

## GROUNDED THEORY: EVIDENCING DIVERGENCES AND CONTRIBUTIONS FOR NURSING RESEARCH

TEORIA FUNDAMENTADA NOS DADOS: EVIDENCIANDO DIVERGÊNCIAS E CONTRIBUIÇÕES PARA A PESQUISA EM ENFERMAGEM

TEORÍA FUNDAMENTADA EN LOS DATOS: DIVERGENCIAS Y CONTRIBUCIONES A LA INVESTIGACIÓN EN ENFERMERÍA

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### ABSTRACT

The Grounded Theory based on the data is a qualitative research method widely used in Nursing and due it was developed to the different aspects, it requires by researches special attention in its application, considering the different approach and techniques. This reflection is presented with the objective of discussing the main points of divergence in the use of the different aspects of the Grounded Theory in Nursing research. In spite of the different approaches in the traditional, relativistic and constructivist aspects, the in-depth study and the careful execution need to be encouraged by professionals in this area of activity, aiming at the production of knowledge, with a guarantee of methodological rigor and qualified research results to subsidize and improve the practice.

**Keywords:** Grounded Theory; Qualitative Research; Nursing.

### RESUMO

A Teoria Fundamentada nos Dados é um método de investigação qualitativa amplamente utilizado na Enfermagem e que, em função das diferentes vertentes, requer atenção especial na sua aplicação, considerando as diferentes abordagens e técnicas. Apresenta-se esta reflexão com o objetivo de discutir os principais pontos de divergência na utilização das diferentes vertentes da Teoria Fundamentada nos Dados na pesquisa em Enfermagem. Apesar das diferentes abordagens nas vertentes tradicional, relativista e construtivista, o estudo aprofundado e a execução cuidadosa necessitam ser encorajados por profissionais dessa área de atuação, visando à produção do conhecimento, com garantia de rigor metodológico e resultados de pesquisa qualificados para subsidiar e melhorar a prática profissional.

**Palavras-chave:** Teoria Fundamentada; Pesquisa Qualitativa; Enfermagem.

### RESUMEN

La teoría fundamentada en los datos es un método de investigación cualitativa sumamente empleada en enfermería. Llamamos la atención sus diferentes vertientes y posible mal uso. En este estudio se discuten los principales puntos de divergencia entre vertientes e investigadores y las aplicaciones de este método en la investigación en enfermería. A pesar de los distintos enfoques en las vertientes tradicional, relativista y constructivista, los profesionales del área deben fomentar el estudio profundo y la ejecución cuidadosa con la finalidad de generar conocimiento, con garantía de rigor metodológico y resultados de investigación calificados para favorecer y mejorar la práctica profesional.

**Palabras clave:** Teoría Fundamentada; Investigación Cualitativa; Enfermería.

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## INTRODUCTION

Qualitative research allows its followers to overcome the positivist model, giving the researchers an in-depth understanding of the context investigated and the integration with the study participants. Among the research possibilities focused on the qualitative approach, phenomenology, ethnography, action research, participant research and Grounded Theory (GT) were highlighted.<sup>1</sup>

The GT is a qualitative research method that seeks to create a theory based on the development of a phenomenon, unveiled by the collection and simultaneous analysis of the data. This methodological reference is used to understand the experiences and meanings that social actors experienced in a given scenario,<sup>2</sup> investigating the interactions, behaviors, and perceptions of individuals and their thinking in a given object.<sup>3</sup> It was recognized as a relevant method in nursing area, being one of the methodologies most used in nursing research in the last decades,<sup>4</sup> since it proposes the human interaction-action, especially in the scope of care, allowing the creation of theories from the practice.<sup>5</sup>

This descriptive-reflexive study was developed considering the historical construction of the method created in 1967 by Barney Glaser and Anselm Strauss, who in the 1990s chose to develop two schools of thought called Glaserian and Straussian. From then on, different readings of the GT were made by researchers and students who used the method, also called second generation, being the constructivist current the one that gained more prominence among the developed ones.<sup>6</sup>

The diversity of GT conduction in each strand can interfere with its application when the researcher does not have clarity about the course and the techniques in which to support it to develop his study and which approach his research object and his research profile better adapt.<sup>4</sup> Understanding its wide dissemination and possible misuse, it is proposed this theoretical reflection, which is organized into three categories, with the objective of discussing the main points of divergence in the use of the different aspects of the Grounded Theory in Nursing research.

## UNDERSTANDING THE GROUNDED THEORY: CONCEPTUAL BASES

The GT aims at understanding a particular process and, in this sense, understanding is considered a form of empathy, as it seeks the intentionality of actions in the place of the other.<sup>7</sup> Therefore, it is advisable to have the aid of an experienced researcher in the area to choose to use it for the first time. The reason for this concern is the need to immerse the researcher in a universe of subjectivity, objectivity, and sensitivity that permeates the multiple relationships between the researcher of this methodological reference and the participants.

When questioning the difference between two situations, for example, a bird catching a fish and a tiger chasing a ram, a

researcher without a GT experience would describe the events in two ways: catching a fish or chasing a ram. However, a researcher experienced in GT would certainly perceive the implicit meaning in the behavior of the bird and the tiger by treating as hunting for food. Undoubtedly, these examples do not express all the complexity of the method, but they constantly advise the researcher to reflect and question the data about what is happening here?

Thus, interpreting GT can be very difficult, especially when the different perspectives of the method, which throughout the 20<sup>th</sup> and 21<sup>st</sup> century have evolved and unfolded in different methodological directions, are unknown. Therefore, the classic GT strand, proposed by Barney Glaser, defends a researcher free of prejudices, receptive to the data and with an emphasis on the identification of patterns of behavior. According to this author, the coding process unfolds in three stages: open, selective and theoretical coding.<sup>8</sup>

Glaser states that the researcher must delimit the context and enter the field without a definite research question, allowing the phenomenon to be studied to be entirely faithful to the reality of the subjects involved.<sup>9</sup> Also, he admits that the researchers are human and inevitably tend naturally to influence research unintentionally with personal interpretations. However, he argues that if the researcher carefully uses coding procedures and the technique of constant comparison, abstain from the literature and collect a wide variety of data from different sources this possible bias can be corrected.<sup>10</sup>

The Straussian or relativist side has two main representatives, Anselm Strauss and Juliet Corbin. In this perspective, the researcher is active in the data, that is, the researcher is the one who interprets the data, and he may have some previous knowledge about the phenomenon studied. Here, the coding process has in the oldest edition of the method:<sup>2</sup> open, axial and selective coding; and in the recent:<sup>11</sup> open coding, axial and integration. Another important aspect of this approach is the use of the paradigmatic model to organize the data.<sup>9,12</sup> In the constructivist perspective, according to Kathy Charmaz, the researcher is the data co-constructor, that is, participant in the process. From this perspective, the analysis occurs in three moments: initial, focused and theoretical coding.<sup>6</sup>

When choosing a strand, it is important that the researcher remain faithful to it throughout the methodological course, from the description of the perspective to the process of construction of theory and theoretical model. For example, if the researcher proposes to work in a more constructivist way,<sup>6</sup> which provides more freedom and creativity in the elaboration of the theoretical model, it is not possible to use open, selective and theoretical coding<sup>8</sup> and present the structured results in the paradigmatic model.<sup>2,11</sup> It is considered that the development perspectives of the method are different and this miscel-

lany may interfere in the consistency of the construction of the theory as well as in the quality of the study developed.

Aiming at the different perspectives, one aspect that generates doubt in the researcher in GT is the use of a theoretical framework. After all, is GT a theoretical and methodological reference or is it only methodological? In summary, it is a methodological reference that can be combined with a theoretical reference of choice of the researcher from the analysis and interpretation of the data. But does this methodological reference really need a theoretical reference to be supported?

The main authors of the theory do not leave this question clear. Glaser defends the line that the GT is self-sufficient to develop a theory, considering that it emerges from the data and therefore any involvement of the researcher or interfering look would hurt the analysis of the data and the development of the theory.<sup>8</sup> Strauss and Corbin treat GT as a set of techniques and procedures, characterizing it as a methodological reference, allowing the researcher to be involved throughout the data analysis process and the use of a theoretical reference.<sup>2,11</sup>

It should be noted that the origin of GT was strongly associated with symbolic interactionism due to Strauss's contribution.<sup>9</sup> This referential seeks the perception or meaning of a given situation or object for a particular individual or group.<sup>9</sup> Symbolic interactionism proposes three premises: human beings they act on things based on the meaning they have for it; the meanings of things are the result of social interaction and these meanings are used and transformed through the processes of interaction that the person faces in the face of different situations. However, currently, authors argue that symbolic interactionism is not necessary to validate GT as a method of scientific investigation, and other theoretical references can be used.<sup>4</sup>

## BUILDING THE GROUNDED THEORY: FUNDAMENTAL ASPECTS FOR ITS DEVELOPMENT

Before starting a GT, the researcher must first know the method and have a first approximation with the main authors and their aspects to choose which perspective will guide him in the methodological course. In this context, regardless of the strand, the profile of the researcher plays a fundamental role.<sup>13</sup>

The development of the theory guides the researcher, who at the same time is guided by the method. The hypotheses arise from the data and indicate new scenarios/participants, characterizing the theoretical sampling in a constant movement of coming and going, submersion and emersion for comparison and confirmation of data or not. In GT, as in any qualitative research, one aspect of great importance is the selection of the sample. In this case, although the theoretical sampling emerges during the development of the theory, it is impor-

tant that the participants are good informants for the objective of the study, that is, people with ease of communication and knowledge/experience of the phenomenon.

Thus, when developing GT, it is expected that the researcher will have a set of characteristics that allow him to be theoretically sensitive to understand the process of theory construction using the dynamics between deduction and induction for interpretation and attribution of concepts that require high degree of abstraction. GT requires creativity, curiosity, aesthetics, critical thinking, flexibility and openness to exchange, theoretical sensitivity and commitment to interviewees and to society and determination as essential aspects of the process of development and construction of emerging theory.<sup>13</sup>

When starting a GT not necessarily the researcher will do a literature review to know the state of the art on the subject of study. Differently, from other qualitative methodological approaches, GT does not require a theoretical organization before or during data collection and analysis, since the need for the researcher to obtain more information in the literature will emerge from this process. Glaser argues that the literature review is only to discuss the findings since it can influence/divert the researcher's perception of the emerging phenomena in the data.<sup>8</sup>

Strauss and Corbin<sup>2</sup> and Charmaz<sup>6</sup> predict the researcher's contact with the literature during the data collection and analysis process, but they highlight the importance against allowing the literature data to be placed between the data of the study and the researcher. In short, the orientation is to have as little influence as possible during the construction of the theory, however, discussion of the findings with other studies is paramount for the validation of the theory.<sup>2,6</sup>

Data collection and analysis are concomitant in GT and should be performed systematically to achieve data significance, compatibility between theory and observation, generalization and reproducibility, precision, accuracy, and verification. Memos and diagrams are strategies to guide the researcher to exercise conceptual relationships and facilitate the construction of hypotheses and concepts. Memos are analytical and conceptual records that consist of products of analysis and intended to keep research based on data.<sup>2,6</sup> As for the diagrams, they are graphical representations of an analytical scheme that aim to delineate the relationships between concepts and show the density of theory.<sup>6,8</sup>

In-depth interviews are essential in the construction of GT, but the use or not of questionnaires for application in the interviews is a point of divergence among the researchers of the method, being frequent to find studies that say using structured and semi-structured questionnaires in the construction of GT.<sup>13</sup>

For the main authors of the method, the interview should be a conversation in which the questions are introduced naturally according to the participant's report, aiming at the the-

oretical deepening. The interview should be initiated with a question wide enough to allow the free expression of the participants, allowing to explore the meanings in these expressions<sup>2,6,8</sup> and can be done individually or in groups.<sup>7</sup> A questionnaire can be used, but it should not be closed, allowing the researcher to explore the emerging data in depth and modify the script during the process of constructing the theory.

Therefore, it is essential that more importance be given to listening and analyzing the statements than to the questions, considering that what the researcher is looking for may not always be the phenomenon that is happening. It is important for the researcher to keep in mind that GT is a process that takes place and in which the researcher needs to have the flexibility to be guided by the data, considering the unforeseen in his methodological path.<sup>7</sup>

In addition to the interviews, GT allows the use of instruments such as photos, videos, documents, participant observation<sup>7</sup>, and it is not mandatory to use these resources, establishing the methodological path as an indicator of the need for use. Interviewing features such as vignettes or graphic representations, which can help the researcher understand the meanings attributed by the participants, stand out.

Regarding the codification of the data, the discussion revolves around the use of the gerund in the elaboration and structuring of the codes. Charmaz<sup>6</sup> defends the use of active codes employing the gerund, since they give a strong sensation of action and consequence to the data and allow the researcher to begin the analysis from the perspective of the participant, that is, internal to the field of investigation. According to the author, the use of nouns in the codes tends to convert actions into topics. Glaser<sup>8</sup> states that the use of gerund in data coding helps the researcher to detect processes and to stick to the data, promoting the theoretical sensitivity that helps him to reflect on the actions. In this sense, the use of gerund is considered a characteristic of GT and should be used with care to avoid "gerund". However, its use is optional, being at the discretion of the researcher.

Researchers have argued that codes should contain the smallest possible information, shortcodes, to facilitate the analysis of the data against the amount of material coming from the interviews, but they should contain enough information to be self-comprehensible.<sup>6</sup> In sum, the concept of data is conceptualized by analyzing and identifying patterns and events.<sup>3</sup> In other words, the purpose of coding in GT is to reduce the volume of data by the conceptualization so the researcher does not need it anymore return to the raw data to describe the results of the study, except to seek clippings from participants expressing the revealed content.

In this sense, for the organization of data, some software are used by researchers of the method, such as Nvivo<sup>®</sup>, for example,<sup>15</sup> which is indicated for studies that use GT, although not exclusive-

ly, to facilitate the organization of data in the face of excess codes and categories. Regardless of some researchers do not advise the use of this software, it has been used in studies that have used GT for more than a decade in its different versions.<sup>7</sup> In the nursing area, there is little record of use in Brazilian productions, which may be related to the cost of access to the technology, as well as to the criticism of the distance of data generated by this tool.<sup>12</sup>

GT can be developed from different perspectives depending on the purpose of the study. Thus, it can acquire a more procedural or more conceptual character. However, regardless of the perspective adopted, does the whole GT result in a theory?

The purpose of the GT is to construct a theory or theoretical model that has a foundation in the data, that is, it predicts the articulation and interrelationship of concepts in order to explain the phenomenon of the study. In this sense, much has been discussed about the use or not of the paradigmatic model in the construction of GT, considering its structure and characteristic of response to the main points to be developed to support a theory. The discussion revolves around the presentation of the theoretical theory or model and its similarity when the paradigmatic model is not used with the other qualitative research.

In the Brazilian context, nursing productions presented in part the result based on the paradigmatic model (50%), and the nomenclature was diverse, contemplating: theory, conceptual model, representative model, theoretical matrix and theoretical scheme.<sup>12</sup> Thus, one can to affirm that the GT, using or not the paradigmatic model, presents a characteristic structure that is the interrelationship of the emergent data categories with the central category, with the phenomenon of the study. The categorization of the data depends on the theoretical sensitivity of the researcher, on the ability to give meaning to the data.<sup>3</sup>

In relation to theoretical validation, GT does not predict the validation of the interviews individually by the study participants, but rather the validation of the theory or theoretical model by expertise in the study area and/or person who experiences the phenomenon of the study.<sup>2</sup> To judge the applicability of the theory to the studied phenomenon can be used structure composed of four criteria, being they adjustment, comprehension, generalization, and control. The form of application is free, and the researcher can use the creativity in the process.

## CONTRIBUTIONS OF THE METHOD FOR ADVANCES IN NURSING RESEARCH: CHALLENGES AND POTENTIALITIES

The result of GT is a substantive theory. Thus, questions in discussions about the method are: how to go beyond GT? How to apply theory in nursing practice and get changes? The discussion takes place around the construction of a formal theory,

which would be the gathering of substantive theories for practical applicability, that is, a theory for application in different situations and scenarios, which seeks generalization.

From the development of GT, it is possible to recognize problems of a given scenario by generating nursing theories with the aim of improving professional practice.<sup>3</sup> Thus, GT can be considered a potential resource to favor scientific production in the area of based on the development of best practices in health and nursing through the understanding of the meanings of the experiences portrayed in the construction of theoretical models.<sup>4</sup>

The GT allows the construction of knowledge in less explored realities, with the possibility of a new look at this reality, favoring the emergence of veiled issues from the meanings of the actors themselves. The method has the commitment to the diffusion of nursing knowledge, evidencing consistency and rigor as attributes that strengthen the results of the qualitative approach studies, allowing the discovery of theories that can bridge the gap between theory and practice.<sup>5</sup>

Also, the need to go and come to the field, the time for the realization of the study before the complexity of the method and the level of abstraction necessary for the construction of the theory can be cited as challenges faced by the GT researcher. As a potentiality, GT allows the flexibility to introduce new research questions and participants, even from other scenarios and enables the use of numerous data collection resources and the use of data organization software.

The use of the paradigmatic model can be considered both a limitation and a potential for the development of the theory. There is a limitation because it restricts the creativity of the researcher in presenting the theory, and there is a potentiality, by building a conceptual structure that responds to the main precepts of a theory.

## FINAL CONSIDERATIONS

As divergent points in the conduction of the GT, this study evidenced the necessity or not of a theoretical reference and of the literature review to conduct the study, the use of structured and semi-structured questionnaires for the data collection, the use of the gerund and the structure of the codes in the data analysis; the use of software for data organization, the structuring of results using the paradigmatic model and the validation of the theoretical theory or model.

Although frequently used in nursing and relevant contributions, GT needs to be encouraged by professionals in this area of work due to the need for studies with methodological

rigor and to enable the production of quality knowledge that can subsidize and modify professional practice.

From this perspective, new questions can be evidenced and from them new discussions being an incessant movement in search of explanations/consensuses that are necessary for the evolution of the method.

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