

MODELS OF ETHICAL DECISION MAKING IN THE FIELD OF HEALTHCARE SERVICES – A LITERATURE REVIEW

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Abstract. We conducted a Pubmed/Medline database survey of ethical decision-making models in medical practice and health care. **Material and methods.** The Pubmed/Medline database search included papers published from January 2000 to October 2023. Twenty-three articles were included in the current review. **Results.** The present study shows that the number of articles concerning the approach to ethical decision-making in medical practice has increased in recent decades. There are many scientific articles related to ethical approaches to health decisions. Articles analyzing a model or framework for dealing with "new age" ethical situations and emerging ethical dilemmas are fewer. In recent decades, the so-called shared decision-making model has been followed more often, as shown by the present study. **Conclusions.** The existence of such health models creates specific ethical situations in which patients and health professionals often find themselves. This outlines the need of developing a framework for dealing with ethical situations.

Key words: health care, decision-making, ethics, literature review

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INTRODUCTION

Medical decision-making is inherently different from any other type of decision-making. It is a complex process requiring time to think critically about health problems to reduce uncertainty [1]. When faced with a health issue, the decision will be made by default if no action is taken. However, such a decision can place the patient in a potentially risky situation. Making ethical health decisions often requires accumulated practical wisdom in synchronous interaction with known ethical principles of the medical profession. Codes of ethics are usually written broadly. They serve to identify issues, but cannot

be used as a standard for making ethical decisions. Making a decision in medical practice requires both knowledge and professionalism, as well as ethical decision-making skills.

All health care providers make decisions according to ethical standards to guide them in the challenging practice environment. Practitioners do not always have complete control over the situations they face. Ethical decision-making skills are improved by studying cases and developing a strategy (model) for dealing with ethical problems [2].

The purpose of this article is to summarize currently known models of ethical decisions in medical practice

by examining the databases of Pubmed/Medline and to investigate four different domains in the ethical decision process (components of ethical decision-making, the prevalence of ethical principles, approaches of ethical decision-making models and limitations of ethical decision models).

MATERIALS AND METHODS

An active search for scientific publications was conducted using the following keywords: „health“, „ethical decision,“ and „model“ in PubMed/ MEDLINE databases. The search concerned articles published between January 2000 and October 2023. Main inclusion criteria were: 1) models/frameworks of ethical decision-making when considering ethical situations, dilemmas and approaches in the field of health care practice; 2) a model of ethical decision-making with at least three identifiable steps to be followed in a text or figure format; Exclusion criteria were: 1) articles that present only research on health care and medical decisions without a focus on ethical dilemmas and ethical decision-making; 2) summaries, comments, etc.; 3) articles that present only social and/or public data and analysis. Four different conceptual domains, based on ethical decision-making models and preliminary literature searches, were investigated: components of ethical decision-making, the prevalence of ethical principles, approaches of ethical decision-making models and limitations of ethical decision models.

RESULTS

A total of 425 articles in the Pubmed/Medline database were studied. In the studies reviewed, ethical assistance and trustworthiness were used as a mandatory part of standards development: protocols or guidelines for practice (n = 62), participation in shared decision-making (n = 14), clinical trials (n = 127), randomized controlled trials, meta-analysis and systematic reviews (n = 222). Most studies report using ethical services and approval without describing the applied ethical model and/or framework. The current review included twenty-three articles that met the inclusion criterion for models of ethical decision-making when considering ethical situations and dilemmas in medical practice. The articles were divided into two groups. The first group includes analyses and models of ethical decisions in specific representative cases with practical application (n = 9), and the second group includes analyses and ethical decisions as a result of considering the theoretical knowledge of philosophy and ethics in medical practice (n = 14) – Table 1.

Table 1. Types of ethical decision models (literature review 2000-2023 Pubmed/Medline)

Author, year	Models of ethical decisions in specific representative cases with practical application in medical practice
Suarez V. et al., 2022 [3]	Nine steps ethical decision-making framework based on 60 peer-reviewed articles
Rogers B et al., 2021 [4]	Ten steps ethical decision model; Ethical dilemmas and components of ethical decisions in representative cases
Meyer-Zehnder B et al., 2017 [5]	Medical ethical decision-making model in intensive care units and geriatric wards; METAP – model (Module, Ethics, Therapy, Decisions, Allocation, Process)
Enck G et al., 2014 [6]	Six steps framework for ethical decision-making for practitioner needs
Lathrop BL et al., 2014 [7]	Eight steps tool MEDSI (Making ethical decisions about surgical interventions)
Tanner et al., 2014 [8]	A framework for evaluating a model for ethical decision-making in the work of interprofessional clinical teams
Page K et al., 2012 [9]	Measuring ethical principles to predict ethical decision-making
Toren O et al., 2010 [10]	Applying an ethical decision-making tool (six steps) to ethical dilemmas in the nursing profession
Cooper RJ et al., 2008 [11]	Four stages ethical-decision model exploring pharmacy care
Author, year	Ethical decision Framework/model as a result of examining the theoretical knowledge of philosophy and ethics in medical practice
Smith CS, 2023 [12]	System-oriented ethical decision-making framework for social and structural determinants of health
Knox JBL, 2023 [13]	Offers a model and a hermeneutic framework that is based on a dialogic approach to ethical issues (Danish research project „Personalized Medicine in the Welfare State“)

Table 1. Continuation

Du J et al. 2022 [14]	Theoretical framework based on a dual process of moral decision-making
Resnicow K, 2022 [15]	Shared decision-making (SDM) model- patients' preferences, disease state, personality, motivation, and psychological need satisfaction
Napiwodzka K, 2021 [16]	Implementation of a shared decision-making model in the Polish healthcare system
Ren X et al. 2020 [17]	Ethical decision-making based on deontology, teleology, and personal commitment theories for substandard drug rejection intentions
Van den Bulcke B et al., 2018 [18]	Theoretical framework and self-assessment instrument for ethical decision-making in an intensive care unit /13 European and United States countries; three domains: interdisciplinary collaboration, leadership and ethical environment
Elwyn G et al., 2016 [19]	Stages and indicators for evaluating shared ethical decision-making
Kotalik J et al., 2014 [20]	Framework of ethical decisions in healthcare institutions based on mission, vision and values (MIV) statement
Rosenthal SA et al., 2013 [21]	Theoretical Framework (five components) on Parental Ethical Decision Making in the neonatal intensive care unit
Park EJ, 2012 [22]	Six steps integrated ethical decision model /review/
Edwards I et al., 2011 [23]	A clinical and ethical decision-making framework for responding to health inequities and social injustice; Three key features: epistemological, dialectical, decision-making with action and reinforcement
Saarni et al., 2008 [24]	Model addresses and guides the whole health technology assessment process; from planning through analysis and preparations for decision-making
Martinez R, 2000 [25]	Four categories of graded-risk model for boundary dilemmas; patient –professional relationship

Components of ethical decision-making

Moral decision-making framework components are based on ethical issues, ethical judgment, ethical intention and ethical behavior [14, 17]. Health system-oriented ethical decision-making frameworks include components in the context of four domains: medical indications, patient preferences, quality of life, and contextual features (i.e., social, economic, legal, and administrative) [11, 12]. As a consequence, such a framework enables clinicians and teams to treat and serve underserved patients to ethical dimensions of care that intersect with clinical care and to improve optimal care and health for all.

Once an ethical issue is identified, the challenge becomes how healthcare practitioners involved in the situation should respond. Making quick decisions is sometimes unavoidable in daily medical practice. In such situations, there is a risk that ethical decisions are not fully reasoned. This may limit the application of a broad systemic ethical decision-making process to ensure ethically acceptable decision options. Such a systematic process was used in sixteen articles in the current review. The incorporated components (steps) in a systematic ethical decision-making process vary between 6 and 10. In the current literature review, most of the components of the process of an ethical decision-making model can be summarized as follows: 1) Identify the circumstances leading to the ethical issue, dilemma or conflict 2) Reporting the need for an ethical decision. 3) Identify the specific ethical problem. 4) Information considering ethical decisions – involved ethical principles, reference code of ethics, case specific information. 5) Potential options for responding to the ethical question 6) Recommendation of a justifiable option 7) Analysis 8) Implementation of the solution 9) Follow up (evaluation). Ethical frameworks and step-solving processes in the reviewed articles support the decision-making by giving possible ethically acceptable options and recommendations in 93,75%. In 37,5% of the articles, an implementation of a solution was made as a final step of the ethical decision-making process.

In Switzerland, a specific model of ethical decisions has been implemented in three intensive care units (ICUs) and two geriatric wards. This model is a Modular, Ethical, Treatment-oriented and resource Allocation process (METAP) to help introduce ethical decisions into routine medical practice. The METAP ethics decision model is promising, and it also has a short version called Leporello that includes checklists for important information and algorithms for ethical case discussion [5]. Components of the model include a four-level escalation approach. Level 1 solves an ethical problem with the aid of a staff mem-

ber with an ethical concern. Level 2 – ethical problem is discussed with a member of the facilitating group. Level 3 – the ethical problem is presented for discussion by an internal interdisciplinary team. Level 4 consultation with hospital ethics committee [5, 8].

In 21,73 % of the reviewed articles an assessment or some evaluation of the ethical decision-making process was made. Evaluation of the step and level–approached ethical decision models shows a reduction of the moral distress in healthcare practitioners by nearly 55% [8].

Prevalence of the ethical principles

Scoping the current literature review of the process of ethical decisions and the role of ethical principles shows that ethical decisions are not entirely based on the basic ethical principles – beneficence, harmlessness, autonomy, and justice. These basic principles are equally fundamental to all the articles of the present study, but from a practical viewpoint and the current state of health care and social functioning absolute autonomy and justice are more like ideals that cannot be achieved. The purpose and aspiration of the ethical decision-making framework is to guide real ethical issues and problems to resolution in a direction approaching fundamental ethical principles, which will appease the stakeholders. In 73,9 % of the reviewed articles, factors other than ethical principles influence ethical decision-making.

The skills in making ethical choices and recommendations depend on professional values, empathy ability, even job title, and forms of in-service training on ethical decision-making [14]. Besides the code of professional ethics, factors that influence ethical decision-making, including the basic ethical principles according to the present study, are quality of life, compassion, patient preferences, religious organizations, emotional-behavioral characteristics and cognitive interface, stakeholder groups, leadership, communication skills, and interdisciplinary collaborations.

Approaches of ethical decision-making

There are three classic approaches to ethical decision-making: a rule-based approach, a goal-based approach, and a care-based approach [2]. The first rule-based approach follows all procedural and technical implementation frameworks that are accepted as standard in the profession. However, even when the standard is met, due to the individual nature of each clinical case, the results of such decisions are unsatisfactory. Using this approach, patients are not always protected from not receiving health care that is no longer available to them because they cannot meet the standard. Those who use the goal-based

approach adhere to the principle of beneficence, which produces the greatest good for the greatest number of people. The results of this approach appear to be good for all stakeholders. A goal-based approach looks more to the common good of society and less to the needs of the individual. A similar approach is applied in cases of a pandemic situation and large-scale crises. The care-based approach follows the ethical standard „do unto others as you would have them do unto you“ [2]. The approach is good, but when it comes to responsibility for the decision taken, the patient may hesitate, which often stems from fear for his health. However, concern always helps to reduce the patient’s fear. In the present literature review, the most adopted approach is goal-based, care-based and a combination of them.

In recent decades, the so-called shared decision-making (SDM) has been gaining ground, as shown by the presented studies [15, 16, 19]. This approach implies not only concern but also communication and a kind of training of the patient through what he has to go through. It should be noted that the introduction of electronic health care significantly reduces the time and number of contacts and communication between health professionals and patients. These circumstances complicate the shared decision-making process. Most reviews apply SDM, but the rule-based, goal-based, or care-based ethical model is not always reported. From an ethical perspective, it is important to understand how shared decision-making was arrived at and which ethical approach was used. Messages in this direction are needed so that practitioners can apply a relevant model to a given situation. There are also situations of clinical practice in which it is possible to switch from one model to another model of ethical decision.

Limitations of ethical decision-making models

Some of the limitations in the presented articles are difficulties in assessment and evaluation based on consensus among the authors [3]. Qualitative exploratory approaches were used in most studies and quantitative approaches are rarely applied. The role of management remains often obscured and without clear guidelines for a code of management ethics. In an organization, management may set rules that employees must adhere to, but in some cases, the rules are not sufficiently coordinated with ethical codes.

DISCUSSION

The physician-patient relationship dates back to ancient times, while the functioning of health systems was introduced in the twentieth century. The new health model /new health policy/ or a change in the

existing one in some form also changes the ethical situations in which patients and health professionals find themselves. Regardless of the large number of scientific articles related to ethical approaches to health decisions, articles that analyze a specific model or framework for dealing with such changed ethical situations „in the new era“ and emerging ethical dilemmas are fewer.

Ethical decision-making models in articles with both a practical and a theoretical focus place two poles of an ethical approach, with patient characteristics such as personality, motivational state and course of the disease on one pole, and on the other pole are more -flexible elements of behavior, such as organizational and social behavior and behavior under the influence of external conditions [15]. In the first case, practitioners are encouraged to adapt their decision-making behavior to the needs, preferences, and other characteristics of patients. In the latter case, the changes and medical decisions made are more external, and a healthcare provider-led approach may be warranted [15, 16]. In this type of shared decision-making, a dialog approach and communication between the patient on the one hand and the healthcare provider on the other is essential [13].

Regarding shared decision-making, an important element is the so-called assessment of the health worker's professionalism. In some countries such as Israel, health managers report the professional competence of health workers to the Ministry of Health by following the basic ethical principle „First, do no harm“. In this specific case, the health and mental state of the health workers is taken into account. Particular attention is paid to the presence of dependence on the part of the health worker on medications and other substances [10].

The results of the conducted survey show that after the year 2000, healthcare has undergone dramatic changes, health insurance models have been introduced and strengthened their functioning. These changes have affected the types of ethical situations encountered in different areas of health care. It should be noted that the provision of individual health care to patients' needs has to be balanced against the fiscal accountability to the health system and society as a whole, as well as the individual personal interest of the patient [26].

CONCLUSION

The functioning of the existing health model creates specific ethical situations in which patients and health professionals find themselves. The survey carried out shows that the number of articles on ethical de-

cision-making approaches in medical practice has increased over the last decade, which outlines the need to develop a framework for dealing with ethical situations. Regardless of the large number of scientific articles related to ethical approaches in health decisions, those that analyze a model or framework for dealing with such modified ethical situations „in the new era“ and emerging ethical dilemmas are relatively few in number. This review examines the main approaches and models for dealing with ethical decision-making in the field of health care. Ethical decision-making skills are improved by studying cases and developing a strategy for dealing with ethical problems.

Author Contributions:

Georgieva V. conceived the original draft preparation. The author was responsible for the conception and design of the review. Georgieva V. was responsible for the data acquisition. Georgieva V. was responsible for the collection and assembly of the articles/published data, and their inclusion and interpretation in this review. The authors have read and agreed with the final version of the manuscript.

Compliance with Ethics Requirements:

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