



Good research practices: a bibliographic study

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SUMMARY

This essay highlights the importance of good practices in scientific research to ensure the quality, integrity, and transparency of research. To avoid duplicate publications, unethical practices, and plagiarism, it is essential to practice aspects focused on research productivity and integrity. The research used bibliographic research to collect data and discuss the importance of these good practices. It is essential to understand and practice transparency, credibility, ethics, and responsible reproducibility in research procedures and participants. The conclusion is that ethics and quality are essential for the advancement of knowledge and for academic and professional development in light of the new realities and concepts surrounding the subject under discussion.

Keywords: Scientific research. Good practices. Ethics. Quality. Integrity

ABSTRACT

This essay highlights the importance of good practices in the development of scientific research to ensure the quality, integrity, and transparency of work. To avoid duplication of publications, lack of ethics, and plagiarism, it is essential to practice aspects focused on productivity and research integrity. The research used the bibliographic research technique to collect data and discuss the importance of these good practices. It is fundamental to know and practice transparency, credibility, ethics, and responsible reproducibility in the procedures and participants of the research. It is concluded that ethics and quality are essential for the advancement of knowledge and for academic and professional training in light of new realities and conceptions around the discussed topic.

Keywords: Scientific research. Good practices. Ethics. Quality. Integrity.

Introduction

The development of scientific research stands out as an issue quite specific, this, considering precisely the various factors associated with the

good practices that guarantee the quality and integrity of research, considering bases regarding strategies to prevent duplicate publications, lack of ethical aspects involved, as well as the transparency involved in writing and associated fieldwork.

According to G rcia and Massaro (2021), it is important to seek to understand the practices that generate aspects of quality in research, and it is precisely through these actions that positive and satisfactory results will be evident in studies of this type, as well such as integrity and security against plagiarism.

Evidently, there is a clear need to practice aspects aimed at integrated research productivity, with a view to alleviating complications in possible publications and identification of plagiarism due to the excess of copied excerpts that are not referenced to the original author (FEIJ  et al., 2018).

In this sense, bad Science in research strategies will be a very common aspect. mitigated, still considering the ethical and bioethical principles when the study is applied to humans and animals, making it necessary to submit to the platforms that work with these issues, such as Plataforma Brasil and CEP/CONEP, whose determine bases involving the use of the term of consent, assent and appropriate testing procedures if they occur in research.

Thus, this research has the following problem: what is the importance of good practices regarding quality and integrity in research? What factors are involved in this reality?

The study directly contributes to the acquisition of more comprehensive views and concepts broad around the strategies for carrying out research and the necessary factors involved. Thus, the research is justified given the numerous contributions to academic training and professional, considering developing research as a necessary reality in the face of teaching practices.

The general objective of the research is to develop discussions and reflections about the importance of good practices in research development. Furthermore, The specific objectives are: to emphasize the issue of ethics in research; discuss the factors involved in good practices in their development; highlight contributions from submissions on platforms that involve ethical aspects.

Methodological procedures, results and discussion

This research, in the essay type, is configured as a methodology strategy initially with a qualitative approach, whose methodology is dedicated to the issue of gathering of relevant data, facts and information, without emphasizing the main aspects the number aspects, but the quality of the data collected.

In this sense, Minayo (2007, p. 32) states: “qualitative research is not is concerned with numerical representation, but rather with the deepening of understanding of a social group, an organization, etc.” The researcher who seeks the organization and development of qualitative research, seek explanations and facts for what is observed in target study populations, using techniques and data collection instruments that meet this need, the main ones being questionnaires and field forms.

The study in question is classified as descriptive in nature, which is evidenced by the search for analysis of bibliographic content, facts, information and other important descriptions that fully contribute to the positive development of search.

In this essay, the bibliographic research technique was used as a means of collection of meanings. To this end, scientific research was carried out in articles, monographs, theses and dissertations related to the area in question, in order to organize the exposed data.

Thus, the present study sought to collect data and various information in sense of generating discussions between different authors of scientific literature and authorial positioning. On this issue, Bardin (2006, p. 4) highlights the technique content analysis:

It refers to a set of communication analysis techniques that use systematic and objective procedures to describe the content of messages. The intention of content analysis is to infer knowledge regarding the conditions of production (or possibly reception), an inference that uses indicators (quantitative or otherwise). (BARDIN, 2006, p. 4)

In short, this essay adopted a qualitative and descriptive approach, seeking to understand and explain the theme through the analysis of bibliographic content, relevant facts and information. The content analysis technique was used to infer knowledge regarding the conditions of message production. The results of the research contributed to the positive development of the study, uniting strands of

diverse scientific knowledge and providing new information and knowledge for the community in general.

The context surrounding the development of research establishes itself as an issue that has evolved and changed over time in light of social bases, historical and philosophical, considering that in each context of development of studies are required and established by the determinations of ethics committees in research. On the crucial pioneering role of the first achievements around ethics in research, authors Guerriero and Minayo, highlight:

The first deliberation on the topic of research ethics in Brazil was created by the National Health Council (CNS), through Resolution no. 196 of 1996, which was updated by CNS Resolution no. 466 of 2012.

This modification, however, did not in any way alter the model or the sense of interference of the biomedical concept in other areas of knowledge, which was already felt in the first resolution. The National Commission on Research Ethics (CONEP) centralizes the functioning of the Research Ethics Councils (CEPs) in Brazil, forming the so-called CEP/CONEP system, subordinate to the National Health Council, a social oversight body linked to the Ministry of Health (MS).

(GUERRIERO AND MINAYO, 2014, p. 2)

In this sense, there are issues related to the context of aspects biomedical and associated areas, mainly involving analysis and testing with humans and animals. However, practical research, which would use questionnaires and other types of approaches, in the sense that it works directly with human beings.

Submission of research projects to the Research Ethics Committee (CEP) is essential to ensure that studies involving human subjects are conducted in an ethical and responsible manner. This process ensures critical evaluation and independent of the proposed methodologies, allowing to identify and mitigate risks potential to the participants. This presupposes the protection of rights, dignity and well-being of the individuals involved, ethical review promotes the transparency and accountability in the academic environment, increasing trust public in research institutions and in the results produced by research.

It is worth highlighting its concept, defined by the Ministry of Defense, a CEP “is an interdisciplinary and independent collegiate body, of public relevance, of consultative, deliberative and educational character, created to defend the interests of research participants in their integrity and dignity and to contribute to the development of research within ethical standards” (Ministry of Defense,

2021).

Furthermore, the CEP ensures that aspects such as informed consent, confidentiality and privacy are strictly observed. This protection is essential to ensure the participation of individuals in a voluntary and well informed/enlightened, preserving the integrity and reliability of the study results. Submission to the CEP also educates researchers on the importance of ethics in research, fostering a culture of responsibility and respect for participants. Thus, scientific research advances in an ethical manner, contributing significantly to the progress of knowledge and the well-being of society.

According to Arendet et al. (2016), ethics in the sense of research was included as a specific aspect in the search for human and animal rights, as well as aspects of quality and integrity in the data obtained, seeking advances in non-duplication of works to be published, as well as certain measures against plagiarism of other research without adequate citations of authors.

In the view of Carvalho and Neto (2015), the philosophical principles and sociological aspects regarding the use and application of ethical procedures in research, are the basis for the many contexts of respecting the limitations and interventions that may or may not be foreseen in the research to be developed, considering precisely the need for more security for potential participants or data third-party bibliographical data collected from the literature.

Some ethical principles in research (Table 1) consist of bases fundamental for the full development of approaches involving human beings humans, animals or in the bibliographic case, the exposure of data that bring the real aspects of original authors.

Table 1- Ethical and bioethical principles in research

BIOETHICAL PRINCIPLE	FUNDAMENTAL ETHICAL REQUIREMENT
AUTONOMY	- free and informed consent - protection of the vulnerable
BENEFITENCE	- commitment to maximum benefit and minimum risk
NO MALEFICENCE	- avoid damage
JUSTICE	- selection of the research subject - guarantee of equal consideration of the interests involved with significant advantage for the research subject and minimum burden for the vulnerable

Source: Carvalho and Neto (2015).

It is quite noticeable, the sense of research in ethical aspects and bioethics, primarily evidenced in practical case studies such as application of forms, tests and experiments with human beings and/or animals, protection and enlightenment of individuals, questioning the need for mitigation and exposure of the possible risks that may be presented by the study to be developed.

Thus, ethics in the sense of research seeks a philosophy towards inclusion in society as the basis for the protection, clarification and guarantee of rights for involved, as well as data security and protection. In addition, throughout the historical context evident in ethics in the face of research, modifications are being made structured, which are assumed to be the new needs and social scenarios for the requirements in developing studies (SILVA, 2022).

Factors involved in Integrity and Quality in Research

Good practices regarding research development are important strategies for determining integrity, quality and mitigation of possible negative factors such as plagiarism without citing original authors studies and the violation of human rights and disclosure of personal data that are collected from practical studies.

For Guandalini et al. (2019), it is important to emphasize that, keeping in mind that misconduct in the act of research can bring to light a series of damages must be crucial factor for researchers, because in the act of publishing and even presentations of these researches, cases of interventions by the ethics committees, if any imprudence is noticed.

Due to the constant increase in research and the dissemination of knowledge increasingly evident, the contexts of the need for good practices are notable to develop them, highlighting the contributions that can be brought to society, researchers and individuals (RUSSO, 2014).

In this sense, strategies such as credibility, responsibility, detection of plagiarism and mitigation of this problem that is still evident in many researches, transparency and submission on ethics committee platforms in

research, are essential and indispensable for the quality of the study and the evolution of good practices in terms of research.

According to Spinak (2022), it is noted that plagiarism and self-plagiarism are considered as problems in various publications and writings by researchers. Many end up copying similar passages without legal authorship of the original record, the which is even considered a crime and bad data science, as well as publishing works already published by the author and without the appropriate citations that are already contained in the publication made.

Other factors included in research quality that should be viewed as basis of investigations, is transparency and reproducibility. According to the considerations of Costa and Alves (2021), these aspects must be quite qualitative, especially reproducibility, since obtaining data and results must be the researcher's full text and, if inspired by other publications, These must be properly cited to avoid evidence of plagiarism in the study.

The authors' contributions in these cases and their publication so that more people have access, it will be more complete and of quality, as good practices in researching and developing a work will guarantee a series of new knowledge and contexts for advances in Science and society.

Submission of research to ethics committees involves processes of assessments and overviews on the issue of development and individuals involved, as well as the series of procedures for data collection and generation of results, analyzing the viability or not of the process. "Ethics committees in research are responsible for the ethical evaluation of research projects; furthermore, must inform and educate their members and the community about their role in the social control" (SILVA; BEZERRA; ANDRADE, 2012).

In this line of thought, platforms such as Brasil and CEP/CONEP are important components of research ethics and evaluation committees, providing the necessary conditions to ensure quality and integrity of scientific studies. According to Silva, Bezerra and Andrade (2012, p. 6), these committees play crucial roles: The CEP is an institutional body and its scope must be defined in internal regulations for analysis of protocols research of an institution or as a co-participant. There are situations in which the CEP acts, for example, by designation of CONEP, analyzing the project of a researcher who is affiliated with an institution that does not have a CEP. The Platform



Brazil allows research to be monitored at different stages - from submission to final approval by CEP and CONEP.

Thus, the importance of knowing and submitting studies to these platforms before the start of research procedures. This process is essential to ensure that projects are ethically reviewed and approved, minimizing possible negative implications. The use of these platforms does not only ensures the ethical compliance of studies, but also directly contributes for the protection of participants and the scientific validation of the results.

Final considerations

The development of scientific research is configured as a process dynamic and structural for the advancement of knowledge in various areas. However, for that this search for new knowledge is carried out in an integral and responsible manner, is essential that ethics and quality are pillars at all stages of the study.

This essay explores the importance of good practices in research, highlighting the need to combat scientific misconduct, such as plagiarism, lack of originality and violation of human rights. The ethical and bioethical principles that guide the research, ensuring the protection of participants and the reliability of results.

The quality of research is closely linked to transparency, credibility and data reproducibility. Through submission to ethics committee platforms in research, such as Brazil and CEP/CONEP, it is possible to ensure critical review and independent of studies, minimizing risks and optimizing results.

Throughout the text, it is emphasized that scientific research is not limited to just production of new knowledge, but also to the social and ethical responsibility of researcher. The search for innovations must be aligned with respect for human rights, human rights, environmental protection, and the well-being of society. Ethics and quality of research are inseparable and complementary. By adopting good practices and principles rigorous ethical principles, a solid foundation is built for the development of research reliable, relevant and that contribute significantly to scientific progress and social. Scientific research is a continuous process of learning and improvement. By cultivating ethics and quality in practices, a promising path is paved for future of science and society.

Although we are facing a promising scenario, there are still challenges to be faced. overcome. The need to combat scientific misinformation and the proliferation of low-quality research requires a joint effort from the scientific community, educational institutions and government agencies.

Continuing education in ethics and good research practices, investment in infrastructure and the development of public policies that encourage research quality are essential measures to strengthen Brazilian science and ensure that it continue to contribute to the well-being of society.

It is concluded that research is of great importance for academic training and professional of those involved, as it allows the acquisition of new knowledge and skills, as well as the ability to apply them ethically and responsibly in future situations. A constant commitment to integrity and quality at all stages of the research process in order to ensure that the knowledge produced is reliable and applicable in different contexts and areas of to know.

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