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# Ethical Dilemmas in Research: A Systematic Review

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## Abstract

Ethics must be respected at every stage of scientific research, including the dissemination stage. Adverse ethical situations are frequently encountered as a result of the dynamism of qualitative studies. This article provides a comprehensive review of the diverse literature that has investigated ethical dilemmas in the field of research. This review underscores the critical importance of ethical mindfulness in research involving human participants. The integrity and reliability of results depend on adherence to values including "informed consent, privacy, and voluntary" involvement. The evolving research landscape—marked by digitalization, systemic injustices, and shifting cultural norms—presents new ethical challenges, particularly in qualitative and medical research. Addressing these dilemmas requires a shift toward quality over quantity, reflexivity, and continuous ethical engagement. Fostering awareness, peer collaboration, and education in research ethics is vital for safeguarding participants' dignity and advancing responsible scientific inquiry.

**Keywords:** Ethical dilemmas, Scientific research, Ethical challenges, Qualitative research and studies, Research ethics committees (RECs), Anonymity, Privacy, Confidentiality, etc.

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## 1 Introduction

Participants must be completely and openly informed about the hazards, advantages, and repercussions of the research; their agreement must be provided willingly and without compulsion or duplication; and the justification for any scientific investigation involving human beings must be relevant and unambiguous. Confidentiality must be preserved and damage must be repaired on a regular basis. The

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ethical principles that motivate scientific inquiry are predicated on the guarantee of human freedom and dignity [1]. The organisations that regulate research involving human beings, known as "Research Ethics Committees (RECs)", adopt ethical standards and guidelines that express these principles. Participants are protected by these guidelines, which also ensure that the search is conducted ethically throughout. However, during qualitative research, a variety of unforeseen circumstances may occur that call for judgements that do not fall within the purview of fundamental ethical norms [2]. Due to the dynamic nature of qualitative research and the possibility of unforeseen occurrences, it is essential that the researcher anticipate potential obstacles and take steps to avoid them. Because of this, ethical standards and codes are not always enough to address issues that arise throughout the course of research [3]. Situational solutions are necessary for many emergency situations that develop in a particular environment, always maintaining the requirements of the participants as the primary consideration [4], [5].

Because the researcher is a subject placed inside the culture being studied, doing qualitative research is a comprehensive and intricate process that presents ethical dilemmas as the researcher does the research and experiences its effects. Studies involving human subjects rather than human subjects are influenced by the setting, which sometimes necessitates that the researcher modify ethical standards and guidelines to fit the circumstances, which may occasionally result in a conundrum [6]. As many researchers tend to think, ethics in study is thus more than just following rules, guidelines, or an ethics committee's permission. Its scientific excellence is inextricably linked to the researcher's duty for maintaining the research's ethical integrity. A lack of ethics renders data of no quality, and the reverse is also true [7]. Ethical considerations are present throughout the entire process, from the selection of the object to the formulation of the theoretical foundations, targets, and approaches. Structure, in addition to "the interpretation and distribution" of the outcomes to the scientific community, managers, participants in the study, or society at large. Although there is no direct danger to participants in a qualitative research, there is a chance that it will cause damage to a person's physical, psychological, moral, intellectual, social, and cultural aspects at any point during the study or after the fact [8].

#### **A. Ethical dilemma**

An ethical dilemma, also known as a moral dilemma or ethical paradox, is a situation in philosophy when an actor is faced with two or more moral imperatives that clash with one another but do not supersede one another. According to a nearly similar concept, an ethical dilemma occurs when all of the options are incorrect [9]. The term is often used more widely in everyday speech to refer to moral conundrums that may be solved, morally difficult choices, and other difficult moral problems. In a strict philosophical sense, this article addresses what are frequently referred to as genuine ethical challenges or ethical dilemmas [10]. Although several examples have been published, there is disagreement about whether they reflect actual or hypothetical ethical conundrums. At the core of the debate around them is the question of whether ethical difficulties really exist. Defenders usually point to clear-cut examples, while their opponents usually attempt to show how their presence violates fundamental ethical principles [11]. There are many different kinds of ethical quandaries. The difference between epistemic and true or

ontological difficulties is important since the latter might give the actor of an unresolvable conflict a false impression. Even if the majority of people think that there are epistemic problems, ethical conundrums are mostly ontological in nature. Philosophers have always maintained that ethical difficulties must not exist in sound moral systems. Modern philosophy has challenged this assumption, however [12].

### **B. Type of ethical dilemmas**

A variety of ethical difficulties exist. When there are arguments about the existence of ethical difficulties, the differences between these categories are often crucial. While certain types may not be addressed by specific arguments against the fact that they exist, others could. And only a few kinds—if any—might qualify as true ethical conundrums.

**Epistemic vs ontological:** The agent is unsure of what to do in epistemic ethical issues because they are unable to decide which moral requirement comes first. This kind of uncertainty is present in many daily decisions, ranging from the insignificant selection between two different-packaged cans of beans at the grocery store to major career decisions. However, unresolvable epistemic conflicts may arise independently of unresolvable conflicts, and vice versa.

**Self-imposed vs world-imposed:** The origin of the competing demands distinguishes self-inflicted ethical issues from those imposed by the outside world. The agent is in charge of the conflict in the self-imposed scenario. Making two incompatible commitments, such as attending two events that are taking place at different locations at the same time, is a typical example in this category. The agent is thrust into the predicament in the world-imposed situation, however, and is not held accountable for its occurrence. For moral theories, the distinction between these two categories is significant [13]. In the past, most philosophers have held that ethical theories should be free of ethical challenges and that moral theories that allow or demand the existence of ethical dilemmas are flawed.

**Obligation vs prohibition:** An obligation is a moral need to behave in a certain way, while a prohibition is a moral responsibility to abstain from behaving in a specific way. The majority of ethical dilemma debates concentrate on obligation dilemmas, which are situations in which an actor must choose between two morally contradictory acts. Prohibition problems, however, are circumstances in which no action is permitted. Many arguments against ethical problems have been said to be effective only when they apply to obligation dilemmas; they do not work well when they apply to prohibition dilemmas.

**Single-agent vs multi-agent:** Ethical dilemmas are characterised by the existence of two courses of action that are both mandatory but mutually exclusive: it is impossible to execute both actions simultaneously. Typically, a single agent is faced with conflicting obligations in single-agent cases. These actions remain incompatible in multi-agent scenarios; however, the obligations pertain to distinct individuals. For instance, two competitors who had pledged to their families that they would prevail in a competition may both be obligated to achieve victory [14]. The conflicting obligations of these two individuals are due to the fact that there can only be one victor.

## 2 Literature Review

(Sharma et al., 2024) [15] The objective is to perform a comprehensive bibliometric analysis of research papers that address the ethical issues and concerns related to "digital mental health care". According to the study, several of the most important issues that need proper management, such as data protection, emergency response, therapist competence, and permission, are clearly addressed in the most often referenced publications on digital mental healthcare. Failure to do so may result in the client experiencing distress and questioning the reliability of "the Digital Mental Health Care system". According to this bibliometric study, there are a number of issues that may be major standards for mental health care provided online. Mental health personnel who operate online must also be informed about the ethical issues that are associated with online mental healthcare.

(Drolet et al., 2023) [16] This study employed a descriptive phenomenological approach to document the ethical dilemmas encountered by a diverse array of "Canadian researchers, REB members, and research ethics specialists". Data was collected through sociodemographic questionnaires and individual semi-structured interviews. Following the triangulation of different perspectives (researchers, REB members, and ethics experts), the following ten units of meaning were created: "ethical distress, distributive injustices, social injustices, research integrity, conflicts of interest, respect for research participants, individualism and performance, lack of supervision and power imbalances, and ethical distress". The results of this investigation revealed a number of problematic components that could potentially facilitate the development of future solutions to the transversal ethical challenges in research that affect the academic community's diverse members.

(Lathan et al., 2023) [17] Investigate the extent to which research ethical practices were implemented and the research methodologies employed in the analysis of Facebook data in public health research. Found six categories of analytical methods to use this data: predictive model development, utility (i.e., whether Facebook is useful as a tool for public health dissemination, surveillance, or attitudes), associational studies of user behaviour and health outcomes, network analysis, and two types of content analysis (sentiment analysis and thematic analysis). Utility studies and prediction studies had the lowest likelihood of requesting IRB review (0/4, 0% and 1/4, 25%, respectively), while associational studies had the highest likelihood (5/6, 83%). It is necessary to provide more comprehensive guidance on research ethics for the use of Facebook data, particularly in relation to the use of personal identifiers.

(Nii Laryeafo & Ogbewe, 2023) [18] Explore the ideas that support the ethics of qualitative research and look at all the ethical issues that the researcher should be aware of while gathering primary data via interviews. The study's conclusions also show that virtue, utilitarianism, rights, and deontology are the main ideologies that underpin ethical concerns in research. Participant rights must be upheld in qualitative research to support the collection of trustworthy data and achieve study objectives. The researcher is guided by these and other ethical standards, including anonymity, privacy, secrecy, voluntary involvement, and the ability to opt out, in order to gather qualitative data via interviews in a way that produces reliable findings.

(Lee, 2022) [19] Clinical research involving human subjects must be truth-based, demonstrate scientific integrity, and follow ethical norms and principles in order to protect study participants. Transparency and strict authorship criteria should be maintained in the publication of clinical research. The extent of investigator malfeasance in clinical research and publication can be diminished by a comprehensive comprehension and knowledge of ethical issues. On the basis of the most recent guidelines, this article reviews and summarises fundamental ethical concerns in clinical research and publication.

(Taquette & Borges da Matta Souza, 2022) [4] There is an obligation to adhere to ethical principles throughout the entire scientific research process, which encompasses the dissemination phase. This integrative review's goal was to synthesise and examine ethical conundrums that come up when looking into qualitative data and approaches that have been proposed to deal with them. Potential harms, misunderstandings about the roles of the researcher, therapist, and friend, confidentiality violations, and deadlocks in the study ethics committees were the main disputes. Numerous conflicts may arise during research. Continuous consent, ethical mindfulness, reflexivity, and self-awareness are the foundations of the proposed solutions.

(Piasecki et al., 2021) [20] Implemented the constant comparative method to identify common ethical motifs. The study exposes the scope, profundity, and complexity of ethical issues that are linked to the use of EHRs in research. Most of the ethical problems with EHR-based research derive from rapid cultural change. Individual and public dimensions of beneficence, as well as the formulation of concepts of privacy, are evolving. At the present time, we are in the midst of this transitional phase. Laws, brain processes, and human emotions are not operating up to speed with technology improvements. The individual patient's health has always been the primary concern in the medical tradition. Our comprehension of research ethics, public health ethics, and health care ethics seems to be impacted by the digitisation and change of healthcare.

(Hosseini & Gordijn, 2020) [21] The findings of a literature study on the moral dilemmas surrounding scientific authorship are presented in the paper at hand. When it comes to reporting, authorship, and publishing research findings, these challenges are seen as queries and/or worries over duties, principles, or virtues. Ten ethical themes—some of which include several ethical issues—have been discovered as a result of the papers' analysis. The following topics are listed in order of frequency of occurrence: 1) attribution; 2) breaches of authorship norms; 3) bias; 4) responsibility and accountability; 5) authorship order; 6) citations and referencing; 7) authorship definition; 8) publishing strategy; 9) originality; and 10) punishments. The present paper maps these themes, examines significant ethical issues, and offers a critical assessment of the application of standards of conduct, different cultural interpretations, and contributing reasons to unethical behaviour.

(Colnerud, 2015) [14] The objective is to furnish empirically derived information regarding the ethical scrutiny laws and procedure. This information will pertain to the experiences of Swedish researchers with ethical issues, conflicts, and challenges in their research. Three phenomena are revealed by the analysis of the researchers' responses, which is partially consistent with similar studies conducted in other nations: (i) the law of ethical vetting restricts the pertinent research ethical questions; (ii) it is

impossible to foresee every research ethical question; and (iii) there are repercussions for the ethical vetting boards' disregard for issues that do not fall under the law.

### **3 Conclusion**

In conclusion, this systematic review underscores the centrality of ethical considerations in research involving human participants, particularly within qualitative and medical studies. Researchers must uphold fundamental principles such as informed consent, anonymity, voluntary participation, privacy, and confidentiality to ensure both the validity of findings and the dignity of participants. The study reveals systemic ethical dilemmas arising from institutional pressures like "publish or perish" and highlights the need to shift toward a culture of quality over quantity in research output. It also stresses the importance of addressing systemic injustices that disproportionately affect underrepresented groups in academia. Moreover, the digitalization of healthcare and the rise of remote data collection through social media have introduced new ethical complexities, necessitating ongoing reflection and adaptation. To navigate these evolving challenges, researchers must practice ethical mindfulness, self-awareness, and continuous consent, while fostering open dialogue with peers. Ethical education and institutional support are essential for maintaining scientific integrity, protecting participant well-being, and fostering an inclusive and respectful research environment. Ultimately, a commitment to ethics is not only a regulatory requirement but a cornerstone of responsible and impactful scientific inquiry.

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