Bioethics, qualitative research and reflective equilibrium
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Abstract
This is a theoretical study where we intend to discuss the use of reflective equilibrium in data analysis process in qualitative research in bioethics. The first part discusses the role of qualitative research in bioethics. In the second part we analyze the use of this procedure in those studies. Reflective equilibrium is a type of moral justification with the purpose of mutual adjustment between the adopted ethical theory research, moral judgments taken into consideration by researcher(s) and moral experience of research subjects, assuming certain morally relevant facts in order to weave a coherent network of beliefs between these components. In this case, both ethical theory and moral experience can be open to criticism.

Keywords: Bioethics. Qualitative research. Data analysis. Ethical analysis.

Bioética, pesquisa qualitativa e equilíbrio reflexivo
Trata-se de estudo de natureza teórica, em que se pretende discutir o uso do equilíbrio reflexivo no processo de análise de dados em pesquisa qualitativa em bioética. Na primeira parte é discutido o papel da pesquisa qualitativa em bioética. Na segunda parte é analisado o uso desse procedimento nesses estudos. O equilíbrio reflexivo é uma forma de justificação moral que objetiva o ajustamento mútuo entre a teoria ética adotada pela pesquisa, os julgamentos morais considerados pelo(s) pesquisador(es) e a experiência moral dos participantes da pesquisa, pressupondo certos fatos moralmente relevantes, de forma a tecer rede de crenças coerente entre esses componentes. Nesse processo, tanto a teoria ética como a experiência moral podem ser passíveis de crítica.


Bioética, investigación cualitativa y equilibrio reflexivo
Se trata de estudio de naturaleza teórica, en el que se pretende discutir el uso del equilibrio reflexivo en el proceso de análisis de datos en la investigación cualitativa en bioética. La primera parte analiza el papel de la investigación cualitativa en bioética. En la segunda parte, se trata el uso de este procedimiento en estos estudios. El equilibrio reflexivo es una forma de justificación moral que tiene como objetivo lograr un ajuste mutuo entre la teoría ética adoptada en la investigación, los juicios morales considerados por el/los investigador/es y la experiencia moral de los sujetos de investigación, asumiendo ciertos hechos como moralmente relevantes, de manera tal de tejer una red de creencias coherente entre estos componentes. En este proceso, tanto la teoría ética como la experiencia moral pueden ser objeto de crítica.


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Declara não haver conflito de interesse.
The role of qualitative research in bioethics

Bioethics, as a branch of applied ethics, can be defined as a theoretical and practical field characterized by complexity, involving different objects of study, theoretical references, social methods and agents, either of academy or organizations of civil society. It has the general objective of describing and analyzing ethical problems related to social practices and their effects over human life and, in a more comprehensive way, life in its different manifestations, as well as moralities that support it. In bioethics, the empirical investigation, especially the qualitative research, has been increasingly used, although it is a recent modality. Many of its study objects involve knowledge about moralities of social groups related to social practices.

From methodological point of view, it can be used different procedures in qualitative researches in bioethics, such as ethnmethodology and hermeneutics, among others, in addition to combinations among them. The objective of this article is discussing the reflexive equilibrium in process of data analysis in qualitative research in bioethics, specifically the research modality that adopts content analysis in its thematic branch. It is not the objective of this article to discuss the different qualitative methods available in bioethics, but only suggesting a procedure that, together or not with other processes and techniques, can be adopted in those investigations.

It must be distinguished between empirical research, that seeks to explain or comprehend the social reality, and normative research, which intends to make judgments about such reality. All in all, two uses of language: A descriptive one, that expresses our beliefs about the world, belonging to frame of discursive registration related to truth (facts); and a normative one, related to the way the world must be, belonging to the so-called moral vocabulary (values). This article does not have the objective of discussing such distinction, being limited to only briefly submit the different ways of integrating the empirical and normative investigation, considering the qualitative research in bioethics.

There are several ways of integrating empirical research and moral theory. Ives and Draper identify two approaches to bioethics, with different purposes: The “philosophical bioethics” and “bioethics towards politics or practice”. The latter is subdivided in its “normative” and “descriptive” versions, being the former engaged in theorization of what must be specific public political and social practices, whilst the latter would be like a “bioethics sociology” and describes how bioethical reasoning concretely occurs in different contexts.

Molewijk and collaborators classify in five the approaches to integrate “descriptive” and “normative” in bioethics: Prescriptive applied ethics; theoretical approach; particularistic approach; prescriptive applied ethics; critical applied ethics and integrated empirical ethics. Such classification is grounded on the matter of knowing if, upon analyzing a concrete investigation problem, the last discretion would be the ethical theory or moral experience of specific social groups related to a certain social practice. As those authors wonder, if the morality of social practice and moral theory do not agree among themselves, who must adapt: Social practice, moral theory, both or none of them?

To prescriptive applied ethics, empirical data never cause adjustments of moral theory; its purpose is assuring that it is operated the prescriptive function of moral theory. To theoretical approach, the results of empirical research have instrumental value, as a way to improve an ethical theory. But the empirical data can only cause refinements in moral theory, as the essence of a moral theory does not change. The particularistic approach does not intend to connect the morality of a social practice to a moral theory, being the former the sole discretion. Within such perspective, empirical data do not only have an instrumental function. They are essential to interpret and explain the morality of a specific social practice.

The prescriptive applied ethics and theoretical approach are characterized by one-way interaction between moral theory and empirical data. They consider the prescriptive applied ethical sequence moral theory to empirical data theoretical approach; in other words, from empirical data up to moral theory. Those approaches affirm that moral theory is the ultimate discretion, generating paternalistic attitudes about morality of a social practice. The particularistic approach neglects the critical function of moral theory.

The fourth approach, critical applied ethics, incorporates the critical function both of ethics to empirical data and of those related to ethics, not acknowledging, not even in moral theories, or in morality of a social practice, the ultimate discretion. If they are not in agreement among themselves, both
Bioethics, qualitative research and reflective equilibrium

one and another can be subject to modifications. Nevertheless, this approach keeps the distinction between descriptive and normative 13.

Finally, the last approach is integrated empirical ethics. This perspective proposes an intense cooperation between ethics and science and it cannot be characterized as a fully normative approach or descriptive one. To integrated empirical ethics there is no distinction between facts and values, but a fundamental interdependence between them and between empirical and normative 11. To the authors, integrated empirical ethics represents a theoretical hybridization of normative and empirical disciplines 14 to constitute a new research field and set out a bridge in the abyss between descriptive and normative. However, they claim it is not wished to make a radical integration to create a comprehensive theoretical unit 14. To such approach, facts produced by “descriptive” sciences are interlaced with epistemic values specific of the discipline 14 and every moral theory is inherently grounded on “background empirical assumptions” 14.

On the other hand, the work of Leget, Borry and Vries 1 defends the critical applied ethics, claiming that the integrated empirical ethics contradicts itself. This is because, on the one hand, the integrated empirical ethics sustains that facts and values cannot be distinguished and empirical and normative must constitute a new hybrid 15. However, it explains this new hybrid recurring to the distinction it intends to surpass. As a methodological consequence, the critical inter-relationship between social sciences and normative ethics is lost 15. Neither the normative can be critically approached by empirical research nor normative implications of the latter can be critically examined. To those authors, it must be continued to distinguish the empirical from normative as two independent focuses, which, with interdisciplinary cooperation, favor the development of bioethics.

Without denying the differences between those different perspectives of using empirical research in bioethics, a broad distinction can be made between approaches that seem to derive ethical prescriptions of results of sociological researches 16, among others and those that incorporate those investigations in ethic justification. Among those, it is included the perspective discussed in this article 17. Kon assesses that the empirical research can contribute to bioethics in four levels, especially emphasizing the attention to health or clinical bioethics 18.

The first of them includes studies that seek to define current practices, opinions, beliefs or other aspects that can be considered status quo 19, constituting a sociology of moral. The second one contributes upon researches that intend to assess to which extent a certain social practice, such as clinical practice, reflects a specific ideal. The third one includes investigations that intend to find ways of solving the problems identified in previous level. And the fourth one is grounded on work of three previous levels, using obtained knowledge to form the grounds of bioethical arguments to change ethical standards 18.

Analysis of content and reflexive equilibrium in bioethics

We will initially submit, in a general way, the procedure of reflexive equilibrium and then examine its use in content analysis in its thematic modality. The reflexive equilibrium was initially proposed by Rawls in his book “A theory of justice” 20, whose objective was preparing a political conception of justice to apply to basic structure of democratic societies. In this regard, the reflexive equilibrium was used as argumentative method to develop and justify justice principles to regulate the institutions and practices that form such structure. Subsequently, the procedure started to be used by other authors for distinct purposes 21.

In a general way, the reflexive equilibrium can be characterized as a grounding process towards the development of moral theory, selection of ethical principles or decision about practical problems 21. It is a process of ethical justification that seeks adjustment or mutual support between moral and not moral beliefs, forming a coherent networks of beliefs. For argumentation purposes, we are calling “belief” a broad set of formulations that include arguments, judgments, visions, notions, conceptions, concepts and categories, either related to description of world or judgment about it. The quality of such process must be assessed related to 1) Broadness of considered beliefs and 2) Reached coherence.

It is not the objective of this process to produce certainties, but building up the broadest and most coherent network of beliefs possible, making an always unstable or provisional equilibrium, permanently open to revisions. This perspective facilitates the dialogue between theory and practice for not designating a preferential status to any of those dimensions in the research problem 22. It is distinguished the broad and limited
reflexive equilibrium, considering two criteria: 1) Magnitude of moral and not moral beliefs that constitute it; and 2) Participation of different social subjects involved in the process. With regard to first criteria, the limited reflexive equilibrium is formed by moral judgments related to specific problem of investigation and ethical theory adopted in the research. The broad reflexive equilibrium seeks to test moral judgments against different ethical theories. With regard to second criteria, the reflexive equilibrium will be limited or broad due to diversity of social subjects involved in the process.

On the face of research problems, it must be attempted to listen to different voices, making a reflexive equilibrium that does not only include the researcher, but other social actors. In qualitative research we can place on the one hand an investigation where the process of reflexive equilibrium is fundamentally made by researchers, so that the moral experience of interviewed person is basically used to enrich the ethical justification of researcher. On the other hand, researches (such as action-research), where it is broadened the participation of social subjects in the process in their different moments.

In this regard, we can think about a “private reflexive equilibrium”, as in the case of Rawls or in “contextual reflexive equilibrium”, as proposed by Walzer, quoted by Wolff and de-Shalit, where the process is fundamentally made by the researcher and prioritarily falls over his moral experiences and ethical theories. But, differently, we can also conceive a “public reflexive equilibrium”, where the considered beliefs and theories are derived from broad sources that effectively participate in the process of ethical justification. It is included, among other social subjects, health care practitioners, general public, activists, philosophers, anthropologists and health service users.

After briefly submitting the reflexive equilibrium procedure, we will start applying it in the field of qualitative research in bioethics, specifically in studies that adopt the analysis of content in its thematic modality. The content analysis is a method used both in qualitative researches and in quantitative investigations. It emerged in the United States in the beginning of XX century, initially related to studies of mass communication and, as it is observed by Bardin, its most important author, up to the 1950s its quantitative aspect predominated.

There are many ways to adopt such method in qualitative researches, including different analysis techniques, such as “enunciation analysis” or “propositional analysis of discourse”. We claim once more that we do not have the objective of discussing the different modalities in this article, but only submitting, in a general way, the stages of content analysis to show how the reflexive equilibrium can be used in qualitative investigations in bioethics. The content analysis is one of used methods to analyze textual data, such as those coming from interviews, field works diaries, videos, etc. To reach the objectives of this article, it is submitted the content analysis moments, in thematic modality. Therefore, it will be considered three essential moments of any research process: 1) Exploratory research, represented by preparation of investigation project; 2) Field work; and 3) Analysis of empirical material.

The exploratory research consists in determining the investigation theme, outline the problem to be studied, defining the object and objectives, choose sources and techniques to collect data and defining the technique to analyze data, within the conceptual theoretical milestone, constituted by certain theories and concepts. Theories are an inter-related group of principles, concepts, thesis and hypothesis that enable the interpretation of empirical reality or explaining social phenomena, providing a conceptual scheme. On the other hand, concepts define the form and content of theory, constituting its grounds. Categories are a type of concept that enables to think the concrete reality in a hierarchical way, operating the ordination of processes and social relationships.

The research theme indicates the interest area or field of practices and theories whose matters incite scientific curiosity, related to a rather broaden delimitation that locates the object or problem about which it is intended to produce knowledge. The definition of problem or investigation object is fruit of problematization process and deepening the theme, generating the questions that are intended to be studied. Those are fundamental, showing one or more analysis units (groups of individuals, public policies, organizations, etc.) that constitute the study object. It is a delimitation process where the object or problem is part of social reality in its totality.

The field work includes collection of data, transcription of records and storing data. It is emphasized that the research field expresses the delimitation of object, in terms of social groups that are intended to be studied, located in a certain space and time and living in process of dynamic social interaction. The field is the intersubjective meeting...
place between researcher and studied group\textsuperscript{12}. Finally, the analysis moment of empirical material can be divided in two main levels\textsuperscript{10}. The first one is related to fundamental determinations represented by economic, social, political and historical context of social group that is intended to be studied, defined in exploratory moment of investigation. The second one is related to the analysis by itself of empirical data, which can be divided in three phases: 1) Ordination of data, 2) Classification of data and 3) Final analysis.

To analyze content, the empirical material or gross text have to pass through a codification process. Therefore, it must be chosen the “registration units” and “context units”\textsuperscript{29}. The registration unit corresponds to the segment of text considered unit of basic signification. The theme has often been used among different registration units, particularly in qualitative researches. The theme can be defined as a claim about a certain subject or “meaning nucleus”, that is comprehended in analyzed text, due to specific criteria resulting from theories and objectives that form the research problem\textsuperscript{30}.

On the other hand, the context unit corresponds to a broader segment of material, that enables to properly comprehend the meaning of registration unit. Moreover, the identified themes must be classified and grouped pursuant to previously defined criteria. Those categories gather a set of thematic elements organized according to common characteristics, around which the research can be developed and the comprehension of object of study can be deepened. It can be identified three stages in such analysis process, representing progressive degrees of deepening of content expressed in the text being analyzed, where new knowledge is created from collected data\textsuperscript{27}.

Upon immersion, the researcher devotes himself to the data to obtain a general vision and identify themes and categories. Upon reduction, the collected data are limited to those relevant to answer research questions, being reorganized in analytically useful categories to the research. The categories can be theoretical, when prepared from a conceptual theoretical milestone of research, or empirical ones, when they come from immersion stage, forming a conceptual map where the categories are organized in comparison with each other. Finally, during interpretation, the categories are discussed grounded on theoretical structure of investigation.

In qualitative researches in bioethics, we can characterize two fundamental moments, according to synthesis below. We are assuming a distinction between moral and ethics, considering the former as shared practices and values that structure the everyday life of a certain social group and the latter -considered as study object – as reflection about moral. The former will be characterized below as a “moral experience” and the latter is related to adopted ethical theories to analyze the social practices and related moral experience\textsuperscript{33}:

### Definition of moral problem

The research questions must be prepared in a way to require an answer of normative type, in other words, a judgment of value related to fair and unfair, good and evil, right and wrong, which must be justified. Moral problems are related to different objects of study, but to purposes of this article they will be limited to social practices and moral experience of social subjects involved in them. Thus, we have social practices, on the one hand, and, on the other hand, a moral judgment about those practices which can or cannot justify or ground them. Such moral problem was built within a conceptual theoretical milestone that included, among others, ethical theories and their specific concepts. Finally, in this plan it is approached the description of moral experience – the justifications of certain social practices – of subject-objects of investigation. Thus, it is related to sociology of moral\textsuperscript{30}.

### Analysis of moral problem

Upon analysis process of empirical data, the conceptual theoretical milestone is used as a critical tool at the same time it is tested, leading to reformulations or overcoming the adopted theories and its constitutive concepts. Such analysis is characterized as a process of moral justification, in other words, related to judgment of value, and it must generate normative conclusions related to research problem. At this moment, it is made a criticism of moral experience, opposing the group of beliefs that constitute the theoretical milestone to beliefs expressed at the collected empirical material. We emphasize that the moral experience is organized in themes, involving certain categories. It is at this moment when the procedure of reflexive equilibrium can be employed more intensively.

There are different versions of reflexive equilibrium and different ways to apply it to qualitative investigation in bioethics. In the approach adopted here, we consider three fundamental components of reflexive equilibrium\textsuperscript{10,34-36}, outlined below.
1) Ethical theory adopted by the research, among other relevant theories to investigation. 2) Moral experience of research subjects, expressed in behaviors and moral beliefs, especially judgments about social practices, understood as a coherent and complex form of cooperative human activity, socially set out (public policies, health services, medical technologies, etc.)37. Morally relevant facts of specific context, understood as components of situation that can be a reason in ethical judgments about the moral problem, object of investigation 38.

Within the perspective of this work, it is comprehended moral experience as practical engagement in a local world, in a process of daily interactions that constitutes, with other components, the social ground of human condition. Such local world is constituted by community, social support networks, health services, neighborhood, family, among other institutions and it is a space that gathers cultural, political, economical, biological and psychological specificities 39. The moral experience is related to what is shared and not shared, where what matters has collective and personal meaning, related to certain lived values. In this regard, the moral experience is related to a spectrum of values – related to right and wrong, good and evil, fair and unfair – considered by individuals as very important and that can be made or violated daily or also being in conflict with each other 40.

In moral experience, the moral beliefs can take shape as “incorporated dispositions”, comprehended as pre-reflexive dispositions of daily social life, not thought while performed. They can equally manifest themselves as problematization processes about certain social practices, where people consciously assess the morally appropriate way of being or acting in the social world. The latter can occur when any event or person happens in the daily life of somebody, forcing him/her to reflect about the appropriate ethical answer, as it is the case of participation in research 41.

During investigation, the reflexive equilibrium process is started considering the moral judgments of researcher(s), expressed in research project. Those judgments work as work suppositions or hypothesis, being a hypothetical reflexive equilibrium about the problem of study, considering certain morally relevant facts and knowledge that the researcher(s) have at the moment 38. Such reflexive equilibrium is the starting point to reach a new reflexive equilibrium, grounded on dialogue between ethical theory and moral experience of research subjects, assuming certain morally relevant facts, in a way that new moral judgments can be built.

We can consider such process as a spiral where a network of moral and not moral beliefs, as broad and coherent as possible, is progressively made in the process of ethical justification related to determined social practice and its morality. Kaufmann describes a similar process when he discussed the deepening of analysis in qualitative research, where there is a confrontation between what he calls “global knowledge” or previously defined abstract categories and “local knowledge” or “native categories”, coming from empirical data 42. To such author, it is frictioning the concepts among themselves, incessantly, in all ways, either them a modest native category or a great legitimate paradigm, adjusting them and locating them in a coherent group 42.

As we have already said, in this process, both ethical theory and moral experience are being criticized, forming new considered moral judgments. Generally, to a moral theory has substantial modifications and, even more, to be surpassed, it is required to accumulate theoretical and empirical researches that exceed the limits of qualitative investigations in specific bioethics. The structure of a network of moral and not moral beliefs (the most inclusive and coherent possible) can lead to indefinite process of ethical justification of morality of a certain social practice.

Thus, to make the research workable and outlined, meeting specific investigative purposes, it is required to select the types of belief and methodological requirement that will be included, depending on the research problem 21. In such direction, we can define a reference point for investigation purposes, around which the process of ethical justification must move. Such reference point can be something like hard nucleus of coherent elements of adopted ethical theory or ethical limit-principles. It is intended to make around it a network of beliefs with moral experience of research subjects, so that the justification of such hard nucleus or limit-principles does not depend on coherence, within the specific research 39.

I believe we can limit the research this way without compromising with that view that, in its essence, a moral theory does not change, in counterpoint with moral experience of a certain social practice. Or that the sole discretion to process of moral justification of a specific social practice is the morality of such practice, the moral theory not having any function. It is a provisional starting point.
that becomes justified if it can have support to and be supported by the network of beliefs made within analysis process. In the comparison of ethical theory with moral experience, the latter can provide new limit-principles or important elements to form the hard nucleus of ethical theory.

Final considerations

We seek to suggest in this work the use of reflexive equilibrium to be analyzed the content in qualitative researches in bioethics. It is an ethical justification process grounded on constitution of a network of moral and not moral beliefs, capable of morally ground a certain social practice. Such network must be as broad and coherent as possible, formed by ethical theory and moral experience of participants of research, considering morally relevant facts.

Such procedure can be used by itself or together with other methods, being also criticism object in the extent it is used. It is a methodological way that seems relevant to be explored in bioethics researches, whose objects are related not only to description of social practices, but, essentially to ethical judgment about them. Evidently, it must not be said this procedure is adequate to all researches of this type, or that it does not have limitations as procedure of ethical justification in qualitative researches in bioethics. In as much as the method is used, it is possible to assess its limitations, as well as identifying the most appropriate objects to its use.

Referências