Health care services and the occurrence of medical errors: an approach in the light of the Principle Theory

ABSTRACT
The written and television media have frequently reported on medical errors that occurred during the assistance provided in health services. Given this, the present study aims to reflect on the occurrence of medical errors in the light of the Principialist Theory. Despite the relevance of the topic for advancing the quality of care and patient safety, there are still few discussions involving bioethical principles. In view of the need for information that reveals empirical data regarding the dimension of the problem, the violation of bioethical principles also constitutes a disobedience to articles that refer to the fulfillment of the duties and responsibilities of each professional category. It is imperative to constantly seek to discuss and reflect on the bioethical principles and moral conflicts present in health services, with the aim of linking technical care with ethical-bioethical care, in a perspective of integralty.

DESCRIPTORS: Bioethics; Patient Safety; Medical Errors; Quality of Health Care.

RESUMEN
Los medios escritos y televisivos han informado frecuentemente sobre errores médicos ocurridos durante la asistencia prestada en los servicios de salud. Ante esto, el presente estudio pretende reflexionar sobre la ocurrencia de errores médicos a la luz de la Teoría Principialista. A pesar de la relevancia del tema para el avance de la calidad de la atención y la seguridad del paciente, todavía hay pocas discusiones sobre principios bioéticos. Ante la necesidad de información que revele datos empíricos sobre la dimensión del problema, la violación de los principios bioéticos también constituye una desobediencia a artículos que se refieren al cumplimiento de los deberes y responsabilidades de cada categoría profesional. Es imperativo buscar constantemente discutir y reflexionar sobre los principios bioéticos y los conflictos morales presentes en los servicios de salud, con el objetivo de vincular el cuidado técnico con el cuidado ético-bioético, en una perspectiva de integralidad.

DESCRIPTORES: Bioética; Seguridad del Paciente; Errores Médicos; Calidad de la Atención de Salud.

RESUMO
Os meios de comunicação escrita e televisiva têm noticiado, frequentemente, os erros médicos ocorridos durante a assistência prestada em serviços de saúde. Diante disto, o presente estudo tem como objetivo reflexionar sobre a ocorrência de erros médicos à luz da Teoria Principialista. Apesar da relevância do tema para o avanço da qualidade da assistência e segurança do paciente, ainda são poucas as discussões envolvendo os princípios bioéticos. Tendo em vista a necessidade de informações que revelem dados empíricos relativos à dimensão da problemática, a violação de princípios bioéticos configura também na desobediência aos artigos que se referem ao cumprimento dos deveres e responsabilidades de cada categoria profissional. É imperativo uma busca constante pela discussão e reflexão dos princípios bioéticos e conflitos morais presentes nos serviços de saúde, com intuito de interligar o cuidado técnico com o cuidado ético-bioético, numa perspectiva de integralidade.

DESCRIPTORES: Bioética; Segurança do Paciente; Erros Médicos; Qualidade da Assistência à Saúde.

Adaiele Lucia Nogueira Vieira da Silva
Nurse. PhD student at the Postgraduate Program in Health and Development in the Midwest Region at the Federal University of Mato Grosso do Sul (UFMS). Master’s in Nursing from the Federal University of Mato Grosso do Sul. ORCID: 0000-0003-4858-9339

DOI: https://doi.org/10.36489/saudecoletiva.2020v10i57p3557-3572
INTRODUCTION

Health service is the establishment designed to assist the population in disease prevention, treatment, recovery and rehabilitation of patients, among which include, in addition to the hospital environment, outpatient clinics, medical and dental clinics and clinics and mental health homes.

The institutions that offer health care services aim to serve users / patients with the minimum or total absence of risks and / or damages that could compromise patient safety. Thus, receiving quality health care is the right of users and health services must provide care that is effective, efficient, free from risks and / or damage, aiming at patient satisfaction throughout the process.

The Brazilian Consumer Protection Code defines life and health protection as a fundamental consumer right, which implies the provision of health care free of risks or damages. In this light, the Brazilian Civil Code points out that whoever, by voluntary action or omission, negligence or imprudence, violates the right and causes harm to another person, even if moral, commits an illegal act.

Regarding the damage caused by bodily injury, protection for the person is not restricted to the protection of life, but must cover their physical and psychological integrity. According to the Penal Code, the concept of bodily injury is any and all damages that compromise the functional normality of the human body, both physiological and mental.

It is worth mentioning that, during health care, many terms are used as synonyms for damages, such as: adverse events (AEs), occurrences of iatrogenic events, ethical occurrences, adverse reactions, iatrogenic complications, iatrogenies, iatrogenic disease, care failures and medical errors.

In this article, we chose to use the term AEs to define all unintended, undesirable, damaging or harmful events to the user, which may compromise the quality of care provided and patient safety. It should be noted that such AEs can occur among other factors, due to acts of negligence, malpractice or negligence.

To deepen the analysis of the theme, it is necessary to differentiate the concepts of negligence, malpractice and imprudence. In this way, negligence can be understood as inaction, inertia, passivity or omission, being negligent who, being able or ought to act in a certain way, through indolence or mental laziness, does not act or...
behave differently. While malpractice is characterized by a lack of knowledge or technical preparation or the ability to perform a certain activity, with respect to recklessness, it can be understood as a quick, hasty action without due precaution. It is unwise to expose the client to risks.

However, as mentioned, other factors corroborate the appearance of AEs, it is worth highlighting some issues related to working conditions, such as: work overload; stress; number of hours worked; low pay, inadequate working conditions and a lack of resources, both material and staff. Other aspects, such as technological advancement, inadequate training, lack of personal improvement and lack of motivation, also corroborate the appearance of AEs.

In addition, many health professionals associate the occurrence of AEs with shame, fear and punishment, in addition to relating them to inattention, demotivation and insufficient training, these factors contribute to health professionals to hide the occurrence of AEs.

The literature shows that when AE appears, the focus is on finding the culprit, losing the chance to better know the context of the AE occurrence, treat it and, mainly, adopt preventive measures.

The occurrence of AEs corroborates with the incidence of countless losses for patients, such as disabilities, physical and psychological traumas, increased length of hospital stay and withdrawal from social life and work.

In addition to damage to users and professionals, AEs cause damage to health services by increasing treatment costs, loss of credibility with the population, as well as moral and organizational detriments and ethical-legal processes. This prerogative leads to the understanding that failures in health care can cause harm not only to patients, but also to service providers who suffer ethical and moral damages, in addition to losses in the professional-patient interaction.

Thus, it is an ethical duty of health professionals to avoid unnecessary damage to patients, however, it is a legal duty of employing institutions to provide safe working conditions, in order to prevent risks, damages, losses or iatrogenies, resulting from the deficiency or insufficiency of human resources and materials. In addition, it is up to the employing institution to provide subsidies for the improvement and updating of its employees.

The occurrence of AEs contributes to the increase in morbidity, mortality, time of treatment and hospitalization of patients, causing higher costs to the entire process, in addition to impacting the social life of users. The focus on quality and health services aims to provide users with total quality in health care, free from risks and damages, generating patient satisfaction and safety.

In this context, the quality of care and patient safety in health institutions are emerging concerns of the national and international scientific community. Nevertheless, the wide access to the means of communication, the magnitude and complexity of the theme have increased the discussion of AEs and patient safety, as well as the bioethical principles involved in this context. Given the above, this article presents the guiding question: “What bioethical principles are violated in the face of adverse events during health care”? Thus, the present study aims to reflect on the occurrence of medical errors in the light of the Principialist Theory.

**DISCUSSION**

**Contextualizing patient safety**

From the end of the twentieth century, patient safety entered the agenda of researchers, being internationally recognized as an essential dimension of quality in health.

In 2004, the World Health Organization (WHO) established the World Alliance for Patient Safety (World Alliance for Patient Safety), in order to face the problems related to the theme.

The WHO has defined patient safety as reducing the risk of unnecessary harm associated with healthcare to an acceptable minimum. Thus, it is understood that it is the duty of health services to eliminate or even decrease the probability of the occurrence of AEs to patients, arising from the provision of health care.

Report released by the United States Institute of Medicine “To err is human: building a safer health care system” evaluated medical records of 30,121 hospitalizations and identified that there were serious iatrogenic impairments in 3, 7% of hospitalizations. Of these, in 6.5% there was permanent damage and 13.6% resulted in the patient’s death. These findings supported the estimate that the damages had cooperated for the occurrence of 180,000 deaths per year in that country.

Against these claims, in 2013, in Brazil, the National Patient Safety Program (PNSP) was created by the Ministry of Health (MH) and the National Health Surveillance Agency (ANVISA) to improve safety and reduce the incidence of adverse events in the country. It should be noted that one of the strategies of this program is to promote a culture of safety.

Regarding to the security culture, this can be understood as a set of attitudes and values that support the encouragement and reward in the identification, notification and resolution of problems related to security. Still,
it should promote, from the occurrence of AEs, organizational learning and provide mechanisms for effective maintenance and accountability of security, such as human and material resources, equipment and infrastructure\(^{19,20}\).

Therefore, the safety of the care provided is one of the indicators with the greatest impact on the quality of health care. Based on this premise, there is no way to provide quality medical and hospital care if it is not done safely\(^{20}\).

Still, the culture of patient safety can also be understood as an individual and organizational behavior that continuously seeks to establish a commitment to the promotion of safe practices and, consequently, to guarantee the quality of services\(^{19,20}\).

A study carried out in a Brazilian public teaching hospital, aimed to analyze the perceptions of health professionals regarding the patient safety culture in its interface with the leadership. In view of the authors’ findings, it is observed that the interviewees indicate a favorable perspective to the safety culture mediated by immediate leadership, however, senior hospital management does not seem to give priority to issues related to user safety. The authors also state that this information may mean the institution’s neglect with the exposure of patients to risks related to care\(^{19}\).

This scenario presented, without a doubt, highlights something serious and potentially harmful to patients, professionals and the institution itself. The lack of concern with patient safety, on the part of senior hospital management, can be a negative factor for those who aim to improve the quality and safety of the care provided. Due to the lack of decision-making power, they can understand that the actions they want are limited\(^{19}\).

In this context, it is crucial to discuss the bioethical principles that often go unnoticed, supporting a theoretical and problematizing reflection on such an emblematic subject to guarantee the safety and quality of the assistance provided. The presented panorama shows the need for discussion on the theme and, still, the approach of the bioethical principles involved and its violation, in the user-professional-institution triad. In the course of this article, such principles will be discussed based on Beauchamp and Childress’s Principle Theory\(^{21}\).

\textbf{Understanding bioethical principles}

In 1978, the Belmont Report disseminated the principlist model, inaugurating a new way of thinking about ethical issues in the field of health, the referred report contained the ideas of Beauchamp and Childress. Such concepts were published year after the release of the Belmont Report in the work called Principles of Biomedical Ethics, first published in 1979\(^{21}\).

Beauchamp and Childress’s Principle Theory defends four principles: the principle of beneficence, non-maleficence, autonomy and justice\(^{21,22}\). These principles will soon be described to facilitate their understanding and assimilation, with the AEs present in health services during the care provided.

The principle of beneficence refers to the duty to help others, to do or promote good, to seek the maximum benefits from others or even to act ethically, minimizing damage and risks. The principle of non-maleficence implies the duty to refrain from doing any harm to patients, from causing harm or putting them at risk. Thus, the health professional must endeavor to assess and avoid the foreseeable damage\(^{21,22}\).

The two principles cited are easily confused, but the Principle Theory focuses on their differences. The principle of non-maleficence refers to the obligations not to harm others, such as not to kill, steal, mutilate, cause pain or suffering or cause offense. The principle of beneficence, on the other hand, relates to obligations to help others, such as promoting well-being, protecting

- The principle of beneficence refers to the duty to help others, to do or promote good, to seek the maximum benefits from others or even to act ethically, minimizing damage and risks.

- The principle of non-maleficence implies the duty to refrain from doing any harm to patients, from causing harm or putting them at risk. Thus, the health professional must endeavor to assess and avoid the foreseeable damage.
and defending the interests of patients, preventing them from suffering harm, eliminating conditions that could cause harm, helping unfit people and rescue people who are in danger\(^\text{2(1,22)}\).

As for the principle of autonomy, it refers to the act of respecting the user’s decision-making power in their health care. In practical terms, this principle is represented by informed consent, professional secrecy, informed refusal, respect for privacy, confidentiality and veracity. The violation of this principle is only ethically admissible when the common / public good demands it. Finally, the principle of justice refers to the coherent and adequate distribution of duties and social benefits. Refers to fair, equitable and appropriate treatment\(^\text{2(1,22)}\).

Understanding these bioethical principles is essential to ensure the safety and quality of care provided, whether in respect for the individuality of the patient, when providing assistance free of risks and / or damage, or even when meeting the needs of each patient, when providing information about the care to be provided to both patient and family, giving them the right to accept or refuse care.

After the explanation of the bioethical principles, it is necessary to discuss the main AEs and the bioethical principles involved in them.

**Adverse events and bioethical principles involved**

It is known that bioethics is a fundamental instrument to assist professional health practice in the face of the dilemmas present in their daily practice. To refine the discussion of the bioethical principles involved in AEs, it is important to define which AE is part of this scope, so, based on the literature, the most frequent AE in health care was selected to support the discussion of the bioethical principles\(^\text{18,23,24}\).

The report published by the United States Institute of Medicine, entitled “To err is human: building a safer health systemi”, found that about 7,000 Americans die each year due to medication errors\(^\text{14,16}\). Drug-related Adverse Events (ADE) are the most common AEs in healthcare services. Since, during hospitalization, patients are susceptible to the occurrence of ADE, since the use of drugs is present in practically all types of therapy and, in most cases, there is concomitant use of several drugs. Faced with this problem, the importance of studying them\(^\text{6,7,12}\).

It is worth mentioning that medication error can be defined as any preventable event, which, in fact or potentially, can lead to inappropriate medication use\(^\text{25}\). Thus, the improper use of the medication may or may not harm the patient, regardless of whether it is under the control of healthcare professionals or the patient.

Regarding to errors in medication administration, the complexity of the processes that involve medication management corroborates this fact, in addition, it is an interconnected process that is performed by a multidisciplinary team. This process consists of several steps ranging from the transmission of orders to the prescription and administration of the medication. This procedural line has numerous probabilities for the occurrence of errors, which can be associated with professional practice, products used, procedures, interpersonal conflicts, communication problems\(^\text{25,26}\).

Emphasis is placed on the difficulty of understanding drug prescriptions, preventing the assistance provided in health services from being delivered with safety and quality. A survey carried out in a hospital that is part of the ANVISA Sentinel Hospitals project analyzed 294 records of patients admitted to the medical clinic of that hospital, and found that of the 294 prescriptions analyzed, 102 (34.7%) were illegible or partially readable\(^\text{27}\).

Other problems listed by the researchers were incomplete drug prescriptions (without presentation, dose,
When it comes to medication errors, one must consider the multiple aspects involved, such as: legal, ethical, moral, social, professional, assistance, among others. It is therefore necessary to have a comprehensive reflection on the theme. Therefore, Bioethics can support such reflection, collaborating with the decision-making process in the face of the occurrence of ADE.

Thus, a priori, when committing errors in medication administration, the professional violates the principles of non-maleficence and beneficence, however, his attitude towards the error made will indicate whether or not there will be other violated principles.

The principle of beneficence refers to an action carried out for the benefit of the other, requiring the promotion of positive acts that seek to promote the good of others, in this case, patients. Beneficence in health care is present in all its fundamental points: in welcoming the individual, in assessing their therapeutic needs and in problems related to pharmacotherapy, in establishing the care plan and in monitoring the clinical evolution.

In view of this principle, health care must be based on an agreement between the user and the professional, with the objective of guaranteeing the quality in the use of medicines, with a view to promoting a humanistic and accountable vision.

When we analyze the principle of non-maleficence according to the Principalist Theory, it can be said that the obligations of non-maleficence are obligations of not harming and of not imposing risks of harm. One person can harm another, or expose him to a risk, even without a malicious intention and the causative agent may or may not be morally or legally responsible for this.

A study that aimed to establish relationships between Law, Health and Bioethics, in an interdisciplinary perspective, through the evaluation of judgments referring to medication errors in hospitals in the jurisprudence of Rio Grande do Sul, being evaluated 43 judgments of Justice of the State of Rio Grande do Sul - Brazil, from 1995 to 2011.

The authors concluded that of the 43 judgments analyzed, only six were properly classified in the “Medication error in hospitals” category. Of these, it was identified that in two situations there was an exchange of medications, one case with an error in the dose of medication to be administered and another in the route of administration of the drug. Since all the judgments were favorable to the plaintiffs, that is, the patients who suffered the damages.

Starting from the premise supported by the Principalist Theory, the occurrence of errors in medication administration, in some situations depending on the organizational context involved, may not be the professional’s moral or legal responsibility. Civil liability was considered to be objective for employing institutions and subjective for the professionals involved.

However, for a complete analysis of the context, we cannot fail to consider the attitude adopted by the health professional in the face of error in medication administration. The communication of the fact between the pro-
professionals corroborates for an accurate and quick assistance according to the displayed signs.

In addition, it should be analyzed whether or not there was a record in the patient’s medical record reporting the act, this attitude also subsidizes decision-making in the implementation of measures according to the picture presented by the patient, as well as the prevention of future errors with similar characteristics. With the report recorded in the patient’s medical record, it should be communicated to the family and/or the patient himself.

If the mentioned attitudes are not adopted, the bioethical principles of autonomy and justice are violated. Regarding the principle of respect for the user’s autonomy in the face of their health-disease process, by not recording the occurrence of AEs in the patient’s medical record and not communicating to the family and/or patient, the health professional refuses to say the truth.

Even in cases where there are other complications, non-communication implies omission of information, violating the obligation to reveal relevant obligations to the patient, significantly interfering in his decision-making process.

In Principalist Theory, only free and informed consent expresses and protects the will and choice of the other, respect for autonomy is only effective when the patient, having an understanding of the situation, and free of any control on the part of another, intentionally, authorizes whether or not the professional to do something.

This thought supported the study of Bittencourt and collaborators, on the consent of subjects submitted to assistance, using the postulates of Paulo Freire to say that the autonomy and dignity of each person is respected because it is an ethical imperative and not a favor to be granted or not.

Regarding the principle of justice, this is violated when, by not registering the act and making the necessary communications, health professionals fail to provide fair, equitable and appropriate treatment, taking into account the users. Finally, it is worth mentioning that, in order to determine which bioethical principles are involved in medication administration errors, the entire context must be elucidated, from organizational structure, human and material resources to the training and development of professionals.

In this sense, it is recommended that health professionals take ownership of this theoretical framework for the development of some actions, such as analyzing their daily practices, in their bioethical dimension, redirecting their actions and creating spaces for discussions.

Thus, these actions need to be carried out not only by Organs supervisory bodies of professional practice, but also by training schools, formulating joint interventions that aim beyond the prevention of AE occurrence and the rehabilitation of the offending professionals. It is essential to develop support and emotional support measures for the health professional involved in EE.

The violation of bioethical principles raises the need for reflective debates that consider the reality experienced, taking the health worker and the user as active subjects in the entire process.

**FINAL CONSIDERATIONS**

The occurrence of ADE violates the principle of non-maleficence, according to which it is not allowed to harm anyone. However, by being negligent, imperious or imprudent, the health professional also violates the principle of beneficence, since the purpose of his actions only makes sense if it is to do good. Furthermore, the literature points out that the violation of a bioethical principle is enough for everyone to be involved, since the relationships between these principles are visceral.

The reflection on medication errors and the possibility of damage resulting from them, as well as the methods for their identification and evaluation, must include a wide perspective of the aspects involved in their occurrence. The knowledge of this reality allows a reflection on the professional performance and the bioethical problems experienced, emphasizing the need to reflect on AE in the light of the bioethical principles. Reaffirms the need for policies aimed at raising the awareness and awareness of health professionals, in order to ensure the quality of care free from negligence, recklessness and malpractice.

Understanding the relevance of this theme, it is said that the subject addressed is not limited to this study and many views may come from this reflection. It is considered extremely important that more studies are carried out on this theme.

**REFERENCES**


REFERENCES


