

# Bioethics and Anesthesia: A Reflexive Study of Reports Published in the Brazilian Journal of Anesthesiology

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**Summary:** Santos MFO, França GV – Bioethics in Anesthesia: A Reflexive Study of Reports Published in the Brazilian Journal of Anesthesiology.

**Background and objectives:** There is a great lack of theoretical subsidies to guide ethical principles, specifically in the case of Anesthesiology. The objective of the present study was to analyze the bibliographic production regarding Bioethics in studies published by the Brazilian Journal of Anesthesiology between 1999 and 2009.

**Methods:** Three studies published between 1999 and 2009 by the Brazilian Journal of Anesthesiology were selected. Those studies covered bioethical issues in Anesthesiology or correlated anesthesia and Bioethics. A content analysis was used, according to the model of Bardin.

**Results:** It was observed that Bioethical ideals were the most predominant issue, especially Principlism (*f* 23; 23.5%). On the other hand, the class that defines ethics as the cradle of Bioethics obtained the lowest amount of elementary context Units (CU) (*f* 15, 15.3%).

**Conclusions:** In the studies mentioned, Bioethics is considered an ideal to be achieved, facing difficulties to be applied in daily Anesthesia practice. The need of studies that focus on anesthesia and Bioethics more specifically, reflecting problems regarding both subjects, should be emphasized.

**Keywords:** Bioethics; Anesthesiology; Ethics, Medical.

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## INTRODUCTION

Bioethics, considered as a systematic study of human behavior in areas involving life, health, and the necessary care for human well-being, appears in the context of technical-scientific innovations in a society that presents several distinct conceptions of ethical values <sup>1</sup>. Thus, it has been the target of uncountable discussions and reflections due to the contents of questions pertaining to this field <sup>2</sup>.

Since the beginning of the 1970s, the real conception of Bioethics has been reduced, allowing new meanings to appear, such as those that include restrictions in the field of life sciences and health. Besides, scientists at the Kennedy Institute starting to refer to Bioethics as ethics applied to Medical and Biological fields in which the main concern was directing the social control of human studies <sup>3</sup>.

The space of dialogue in Bioethics shows that the way ethics is thought is followed by changes in the world, where the individual is no longer the emphasis, but becomes the subject in a social context, i.e., micro-ethics becomes macro-ethics <sup>3</sup>.

The innovative discovery and fast development of Bioethics as an area of knowledge that encompasses several disciplines brings academic challenges. Its study has become a new experience without a defined didactic model. The traditional form of teaching based on disciplinary conception is not effective for complete understanding of the field, i.e., it is not only about of an interchange of knowledge belonging to the same field, but the intercommunication of two distinct fields or even the integration of disciplines in a particular field <sup>4,5</sup>. The philosophical concept of Bioethics, as it was developed in European countries, recognizes, in anthropology (cultural and philosophical), the technical support for its study <sup>6</sup>.

The development of Bioethics in 1971, as well as the recognition of its need in field of life sciences, is a reference that we have about the evidence of the disharmony between technological progress and the maturity of moral reflections, which is also evident in the growing search of new knowledge to be the basis of understanding nature and life. Such understanding should be the goal of professionals in several fields, such as physicians, biologists, nurses, and ecologists, to be adequately prepared for their profession, especially regarding the sense of responsibility and moral obligation when making decisions considering human life <sup>6</sup>.

This type of professional is needed as a means to regain modern and pluralist societies, in which this need can be proven through the growing number of Bioethics courses in universities all over the world. Through this innovation, improvement and specialization are achieved both in graduation and post-graduation <sup>6</sup>.

Even before the launching of ethical directives in biomedical interventions, especially with the sanitary reform, which was triggered all over the world from the 1980s on, professional education, both in nursing and medicine, was aimed

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at only to biological aspects. The work was mainly individual, with a multi-professional approach, and it consisted of fragmented interventions of different professionals for the same patient<sup>7</sup>.

However, it is known that the development in all fields of medicine, such as Anesthesiology, can have positive influence in other forms of health assistance when it values aspects suppressed during the domain of the so-called scientific-technologic medicine, which kept human and ethical-spiritual dimensions of an individual in second plane<sup>8</sup>. Those dimensions are included in the notion of Bioethics.

The “cure paradigm” that currently determines health action is directed by the higher technological medicine that can be seen in the growth of Intensive Care Units (ICU) in hospitals<sup>9</sup>. However, this paradigm forgets humanizing practices, such as showing consideration, worry, and solidarity for patients<sup>8</sup>.

Specifically in Anesthesiology, a great need of theoretical subsidies exist, to guide those humanizing practices currently required. Evolution in this medical field has been gradual and time-consuming, with changes in concepts in the light of scientific methodology.

In view of what has been exposed here, the objective of the present study was to analyze the biography on the subject, mainly articles published in the Brazilian Journal of Anesthesiology from 1999 to 2009. This journal was used as an example since it is specifically and traditionally connected to anesthesia and discussions in this field.

## PRINCIPALIST BIOETHICS

The fundamental basis of Bioethics is a set of principles called, by beneficence, non-maleficence, autonomy and justice. On the reasons based on principlism, autonomy owes a great deal to Kant, in which Bioethics becomes rapidly known, gaining dimension. On the other hand, in the beginning of the 1980s, new moral epistemological analysis proposals arouse, opening the doors for the development of critics to principlism in the 1990s based on the idea that ethical principles should guide human research<sup>10</sup>. Basic principles prioritized a type of simplified tool for practical conflict analysis seen only in the medical field<sup>11</sup>.

David Ross' theory of “*prima facies*” which defended that several basic and inflexible moral principles express *prima facies* obligations, became the reference of principlist Bioethics. Such statement indicates that something must be fulfilled, except for conflicts among particular occasions and equally important or higher obligations<sup>12</sup>.

In the case of the principles mentioned, non-maleficence states that professionals should not cause any harm to their patients, which is based on the saying “*primum non nocere*”. Some texts in the literature translate, erroneously, professional non-maleficence obligation as beneficence obligation, based on the Hippocratic affirmation: “I will apply the treatment to benefit the patient according to my abilities and judgment, but I will never use it to harm him”<sup>12</sup>.

Regarding the principle of autonomy, one can say it is based on moral according to Kant, which states that “respect to autonomy originates from the knowledge that all individuals have unconditional value and they all have the capacity to determine their own destiny”. Thus, the objective of autonomy is the recognition that every individual has his/her own opinions, are capable of making their own choices, and to determine their fate, behaving according to their values and beliefs. When this principle is violated, the individual is considered half of an individual<sup>12</sup>.

Justice, also included in “*prima facies*”, is difficult to define and a problem to apply. Unlike Kant, who considers justice a right, and Aristotle, who considers it a virtue, John Rawls, creator of the Theory of Contractual Justice, sees justice as equity. Based on Rawls, who defends the equality of rights for all human beings, equity, i.e., justice in itself, refers to general cooperation rules recognized by free individuals who develop social activities with mutual respect<sup>10</sup>.

## METHODS

This is a bibliographic, descriptive, qualitative, and exploratory review study based on document analysis. The sample consists of three articles published in the Brazilian Journal of Anesthesiology from 1999 to 2009. In order to collect those articles, the site of the journal, as well as the records referring to the period aforementioned, were searched for studies that related anesthesia and Bioethics or were on Bioethics, specifically in the field of Anesthesiology.

The technique of Manual Contents Analysis, according to the model of Bardin<sup>13</sup>, who proposes a set of written communication analysis techniques, in which the focus is in obtaining the description of the contents of messages using systematic procedures, was used in the analysis<sup>13</sup>. His method is composed of three basic steps, namely (a) pre-analysis, through fluctuating reading to make the *corpus* (one document), defined by the subject of the articles; (b) exploring the material; and (c) treatment of the results, inferences, and interpretation<sup>13</sup>. According to the principles of this methodology, content structures and elements were disassembled and analyzed by carefully studying the words and phrases, looking for their meaning, recognizing, comparing, assessing, and selecting it to clarify different characteristics, and extract their meaning by using the thematic criteria.

## RESULTS AND DISCUSSION

During the period of the study (1999 to 2009), only three articles on the subject were found. Considering the 10-year interval, one can say that the Bioethics in anesthesiology production has been scarce in the journal mentioned. Those three articles underwent qualitative analysis, working as an analysis unit, according to Bardin<sup>13</sup>, but due to the limited number of articles, each article made a category whose main contribution and discussion to Elementary Context Units will

be exposed below. The articles analyzed were: (I) Anesthesia and Bioethics<sup>14</sup>; (II) Bioethical Dilemmas in Anesthesia<sup>5</sup>; and (III) Bioethics: Issues Regarding the Anesthesiologist<sup>16</sup>.

To better view the interfaces and dissonancies among those works, it was decided to perform a *posteriori* categorization encompassing all Elementary Context Units of all the texts as a set to identify the themes on which they were developed (Table I).

As can be observed in Table I, and based on what presupposes Bardin<sup>13</sup> that the more one talks about a subject, more important it is, the stronger category, in terms of numbers of ECUs, was category III (general *f* 48; 48.9%), which refers to the ideals of Bioethics. Among them, three ideals stand out: Principlism, Humanism, and Respect for the Medical Ethics Code (MEC), and among them, the ideal of Principlism (*f* 23; 23.5%) should be mentioned, while the class with the lower number of ECUs (*f*15; 15.3%) is the one that defines ethics as the cradle or principle of Bioethics.

Note the importance given to Bioethics as something that should be geared towards justice, beneficence, and autonomy, and non-maleficence in treating human beings, which reflects respect for life, meeting humanistic principles, besides relating to the MEC itself, which is based on those principles.

## CONCLUSIONS

One can observe through the analysis presented here four main thematic axes, which inspired the articles. The first axis refers to ethics as a context for the birth and development of Bioethics. In this sense, ethics is restricted to socially stipulated values on what is healthy for preservation of life and social relationships or not. However, since it deals with more complex questions and dilemmas than involve life and death in different contexts and decision making processes, specifically in anesthesiology, Bioethics transcends ethics.

The second axis has to do with the meanings of Bioethics as a science historically constructed in parallel to medical-technological developments. Thus, Bioethics is the point of discussion and consideration on the actions of the anesthesiologist, in order to maintain life in several crucial situations, among them assisted suicide and euthanasia.

The third axis has to do with ideals that, in our profession, are considered to be guided to a Bioethical conduct, which are: Principlism, which defends the follow-up of fundamental conduct principles: autonomy, non-maleficence, justice, and beneficence; Humanism, according to which the life of a human being is the main value to be respected, in all its aspects, and all medical actions are geared to the well-being of individuals and society; and the Respect to the Medical Ethics Code (MEC) in all its aspects, which are in consonance with the other two aspects already mentioned.

The fourth and last axis is related to the bioethical dilemmas of the anesthesiologist, among them we should mention the judicial questions in Brazil, their responsibility in assisting the elderly and terminally-ill patients, as well as euthanasia and assisted suicide. Those professionals tend to adopt a defensive conduct to avoid litigation, even though it might go against the principles of their profession. Note that those principles cannot always be considered as "directly applicable" in the context of the complexity of Anesthesiology.

It is important to observe that, among the categories that arouse from the analysis of those articles, the one with the higher number of ECUs, corresponding to almost half of the total (48.9%), was the one referring to ideals, which demonstrates an association between Bioethics and the notion of an ideal. In other words, one can say that Bioethics is considered, in those articles, an ideal that is difficult to apply. Still within this class, the only that did not show homogenous contents, presenting subclasses, a subclass with the highest ECU (*f* 23; 23.5%), has to do with Principlism, demonstrating the four basic principles of beneficence, autonomy, non-maleficence, and justice.

Considering that the studies analyzed here, despite their value in terms of theoretical production and subsidies for future studies, still treat the question of anesthesia and Bioethics in a very generalist and intolerant manner; this indicates the need of further, more specific, studies on those subject, reflecting the problematic issues involving those two subjects. However, the presence of those discussion on this field, both in the journal chosen here and in other journals on the specialty, represents an important step to make Bioethics go beyond the concept of ideal or a set of abstract information and become practical actions.

**Table I** – Categorization of Elementary Context Units (ECU) Selected in the Three Articles Analyzed

Categories	Operacionalization	ECU <i>f</i>	ECU %
I - Ethical context	Refers to ethics as a context in the birth of Bioethics	15	15.3
II - Meanings of Bioethics	Refers to the different meanings attributed to Bioethics as a concept being formed	18	18.4
III - Ideals			
Principlism	Refers to Bioethical ideals, i.e.: Principlism, which means following ethical principles	23	23.5
Humanism	Humanism, the exercise of the profession, whose main value is human life	18	18.4
Respect to the MEC	Respect to the Medical Ethics Code	7	7.1
IV - Dilemmas	Refer to conflicts between ideals and professional practice in the medical-hospital context	17	17.3
Total		98	100

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**Resumen:** Santos MFO, França GV – Bioética y Anestesia: Un Estudio Reflexivo de Publicaciones de la Revista Brasileña de Anestesiología.

**Justificativa y objetivos:** En el caso de la Anestesiología específicamente, existe gran falta de subsidios teóricos para guiar los principios bioéticos. El presente trabajo es una propuesta para el análisis de la producción bibliográfica referente al tema de la Bioética, en forma de artículos de la Revista Brasileña de Anestesiología, entre los años 1999 y 2009.

**Método:** Se seleccionaron tres artículos de la Revista Brasileña de Anestesiología, publicados durante el período de 1999 a 2009. Los artículos abordaban la cuestión bioética específicamente en el área de la Anestesiología, o tenían una relación entre la anestesia y la Bioética. Como procedimiento metodológico, se usó la técnica del análisis del contenido manual, según el modelo de Bardin.

**Resultados:** Observamos que el tema más urgente en el material analizado se refería a los ideales de la Bioética, con destaque para el ideal del Principialismo (f 23; 23,5%). Por otra parte, la clase que define la ética como la cuna de la Bioética fue la que obtuvo una menor cantidad de unificación de contexto elemental (UCE) (f 15, 15,3%).

**Conclusiones:** En las producciones referenciadas, la Bioética todavía se considera un ideal a ser alcanzado, encontrando dificultades en el ámbito de aplicación en la práctica diaria de la Anestesiología. Resaltamos la necesidad de implementar estudios que aborden la anestesia y la Bioética de una manera más específica, reflejando las problemáticas que involucren a ambos temas.

**Descriptores:** ANESTESIOLOGÍA; ÉTICA MÉDICA, Bioética.