

INVESTIGATING ORAL HEALTHCARE IN THE ELDERLY USING GROUNDED THEORY¹

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The present article aimed to describe the foundations and adequacy of the Grounded Theory (GT) to the construction of the substantive theory on the phenomenon of oral health care of institutionalized elderly people. GT is a methodology that allows formulating orderly abstractions from the real life data. Through this referential is possible to elaborate a relevant and functional theory in order to understand the meaning of the elderly oral health care practices. GT allowed an extensive and rich production of information codes submitted to a process of Comparative Analysis. The immersion in the actors' subjective and private view, through interviews performed with the participants, allowed by the open and flexible character of the method, permitted the formulation of comprehensive analysis categories. The text demonstrates the validity of this alternative methodology to the scientific investigation of this complex phenomenon.

DESCRIPTORS: aged; empathy; oral health

INVESTIGANDO EL CUIDADO A LA SALUD BUCAL DE ANCIANOS UTILIZANDO LA TEORÍA BASADA EN LOS DATOS

El presente artículo objetiva describir las fundaciones y adecuabilidad de la Teoría Basada en los Datos (TFD) en la construcción de una teoría substantiva acerca del fenómeno del cuidado a la salud bucodental de los ancianos institucionalizados. La TFD es una metodología que permite formular abstracciones ordenadas a partir de los datos de la vida real. Utilizando ese referencial, es posible elaborar una teoría relevante y funcional para la comprensión del significado de las prácticas de cuidado a la salud bucodental del anciano. La TFD hizo posible una producción extensa y rica de códigos informacionales sometidos a un proceso de Análisis Comparativo. Esa inmersión en la visión subjetiva y particular de los actores, a través de las entrevistas con los participantes, y propiciada por el carácter abierto y flexible del método, creó las condiciones para la formulación amplias categorías de análisis. El artículo demuestra la validez de la aplicación de esta metodología alternativa para la investigación científica de este fenómeno complejo.

DESCRIPTORES: anciano; empatía; salud bucal

INVESTIGANDO O CUIDADO À SAÚDE BUCAL DE IDOSOS UTILIZANDO A TEORIA FUNDAMENTADA NOS DADOS

O presente artigo tem por objetivo descrever os fundamentos e adequabilidade da Teoria Fundamentada nos Dados (TFD) na construção de teoria substantiva sobre o fenômeno do cuidado com a saúde bucal de idosos institucionalizados. A TFD é metodologia que permite formular abstrações ordenadas a partir dos dados recolhidos da vida real. Segundo esse referencial, é possível elaborar uma teoria relevante e funcional para a compreensão do significado das práticas de cuidado com a saúde bucal do idoso. A TFD possibilitou produção extensa e rica de códigos informacionais submetidos a um processo de Análise Comparativa. Essa imersão na visão subjetiva e particular dos atores envolvidos, por meio das entrevistas realizadas com os participantes e propiciada pelo caráter aberto e flexível do método, criou condições para formulação de categorias de análise abrangentes. O texto demonstra a validade da aplicação dessa metodologia alternativa para a investigação científica desse fenômeno complexo.

DESCRITORES: idoso; empatia; saúde bucal

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ORAL HEALTHCARE IN THE ELDERLY AS AN OBJECT OF STUDY

Worldwide demographic data show a continuous expansion of the ratio of elderly people in the global population⁽¹⁾. However, such expansion, when associated to the process of living, is not always accompanied by gains in health⁽²⁻³⁾. That becomes evident when the oral condition of elderly Brazilians is analyzed⁽⁴⁾.

Oral healthcare, by itself intrinsic to care in both the individual and collective spheres, implies a dynamic and continuous process of human living and its consequential, responsible decision-making and actions that are focused on promoting oral healthcare, aiming to protect life. Hence, oral healthcare is a daily construct that moves beyond the present space-time, assuming a thorough view of the human being and how it relates to other beings, society and the environment.

Appropriate oral healthcare has not received sufficient attention when it comes to long-term care facilities for the elderly, where flagrant omissions have been observed⁽⁵⁾.

The institutionalization of the elderly establishes a complex web of social and economic relations⁽⁶⁾. At the very least, the following players take part in this web: the elderly and their family; the public, private or third-sector institution where they reside; the professionals who work there and who are, or should be, available at all times; the state and also the government, the former because of its corresponding social function and the latter due to the policies and actions that are devised and implemented.

The increasing, disordered institutionalization process, as a product of structural changes in family relationships⁽⁷⁾, generates a complex scenario of interactions between subjects and organizations, with marked effects on oral healthcare. Moreover, especially in the area of oral healthcare for the elderly, research and studies are still incipient and rather circumscriptive.

The process of epistemological construction of oral healthcare in the elderly as a theoretical body must consider multidisciplinary and encourage comprehensive, thorough dentistry praxis. The multidisciplinary of the research topic aims to surpass, thus, the barrier of isolated actions in dentistry and other health areas, and evidences the need to

address the social and human context of the elderly in its many interfaces.

Thus, this article aims to describe the fundamentals and adequacy of the construction of a substantial theory about oral healthcare practices for institutionalized elderly patients, developed through Grounded Theory (GT).

Having oral healthcare practices circumscribed into a scenario of human interaction as its object of study, GT brings to light substantial knowledge that had been veiled in such a scenario. Therefore, understanding the meaning of oral healthcare in the elderly living in long-term care facilities was considered pertinent, considering perspectives of living and aging in good health. This understanding permits the elaboration of a substantial theory about the phenomenon that comprehends the practices of oral healthcare in the elderly, in a context of long-term care facilities, in its many dimensions: individual, professional, institutional and public/governmental.

The understanding of this phenomenon, based on the interaction among these dimensions, and particularly in the sphere of the relationships established around these institutions, might warrant the (re)construction of healthcare practices, considering perspectives of living and aging in good health.

GROUNDED THEORY - A METHODOLOGICAL POSSIBILITY

The choice of the research method basically depends on the nature of the problem that is being investigated. The characteristics of the study phenomenon, by themselves, set limits to the researcher.

The oral healthcare situation of the institutionalized elderly is precarious, and the amount of studies that measure and analyze the condition of oral healthcare in the elderly constantly increases. These are scientifically relevant articles, built on quantitative bases. However, it seems that quantitative studies cannot reveal the multiple and different sides, i.e.: a better and more comprehensive understanding of what happens, approaching the complexity of the resulting relationships; obtaining data on how oral healthcare and the people involved develop, enabling these people to make themselves heard; building up knowledge from

people's experiences, the needs that come into being, the feelings that surface, and investigating oral healthcare using everything that is reported and lived in these long-term care facilities for the elderly.

The phenomenon under study fits better into a qualitative study, with findings that could hardly be obtained by statistical procedures or other means of quantification⁽⁸⁾. Hence, qualitative research techniques were applied for data collection and analysis. The qualitative analysis corresponds to a non-mathematical process of interpretation, which is performed to discover and elaborate concepts and relations between the raw data and to arrange them into a theoretical framework. This procedure requires a theoretical and methodological basis found in the so-called Grounded Theory, or GT.

GT is a methodology that permits the formulation of abstractions, engineered from the data collected in real life situations. According to this methodological reference, it was possible to come up with a substantial, relevant and functional theory in view of the concerns that moved the authors towards the understanding of the meaning of oral healthcare practices in the elderly, focusing on living and aging in good health.

Thus, the field work consisted of an orderly excursion that used academic research approaches, capable of contributing to the construction of scientific knowledge, whose perspective and selected method have not been thoroughly explored as of yet.

The research object presented herein denotes a structure, people, practices, a process and the consequences derived from all of them. Although they may all vary, a relation of constancy and the phenomenon, as a whole, shows a capacity to develop continually. The GT method is a sufficiently broad and well-adjusted platform to accommodate this reality. The acknowledgment of the complexity and variability of the phenomena that make up oral healthcare in the elderly, as well as the belief that the subjects play an active role in the face of the problem situations, are sufficient as a base for the emerging knowledge of the reality reported by the subjects themselves and by the meanings they attribute to the phenomenon.

THE RESEARCH PROCESS IN GROUNDED THEORY

The Grounded Theory methodology, or GT, was created by American sociologists, based on the

orderly formation of a theory from data found through social surveying⁽⁹⁻¹⁰⁾. It is an effort to bring what is concrete to a degree of abstraction.

Theorizing on the field of Sociology is a strategy to deal with research data, providing methods of conceptualization to describe or explain a phenomenon⁽⁹⁾. The theory must clearly explain categories and hypotheses, in a way that they can be verified in present and future studies. Moreover, it must be understandable, have practical applications and be capable of modification as new data are found. GT is inspired on the principle that reality is flowing, while ideas are lasting. Findings are soon forgotten, but not ideas⁽¹⁰⁾.

Comparative Analysis is the methodological structure used to discover a theory based on data. Theory is emphasized as a process, as a continually developing entity, and not as a perfect and static product⁽⁹⁾.

The elements of the theory generated through Comparative Analysis and the researcher' theoretical sensitivity are primarily categories, and also their conceptual properties, followed by hypotheses and generalized relations between these categories and properties⁽⁹⁾.

GT has offered an important contribution to materialize research under less-explored angles, and has been mainly applied to preliminary, explanatory and descriptive studies⁽¹¹⁾. Due to the fact that theory is based on data, it is expected that awareness of the phenomena increases and provides a significant guide for action⁽⁸⁾. It is also believed that a theory built on research data would be more successful than theories logically deduced from previously elaborated inquiries⁽⁹⁾.

GT does not need an epistemological base to justify its usage. It is a comprehensive method, based on an indicative-concept model, which may use several theoretical perspectives, provided that they are pertinent to the topic under study. GT is an inductive method, which may be used with any kind of database, and it is generic enough to be used by any researcher in his or her field⁽¹²⁾.

Nevertheless, the independence from these elements in terms of building a theoretical/methodological reference should be appointed. GT is not linked to any theoretical framework or school of thought that limits the possibility of the emergence of a theory based on research data⁽¹²⁾.

REPORT OF A GT RESEARCH ON ORAL HEALTHCARE IN INSTITUTIONALIZED ELDERLY

The research example described here, using GT, was performed with a group of four private, profit and non-profit long-term care facilities for the elderly. The data collected and the concomitant, successive analyses guided both the number of participants in each group and the inclusion of new groups of subjects necessary for the construction of the theory.

Previous knowledge of the problem and the phenomenon to be studied has helped to identify the following starting groups: Elderly residents of long-term care facilities, caregivers employed in long-term care facilities for the elderly (Nursing professionals), directors of long-term care facilities for the elderly. Besides, according to the GT methodology of theoretical sampling criteria, other groups were also included in the study: dental surgeons from public health services, directors of public health (on the state and city levels), members of elderly defense entities.

It is important to point out that GT is not about collecting as many data as possible from a particular group, but collecting data about the category, aiming to generate properties and hypotheses, and thus determining the depth of a sample⁽⁹⁾. By identifying gaps not covered by theory, the researcher will seek new sources or places to collect data or new styles of interviewing, directing the questions on the emerging topics of interest to complete the study. Thus, when GT is applied, it is difficult to predict how many groups will take part in the study. While the researcher is immersed in the challenge of designing a theory, several groups or situations may become involved in the research. However, there comes a time when criteria need to be defined to judge when the sample is sufficient for that theoretical point. This judgment criterion is called theoretical saturation⁽⁹⁾.

At the end of the research process, the group of interviewees consisted of nineteen people, fourteen of whom were women: Three elderly subjects living in long-term care facilities; six Nursing professionals, being three nurses and three nursing aids; four directors of long-term care facilities; three dental surgeons from the public health service; three public

administrators, one of which also represented an elderly defense entity.

In GT, the data collection stage overlaps with the analysis stage, i.e., both happen concomitantly. The data collection was performed by means of interviews with initial questions that aimed to answer the initial research question: How do the relations of oral healthcare happen, according to the interviewees? Which practices do they report or show? What is the significance of these practices? These questions were altered according to the groups of subjects and their interaction with the topic under study. The interviews constituted an exercise in listening to the participants' discourse.

The process of data analysis started with coding. Coding is the general term used to transform data into concepts. A code transforms patterns from a group of empirical markers into data contents. From the hypothetical relations between conceptual codes (their categories and properties) originated in the data, an abstraction of theoretical nature is built, backed by data⁽¹³⁾.

The process begins with open coding, where the researcher must step in with as few prejudices as possible, and keep an open mind to each and every signal the data might point out. The researcher starts to analyze the data in every possible way, scanning the text line-by-line and trying to identify substantial codes. Open coding aims to generate categories and their properties from a careful analysis of the constituent incidents of the data. It is an analytical process where concepts, their properties and their dimensions are identified. Properties are general or specific characteristics or attributes of a category and dimensions represent the placement of a property within a ranking⁽⁸⁾.

The text of the interviews was thoroughly analyzed, phrase-by-phrase, and every so often word-by-word. When the text was read, questions were asked: Do these data refer to the study? What does this incident show? What is happening? What did the participant mean?

The arrangement of the codes was performed according to their properties, similarities and differences, at levels that represent the dimensions they belong to. Initially, the codes were grouped into components; components were grouped into subcategories and subcategories were grouped into categories.

To refine the emerging categories that were strictly related to the phenomenon under study, the process of open coding had to be delimited. The so-called selective coding forces the researcher to code only the events that relate significantly to the central category, so that the theory can be devised⁽¹⁰⁾. The process of delimiting occurred at two levels: theoretical and categorical. Adjustments, modifications of logical order, elaboration of property details, elimination of irrelevant properties and integration of properties were all performed. At the same time, a process of reduction was performed, since there was a certain degree of uniformity among the original categories, which permitted the construction of the theory with a smaller number of concepts. At the second level of delimitation, it was also decided that a reduction in the list of the components and subcategories was necessary to finish data collection and coding.

The interaction between substantial and theoretical codes is what characterizes GT as an analytic-inductive research method⁽¹²⁾. When theoretical coding establishes new connections and transforms them into relevant ideas, it also determines the original character of the theory⁽¹⁰⁾. The theoretical codes were selected as they emerged from the data and were considered relevant and useful to integrate the components, subcategories and categories; and consequently, to elaborate the theory.

Epistemological fundamentals from different fields of knowledge were applied, and the use of theoretical references from Symbolic Interactionism, Theory of Complexity, Health Promotion and Better Practices was also necessary.

Another step in the process of generating the theory is the production of written memorandums. These are the registries of ideas, through written records, about codes and their relations, taking concepts that surfaced from the process of data analysis to the highest level of abstraction⁽¹⁰⁾.

When the researcher elaborates memorandums, he or she raises the data to conceptual levels, develops the properties of each category, elaborates hypotheses about connections between categories and their properties, begins to integrate these connections in category groups and relates the emerging theory with other potentially

relevant theories⁽¹⁰⁾. The memorandums in the described research had been produced since the early stages, along the data collection and coding process. Considering that they are a cache of analytic ideas that can be grouped, ordered, classified and retrieved⁽⁸⁾, the systematic production of memorandums makes it easier to articulate the theory. If the codes conceptualize the data, the memorandums reveal and connect the properties of the substantial codes through theoretical codes.

Once theoretical saturation of the categories was reached, processes of revision, sorting and integration of the memorandums related to the categories followed. While the content of the memorandums constitute the base of GT, their sorting is the key to elaborate the theory for a textual presentation⁽¹⁰⁾.

The final stage of the process of generating a substantial theory, before writing, is integration: the cumulative arrangement (or articulation) of the theory components⁽¹³⁾. The categories and properties are sorted by similarity, connections and conceptual arrangement. Integration is centered on the sorting of the memorandums⁽¹⁰⁾.

In GT, texts published in literature are considered to be another source of data the researcher can access and integrate into the theory through the Comparative Analysis method⁽¹⁴⁾. A broad literature review was then performed as the study took place, aiming to comply with the requirements of the analyses of the data from the interviews. The literature also helped in the elaboration of hypotheses, delimiting properties of categories, and in the definition of the theoretical codes.

The description of these emerging categories, as a whole and in their interrelations, revealed the category that was central to all the others: "Promoting oral healthcare of the elderly in the context of long-term care facilities". This category matches what is defined as the Basic Social Process, especially because it is fully capable to regard action and manifesting the relations among the multiple categories of analysis⁽¹²⁾.

The central category incorporated seven other categories that defined the structures, properties and dimensions of the phenomenon. These categories, endogenous to the data, are presented in Figure 1.

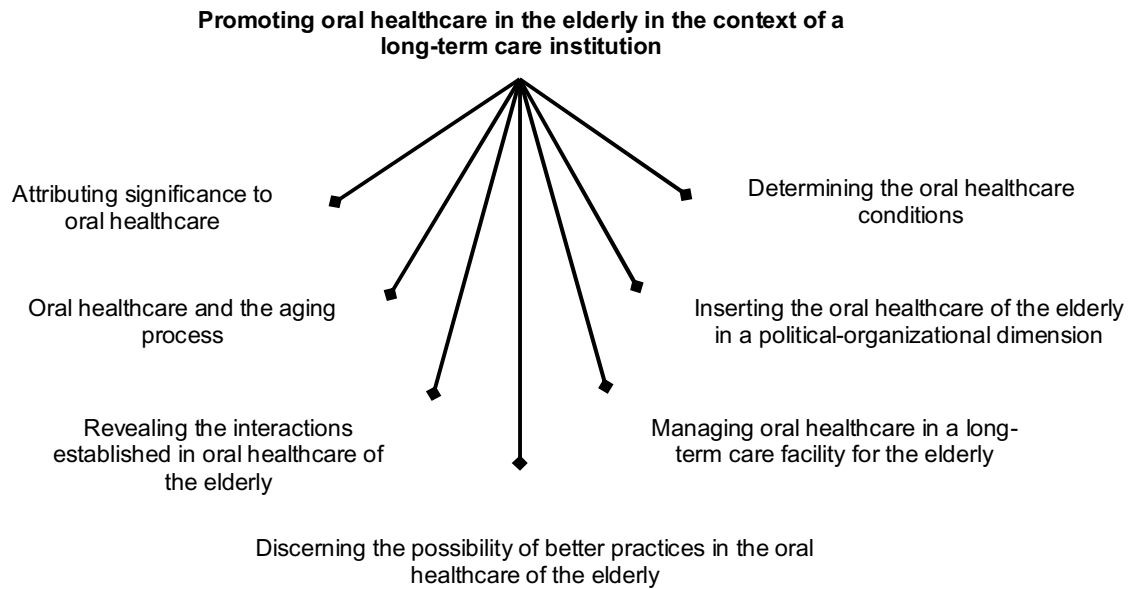


Figure 1 - promoting oral health care in the elderly in the context of retirement homes: central category and subcategories

The theoretical model formulated and its constituent elements are represented by the seven interrelated analytical categories and the central category. Two process stages are identified, which, from an evolving perspective, constitute two distinct moments of the phenomenon. The promotion of oral healthcare of the elderly residing in institutions contains a stage that represents the state of apathy in the face of the contradictions in the healthcare process and its malignant consequences for the oral healthcare of this group. This stage seems to correspond to the situation that prevails in a large share of the local Brazilian reality, which may be verified from the perspective of the theoretical analysis model, by itself a product of this research. The second stage, considered qualitatively superior, derives from the first stage because it maintains the original contradictions. This new stage incorporates attitudes of continuous improvement, elaborated on top of the contradictory elements of the preceding stage. Such elements are neither discarded nor dismissed, but confronted, driven by the desire to overcome contradictions and push both lethargy and inaction away, through the adoption of new action-awareness, translated as the implementation of better healthcare practices.

The resulting theoretical model to address the process of oral healthcare promotion in the elderly living in institutions, using GT, is characterized by variability and diffusion. The structuring bases of the theoretical model were designed as questions/inquiries and

support each and every category of analysis. They are a guide to step into the world of oral healthcare directed to elderly patients living in institutions, and they also contribute to the building and orientation of studies about oral healthcare of the elderly. Therefore, the use of GT has demonstrated, in this research, the validity of its application as a scientific method capable of accommodating such a complex phenomenon.

FINAL CONSIDERATIONS

By studying oral healthcare, the present research, although selecting only one of its aspects, stems from the premise that human life is caring. Thus, caring as concern for life irradiates and simultaneously integrates itself to every discipline that constitutes the health area, and establishes a strong bond with the environment. In a systemic view, where multiple elements interact to generate a result, oral healthcare is understood as one of the essential components of the healthcare system, in its many dimensions. Such dimensions - individual, professional, institutional and political-organizational - are not stationary. Quite the opposite: there is an intense, complex interchange of reciprocal and interdependent relations.

A closer look at these interactions allowed for the acknowledgment of the significance that the practices of oral healthcare directed to the elderly

living in institutions poses to the players involved. This has only been possible with the total and careful adoption of the chosen methodology. GT permitted an extensive and rich production of informational codes from the data collected, which were then submitted to a permanent process of comparative analysis. This immersion into a subjective and individual perspective of the involved players, by means of interviews with the research participants and the researcher's theoretical sensitivity, and also provided by the flexible and open characteristic of the method, has created the adequate circumstances to formulate sufficiently broad analysis categories.

The phenomenon of the oral healthcare promotion process in the elderly living in institutions can be examined in the context of the constructed theoretical model. In this sense, the model has the following properties: it can be applied in other time or space circumstances of oral healthcare in the elderly, since it shows an adequate level of abstraction; it is

capable of adapting to conditions of variability of the "oral healthcare" phenomenon, posing no risk to its architecture; it is capable to receive the movements of transformation of the process; it admits change, through the incorporation of new theoretical elements, aiming to improve itself, and its application induces critical reflection about the promotion of oral healthcare for the elderly living in long-term care institutions.

The study reaches its end by aiming to contribute to the adoption of appropriate oral healthcare practices directed towards a healthy aging process. Living with the complexity of the situation-problem in the little-big world of long-term care institutions clearly shows, to those who are sensitive and have a sense of civility, the social value and urgency of research in this area. The production of knowledge that not only contributes to the academic development of the disciplines and fields of study involved, but also to provide groundwork for relevant social actions, including governmental responsibility.

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