## BREAST CANCER: COPING STRATEGIES AND THEIR RELATION WITH SOCIO-**ECONOMIC VARIABLES**

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#### **ABSTRACT**

It is a cross-section and exploratory study, with quantitative approach, aimed to identify the coping strategies adopted by women who experienced the breast cancer diagnosis and to examine their relation with socioeconomic variables. The study population were 22 breast cancer diagnosed women registered in the Family Health Strategy or in the Health Community Agents Program in the city of São Mateus, Espírito Santo. For data statistical analysis the Social Package Statistical Science, version 19.0, 2010 was used. The results show that the focus in the problem and the religious practices are more used by the women with breast cancer, followed by the social and emotional support (p>0.05). Women with higher education level and from higher economic class use more the coping strategy focused on the problem (p<0.05). There were not significant statistic in the coping strategies like religious practices, social and emotional support and socio-economic variables (p>0.05). Conclusion: women adopted more frequently coping modalities focused on the problem and searching for religious practices, strategies used influencing by the economic class and education level.

Keywords: Breast Cancer. Psychological Adaptation. Socio-economic Factors. Nursing.

## INTRODUCTION

Due to the high rate of morbidity and mortality and mutilation, breast cancer is a cause of fear for women. This cancer involve selfesteem and social, personal, professional and affective relationships<sup>(1)</sup>. Its diagnosis treatment can harm women's health physically by exposure to medicine of large systemic effect and emotionally associated with the onset of psychosocial and physical stress<sup>(2)</sup>.

In this context, health professionals should pay attention to physical and psychic aspects of this woman, even after diagnosis. For this, it is important to consolidate actions to better evaluate it, not only in physiologic aspects but also in psychosocial aspects<sup>(3)</sup>.

Many women with breast cancer have stress, especially the physical and psychological symptoms<sup>(4)</sup>. This behavioral and cognitive effort is used as a coping strategy to deal with the situation causing stress, denominated coping<sup>(5)</sup>.

This phenomenon consists in a process that the individual controls the demands related as a

way to satisfy the social demands, keeping stables physical, psychological and social state and controlling potential stressors before being a threat. Regardless the success or the failure, coping is a response to any attitude to the stressor agent and it has two functions: modifying the relationship between the person and the environment and controlling or changing the caused problem of distress (coping centered on the emotion)<sup>(5)</sup>.

The diagnosis of breast cancer takes women to develop strategies of coping according with their personal concepts and feelings related to the disease to build a new life style<sup>(2)</sup>. Thus, social and economic aspects of women can be associated to the adopted coping<sup>(6)</sup>.

The ways to evaluate and coping the stress and the illness, in an optimistic way, strengthen the reduction of its impact in the psychophysiologic balance. The increased exposure of women to stress, showed the relevance of the psycho-educative programs reducing its impact in female population<sup>(7)</sup>.

Breast cancer is a stressful situation and it is together with biological, psychological and social changes, affecting life of several women

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and their family. How the women cope this situation is very important for nursing, because it promoted women's care, once this cancer coping can reflect in the treatment and in the self-care promotion. In this way, this study is justified, because its objective is to identify the coping strategies adopted by women with breast cancer and examine the relation with socio-economic variables.

### **METODOLOGIA**

This is a descriptive and exploratory study with a quantitative approach. The study subjects were women with breast cancer diagnosis in the period 2005 to 2010, and were contacted by Family Health Strategy (FHS) or Program Community Health Workers (PACS) registrations, of the municipality of São Mateus, Espírito Santo. The total was 22 women. Data collection was conducted from January to February 2012, through individual interviews, not being excluded illiterate women in the study. The participants were guided about the objectives of the study and signed the informed consent form.

The variables were classified according to the characteristics of the previous studies on the same population and to promote the analysis, thus avoiding that strata stay with small number of observations. The women were asked about the age (in years old); education (none, elementary school, high school/ university); marital status (married and other), religion (Catholic and other), family income (less than 2 minimum wages and more than two minimum wages). The economy class was obtained by estimating the purchasing power of the family, through the instrument of **Economic** Classification of Brazil, of the Brazilian Association of Research Companies-ABIPENE<sup>(8)</sup>, through seven categories, with the highest scoring A1 and the less scoring E. The lower economic class variable was stratified into two groups, level B2/C and level D.

The coping strategies variable was identified by the Scale Mode of Coping (EMEP) and validated for the Brazilian population with factor analysis by Seidl, Tróccoli and Zannon<sup>(9)</sup>. This scale consists of 45 items divided into four coping modes: problem (18 items), emotional (15 items), social support (five items) and search for religious practices/fantasies thoughts (seven items). The answers are Likert type with five point scale order (1 = never do this, 2 = I do it a little, 3 = sometimes I do it, 4 = I do it a lot, 5 = I always do it). When a score is higher in a particular way of coping, it indicates that the person uses more this coping strategy in relation to others<sup>(9)</sup>.

In the statistical analysis, the Statistical Package Social Science (SPSS), version 19.0, 2010 was used, obtaining the mean, median and standard deviation. For analysis of the variables parametric tests were applied: Variance Analysis (ANOVA) and t test. Results were considered with significant difference when the p-value was less than 0.05. This study was approved by the Ethics Committee in Research of the University Center North of Espírito Santo, under the n°018/2011, on June 17, 2011.

### RESULTS AND DISCUSSION

From the interviews performed, it was found that the participants in this study had higher mean (4.03) to use the mode of coping focused on the search of religious practices, followed by focused on the problem (3.83), search of social support (3.17) and focused on emotional (2.01) (Table 1).

The coping strategy focused on religious practices played an important role in dealing with breast cancer, since the process of facing this disease can produce behaviors that increase psychological well-being, reducing the impact caused by the disease, so that women can deal positively<sup>(10)</sup>. For some women, the disease appears as a process of bargaining with God, life and health<sup>(1)</sup>, for others, an opportunity to acquire new values, rethink about life and appreciate the spiritual side, putting into practice after the disease<sup>(11)</sup>.

The coping strategy focused on the problem presupposes adequate planning to deal with stressors. Rather than cancel or remove the stressor of everyday life, the person chooses to solve the problem, modify their attitudes, being able to handle the pressures of people and the surrounding environment, reducing or eliminating the source of stress<sup>(12)</sup>. After a cancer diagnosis, some women have greater care for

themselves<sup>(11)</sup>. Despite the fear and anguish about the disease, women reported the search to suit a new life and to follow their routines, knowing they must face the problem, so healing becomes their primary goal<sup>(13)</sup>.

Regarding social support, the authors<sup>(9)</sup> indicate that this type of coping is characterized by the search for social support to find solutions, emotional support from friends and family and the support of professionals. Social support is a coping strategy of seeking instrumental, emotional and information support as coping strategies from the situation causing stress.

Regarding the revealed lowest median of emotion focused coping strategy by the interviewees, this finding is extremely important since high scores on this type of coping suggest psychological difficulties for expressing feelings of guilt in themselves and the other, negative emotions and avoidance behaviors, denial, with palliative function or removal of the problem<sup>(9)</sup>. In the confrontation stage, it was revealed the denial of the disease, therefore, it was found in the phase in which the person does not believe the problem is experiencing<sup>(1)</sup>. The event of the disease may cause a deep emotional impact triggering suffering and irritability<sup>(11)</sup>.

**Table 1 -** Coping strategies of Women problems with breast cancer. São Mateus, Espírito Santo, 2012.

EMEP	Mean	Median	Standard- Deviation
Focused on searching social suppert	3,10	3,17	0,78
Focused on the problem	3,83	3,83	0,40
Focused on religious practices	4,00	4,03	0,56
Focused on emotional	1,93	2,01	0,56

Despite the coping strategy focused on religion have obtained higher mean, when correlates coping strategies experienced by women with breast cancer (Table 2), it was noted that when comparing the focused on the problem with the religion practice, there was no significance statistically (p> 0.05), so it is not possible to identify which of these two strategies are more adopted.

Thus, in the present study there was the increased use of coping strategies focused on

searching of religious practices and focused on the problem, a result that goes against the study revealed that women with mastectomies increased use of methods of coping with focused on the problem<sup>(14)</sup>.

The relationship between coping strategies focused on the problem, searching for social support and emotional, it was noted that the focused on the problem was more used by women than searching for social support and emotional (p < 0.05). In this way, the relationship between the strategies religious practices, focused on searching social support and emotional, was centralization in the religious practice being used more as a way to deal the problem than the social support and emotional (p = 0.0001). However, the relationship between searching social support and emotional indicated that the coping strategy searching social support, was the strategy being adopted more than focused on emotional (p = 0.0001). These findings corroborate the research entitled "Coping experienced by women diagnosed with breast cancer on tamoxifen"(14).

**Table 2 -** Correlation between coping strategies adopted by women with breast cancer. São Mateus, Espírito Santo, 2012.

Coping Strategy	P-valor		
Problem x Social	0, 002		
Problem x Emotional	0,0001		
Problem x Religion	0, 210		
Religion x Social	0,0001		
Religion x Emotional	0,0001		
Social x Emotional	0,0001		

Table 3 shows the relation between coping strategy and socioeconomic variables. It was noted that women with high school and University had higher mean (4.17) when compared to participants with incomplete elementary school and did not attend school, respectively (3.72) and (3.52). The differences between means were statistically significant (p = 0.002), i.e., women with higher levels of education use more coping strategy with a focused on the problem. This result is in agreement with another study conducted with women with breast cancer, showing that those with high school and University used more coping focused on the problem<sup>(6)</sup>.

With regard to coping strategies focused on the problem, according to economic class, another important finding was a highly significant difference (p=0.0001) between the mean of women belonging to Class B2/C (4.15) and in Class D (3.60). Statistically significant difference was found (p=0.0001) indicating that the higher the economic status of women, the coping strategy used will be focused on the problem, similar to data shown in another study that demonstrated that women belonging to economy class B more often use coping focused on the problem<sup>(6)</sup>.

Although this study did not show statistical significance between the variables: marital status, religion and family income, and the way of coping with focused on the problem, it is worth noting that in another study, regardless of religion and marital status, women with breast cancer more often experiences the coping focused on the problem and religious practices, followed by the search for social support and emotional<sup>(14)</sup>.

There was the absence in the present study, of the association between coping focused on the problem and family income, finding in other research that women with a family income equal to or greater than three minimum wages use more coping strategies focused on the problem<sup>(6)</sup>, suggesting that low-income patients have little adaptive strategies.

Regarding the relationship between coping strategies on searching for religious practices, social support and emotional and socioeconomic variables: education, marital status, religion, economic class and family income, there was no statistical significance in the present study. However, this relationship in another study showed that people with lower education use as a coping strategy to focused on religious practices, with fantasy thoughts permeated with feelings of hope and faith. It is also worth emphasizing that the focused on religion can foster positive feelings, reducing internal stress and the stressor agent (10).

**Table 3 -** Relation between the coping strategies of women with breast cancer socio-economic variables. São Mateus, Espírito Santo, 2012.

Coping focused on religious prac	ctices	Md	M	SD	p-value
	None	4,00	4,10	0,62	0,822
Education	Elementary School	3,93	3,93	0,62	
	High School/University	4,00	4,09	0,52	
Marital Status	Married	4,00	4,04	0,47	0,958
	Other	4,00	4,03	0,67	
Religion	Catholic	4,00	4,07	0,53	0,608
	Other	4,00	3,93	0,68	
Egonomia Class	Class B2/C	4,00	3,97	0,61	0,667
Economic Class	Class D	4,00	4,08	0,55	
Family income	1 -   2 minimum wages	4,00	3,91	0,55	0,098
	2 -   4 minimum wages	4,50	4,36	0,48	
Coping focu	Coping focused on the problem		M	SD	p-value
	None	3,64	3,52	0,33	0,002
Education	Elementary School	3,75	3,72	0,32	
	High School/University	4,19	4,17	0,26	
Manital Ctatus	Married	3,83	3,86	0,47	0,731
Marital Status	Other	3,78	3,80	0,33	
Religion	Catholic	3,78	3,78	0,44	0,417
	Other	3,92	3,94	0,26	

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	Class B2 / C	4,17	4,15	0.25	0,0001
Economic Class	Class D			0,25	0,0001
		3,72	3,60	0,32	0.627
Family income	1 - 2 minimum wages	3,81	3,80	0,35	0,627
	2 -   4 minimum wages	3,86	3,90	0,54	
Coping focused on s	earching social support	Md	M	SD	p-value
Education	None	3,10	2,90	0,95	0,281
	Elementary School	3,60	3,53	0,48	
	High School/University	3,00	3,03	0,86	
Marital status	Married	3,00	2,85	0,69	0,054
	Other	3,60	3,49	0,77	
Religion	Catholic	3,20	3,18	0,81	0,983
	Other	3,00	3,17	0,78	
Economic Class	Class B2 / C	3,00	3,13	0,87	0,850
	Class D	3,20	3,20	0,76	
Family income	1 - 2 minimum wages	3,50	3,35	0,79	0,083
	2 -   4 minimum wages	3,00	2,70	0,56	
Coping focused on emotional		Md	M	SD	p-value
Education	None	1,90	1,93	0,63	0,252
	Elementary School	2,33	2,27	0,63	
	High School/University	1,77	1,81	0,36	
Marital status	Married	2,13	2,14	0,56	0,285
	Other	1,87	1,88	0,55	
Religion	Catholic	1,93	1,97	0,59	0,612
	Other	1,93	2,11	0,52	
	Class B2 / C	1,87	1,90	0,43	0,445
Economic Class	Class D	2,00	2,09	0,64	
		2.07	2.00	0.50	0,268
Family income	1 - 2 minimum wages	2,07	2,09	0,59	0,200

Data expressed in median (Md), mean (M), standard deviation (SD). Significance index (p<0.05) – ANOVA and teste t.

### FINAL CONSIDERATIONS

The present study aimed to identify the coping strategies adopted by women who experienced breast cancer DIAGNOSIS and to examine the relationship with socioeconomic variables. We observed that women more often adopt the methods of coping with a focused on the problem and in the religious practices followed by the searching for social support and

emotional. A woman can adopt different coping strategies, so it is essential that the health professional who deals with women diagnosed with breast cancer recognize the coping strategies adopted in different stages of their treatment and promotes a holistic care.

This study highlighted the importance of identifying the coping strategies adopted by women who experience breast cancer diagnosis, since the understanding of such strategies may assist health professionals in building an individual care that meets the demands

presented, thereby allowing the professional to participate and contribute to effective adaptation to the diagnosis.

In the association of coping and socioeconomic characteristics, it was observed that women with higher levels of education and higher social status use more often focused on the problem strategy, demonstrating therefore that these variables influence the adoption of coping strategies of problems.

It is noteworthy in this study, limitations such as difficulty in the discussion of results, reduced

by the amount of current research on the subject; the lack of significant association with socioeconomic factors and coping in the problem, indicating low power of the sample. In other studies with larger sample size, these associations were statistically significant not using open and optional question in the application of the instrument to identify new ways of coping or even strengthen those identified by closed questions.

# CÂNCER DE MAMA: ESTRATÉGIAS DE ENFRENTAMENTO E SUA RELAÇÃO COM VARIÁVEIS SOCIOECONÔMICAS

### **RESUMO**

Trata-se de estudo transversal, exploratório, com abordagem quantitativa, cujo objetivo foi identificar as estratégias de enfrentamento adotadas por mulheres que vivenciaram o diagnóstico de câncer de mama e examinar a relação com as variáveis socioeconômicas. A população do estudo foi composta por 22 mulheres diagnosticadas com neoplasia mamária cadastradas na Estratégia de Saúde da Família ou no Programa de Agentes Comunitários de Saúde, do município de São Mateus, Espírito Santo. Para a análise estatística dos dados, foi utilizado o Social Package Statistical Science, versão 19.0, ano 2010. Os resultados demonstraram que o foco no problema e as práticas religiosas são mais utilizados pelas mulheres com câncer de mama, seguido do suporte social e emoção (p<0,05). Mulheres com maior grau de instrução e pertencentes à classe econômica mais elevada utilizam mais a estratégia de enfrentamento com focalização no problema Não houve significância estatística entre as estratégias de enfrentamento busca por práticas religiosas, suporte social e emoção e variáveis socioeconômicas. Conclusão: a mulher adota com mais frequência modalidades de enfrentamento com foco no problema e busca por práticas religiosas, sendo que as estratégias utilizadas podem ser influenciadas pela classe econômica e grau de instrução.

Palavras-chave: Neoplasias da Mama. Adaptação Psicológica. Fatores Socioeconômicos. Enfermagem.

# CÁNCER DE MAMA: ESTRATEGIAS DE ENFRENTAMIENTO Y SU RELACIÓN CON LAS VARIABLES SOCIOECONÓMICAS

#### RESUMEN

Se trata de un estudio transversal, exploratorio, con enfoque cuantitativo, cuyo objetivo fue identificar las estrategias de enfrentamiento adoptadas por mujeres que vivieron el diagnóstico de cáncer de mama y examinar la relación con las variables socioeconómicas. Los sujetos del estudio fueron compuestos por 22 mujeres diagnosticadas con neoplasia mamaria inscritas en la Estrategia de Salud de la Familia o en el Programa de Agentes Comunitarios de Salud, de la ciudad de São Mateus, Espírito Santo. Para el análisis estadístico de los datos, fue utilizado el *Social Package Statistical Science*, versión 19.0, año 2010. Los resultados demostraron que el foco en el problema y las prácticas religiosas son más utilizados por las mujeres con cáncer de mama, seguido del soporte social y emoción (p<0,05). Mujeres con grado más elevado de instrucción y pertenecientes a la clase económica más alta utilizan más la estrategia de enfrentamiento con enfoque en el problema No hubo significancia estadística entre las estrategias de enfrentamiento: busca por prácticas religiosas, soporte social y emoción y variables socioeconómicas. Conclusión: la mujer adopta con más frecuencia modalidades de enfrentamiento con foco en el problema y busca por prácticas religiosas, siendo que las estrategias utilizadas pueden ser influidas por la clase económica y el grado de instrucción.

Palabras clave: Neoplasias de la mama. Adaptación psicológica. Factores socioeconómicos. Enfermería.

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