

# The Impact of Medical Errors on the Practice of Brazilian Physicians

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ARTICLE INFO	ABSTRACT
<p><i>Article type:</i> Original article</p> <hr/> <p><i>Article History:</i> Received: 12-Dec-2018 Accepted: 25-Feb-2019</p> <hr/> <p><i>Key words:</i> Medical error Professional practice Qualitative research</p>	<p><b>Introduction:</b> This article discusses how Brazilian physicians think about medical errors and the consequences on their professional careers. A retrospective study with a qualitative approach based on the professional experience of Brazilian physicians who work in a private hospital in Sao Paulo, Brazil.</p> <p><b>Materials and Methods:</b> The participants were twenty Brazilian physicians, including ten without medical errors and ten with medical errors. In-depth interviews were conducted with the physicians, and content analysis was conducted based on the phenomenological method.</p> <p><b>Results:</b> No significant difference between the two groups was found. Both groups indicated that there is no error-free practice and that educational and health institutions offer no specific training for what to do when an error occurs. Physicians believe that they should not let themselves be influenced by society's judgment of a physician who commits an error or by the medical error concept. The Brazilian media and society tend to blame physicians for their errors. The availability of a service or an institution that supports physicians who have committed a medical error is important because these professionals do not feel supported when an error occurs and feel that they require mental health support to face the ethical and civil proceedings. Well-established doctor-patient relationships can promote the well-being of medical practitioners.</p> <p><b>Conclusion:</b> It is necessary to implement training and institutional practices that specify conduct conducive to improving Brazilian medical practice.</p>
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## Introduction

The social role of medicine is rooted in the power of healing and salvation. Medical training is distinguished by the pursuit of infallibility and influenced by the traditional hegemonic message that errors involving patients are unacceptable. However, in modern times, with the advent of new technologies, the medical field is evolving, and a variety of medical errors have accompanied this movement. These errors have generated a series of discussions in which caution and patient care are central themes (1-3).

The literature on medical errors indicates that the number of victims has increased exponentially. In the United States, in 2000, an

average of 98,000 deaths occurred because of errors (4). In the United Kingdom, the estimated error occurrence rate was one in 10 patients admitted to the hospital (5). In France, in 2008, approximately 190,000 cases were analyzed to check for medical errors (6). In Brazil, there is no accurate estimate of the number of patients affected by medical errors because no official service is responsible for gathering this information.

The number of complaints against physicians in the United States began increasing in the 1970s. An American study reported that in 1960, one complaint per year was filed by patients in

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the United States for every 100 physicians. In 1985, the number of complaints increased to 18. Compensations have followed the same trend, increasing from US \$60 million to US \$5 billion over the same period (7).

A 2013 British study reported that 16% of hospitalized patients were affected by medical errors and that half of these errors occurred during procedures performed prior to the exercise of medical practice (8). Countries such as France have developed procedures for more rigorous control of, prevention of and punishment for errors by medical professionals. As one in ten hospitalized patients are affected by medical errors, the French government developed a regulatory framework to protect victims and reduce the number of errors, mainly by prohibiting excessive work hours for physicians (6).

The reference study *To Err is Human* focuses on the scope of medical errors and defines a medical error as the "failure of a planned action to be completed as intended or the use of an incorrect plan to achieve an aim." The disclosure of errors is critical to satisfy the needs of patients and their families and ensure learning and improvement (4,9,10).

Given the international relevance of and focus on studying and improving patient care and patient safety to reduce the incidence of medical errors, along with the scarcity of scientific discussion and research on the subject in Brazil, the importance of studying the relationship of Brazilian medical professionals with medical errors in health care fields/institutions is clear. This study aimed to understand how Brazilian physicians think about medical errors and the consequences for medical practice.

## Methods

This was a qualitative study involving interviews conducted with Brazilian physicians in 2016 and 2017. The selection criteria for participants included being a physician contracted by the hospital under study, having a medical license and, specifically for the group with errors, having undergone medical error disclosure.

The medical narratives were produced using in-depth interviews with a semi structured script. This method was developed with questions for investigating aspects such as "the meaning of medical error in the practice of medicine; how physicians should address medical errors in their practice; parameters for determining good medical practice; the evaluation and judgment process; and the consequences of medical errors for a medical career". The interviews were conducted individually on the premises of the

hospital under study. Each interview lasted between forty minutes and one hour and twenty minutes.

The study included 20 interviewees (16 men and 4 women). The group with errors comprised 10 male physicians, whereas the group without errors comprised 6 male and 4 female physicians. The physicians' ages varied between 28 and 70 years. The physicians represented various medical specialties. All the interviewees resided in the state of Sao Paulo, where the hospital chosen for study is a private institution with more than 6,000 physicians on its clinical staff. The hospital has a disclosure service for reporting adverse medical events and errors. The service follows a set of processes and controls to ensure safety management. When a medical error is identified, the institution openly communicates the information to the patient and their family. This hospital was chosen because it is one of the only hospitals in the country that uses this approach to address medical errors.

The study was approved by the Ethics Committee on Human Research in Brazil number 46017215.0.0000.5561. The study followed all required ethical and normative principles and safeguarded the anonymity of the participants.

The interviews were recorded and transcribed. They were analyzed and interpreted based on the assumptions and concepts of the phenomenological-existential theoretical perspective, which understands reality by reflecting on lived experience to determine the essence of knowledge (11). The resulting phenomenological analysis seeks to identify the meanings attributed by physicians to their everyday experiences. Thus, the attempts to produce a universal explanation are abandoned in favor of remaining close to concrete experience (12).

## Results

Although physicians' attitudes toward medical errors had much in common, important differences existed between the perspectives of these 2 groups (Table 1).

### *Physicians' view of medical errors*

The group of physicians without medical errors had an easier time discussing medical errors compared to the group with errors. According to the former group, there is difficulty conceptualizing medical error, which the Brazilian media and society reflect. In Brazil, medical errors are only discussed from three perspectives: incompetence, recklessness and negligence.

Another problematic issue that the physicians

**Table 1.** Comparison between physicians with and without medical errors (MEs)

Interview themes	Physicians without MEs	Physicians with MEs
Physicians' view of MEs	Difficulty conceptualizing MEs	Errors are unacceptable
How physicians should address MEs	Assume that this possibility exists	Assume that this possibility exists
MEs as parameters for evaluating medical practice	Importance of the physician-patient relationship	Errors are warning signs
Judgment and evaluation of physicians who commit errors	Ethical concern	Concern related to conviction for justice
Consequences of errors	Have a direct impact on physicians	Error as learning

in the group without errors noted was the difficulty faced by society and patients in differentiating a medical error from a poor outcome. The physicians also stated that patients have difficulty understanding that medicine is a science of means, not results.

*Another difficulty that exists, mainly for lay people, is understanding medical errors and poor outcomes. They are two absolutely different things. The doctor may have been technically trained, diligent, had expertise and was not reckless, but the outcome was poor. That is why in Law, especially in our country, it is said that Medicine is a science of means and not of results (physician without error).*

In general, according to the group without errors, medical errors can be committed by any professional who misses or does not pay due attention to certain details that compromise the diagnosis or the good health of a patient for whom they are responsible.

The group with errors had greater difficulty expressing their ideas on the subject. In the interview responses, the social pressure that physicians experience because of the traditional view in medicine that errors are unacceptable and that medical practice must be error-free was consistently noted. Another issue identified in the interview responses concerns the hierarchical attitudes present in the profession, which make it difficult for physicians with lesser degrees or less experience to identify errors made by colleagues with higher degrees or who are older.

### **How physicians should address medical errors in their practice**

On this topic, the interview responses from both groups were highly similar and not conflicting. The two groups believed that medical professionals must remember that medical errors are not intentional and must accept the possibility of committing errors.

A system that accepts and supports physicians when an error occurs can promote physicians' confidence. The fact that the hospital has a well-established safety culture, in which medical errors are studied to prevent their recurrence, reduces the professionals' self-criticism. The occurrence of a medical error is an opportunity

for learning rather than an occasion for judgment and punishment.

*Because we are human beings, I think it is unrealistic to think that we will be free of them [errors]. What we must do is strive toward this goal, learn from failures and develop safety and redundancy mechanisms. But it is an inglorious struggle. The first task is to accept that they [medical errors] exist. Accept that they are not intentional. That's the way to proceed, but it's not easy. It is a journey that our country will have to go through. I have the pleasure of working here, where a culture of safety already exists. We can talk openly. And where do they [errors] not exist? (Physician with error).*

Trying to be as transparent and honest with oneself as possible and with patients is a quality that physicians believe is essential for reducing the future distress that an error may cause. Interviewees from both groups stated that knowing how to listen to opinions and voice questions and conducting retraining or studying what you do not know may also help reduce the possibility of committing an error.

### **Medical errors as parameters for evaluating medical practice**

Both groups indicated the use of medical errors as parameters to assess the conduct of medical professionals, namely, to evaluate and particularly to monitor professionals who commit recurrent errors. For physicians, errors remind them to take care in interacting with their patients. The occurrence of many errors is a warning sign.

However, the respondents clarified that the occurrence of errors or lack thereof does not reflect the professional competence or incompetence of a physician but may be a warning sign to the institutions, patients and the physicians themselves when errors occur over a brief period of time.

*For physicians who commit many errors, there is a correlation with their practice, that is, with the attention they give to their work. The more errors, the less attention. The less they are focused on improving. A sequence of errors may indicate that the physician is unprepared (physician with error).*

The group of physicians without errors highlighted the importance of the physician-patient relationship because if this relationship is not well-established, there is a high probability that communication failures or misunderstandings will arise and, consequently, that an error will occur. Moreover, a lack of communication or empathy, by both the physician and the patient, can spur complaints concerning medical errors. When an error occurs, if this relationship is not well-established, the consequences can be even more dramatic and traumatic for both sides.

### **Judgment and evaluation of physicians who commit errors**

The two groups differed significantly in their views on this topic. The group of physicians without errors exhibited greater discussion and concern about the judgment submitted to the Medical Councils, the bodies responsible for supervising the professional ethical compliance in medicine in a country. Specifically, these physicians are more concerned with the possibility of one day having to provide explanations to inspectors of the medical profession.

This group was clear that ethical infractions can result in penalties ranging from a confidential warning to medical license suspension. Being convicted by a professional ethics body strongly impacts the physician such that the physician is more alert and knowledgeable about ethical standards. This conviction is based on peer judgment, whereas a conviction in a court of law has only financial repercussions.

By contrast, the discussion in the group of physicians with errors was more focused on the court of law. Because all these physicians had participated in the medical error disclosure process, they considered the evaluation by the institution as similar to an ethical process because physicians in the same specialty, but in different sectors of the hospital, weigh in and write opinions on the case. Coworkers' opinions are consulted, so the physicians with errors place greater emphasis on the civilian aspects of a trial because nearly all the physicians went through a trial in court.

According to both groups, the justice system is improving its evaluation of medical malpractice lawsuits because the judge must be supported by good medical experts, whose judgment can often be countered by the defense of the physicians who are on trial, as the legal counsel hired by the institution is always of excellent quality; specifically, physicians on trial prefer to defend their position before a judge rather than defend themselves to their peers.

*I think there is a very large difference between what happens in Medical Councils and what happens in ordinary courts. I think the Medical Council proceeding would leave me considerably more upset than a lawsuit in an ordinary court. In the Council, your peers are judging you. In ordinary courts, this [judgment] is performed by a person who does not know you, does not know who you are and does not have the technical skills; a good lawyer secures a good defense (physician without error).*

### **Consequences of errors for the physician's medical career**

The group of physicians without errors was slightly more aggressive when discussing this topic, perhaps because they had never committed a medical error. They believed that the consequences should indeed be felt by physicians who commit an error, and some were categorical in arguing for suspending or revoking the medical license of colleagues with recurring medical errors.

Some interviewees in this group believed that physicians with errors display a distinct personality trait because the interviewees know many professionals who do not accept their own errors. For these interviewees, a physician with this profile does not seem to suffer from the consequences that an error has on their practice. Others of this same group fear social injustice, as they believe that society tends to create gods and deplorable people and, in so doing, promotes the social lynching of medical professionals. Therefore, these interviewees always exhibit radical attitudes. A good evaluation is required before making a judgment because the emotional consequences may be irreversible.

*A serious error makes a strong impact. It can have an emotional and financial impact. I think the question does not have to be only punitive. The person must receive feedback regarding the situation and what they are doing that is inadequate (physician without error).*

For the group with errors, the words "learning", "criticality" and "weighing" are crucial. They use the negative experiences of mockery, humiliation and emotional trauma as motivators to monitor and heighten attention when performing new procedures to prevent new errors. Many of these physicians find the environment of a police station or a legal forum unpleasant because they are placed in the same situation as other people who are judged for more serious crimes.

Some participants in this group expressed dissatisfaction with the hospital's disclosure service. For these participants, the actual position of the hospital is unclear: Does the hospital aim to

understand and study the case or to prevent the family from taking the case public and demanding compensation? This lack of clarity was expressed by some physicians who perceived an absence of technical and emotional care by the members of the hospital's clinical staff who were involved in medical errors.

## Discussion

The interviewed physicians were not so far removed from the concepts typically considered parameters in Brazil. A medical error is described as "inadequate conduct capable of causing damage to the life or injury to the health of the patient, by action or omission of the medical professional", (1) or "a failure in the exercise of the profession, which results in a poor result or an adverse outcome, effected through the action or omission of the professional" (13).

In the American context, a medical error is defined by the Institute of Medicine as the failure to complete a planned action as intended or the use of an incorrect plan to achieve an aim (4).

In the Brazilian Code of Medical Ethics, the only mention of the topic occurs in Chapter III, Article 1, which states that physicians are forbidden "to cause harm to the patient, by action or omission, characterized as incompetence, recklessness or negligence"(14). Incompetence can be understood as the situation in which the physician performs a procedure in which they are not skilled; recklessness occurs when the physician takes risks with no scientific support for their conduct; and negligence occurs when the necessary care is not provided to the patient, suggesting inaction, passivity or omission (15).

Brazil is a country where medical training remains based on a more traditional education that lacks an adequate stimulus for the development of autonomy, analytical thinking, judgment and evaluation (16). Medical training should encourage greater humanization of the profession, including doctor-patient relationships based on empathy and care.

Another aspect that must gain prominence and be practiced more widely in Brazilian health care institutions is the disclosure process. This aspect is not part of the culture of Brazilian institutions because it is a practice still unknown in the country. However, it is a central component of high-quality health care because it improves patient safety, reduces patient frequency and distress and alleviates the suffering of physicians in their relationships with patients (9,17-20). One caution regarding the implementation of disclosure is that institutions must be up to date and trained to develop this practice. More importantly, the disclosure process should not be an alternative

for health care institutions to avoid legal proceedings or proceedings held by Brazilian Medical Councils but, rather, should serve to promote risk management and a culture of patient safety.

It is necessary to avoid the occurrence of medical errors from becoming commonly accepted in practice in Brazilian health care institutions. Moreover, these institutions should not fear their occurrence because the hiring of good lawyers is a common means for physicians and institutions to escape punishment, which would make the practice of medicine unfair for the patient. Best practices for nonoccurrence of errors and analysis when these errors occur must be reinforced. Using the law to absolve guilt is a practice that reinforces the Brazilian cultural view of the social role of medicine as error-free and immune to failure.

This study has some limitations. The errors made by the interviewed physicians were not verified by the courts or Medical Councils. Instead, the study relied on disclosure evaluation and judgment of the studied hospital. It is not possible to confirm that a physician's non-acceptance or denial of errors is related to a personality trait, as suggested by some interviewees.

## Conclusion

In conclusion, we hope that the occurrence of medical errors in medical practice can promote greater care and attention by health care professionals and institutions so that negative consequences can be minimized and appropriate patient safety standards and behaviors in Brazil can be promoted.

As recommendations, we consider that medical schools and health institutions need to improve how the physician should address the issue of error in their practice. Schools need to understand that excessive accountability is not beneficial to the future professionals; furthermore, schools need to foster discussion about error disclosure, create disclosure training programs and discuss patient safety theory and emotional support for patients and doctors. Regarding health institutions, they should create rules and standards so that disclosure can be properly implemented, with physician training programs and support resources. Physicians need to have internalized this process and already understand that communication with the patient is voluntary and is an opportunity for them to formally apologize and provide support to patients and family members. All of this is aimed toward improving medical practice in an attempt to promote a culture of honesty, ethics and transparency,

ensuring to physicians the commitment of quality medical practice.

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