

CONTENT ANALYSIS IN STUDIES USING THE CLINICAL-QUALITATIVE METHOD: APPLICATION AND PERSPECTIVES

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Content analysis comprises a set of techniques for organizing communication/information – a procedure used with qualitative data to make themes/topics and concepts/knowledge emerge. Communication content, considering human written or spoken discourse, is complex and presents valuable polysemous characteristic. With the dissemination of the clinical-qualitative method, the use of content analysis, considered an important methodological tool, raises theoretical-practical issues that need to be taken into consideration for its academically precise use. Thus, this article aimed to enumerate specific elements of the content analysis technique and discuss its suitability for the clinical-qualitative method that combines generic qualitative methods from Human and Cultural Sciences with the area of Health Sciences. Concepts were selected due to their pertinence, use and eventual adaptation to the method focused on.

DESCRIPTORS: methods; qualitative research; nursing methodology research

ANÁLISIS DE CONTENIDO EN INVESTIGACIONES QUE UTILIZA LA METODOLOGÍA CLÍNICO-CUALITATIVA: APLICACIÓN Y PERSPECTIVAS

El análisis de contenido incluye un conjunto de técnicas de organización de comunicaciones/informaciones – un procedimiento frente a datos cualitativos para hacer surgir temas/tópicos y conceptos/conocimientos. El contenido de una comunicación, considerando el discurso humano hablado y escrito, es complejo y presenta una valiosa característica polisémica. Con la difusión del método de investigación clínico-cualitativo en nuestro medio, la utilización del análisis de contenido, una importante herramienta metodológica, trae cuestiones teóricas y prácticas que necesitan ser bien observadas para obtener una utilización académicamente precisa. Así, nos proponemos, en este artículo, enumerar elementos particulares de la técnica de análisis de contenido, discutiendo su adecuación a la metodología Clínica-Cualitativa que une los métodos cualitativos genéricos, construidos en las Ciencias del Hombre y de la Cultura, con el campo de las Ciencias de la Salud. Fueron seleccionados conceptos tomando en cuenta su pertinencia, empleo y eventuales adaptaciones para el método citado.

DESCRIPTORES: métodos; investigación cualitativa; investigación metodológica en enfermería

ANÁLISE DE CONTEÚDO EM PESQUISAS QUE UTILIZAM METODOLOGIA CLÍNICO- QUALITATIVA: APLICAÇÃO E PERSPECTIVAS

Análise de conteúdo abrange um conjunto de técnicas de organização de comunicações/informações - um procedimento frente a dados qualitativos para fazer emergir temas/tópicos e conceitos/conhecimentos. O conteúdo de uma comunicação, considerando o discurso humano falado ou escrito, é complexo e apresenta valiosa característica polissêmica. Com a difusão do método de pesquisa clínico-qualitativo dentre nós, a utilização da análise de conteúdo, importante ferramenta metodológica, traz questões teórico-práticas que necessitam ser bem apreciadas para a utilização academicamente precisa. Dessa forma, objetivou-se neste artigo enumerar elementos particulares da técnica de análise de conteúdo, discutindo sua adequação à metodologia clínico-qualitativa, que casa os genéricos métodos qualitativos, construídos nas Ciências do Homem e da Cultura, com o campo das Ciências da Saúde. Foram selecionados conceitos visando sua pertinência, emprego e eventuais adaptações para o citado método.

DESCRIPTORES: métodos; pesquisa qualitativa; pesquisa metodológica em enfermagem

INTRODUCTION

The construction and development of a scientific research resource based on two already established methodological models: the comprehensive-interpretative approach of symbols in Human Sciences and clinical approaches in health. These two models, jointly with psychodynamics, in the understanding of interpersonal relations, comprise the so-called *clinical-qualitative method*⁽¹⁾. It is based on three principles: on the millennial clinical attitude of looking at those who carry a pain, on the secular psychoanalytical attitude of listening to those who experience emotional conflicts and on the classical existentialist attitude of reflecting on human anguishes.

The clinical-qualitative research method can be understood as: "...the study and the construction of epistemological limits of a certain qualitative method, particularized in health care settings, including a discussion on a range of adequate techniques and procedures to describe and understand the relation of meaning regarding human phenomena referred to in this field"⁽¹⁾.

The method's overlapping aspects make us reflect on how to apply the several research techniques it comprises and how to make connections between the setting characteristics, where the phenomena of the health-disease process take place, and psychodynamic conceptions of the relations established in that setting, in a broad picture of theoretical frameworks to anchor and collate, among other particularities.

The use of data analysis techniques shows its importance as, after data collection, it requires accurate readings and interpretative and creative discussions. It is known that, in the universe of qualitative research, the choice of a method and its techniques of data collection and analysis should be carried out under a multifaceted perspective on the totality of results, including observations and interviews – *the corpus*. Such requirement is due to the multiplicity of senses attributed by the subjects who experience the phenomena under study – the polysemous nature of research⁽²⁾.

Content analysis is a widely used strategy for discourse treatment in qualitative investigation. It comprises a set of strategies whose objective is to search for meanings contained in documents, material collected through interviews⁽²⁾, or observation in field diaries⁽³⁾.

This review aimed to enumerate the specific elements of content analysis and discuss their suitability for the clinical-qualitative method, which inserts the generic qualitative methods built in Human and Cultural Sciences into the Health Sciences area.

Brief history of the content analysis method

A remote attempt to understand the *meaning* of a given message happened through the so-called *exegesis*, detailed interpretation, specifically employed in biblical texts for a possible understanding of what underlies metaphors and parables of these documents⁽⁴⁾.

However, it seems that it was only in the mid-20th Century that this analytic strategy was presented in a more systematized way with true research rigor for scientific knowledge. Authors like Berelson, Lazarsfeld and Lasswell are considered landmarks in the creation of content analysis tools⁽⁵⁾, which were strongly influenced by positivist thinking though.

This philosophical reductionist bias can be observed in a concept reported by one of its authors: "content analysis is a research technique that aims to objectively, systematically and quantitatively describe the manifest communication content"⁽⁶⁾. At the time, the objective was to analyze journalistic material for political investigation – the so-called subversive propaganda – thus, *hidden* senses, which the *status quo* wanted to unveil, were sought.

Refinement of the content analysis technique for clinical and qualitative research

Stage of free-floating reading to get impregnated with content

Free-floating reading, term used in analogy to the psychoanalytical concept of *floating (uniformly) attention*⁽¹⁾, is understood here as a way of listening, which, *a priori*, should not privilege any of the discursive elements. It implies a way of operating in which your own unconscious activity is let as free as possible and your motivations that usually direct attention are suspended⁽⁷⁾.

The set of recorded interviews will result in several hours of cassette tape recordings and their transcriptions of pages by tens. To deal with such abundance of material, one should use some specific procedures. These are very simple procedures as

they do not require any extraordinary means, basically consisting of directing one's observation to something specific, but merely "touching" with *uniform attention*, all that is heard and/or read. This way, one saves mental effort to persistently maintain acute attention, which would be very stressful and unproductive for the purposes of getting to the subjects' latent discourse.

From "mute" content to "eloquent" interpretations

It refers to the limits of manifested and latent content of a message. The analysis has to initiate with the *manifested* (explicit) *content* and not talk through it, in an exercise of mere subjective projection⁽⁸⁾. Often, what is recorded during data collection is not what the interviewee really meant to say. One starts by the initially enigmatic level of symbolism, which belongs to the *latent content* (implicit).

The crucial point for the clinical-qualitative researcher is to avoid potential dualistic or extreme attitudes, the choice of one content to the detriment of another. One should be careful not to deny human subjectivity or impose one's own values to the detriment of the basic principle of qualitative research, that is, analyzed data take into account that meanings are always attributed by the *study subject*. Thus, content analysis should not be temerarily or rigidly linked to the text or to the technique, to the point of hindering the scientist's creativity, a consideration taken in phenomenology: Not to disrupt the researcher's peculiar intuitive and therefore not truly subjective capacity.

The idea that content analysis, as an investigation tool, should lead the clinical-qualitative researcher beyond the description of results is licit. If on the one hand data are silent and inert, on the other hand, it is the scientist who gives them voice. This process takes place through *interpretative activity*, which creates a theoretical model and reveals an invisibly existent order, based on a theoretical reference established in literature⁽¹⁾.

Inference in content analysis

Content analysis is usually carried out based on *records* and permits what we methodologically call *inference*, generically ranging from a passage of premises in review through the text up to the study

conclusion. We stress that the "act of inferring means to perform a logical operation, through which a proposition is admitted due to its connection with other propositions already accepted as true"⁽⁴⁾.

Producing inferences from a text, such as a set of interviews, grants theoretical relevance to the method, for instance, linking up a set of statements to some theory to be established⁽⁹⁾. And, in a way, based on the subjects' discourse, one is respecting the *emic* principle of research, i.e. the interpretation is carried out from the perspective of individuals under study and not from the scientist's worldview.

According to this conception, producing inferences in content analysis mainly means producing knowledge subjacent to a certain message and also anchoring them to a set of theoretical frameworks, situating them in an academic paradigm, a concrete situation that is viewed in the historical and social context of their production.

Content analysis has to be adapted for the intentional use of symbols and language, providing objective and systematic meanings, leading to valid inferences as from several types of obtained data, aiming to demonstrate specific phenomena⁽¹⁰⁾. Yet, the same author reinforces the importance of contextualization and the importance of the environment where data are produced, which increases the range of information and provides inferential analysis of results in the context they were produced in.

The setting in clinical-qualitative research, understood as the microenvironment of interpersonal relations, is strongly psychological⁽¹⁾, conveying much more than the physical space utilized, what we call *naturalistic environment* in qualitative research applied to healthcare settings.

In this contextualization, data from this type of study are collected and, amidst interpersonal relations possible due to face-to-face interviews, much more than the sum of written information is produced. The researcher is existentially interested in the anguish and anxiety that is generated, not only for this human relation but also for the several reports of their life experiences in the health-disease process, the clinical treatment, outcomes and relations with health professionals in general⁽¹¹⁾.

As one can conclude, the inferential focus can and should start very early, often in the way of carrying out an interview and during observations,

when the researcher, through previous theoretical knowledge and intuition, perceives that (s)he can focus on situations that are not objectively exposed but that could certainly provide material for discussion.

If one takes into account that the inferential/interpretative process leads to the subjective reading of non-manifested content, this discussion can begin even before the material is collected and transcribed. The contact *per se* during the interview already provides material for crescent analysis. Anything that can be recorded in a *field diary*, preferably right after the interview, might become useful.

The concurrent nature of the collection and analysis of qualitative data is noted in literature. This concomitant process offers the researcher the opportunity to develop incipient conclusions, refine questions and search for new avenues of inquiry, now with greater depth⁽¹²⁾.

Categorization process by relevance criteria

The *categorization* process can be understood as a process of didactic-scientific presentation of results and discussion related to data analysis. It is didactic as a certain order for an apparently "chaotic mass" of meanings is required so as to make its presentation more palatable and plausible for the patterns of understanding of the phenomenon claimed by a researcher. And it is scientific as it can be based on theoretical and philosophical knowledge and follows rules already universally established by the scientific community.

As category we understand "great statements that include a variable number of themes, according to their degree of closeness, and which can, through their analysis, express important meanings that meet the study objectives and create new knowledge, providing a differentiated view of the proposed themes"⁽²⁾.

The elaboration of categories, which is based on the topics that emerge during re-readings⁽¹⁾, analysis or thematic units⁽⁴⁾, can be configured according to *relevance* criteria. The term *relevance* denotes an important theme. Even though it does not present numerical repetition among reports, its importance to answer the initially formulated hypotheses is of great potential and richness for the development of new knowledge, assuring, by itself,

consistent material to get deeper into the phenomenon.

Sequential use of inductive and deductive rationale in the analysis

Inductive rationale in the analysis of qualitative data is widely known and endorsed^(1,3,13). Induction configures a mental attitude from which, based on specific data, one infers a general or universal truth, which is not contained in the examined parts only, and whose objective is to present generalizable conclusion. Induction is a bold (and temerarious) step from where I am to where I am not, from the moment in which I live to moments in which I do not, from my research setting to a situation.

Theoretical abstractions are formed and consolidated based on the discussion of results even before it, when data are being collected, and the researcher constructs his(er) theory moving from the *particular* to the *general*. "A framework is gaining form as parts are being collected and examined"⁽¹⁴⁾.

On the other hand, a deductive research process would occur in an inverse way. Variables, concepts, constructs and hypotheses are derived or originated from the total relations observed during the data coding process⁽³⁾. The researcher in this case works from a general universe already elaborated for a certain particularity⁽¹⁾. It is speculated on that deductive thinking is the real epistemological path to scientific knowledge, as theories are conceived by the geniality of some scientists, who need to prove the conception they created in practical situations so as to satisfy academic canons and be accepted by peers.

An interesting way to construct knowledge in clinical-qualitative research would be to admit and attempt to use a dialectic inductive-deductive process, understood in its totality, also including its related intuitive character^(1,15).

Nonetheless, in the global perspective of scientific research and epistemologically examining the rigor of the methods used by researchers in Natural Sciences and Human Sciences, one can observe that the *deductive and inductive rationales* occupy their proper places. The table below presents an overview of the methodological pathways in which the data analysis technique, discussed in this article, constitutes a peculiar phase⁽¹⁶⁾.

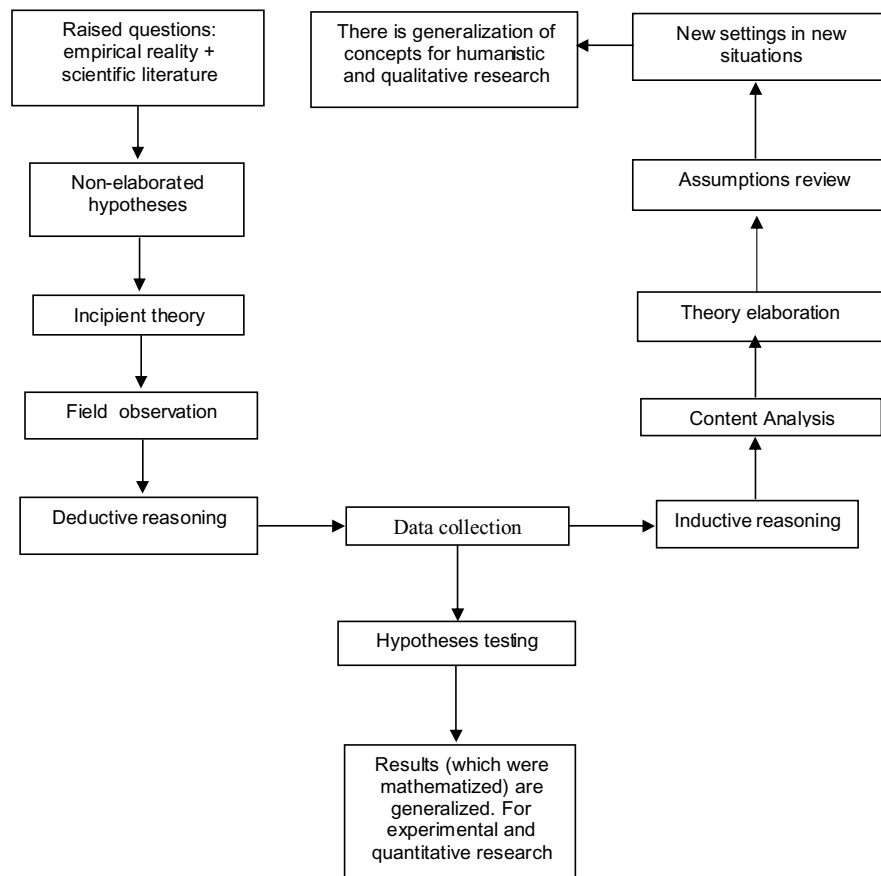


Figure 1 – Methodological pathways used by researchers, including Content Analysis, considering qualitative studies

Validation of analysis results as the method's strong attribute

One can say that the strength of qualitative studies, considering research in human sciences, is based on their sound *validity*, that is, what is studied and understood by the researcher's conscience, reflected and elaborated in his(er) inner world, would be very close to the phenomenon under examination in the outer world⁽¹⁾. This is due to the peculiarity of data collection that highly respects the natural flow of discourse and the subjects' behavior in scientific research.

In the same way as a research project needs to be validated, the data collection process also needs validation of data treatment by the researcher. There are several ways of performing this validation, such as the triangulation of methods and theories, in which several methodological resources are used and data are analyzed through several theories.

External validity is also carried out through the interaction of judges and peers, that is, by supervision of an advisor and senior researchers,

acknowledged for their experience with theoretical frameworks and methods used. Validity can be also improved through the presentation of results to research groups, presenting and discussing preliminary results in events and so forth⁽²⁾.

Finally, it is relevant to stress that there are many possibilities of theoretical constructions made by the same researcher, and also that findings can be interpreted differently by other researchers, given the polysemous character of human sciences. The principle is not to restrict interpretative ideas, though one has to be careful in identifying present biases and eliminate them if possible; if not possible, they should be taken into account when the material is analyzed.

CONCLUSIONS

After reading this brief discussion, one might get an instigating perception that other elements of the content analysis could be addressed and discussed in the light of the needs of the clinical-qualitative

method. However, the aim was to address different viewpoints regarding the use of a method being established. Addressing the content analysis means showing its versatility as well as its operating

limits. The development of a method invariably goes through the creativity and capacity of the qualitative researcher in dealing with unusual situations in the study of human phenomena.

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