem Coping Mode Scale (EMEP) was applied, validated by Seidl, Tróccoli e Zannon (2001), in a factor analysis of a Brazilian population, comprising people from the general population and people with chronic conditions⁽¹²⁾.

The EMEP contains 45 items, divided in four coping strategies: problem-focused coping, emotion-focused coping, search for religious practice / imaginary thinking and search for social support. Answers are evaluated

on a 5-point scale (1 = I never do that; 5 = I always do that). Higher scores indicate greater use of a given coping strategy. For statistical analysis of medians, standard deviations and Wilcoxon's non-parametric test, Statistical Package for the Social Sciences (SPSS) software – version 13.0 – 2004 was used. Significance was set at $p < 0.05$.

This research complies with the ethical determinations established in National Health Council (CNS) Resolution No. 196/96 and received approval from the Research Ethics Committee at *Escola Superior de Ciências da Santa Casa de Misericórdia de Vitória* (EMESCAM), under No. 037/2008.

RESULTS

Illiterate women predominantly use religion-focused coping ($p < 0.05$), while the group with secondary and higher education degrees more frequently uses problem-

focused coping ($p = 0.000$). In groups with or without a primary education degree, no statistically significant association was found when relating religious and problem-focused coping strategies ($p > 0.05$). Independently of education, women use the problem focus more than the search for social support and emotion ($p = 0.000$) and find more help in religion than in social support. Emotion ($p = 0.000$) and social support are more present than emotion-focused coping ($p = 0.000$). Women with breast cancer using tamoxifen have made less use of emotion-focused strategies (Table 1).

Women from economic class B experience more problem-focused strategies ($p = 0.000$) and, among women from classes C, D and E, no greater use of religion or problem-focused strategies was found ($p > 0.05$) (Table 2). Independently of economic class, women adopt the problem-focused strategy more than the search for social support and emotion ($p = 0.000$), uses religion more than social support and emotion

Table 1. Coping strategies measured using the EMP, according to education (N=270)

Education	Tests	Median	Standard deviation	P-value
Illiterate	Religious x Social	3.86 x 3.00	0.62 x 0.73	0.000
	Religious x Emotion	3.86 x 1.73	0.62 x 0.56	0.000
	Religious x Problem	3.86 x 3.42	0.62 x 0.56	0.015
	Social x Emotion	3.00 x 1.73	0.73 x 0.56	0.000
	Problem x Social	3.42 x 3.00	0.56 x 0.73	0.016
	Problem x Emotion	3.42 x 1.73	0.56 x 0.56	0.000
Unfinished primary education	Religious x Social	3.86 x 2.90	0.61 x 0.79	0.000
	Religious x Emotion	3.86 x 1.67	0.61 x 0.49	0.000
	Religious x Problem	3.86 x 3.69	0.61 x 0.46	0.076
	Social x Emotion	2.90 x 1.67	0.79 x 0.49	0.000
	Problem x Social	3.69 x 2.90	0.46 x 0.79	0.000
	Problem x Emotion	3.69 x 1.67	0.46 x 0.49	0.000
Finished primary education	Religious x Social	3.57 x 2.90	0.57 x 0.73	0.000
	Religious x Emotion	3.57 x 1.73	0.57 x 0.56	0.000
	Problem x Religious	3.78 x 3.57	0.53 x 0.57	0.310
	Social x Emotion	2.90 x 1.73	0.73 x 0.56	0.000
	Problem x Social	3.78 x 2.90	0.53 x 0.73	0.000
	Problem x Emotion	3.78 x 1.73	0.53 x 0.56	0.000
Finished secondary education	Religious x Social	3.71 x 3.00	0.75 x 0.77	0.000
	Religious x Emotion	3.71 x 1.47	0.75 x 0.47	0.000
	Problem x Religious	3.94 x 3.71	0.53 x 0.75	0.001
	Social x Emotion	3.00 x 1.47	0.77 x 0.47	0.000
	Problem x Social	3.94 x 3.00	0.53 x 0.77	0.000
	Problem x Emotion	3.94 x 1.47	0.53 x 0.47	0.000
Finished higher education	Religious x Social	3.57 x 2.90	0.72 x 0.77	0.000
	Religious x Emotion	3.57 x 1.57	0.72 x 0.54	0.000
	Problem x Religious	3.97 x 3.57	0.52 x 0.72	0.000
	Social x Emotion	2.90 x 1.57	0.77 x 0.54	0.000
	Problem x Social	3.97 x 2.90	0.52 x 0.77	0.000
	Problem x Emotion	3.97 x 1.57	0.52 x 0.54	0.000

($p=0.000$), and the search for social support is used more than emotion ($p=0.000$).

Data in Table 3 demonstrate the relation between coping strategies and family income. In all groups, the problem focus is used more than the search for social support and emotion ($p=0.000$). Religion is also used more than social support and emotion ($p=0.000$), and the search for social support has been more adopted than emotion ($p=0.000$). A very relevant data is the fact that, in the group of women with a family income of three or more minimum wages, the problem-focused coping strategies are used more ($p<0.05$).

Women living in urban areas experience problem-focused coping more ($p<0.05$). For women living in rural areas, no statistically significant association was found between religion and problem-focused coping ($p>0.05$). It is highlighted that women living in urban and rural areas use religious coping strategies more than the search for social support and emotion ($p=0.000$), uses social support more frequently than emotion ($p=0.000$) and the problem focus is more adopted than social support and emotion ($p=0.000$) (Table 4).

DISCUSSION

Based on the findings, it could be identified that, independently of sociodemographic characteristics, women preferably adopt religion and problem-focused coping strategies, followed by the search for social support and emotion. These data are similar to other studies that indicate that, in general, high scores for problem-focused coping are associated with low scores for emotion-focused coping. This fact indicated that these two strategy types are somewhat incompatible, as active coping, directed at handling the situation and at a new way of seeing the problem, i.e. problem-focused coping, is opposed to emotion-focused coping^(13,14).

Thus, it is extremely important to know that, among other strategies, women with breast cancer using tamoxifen more frequently adopt the problem-focused coping mode, as this strategy represents adaptation to the disease as a form of adjustment to the new reality, characterizing a positive attitude towards the stressor⁽¹⁷⁾. This finding discloses adaptive responses that entail improved self-esteem and self-concept⁽¹⁸⁾.

Table 2. Coping strategies measured using the EMP, according to economic class (N=270)

Economic class	Tests	Median	Standard deviation	P-value
Class B	Religious x Social	3.64 x 2.60	0.42 x 1.02	0.007
	Religious x Emotion	3.64 x 1.53	0.42 x 0.41	0.000
	Problem x Religious	3.86 x 3.64	0.46 x 0.42	0.032
	Social x Emotion	2.60 x 1.53	1.02 x 0.41	0.001
	Problem x Social	3.86 x 2.60	0.46 x 1.02	0.001
	Problem x Emotion	3.86 x 1.53	0.46 x 0.41	0.000
Class C	Religious x Social	3.71 x 3.00	0.76 x 0.76	0.000
	Religious x Emotion	3.71 x 1.53	0.76 x 0.52	0.000
	Problem x Religious	3.78 x 3.71	0.56 x 0.76	0.066
	Social x Emotion	3.00 x 1.53	0.76 x 0.52	0.000
	Problem x Social	3.78 x 3.00	0.56 x 0.76	0.000
	Problem x Emotion	3.78 x 1.53	0.56 x 0.52	0.000
Class D	Religious x Social	3.71 x 3.00	0.66 x 0.73	0.000
	Religious x Emotion	3.71 x 1.60	0.66 x 0.50	0.000
	Problem x Religious	3.83 x 3.71	0.52 x 0.66	0.105
	Social x Emotion	3.00 x 1.60	0.73 x 0.50	0.000
	Problem x Social	3.83 x 3.00	0.52 x 0.73	0.000
	Problem x Emotion	3.83 x 1.60	0.52 x 0.50	0.000
Class E	Religious x Social	3.86 x 2.80	0.61 x 0.77	0.000
	Religious x Emotion	3.86 x 1.83	0.61 x 0.55	0.000
	Religious x Problem	3.86 x 3.64	0.61 x 0.51	0.152
	Social x Emotion	2.80 x 1.83	0.77 x 0.55	0.000
	Problem x Social	3.64 x 2.80	0.51 x 0.77	0.000
	Problem x Emotion	3.64 x 1.83	0.51 x 0.55	0.000

Table 3. Coping strategies measured using the EMP, according to family income (N=270)

Family income	Tests	Median	Standard deviation	P-value
Up to 1 minimum wage	Religious x Social	3.66 x 3.00	0.63 x 0.65	0.000
	Religious x Emotion	3.66 x 1.87	0.63 x 0.47	0.000
	Religious x Problem	3.66 x 3.61	0.63 x 0.51	0.620
	Social x Emotion	3.00 x 1.87	0.65 x 0.47	0.000
	Problem x Social	3.61 x 3.00	0.51 x 0.65	0.000
	Problem x Emotion	3.61 x 1.87	0.51 x 0.47	0.000
1 - 2 minimum wages	Religious x Social	3.71 x 3.00	0.61 x 0.83	0.000
	Religious x Emotion	3.71 x 1.73	0.61 x 0.60	0.000
	Problem x Religious	3.78 x 3.71	0.50 x 0.61	0.304
	Social x Emotion	3.00 x 1.73	0.83 x 0.60	0.000
	Problem x Social	3.78 x 3.00	0.50 x 0.83	0.000
	Problem x Emotion	3.78 x 1.73	0.50 x 0.60	0.000
2 - 3 minimum wages	Religious x Social	3.79 x 3.00	0.66 x 0.82	0.000
	Religious x Emotion	3.79 x 1.53	0.66 x 0.40	0.000
	Problem x Religious	3.89 x 3.79	0.53 x 0.66	0.251
	Social x Emotion	3.00 x 1.53	0.82 x 0.40	0.000
	Problem x Social	3.89 x 3.00	0.53 x 0.82	0.000
	Problem x Emotion	3.89 x 1.53	0.53 x 0.40	0.000
3 - 4 minimum wages	Religious x Social	3.71 x 2.80	0.76 x 0.78	0.000
	Religious x Emotion	3.71 x 1.40	0.76 x 0.46	0.000
	Problem x Religious	3.94 x 3.71	0.54 x 0.76	0.033
	Social x Emotion	2.80 x 1.40	0.78 x 0.46	0.000
	Problem x Social	3.94 x 2.80	0.54 x 0.78	0.000
	Problem x Emotion	3.94 x 1.40	0.54 x 0.46	0.000
4 minimum wages or more	Religious x Social	3.43 x 2.80	0.71 x 0.76	0.000
	Religious x Emotion	3.43 x 1.47	0.71 x 0.52	0.000
	Problem x Religious	3.83 x 3.43	0.52 x 0.71	0.001
	Social x Emotion	2.80 x 1.47	0.76 x 0.52	0.000
	Problem x Social	3.83 x 2.80	0.52 x 0.76	0.000
	Problem x Emotion	3.83 x 1.47	0.52 x 0.52	0.000

Table 4. Coping strategies measured using the EMP, according to place of residence (N=270)

Place of residence	Tests	Median	Standard deviation	P-value
Urban	Religious x Social	3.71 x 3.00	0.67 x 0.77	0.000
	Religious x Emotion	3.71 x 1.60	0.67 x 0.50	0.000
	Problem x Religious	3.83 x 3.71	0.52 x 0.67	0.003
	Social x Emotion	3.00 x 1.60	0.77 x 0.50	0.000
	Problem x Social	3.83 x 3.00	0.52 x 0.77	0.000
	Problem x Emotion	3.83 x 1.60	0.52 x 0.50	0.000
Rural	Religious x Social	3.71 x 3.00	0.66 x 0.71	0.000
	Religious x Emotion	3.71 x 1.80	0.66 x 0.55	0.000
	Religious x Problem	3.71 x 3.58	0.66 x 0.52	0.057
	Social x Emotion	3.00 x 1.80	0.55 x 0.52	0.000
	Problem x Social	3.58 x 3.00	0.52 x 0.55	0.000
	Problem x Emotion	3.58 x 1.80	0.52 x 0.52	0.000

The religion-focused coping strategy also plays a relevant role in coping with breast cancer, as belief in God, optimism and positive thinking strongly influence the development of adaptive responses to difficult situations deriving from the disease⁽¹⁸⁾. It was verified in the study that women have been using this type of coping. Thus, research by Silva⁽¹⁹⁾ affirms that faith in God is the main way in which women with breast cancer cope with the treatment.

Although less present than problem and religion-focused strategies, the search for support represents the search for social and emotional or instrumental support to help them to cope with the problem⁽²⁰⁾. In this study, it was verified that this mode is less frequent than the focus on the problem and religion. The lesser use of emotion-focused coping is highlighted though, which is extremely significant and positive, as this coping mode indicates the presence of emotional difficulties, associated with feelings of guilt towards oneself and the other. Negative emotions and avoidance behavior indicate that higher scores for this type of coping point towards relevant psychological difficulties, which was not observed in this study, showing lesser use of the emotion-focused coping mode⁽¹²⁻¹⁴⁾.

In the relation between coping modes and education, it is verified that illiterate women adopt the religion-focused coping strategy more ($p=0.000$), in line with other studies⁽¹²⁻¹⁴⁾. The search for religion, as a coping strategy in the act of praying, as well as the search for religious services can help to adapt to this new concept of life, in which women can start to see the diagnosis as part of a broader plan that is meaningful for their life, instead of defining it as a random event⁽²¹⁾. Faith plays a significant role as a coping strategy, as belief in God influences the development of adaptive responses to difficult situations deriving from the disease⁽¹⁸⁾. It should be highlighted, however, that the search for religious practices can also function as a justification to deny the problem and attribute its solution to a divine being⁽¹²⁾.

The group of women with secondary and higher education degrees, in economic class B, with a family income of three or more minimum wages and living in urban areas, adopt the problem-focused coping strategy

more ($p<0.05$). This result is in line with other findings that reveal that people with higher education levels use problem-focused strategies more⁽¹²⁾. The greater use of this coping mode demonstrates further approximation with the stressor and a modified relation between the person and the environment, through the control or alteration of the problem causing stress, as situations are considered modifiable. The problem is addressed⁽⁹⁾.

CONCLUSION

Independently of sociodemographic variables, in this process of coping with breast cancer and tamoxifen treatment, these women experience the four coping strategies: focus on the problem, religion, social support and emotion. Nevertheless, the religion and problem-focused strategies are used more.

It is underlined, however, that social and economic aspects are associated with the problem coping mode, that is, illiterate women turn more to religious practices as a problem coping strategy, while secondary and higher education graduates in class B, with a family income of three or more minimum wages and living in urban areas, make greater use of the problem focus.

These findings are highly relevant for the health area, especially for nurses, due to their closer contact with women diagnosed with breast cancer. These professionals should heed the sociodemographic context these women are inserted in and the stressful elements they are facing. Then, they should promote holistic and humanized care, going beyond technical care and acknowledging mastectomized women as protagonists in this unique moment for themselves and their families.

Thus, during all disease phases in which women experience stress, nurses should contribute by medicating more adaptive responses and enhancing effective problem coping.

As a study limitation, it is highlighted that the analysis was quantitative only, which did not permit the identification of other coping modes not addressed in the adopted instrument. Also, further research is due to investigate the coping strategies women with breast cancer taking tamoxifen adopt in the different phases of the disease.

REFERENCES

1. Regis MF, Simões SM. Diagnóstico de câncer de mama: sentimentos, comportamentos e expectativas de mulheres. *Rev Eletrônica Enferm.* [Internet]. 2005 [citado 2008 Jan 25];7(1):[cerca de 6 p]. Disponível em: http://www.fen.ufg.br/revista/revista7_1/pdf/ORIGINAL_08.pdf
2. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Instituto Nacional de Câncer. Coordenação de Prevenção e Vigilância. Controle do câncer de mama: documento de consenso. Rio de Janeiro: Ministério da Saúde; 2004. 39 p.
3. Kapoor A, Vogel VG. Prognostic factors for breast cancer and their use in the clinical setting. *Expert Rev Anticancer Ther.* 2005;5(2):269-81.
4. de Oliveira VM, Aldrighi JM, Rinaldi JF. Quimioprevenção do câncer de mama. *Rev Assoc Med Bras* [Internet]. 2006 Dez [citado 2008 Jan 12]; 52(6):[cerca de 7 p]. Disponível em: <http://www.scielo.br/pdf/ramb/v52n6/a28v52n6.pdf>
5. Buckley MM, Goa KL. Tamoxifen. A reappraisal of its pharmacodynamic and pharmacokinetic properties, and

- therapeutic use. *Drugs*. 1989; 37(4):451-90.
6. Makluf AS, Dias CR, Barra AA. Avaliação da qualidade de vida em mulheres com câncer de mama. *Rev Bras Cancerol*. 2006;52(1):49-58.
 7. Bachion MM, Peres AS, Belisário VL, de Carvalho EC. Estresse, ansiedade e coping: uma revisão dos conceitos, medidas e estratégias de intervenção voltadas para a prática de enfermagem. *Rev Min Enferm*. 1998;2(1):33-9.
 8. Folkman S, Lazarus RS. An analysis of coping in a middle-aged community sample. *J Health Soc Behav*, 1980; 21(3):219-39.
 9. Lazarus RS, Folkman S. *Stress, appraisal and coping*. New York: Springer; 1984.
 10. Guido LA. *Stress e coping entre enfermeiros de centro cirúrgico e recuperação anestésica [tese]*. São Paulo: Universidade de São Paulo; 2003.
 11. Sowell RL, Seals BF, Moneyham L, Demi A, Cohen L, Brake S. Quality of life in HIV-infected women in the south-eastern United States. *AIDS Care*. 1997; 9(5):501-12.
 12. Seidl EM, Tróccoli BT, Zannon CM. Análise factorial de uma medida de estratégias de enfrentamento. *Psicol Teor Pesqui [Internet]*. 2001 [citado 2007 Maio 15];17(3):[cerca de 10 p]. Disponível em: http://www.scielo.br/scielo.php?pid=S0102-37722001000300004&script=sci_arttext
 13. Seidl EM. Enfrentamento, aspectos clínicos e sociodemográficos de pessoas vivendo com HIV/AIDS. *Psicol Estud [Internet]*. 2005 [citado 2007 Jan 12];10(3):[cerca de 9 p]. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-73722005000300010
 14. Seidl EM, Zannon CM, Tróccoli BT, Pessoas vivendo com HIV/AIDS: enfrentamento, suporte social e qualidade de vida. *Psicol Reflex Crít [Internet]*. 2005 [citado 2007 Jan 12];18(2):[cerca de 8 p]. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-79722005000200006
 15. Bertolin DC, Pace AE, Kusumota L, Ribeiro RC. Modos de enfrentamento dos estressores de pessoas em tratamento hemodialítico: revisão integrativa da literatura. *Acta Paul Enferm*. 2008 [citado 2011 Set 6];21(No.Espec): 179-86.
 16. Associação Brasileira de Empresas de Pesquisa. Critério de Classificação Econômica Brasil [Internet]. 2003 [citado 2008 Fev 24]. Disponível em: <http://www.abep.org/novo/Content.aspx?ContentID=301>
 17. Bergamasco RB, Ângelo M. O sofrimento de descobrir-se com câncer de mama: como o diagnosticado é experienciado pela mulher. *Rev Bras Cancerol*. 2001;47(3):277-82.
 18. Rodrigues DP, da Silva RM, Mamede MV. Analisando o processo adaptativo no autoconceito da mulher mastectomizada. *Nursing (São Paulo)*. 2002;5(51):29-34.
 19. Silva MR, Borgognoni K, Rorato C, Morelli S, Silva MR, Sales CA. O câncer entrou em meu lar: sentimentos expressos por familiares de clientes. *Rev Enferm UERJ*. 2008;16(1):70-5.
 20. de Faria JB, Seidl EM. Religiosidade, enfrentamento e bem-estar subjetivo em pessoas vivendo com HIV/AIDS. *Psicol Estud [Internet]*. 2006 [citado 2010 Jun 3];11(1):[cerca de 10 p]. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-73722006000100018&lng=en&nrm=iso
 21. Jim HS, Richardson SA, Golden-Kreutz DM, Andersen BL. Strategies used in coping with a cancer diagnosis predict meaning in life for survivors. *Health Psychol*. 2006;25(6):753-61.