THE BREAST RECONSTRUCTION PROCESS OF WOMEN WITH BREAST CANCER: A THEORETICAL MODEL


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THE BREAST RECONSTRUCTION PROCESS OF WOMEN WITH BREAST CANCER: A THEORETICAL MODEL

Cilene Volkmer¹  Evanguelia Kotzias Atherino dos Santos²  Alacoque Lorenzini Erdmann²  Fabiana Flores Sperandio²  José Luís Guedes dos Santos²  Ana Izabel Jatobá de Souza²


ABSTRACT

Objective: to build a theoretical model on the experience and meaning of the breast reconstruction process in women with breast cancer.

Method: a qualitative research using Grounded Theory and Symbolic Interactionism as theoretical-methodological frameworks. Data collection and analysis occurred simultaneously, from April to October 2015, through theoretical sampling and theoretical saturation of the categories. Theoretical sample with 31 participants, 21 women and 10 health professionals, interviewed at home or at work, comprising four sample groups.

Results: the theoretical model “Women face challenges and overcome difficulties: fear of death, breast mutilation and breast reconstruction, changing the way of being a woman” offers an explanation of the phenomenon and emerged from the systematic interrelation of the 11 study categories, with three causal categories, one category representing the context, five categories of intervening conditions, the strategies and the consequences represented by one category each.

Conclusion: this study demonstrates the experience of the breast reconstruction process for women with breast cancer, the meaning of overcoming difficulties, value life and oneself, putting themselves first, taking care of themselves and learning to change, to be more tolerant, to value material things less and to face life with courage and faith. It also indicates that research on theoretical models on issues that plague our professional practices can enhance teaching and science and, consequently, improve care in women’s health.

O PROCESSO DE RECONSTRUÇÃO MAMÁRIA DA MULHER COM CÂNCER DE MAMA: UM MODELO TEÓRICO

RESUMO

Objetivo: construir um modelo teórico sobre a experiência e significado do processo de reconstrução mamária da mulher com câncer de mama.

Método: pesquisa qualitativa, com Teoria Fundamentada nos Dados e Interacionismo Simbólico como referenciais teórico-metodológicos. Coleta e análise de dados ocorreram simultaneamente, de abril a outubro de 2015, mediante amostragem teórica e saturação teórica das categorias. Amostra teórica com 31 participantes, sendo 21 mulheres e dez profissionais da saúde, entrevistados no domicílio ou local de trabalho, compondo quatro grupos amostrais.

Resultados: o modelo teórico “A mulher enfrenta desafios e supera dificuldades: o medo da morte, a mutilação da mama e reconstrução mamária, modificando a maneira de ser mulher” oferece uma explicação sobre o fenômeno e surgiu do interrelacionamento sistemático das 11 categorias do estudo, sendo três categorias causais, uma categoria representando o contexto, cinco categorias de condições intervenientes, as estratégias e as consequências representadas por uma categoria cada.

Conclusão: este estudo demonstra a vivência do processo de reconstrução mamária para a mulher com câncer de mama, significando transpassar dificuldades, valorizar a vida e a si mesma, colocando-se em primeiro lugar, cuidando de si e aprendendo a mudar, a ser mais tolerante, a dar menos valor a coisas materiais e a encarar a vida com coragem e fé. Também indica que pesquisas em busca de modelos teóricos sobre questões que atormentam nossas práticas profissionais podem incrementar o ensino e a ciência e melhorar, por consequência, a assistência na área da saúde da mulher.


EL PROCESO DE RECONSTRUCCIÓN DE LA MAMA EN MUJERES CON CÁNCER DE MAMA: UN MODELO TEÓRICO

RESUMEN

Objetivo: construir un modelo teórico sobre la experiencia y el significado del proceso de reconstrucción mamaria de mujeres con cáncer de mama.

Método: investigación cualitativa, con la teoría fundamentada en los datos y el interaccionismo simbólico como marcos teórico-metodológicos. La recolección y el análisis de datos ocurrieron simultáneamente, de abril a octubre de 2015, a través del muestreo teórico y la saturación teórica de las categorías. Muestra teórica con 31 participantes, 21 mujeres y 10 profesionales de la salud, entrevistados en el hogar o en el trabajo, compuesta por cuatro grupos de muestra.

Resultados: el modelo teórico “Las mujeres enfrentan desafíos y superan dificultades: miedo a la muerte, mutilación de la mama y reconstrucción mamaria, cambiando la forma de ser mujer” ofrece una explicación del fenómeno y surgió de la interrelación sistemática provenientes de 11 categorías de estudio, siendo tres categorías causales, una categoría que representa el contexto, cinco categorías de condiciones intermedias, estrategias y consecuencias representadas a través de una categoría cada una.

Conclusión: este estudio demuestra la experiencia del proceso de reconstrucción mamaria para mujeres con cáncer de mama, lo que significa superar las dificultades, valorar la vida y a sí mismas, ponerse en primer lugar, cuidarse y aprender a cambiar, a ser más tolerante, a dar menos valor a las cosas materiales y a enfrentar la vida con coraje y fe. También indica que la investigación de modelos teóricos sobre temas que afectan nuestras prácticas profesionales puede mejorar la enseñanza y la ciencia y, por consiguiente, mejorar la atención en la salud de las mujeres.

INTRODUCTION

Breast cancer has the highest rates of mortality due to cancer in women in Brazil and, in an attempt to change this reality, the Ministry of Health recommends that the treatment of this condition be based on a multidisciplinary approach, considering the totality of women. Among the prerogatives of the Consensus on Breast Cancer Control, we can cite the importance of multidisciplinary interventions, once the pathology is diagnosed in women and their families through joint action with health professionals.\(^1\)

A woman has numerous concerns, doubts and fears when she discovers she has breast cancer and faces the possibility of undergoing a mutilating surgery. Thus, when the need for mastectomy is confirmed, immediate breast reconstruction must be considered, as all women who are mutilated as a result of breast cancer treatment are entitled to reconstructive plastic surgery.\(^2\)

Due to concerns about the professional practice of the researcher, it was necessary to understand the woman with breast cancer because, when undergoing breast reconstruction, her biopsychosocial complexity is altered, i.e., her subjectivities, experiences and feelings become modified.

Qualitative and quantitative studies are conducted in the area of women’s health, involving different health professionals. Studies conducted in physiotherapy are, in their entirety, derived from quantitative research and, when referring to qualitative studies, most of them concern research focused on quality of life, with analyzes and statistical results. The number of qualitative studies that consider women’s health is still poorly represented.\(^3–4\)

Qualitative studies in the area of women’s health associated to mixed methodologies by physiotherapy professionals have only emerged in the last 15 years, with the entry of physiotherapists in postgraduate courses in Nursing and Public and/or Public Health, or also in areas such as Production Engineering/Ergonomics, which study and incorporate philosophical, anthropological and sociological conceptions in their guidelines, seeking to understand and adapt human theories to the health area, as health professionals deal with human beings and not with the diseases themselves.\(^5–8\)

Among the theories used in qualitative approaches in health, especially in Nursing, the Grounded Theory (GT) is highlighted as it has an interpretative character and helps to understand a given phenomenon or the theoretical debate involved in the interpretation of the reality in focus.\(^9–10\)

A bibliometric study identified that the first research involving the area of women’s health, Nursing and GT, in Brazil, took place in 1996. The number of researches only increased in 2004, with the expansion of Postgraduate Nursing courses in Brazil and the development of public policies directed to women’s health. The study also highlighted that the most investigated topics in the area of women’s health were, then, those related to oncology nursing, highlighting studies involving breast cancer.\(^6\)

Considering the qualitative studies related to health throughout history, I believe that continuing research on women’s health in order to build new knowledge, especially regarding breast cancer and the process of breast reconstruction, is indispensable as a support, to professional practices, which need to be connected in all areas involved in women’s care, considering the understanding of the human being, science and the health-disease-care process.\(^9\)

Thus, the following question arose: How to build a theoretical model on the experience and meaning of the breast reconstruction process for women with breast cancer? Thus, this study aims to build a theoretical model on the experience and meaning of the breast reconstruction process for women with breast cancer.
METHOD

This qualitative research was based on the methodological framework of GT. The choice of this referential occurred because it allows the construction of theoretical models, based on research data, which systematically integrates various concepts through statements, with the intention of knowing the reality of the researched theme more profoundly, thus generating different possibilities for action.\(^{9–10}\)

GT proposes the inductive construction of a theoretical model based on the collected data, aiming at the improvement of professional practices through the emergence of new knowledge and finding different possible ways of understanding the studied phenomenon.\(^{10}\)

There are several international studies in the most varied areas of knowledge which use the theoretical-methodological approach similar to GT. Such an approach was initially devised by Barney Glaser and Anselm Strauss, sociologists of the 1960s, but after a disagreement, they split up and Strauss partnered with Juliet Corbin, continuing the methodological refinement of GT. In addition to them, other researchers began to study, apply and disseminate this framework in various parts of the world. Thus, due to different strands of GT, this study uses the concepts of Strauss and Corbin.\(^{11–15}\)

By returning to the origins of GT, we find Symbolic Interactionism, a reference idealized in the 1930s by George Hebert Mead, whose focus is on the process of human interaction, considering that people can respond positively or negatively to new possibilities and understanding that the rationale of society lies in harmony, sharing ideas and feelings, understanding the world, as well as common expectations, stating that interrelationship is at the heart of human behavior and action.\(^{10,16–18}\)

The expression Symbolic Interactionism was proposed by Herbert Blumer in 1937. He was one of Mead’s followers and responsible for defining the assumptions and premises in the interactionist approach, defending the view that, to understand the world, it is necessary to analyze the attitudes and the way human beings interconnect. Therefore, the researcher must connect to the reality in question and analyze its fundamental parts through exploration and inspection, in order to clarify the meanings and interpretations that individuals put into practice, seeking the construction of the real world.\(^{16–17,19}\)

Thus, we chose to associate the references of GT and Symbolic Interactionism in this study.

According to Strauss and Corbin, GT advocates the use of the Conditional / Consequential Model, which helps to contextualize the phenomenon, positioning it within a conditional structure and identifying the means by which a category manifests itself. This allows to relate structure to process, considering that the structure is composed of conditions of cause, context and actors, while process is related to the conditions of strategy, involving action and relationship of women undergoing breast reconstruction, and the consequences of these actions. Thus, it is necessary to study structure and process to understand the dynamics and evolutionary nature of the facts.\(^{10,20–22}\)

Initially, the participants were selected via invitations that were sent to the women who attended the researcher’s office as well as to the professionals working in the municipality. The women were informed that the refusal to participate in the research would not bring risks or harms to their treatment (surgical or physical therapy); It would be possible, if they participated, to withdraw from the research at any time, due to any inconvenience or discomfort during the interview, without any interference in the continuity of treatment. In addition, the participants’ autonomy was guaranteed, and they were also informed that they would not receive any financial advantage by participating in the research. Subsequently, another selection technique was adopted, called “snowball”, in which each participant could indicate other women or health professionals working in the area to participate in the study.

Data collection and analysis occurred simultaneously from April to October 2015, which was conducted by the principles of theoretical sampling and ended with the theoretical saturation of categories, when no new data appear in the interviews. The theoretical sample consisted of 31 participants, 21 women diagnosed with breast cancer, who underwent breast reconstruction and 10 health professionals. The interviews were conducted at home or at the workplace of women and health professionals or at the researcher’s workplace in Florianópolis, Brazil.
The guiding questions related to women, which were formed according to the researcher’s professional experience, were: What does it mean for you to experience or have experienced the breast reconstruction process after breast cancer mastectomy, considering the periods, before, during and after the surgery? What does it mean for you to experience or have experienced the process of breast reconstruction after breast cancer mastectomy in relation to your personal, family and social life? Comment on the care you received from health professionals during your breast cancer treatment and breast reconstruction process.

The guiding question related to health professionals was: Tell me about your approach to women diagnosed with breast cancer who are indicated or having breast reconstruction.

Initially, only women who underwent treatment via private funding (researcher’s client) were interviewed. However, the need to include women who had been treated in different institutions (public and private) was noted in order to encompass the greatest variety of experiences regarding the breast reconstruction process. Thus, different sample groups were observed, considering the hypothesis that, due to the type of treatment cost, there would be different conducts, directions, details and solutions regarding the procedures and behaviors taken by both women and professionals involved.

Considering that the practice of GT uses simultaneity in data analysis and collection, codes and categories are constructed based on raw data; The continuous comparison technique is developed in the different stages of the analysis. The model is gradually delineated during the phases of the research process; and the hypothesis are constantly readjusted and reformulated during the research, allowing for the formation of new sample groups.¹⁰

After the initial analysis of the collected data, the invitation was extended to women who had paid for treatment through health insurance plans and the Unified Health System (Sistema Único de Saúde - SUS), generating three sample groups regarding women: 1st group - 10 women who had paid for the treatment or who had private/health insurance plans; 2nd group - seven women who had paid for the treatment via health insurance plan only; 3rd group - four women who had treatment via SUS. Regarding the group of professionals: 4th sample group - 10 health professionals, working for at least two years in the area in question, including four doctors, two nurses, one psychologist, one physiotherapist, one nutritionist and one nursing technician, considering the hypothesis that different areas of practice and academic background lead to different views on women who experience the breast reconstruction process.

GT encompasses the methodological rigor necessary for qualitative studies, going beyond conceptual adequacy and reaching the construction of the theoretical model, through analysis at three different levels: description, concept ordering and theorizing. As for the description, it is the careful conception of the phenomenon and the basis of the other steps and the feasible hypotheses. The conceptual ordering is highlighted as a precursor of theorizing, because in this process, the data are organized in categories, considered primordial to perform analysis for the progress of theorizing, considering that all theory is composed by concepts elaborated from certain particularities and dimensions. In relation to theorizing, it is understood as the association of categories and concepts connected in an organized way, through statements and elaborated in the form of schema or diagram, explaining the phenomenon. The theory arises at this stage of construction, called theorizing, emphasizing that it is a constructive process.⁶,¹⁰,²³

The analysis began by microanalysis, line by line, necessary for the generation of categories. Afterwards, codings were performed, and the relations between them emerged, with coding being defined as an analytical process in the following stages: open, axial and selective. In the open, decomposition was performed, followed by analysis, comparative process, conceptualization and organization of data into categories. In the axial, categories, according to their properties and dimensions, were related to the subcategories, considering that the category classification is equivalent to the phenomenon revealed in the data and the subcategory points to responses related to the phenomenon. The selective
represents the integration and refinement of categories, defining the relationship between secondary and central categories.\textsuperscript{6,10,22}

Regarding the construction of the Theoretical Model, in the form of an organizational scheme of the results, composing the phenomenon in question, its validation is considered a methodological strategy, in the sense of gathering information through the interaction of concepts and categories, symbolizing an abstract composition from the interpretation of the data. It is essential to establish how abstraction fits the data and to define whether there were omissions in the final result of the graphical representation of the theory. One of the ways to validate the study phenomenon is to ask research participants to comment on the constructed theoretical model, saying whether they are able to recognize themselves and perceive the model as a credible tool that can adequately elucidate facts from the study in spite of small gaps or mismatches in some points, the broader concepts should be contemplated. Therefore, validation represents the comparison of concepts and establishes their level of adequacy to the developed study.\textsuperscript{10,24}

In this study, the theoretical model was represented by an explanatory scheme, which was sent to the participants via email. Ethical criteria established by the recommendations of Resolution 466/2012 on research with human beings were respected. Regarding the information collected, total confidentiality was guaranteed, as well as the anonymity of the participants, and all women and health professionals received and signed two copies of the Informed Consent Form, with one for the participant and the other for the researcher.

RESULTS

The results are presented through observations, interpretations, interactions, reflections, connections and interconnections, from the research data, following the methodological rigor of GT. Thus, a theoretical model was elaborated related to the woman with breast cancer who had breast reconstruction.

The theoretical model “Women face challenges and overcome difficulties: fear of death, breast mutilation and breast reconstruction, changing the way women are” offers an explanation of the phenomenon and emerged from the systematic interrelationship of the 11 study categories. The interconnection process of categories, which enabled the construction of the theoretical model is illustrated through the explanatory scheme shown in the diagram (Figure 1).

According to the interrelationship between the categories and throughout the process at both macro and micro levels, representing the dynamic and evolutionary nature of action/interaction, the theoretical model was developed and is represented in the scheme as phenomenon.

The phenomenon emerged from the three causal categories: “Resuming the Period Prior to Breast Cancer”, “Experiencing the Surgical Procedure” and “Dealing with the postoperative consequences and needs”, which highlights the various situations experienced by women. In addition, the phenomenon also emerged from the context, represented by the category “Revealing the feelings and emotions involved in the breast reconstruction process”, which reveals the problems arising from the experienced situations. The intervening conditions of the phenomenon were present in the categories “Introducing the routine of professionals”, “Professionals and the skills needed to care for women”, “Professionals’ view of women”, “Receiving support in various ways” and “Women reflecting on the relationship with health professionals”. The strategies are represented by the category “Adapting routine activities to the new condition”, which indicates an action/interaction to solve a problematic situation and the consequences can be identified in the category “Facing femininity/sexuality”.

The central category “Women face challenges and overcome difficulties: fear of death, breast mutilation and breast reconstruction, changing the way women are”, in this study, represents the phenomenon, as it has the analytical power to form an explanatory whole. on the topic studied.
Validation of the constructed model and the explanatory scheme

The development of the theoretical model, one of the objectives of GT, happens during selective coding, through the integration and refinement of the categories that emerged in axial coding. This integration happens continuously over time, considering the interaction between the researcher and the data. This interaction results in the presentation of the results as a set of interrelated concepts, with the researcher interpreting and reducing the data through the construction of abstractions. Thus, the central category of the study arises from interpretations of data and abstractions, bringing the other categories together in order to form a theoretical framework.10

Figure 1 – Theoretical model of the phenomenon “Women face challenges and overcome difficulties: fear of death, breast mutilation and breast reconstruction, changing the way of being a woman”. Florianópolis, SC, Brazil, 2016
Once constructed, the theoretical model needs to be refined, which includes the scheme being revised and evaluated, looking for possible mismatches, excesses, gaps or failures, improving internal consistency, reworking and rearranging categories. Once the refinement of the model has been completed, it must be validated.9–10,24

Validation can be done by returning to the data, comparing the schema to the raw data, doing a type of high level comparative analysis, where the schema should be able to explain most cases. In addition, the scheme can be shared with the participants, who must say if the theory fits their case. In general, the recognition of themselves should be pointed out by the participants, realizing that the phenomenon provides a reasonable explanation for their stories.9–10,22

Therefore, the present theoretical model was validated in two described ways, by comparing the participants' raw data and opinion, in order to ascertain how the model was capable of encompassing women’s experience, if the relations of the categories converged with the phenomenon, if the abstract model represented the process experienced by them and if the concepts used by the researcher contemplated their stories. Participants received the theoretical model, in addition to the objectives of the study, via e-mail and answered via email or telephone. Among the 31 participants, 29 were very satisfied and touched, demonstrating deep identification with the theory and the theoretical scheme. Only four women suggested minor changes.

DISCUSSION

This theoretical model refers to a more specific sphere of concern, specific to a group of women diagnosed with breast cancer, and seeks to understand the meaning that these women have in relation to the breast reconstruction process.10

Regarding the meaning of experiencing the breast reconstruction process for women with breast cancer, we can affirm, at first, that it was focused on fear, anguish and difficulties related to receiving the cancer diagnosis, facing the surgical procedures, sequelae and treatments. However, the support received in various ways, such as through adaptation strategies that help them to return to daily, work and leisure activities, transform fear into energy in the search for solutions to challenges and, as a consequence, the acceptance of the transformation of femininity and sex life. Sometimes, unfortunately, this acceptance does not occur, and fear and impotence remain, especially in the face of the possibility of relapses or metastases.

Women also came to value new and old relationships, both family and friendship, including those established with health professionals, and the realization that the process of reconstruction is an unfinished process that requires a strong disposition in order to continue treatment. Thus, experiencing the process of breast reconstruction after breast cancer means the resurgence of a stronger, braver, tolerant and compassionate woman, despite her different, incomplete and marked body; but also of a more fragile, vulnerable woman, if faced with relapses, the uncertainty of healing.

Regarding the process of building the theoretical model, after the elaboration of categories and subcategories, it is necessary to use a coding mechanism to help the researcher to keep several analytical points in mind. The authors classified this conditional/congruence model mechanism, indicating that both micro and macro conditions and consequences should be considered in the analysis; In addition, this model also helps to capture the interaction between conditions, participant responses, and the resulting consequences. The model allows the researcher to systematically follow the study’s chain of events, drawing a conditional line and trying to discern what conditions existed at a given moment, what sequence of action/interaction followed and what consequences resulted. Thus, the authors called a process the series of evolutionary action / interaction sequences between categories, which occur in time and space, changing or sometimes remaining unchanged in response
to the situation or context, considering it important that the researcher analyze the data in search of the process at any stage of the analysis.10

Brazilian nursing authors also highlight that this mechanism helps to gather and systematically order data, enabling the relationship of the structure conditions, which are related to the causes, context and intervening issues, with the process conditions that deal with action/interaction strategies of women who experienced the breast reconstruction process and the consequences.9,22–27

The limitations found during the research were related to the schedules of health professionals working in the area in question with the researcher, requiring various scheduling and rescheduling in order to be able to conduct the interviews smoothly, without concerns about their duration.

Regarding the implications for practice, the present theoretical model on the meaning of the breast reconstruction process is intended to be useful for health professionals who provide care to women with breast cancer, as well as health professionals working in other areas of care to the human being, in the different phases of life, since the construction of models improves scientific knowledge and allows care to be improved. It is expected that the study in question contributes to future investigations, encouraging researchers to elaborate other theoretical models, addressing different themes and contexts, as well as supporting studies directed to the care of women diagnosed with breast cancer undergoing breast reconstruction.

The use of GT is increasing in qualitative health studies, especially in nursing, with the construction of theoretical models that emphasize practices based on the relationship between different actors: individuals, families and health professionals, contributing to the improvement of comprehensive care and providing an understanding of different experiences in the face of a certain pathological or health condition.20–27

The use of an explanatory scheme proved to be appropriate for the construction and validation of this theoretical model, especially for new researchers with studies based on Grounded Theory. The authors of this referential suggest that researchers who perform this type of study for the first time should perform all steps manually, without the use of software, because the analytical process is an extremely complex and intricate activity, which can be used as a great learning opportunity.

The collected data, interpreted in the light of the methodological framework of GT, associated with the theoretical framework of Symbolic Interactionism, provides the understanding that the “meaning” is produced through communication and conviviality between people, with their commitment to live in a continuous process of activity, developing lines of action in the numerous situations they encounter. Thus, the study found that the actions of women who experience this condition are based on their interpretations of the phenomena related to breast cancer and its relationship with the world.10,16–17

CONCLUSION

The theoretical model built from the meaning, or rather, experiencing the breast reconstruction process of women with breast cancer, supported by the pillars of the Grounded Theory and Symbolic Interactionism, shows that the meaning is related to the experience of breast cancer, difficulties caused by the disease, treatment, fear of death, obstacles related to the cost of treatment, as well as being faced with the new body image, represented by the reconstructed breast. Thus, women, facing and overcoming these difficulties, come to value life and themselves, putting themselves first, taking care of themselves and learning to be more tolerant, to give less value to material things and to face life with courage and faith; understanding that they cannot change others, only themselves.

The theoretical model “Women face challenges and overcome difficulties: the fear of death, breast mutilation and breast reconstruction, modifying the way of being a woman”, is built from the interrelationship and integration between the 11 study categories, considered the phenomenon, in addition to being the central category, as it also represents the central theme of the research.
It is possible to affirm that the constructed model allows reflections on the meaning of the experience of the breast reconstruction process for the woman diagnosed with breast cancer and for health professionals, allowing to amplify and deepen the comprehension of the process, considered complex, arduous, long and under constant construction as it seems to have no end.

Thus, the constructed model is considered relevant, useful and appropriate for women facing breast cancer and breast reconstruction, and also for health professionals working in the area of women's health, as it represents, in a simplified and objective manner, factors related to the meaning of the process experienced by women, enabling these professionals to develop a care model that addresses all the needs of these women.

In addition, this study contributes to the construction of theoretical models about other aspects related to women's health, or even in any health area that intends to understand the meanings of the health-disease process for humans.

REFERENCES


NOTES

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CORRESPONDENCE AUTHOR
Cilene Volkmer
cilenev@gmail.com