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Ethical Dilemmas and Clinical Decision-Making among Hospital Physicians during the COVID-19 Pandemic in the Czech Republic

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Abstract

Throughout the COVID-19 pandemic, healthcare systems worldwide faced extraordinary challenges, primarily due to severe resource shortages and widespread concerns about substandard patient care. The primary objective of our research was to examine the viewpoints and firsthand experiences of inpatient physicians regarding healthcare delivery during the COVID-19 pandemic under conditions of limited resources. This study employed a detailed 24-item electronic survey titled "Reflections on the Provision of Healthcare during the COVID-19 Pandemic" to explore the real-world experiences of 938 physicians working in the Czech Republic. More than half of the respondents reported observing a "lower standard of care" relative to the pre-pandemic period. Physicians held differing views on whether the basis for such decisions was medical, ethical, or legal. A distinct gender difference emerged: male physicians predominantly adopted a medical viewpoint, while female physicians placed greater emphasis on ethical considerations. Decisions to restrict healthcare required consensus among the physicians on duty, interdisciplinary teams, or shift supervisors. The extent of patient or family involvement in these healthcare decisions varied considerably. Factors including patient age, pre-existing medical conditions, and estimated life expectancy played a significant role in shaping care decisions. Notably, half of the physicians reported instances in which patients were denied transfer to better-equipped facilities due to resource limitations. One-third of the physicians stated that they never discussed care limitation decisions or alternative options with patients or their families. Consequently, nearly half of the physicians rarely or never communicated information regarding care limitations to patients. The survey illuminated the deep ethical challenges confronting hospital physicians across different healthcare settings during the pandemic. It highlighted the urgent need for transparent dialogue and academic discussion on resource allocation strategies, along with greater emphasis on involving patients and their families in care-related decisions during future public health emergencies.

Keywords: Ethical Dilemmas, Decision-Making, Hospital Physicians, COVID-19 Pandemic

Introduction

The COVID-19 pandemic imposed tremendous strain on healthcare systems globally, resulting in depleted resources, reduced quality of care, and an exhausted workforce contending with a massive influx of patients, insufficient equipment, and critical staff shortages [1]. This exceptional burden triggered numerous ethical dilemmas and complicated treatment decisions and resource allocation, exacerbated by overcrowding, restricted patient access, procedural postponements, and a diminished number of available healthcare professionals. Such conditions, which contributed to the decline in care standards throughout the pandemic,

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carried important consequences for patient outcomes and overall quality of life [2-5].

The pandemic created formidable obstacles to healthcare provision worldwide. It compelled healthcare workers to navigate exceptionally difficult decision-making contexts, thereby exposing pre-existing vulnerabilities within health, medical, and public health infrastructures [6-9]. Shortages of vital resources and anxieties about inadequate patient care were especially evident during the initial 2020 response phase and continued to affect subsequent waves of the outbreak [8].

To manage these resource constraints, several tiers of care were introduced. These ranged from conventional care guided by EBM (Evidence-Based Medicine), which aims to deliver the usual standard using whatever resources are available, to contingency care that substitutes standard practices with functionally comparable alternatives [6, 10]. When resources are short, a lower standard of medical care or full crisis care is implemented, adjusting service levels to match available resources. This situation increases the likelihood of poorer health outcomes, although these risks can be partially offset by forward-looking resource-allocation measures [6, 10].

In addition, the pandemic introduced new complications to patient care, notably a severe reduction in communication with critically ill hospitalized patients [11]. Strict infection prevention protocols and efforts to limit exposure while conserving personal protective equipment often led to patients being isolated, with minimal face-to-face contact with medical staff and virtually no access for family members or visitors [12, 13].

The crisis also highlighted the vital importance of ethical consultation and support services in guiding moral decision-making, alleviating moral distress, and protecting the psychological well-being of healthcare staff. These consultation services have proven essential in helping professionals address complex choices while upholding the highest standards of ethical patient care [14]. However, the availability of such ethical support varied substantially across regions and healthcare systems due to a range of factors [14, 15].

The primary objective of our research was to examine the viewpoints and firsthand experiences of inpatient physicians regarding healthcare delivery during the COVID-19 pandemic under conditions of limited resources. For this purpose, we designed a questionnaire named “Reflections on the provision of health care during the COVID-19 pandemic.” The instrument was created to collect meaningful data on the difficulties, ethical issues, and decision-making approaches physicians faced when resources were scarce. By analyzing the perspectives and experiences of inpatient physicians, the study sought to gain a richer understanding of the intricate dilemmas associated with providing care in such exceptional circumstances. Ultimately, this work aims to enrich the ongoing conversation about enhancing healthcare delivery and ethical practices during times of crisis.

Materials and Methods

This investigation used a questionnaire titled “Reflection on the Provision of Health Care in Times of Pandemic.” The tool was created by our Working Group on Limitation of Care, which is part of the Section for Ethics in Palliative Care of the Czech Society of Palliative Medicine. It consisted of eight items exploring awareness of care-related decisions and views on ethical dilemmas, and seven items addressing ethical dilemmas and the maintenance of care standards.

Participants were unselected physicians practicing in inpatient wards of all types of hospitals throughout the Czech Republic. In June 2021, the survey was sent via the Czech Medical Chamber’s digital platform to 39,548 physicians. Since membership in the Chamber is obligatory for all practicing doctors, this method reached every hospital physician in the country. A total of 1,045 doctors returned fully answered forms. Of these, 107 submissions from outpatient practitioners were excluded from further analysis, yielding 938 valid responses from inpatient physicians included in the final assessment. The Czech hospital system divides facilities into three main groups. Teaching or Faculty Hospitals are connected to medical universities and provide hands-on training for students. Regional Hospitals serve larger territories and provide a broad spectrum of services tailored to diverse patient populations. Rural Hospitals, in turn, focus on meeting the medical needs of smaller rural communities and play a key role in delivering accessible care in those settings.

Among the 938 completed forms, special focus was placed on responses from anaesthesiologists and intensive care specialists, taking into account their rank, level of specialization, and the length of time they had spent in clinical work. Their specific knowledge is highly relevant when critical decisions must be made about

equipment, procedures, and alternative options in intensive care during major events such as the COVID-19 pandemic.

All collected information was processed with SPSS (Statistical Package for the Social Sciences) Statistics, version 24. Descriptive statistics were applied, covering the arithmetic mean, standard deviation, and both absolute and relative frequency counts, to present an overall picture of the data. In addition, the Mann-Whitney test was used to compare group differences.

Results and Discussion

Demographic and occupational data

Respondents had an average age of 45 years, accompanied by a standard deviation of 12.6 years. The age profile was as follows: 14.5% were younger than 30 years, 26.9% were 31–40 years, 25.0% were 41–50 years, 19.5% were 51–60 years, and 14.1% were > 61 years. The gender distribution was 47.0% men and 53.0% women. Regarding professional qualifications, 11.3% were fresh graduates, 13.5% were still in residency training, and 75.2% held board certification. Moreover, 16.6% possessed board certification specifically in anaesthesiology and intensive care medicine, whereas 83.4% did not. Participants were distributed across departments as follows: 30.2% worked in Intensive and Resuscitation Care Units, 59.9% in ordinary (non-intensive) wards, and 9.9% in Post-Acute Care Units (aftercare units or departments). Regarding hospital type, 30.2% practised in teaching or faculty hospitals, 59.9% in regional hospitals, and 9.9% in rural hospitals.

A full breakdown of the study population characteristics is displayed in **Table 1**.

Table 1. Demographic and occupational data of the study population (n = 938). From: Decision-making and ethical dilemmas experienced by hospital physicians during the COVID-19 pandemic in the Czech Republic

Characteristic	Frequency (%)	Characteristic	Frequency (%)
Age		**Department**	
Mean (SD)	45.0 (12.6)	Intensive and resuscitation care units	283 (30.2)
≤ 30 years	136 (14.5)	Standard departments (non-intensive departments)	562 (59.9)
31–40 years	252 (26.9)	Post-acute care units (aftercare unit/departments)	93 (9.9)
41–50 years	235 (25.0)		
51–60 years	183 (19.5)	**Type of facility**	
> 60 years	132 (14.1)	Teaching/faculty hospitals	283 (30.2)
Gender		Regional hospitals	562 (59.9)
Men	441 (47.0)	Rural hospitals	93 (9.9)
Female	497 (53.0)		
Professional status		**Board certification in anaesthesiology and intensive medicine**	
Graduates	106 (11.3)	Yes	156 (16.6)
Residents	127 (13.5)	No	782 (83.4)
Board-certified physicians	705 (75.2)		

Providing a lower standard of care

The questionnaire examined whether hospital doctors had encountered cases in which patients received a "lower standard of medical care" amid the pandemic. Here, "lower standard of medical care" means the patient received fewer treatment interventions than would ordinarily be offered under normal pre-pandemic conditions. This concept was formally defined in a position statement from the Czech Society of Anaesthesiology and Intensive Care Medicine (published only in Czech) and made available on the Czech Ministry of Health website [16]. Findings indicated that more than half the physicians stated they had, at least occasionally, been required to deliver a "lower standard of medical care" **(Figure 1).** Only a very small share (less than 5%) reported facing such circumstances every day. These

outcomes illustrate the considerable pressures placed on medical staff during the pandemic, as many had to operate at a level below conventional care due to resource limitations.

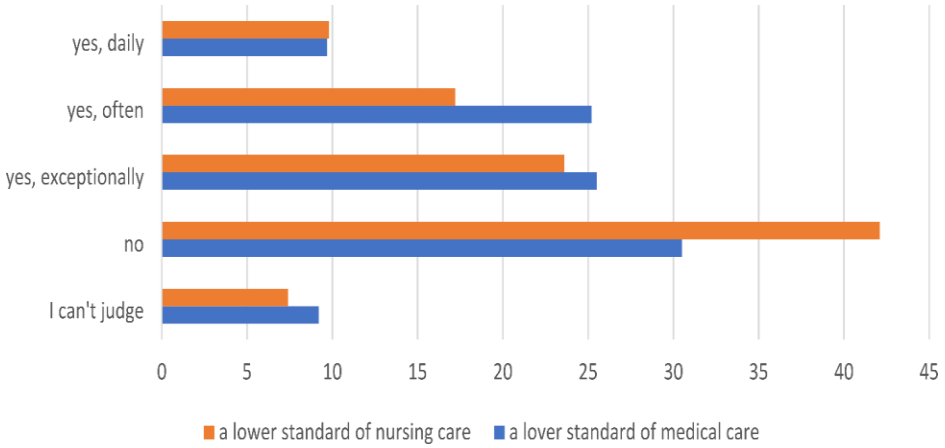

Figure 1. Reporting of a "lower standard of care." From: Decision-making and ethical dilemmas experienced by hospital physicians during the COVID-19 pandemic in the Czech Republic.

Roughly 46% of doctors in anaesthesiology departments or ICUs indicated that decisions to restrict care were reached through agreement with a multidisciplinary team — a markedly higher rate than the 11.4% recorded in standard wards, where this collaborative method was far less common.

A decision about healthcare

Doctors generally regarded the choice to deliver a "lower standard of care" — especially when more patients could potentially have benefited from the "usual standard of care" guided by EBM (Evidence-Based Medicine) — as raising both medical and ethical questions rather than purely legal ones. Around 20% of participants could not categorize the issue, while 90% agreed or partially agreed with each listed concern. This pattern underscores the intricate and weighty nature of the decisions involved **(Figure 2).** Each item was rated separately based on the respondent's level of agreement.

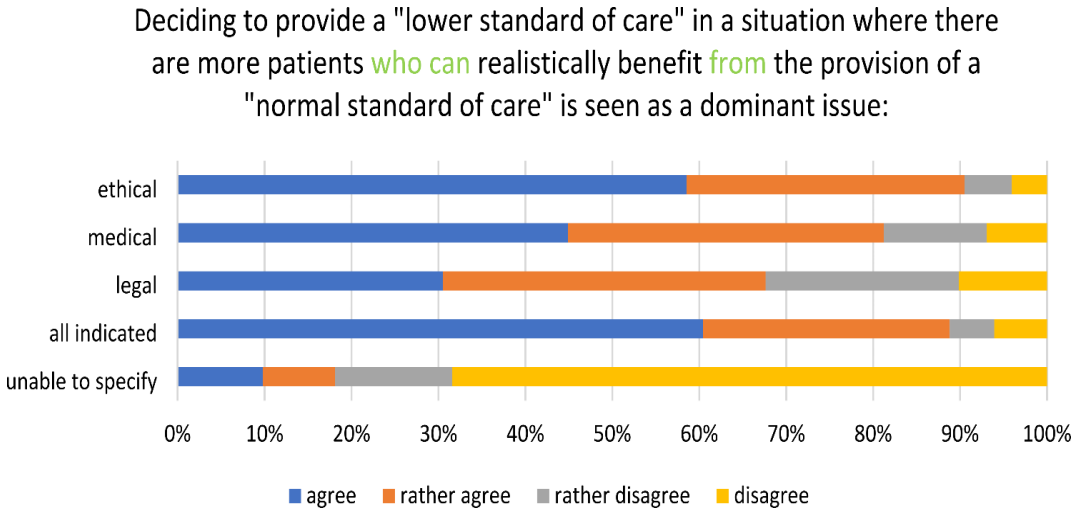

Figure 2. Physicians' perception of the decision to provide a "lower standard of care." From: Decision-making and ethical dilemmas experienced by hospital physicians during the COVID-19 pandemic in the Czech Republic.

Analysis also uncovered a clear gender contrast in interpretation: male physicians showed a significantly

stronger tendency to classify the situation as primarily medical ($P < 0.001$), whereas female physicians were more likely to view it as an ethical matter ($P = 0.037$); details appear in **Table 2**. This divergence implies that personal outlook and clinical background can substantially shape how these demanding situations are understood [17, 18]. Other observed differences did not achieve statistical significance.

Table 2. Differences in physicians' perception of the decision to provide a "lower standard of care" according to gender. From: Decision-making and ethical dilemmas experienced by hospital physicians during the COVID-19 pandemic in the Czech Republic

	Medical		Ethical	
	Male	**Female**	**Male**	**Female**
Agree	222 (50.3)	199 (40.0)	246 (55.8)	303 (61.0)
Rather agree	37 (8.4)	28 (5.6)	141 (32.0)	159 (32.0)
Rather disagree	135 (30.6)	206 (41.4)	30 (6.8)	21 (4.2)
Disagree	47 (10.7)	64 (12.9)	24 (5.4)	14 (2.8)
P-value	0.0001		0.037	

The review of doctors' opinions on ventilator distribution under shortage conditions highlighted a layered, intricate decision-making process in emergency settings. **Figure 3** presents physicians' perspectives on the ethical and operational challenges of withholding artificial pulmonary ventilation when ventilator supplies are limited. Most respondents saw the scenario as an ethical dilemma, and approximately 70% agreed or largely agreed that a well-defined decision-making framework should be established in advance. This widespread view signals strong support for having explicit guidelines to manage such tough choices. A large group also agreed or tended to agree with exhausting all available ventilators, demonstrating a general desire to use scarce resources as fully as possible. Views diverged noticeably, however, on patient grouping and the tightening of medical standards. Close to half the physicians felt that categorization should apply only when the final ventilator is left in place, suggesting a preference for postponing such steps until no other option remains. The notion of restricting medical criteria to favor particular patient categories likewise elicited varied, often opposing reactions, highlighting the controversial nature of this tactic.

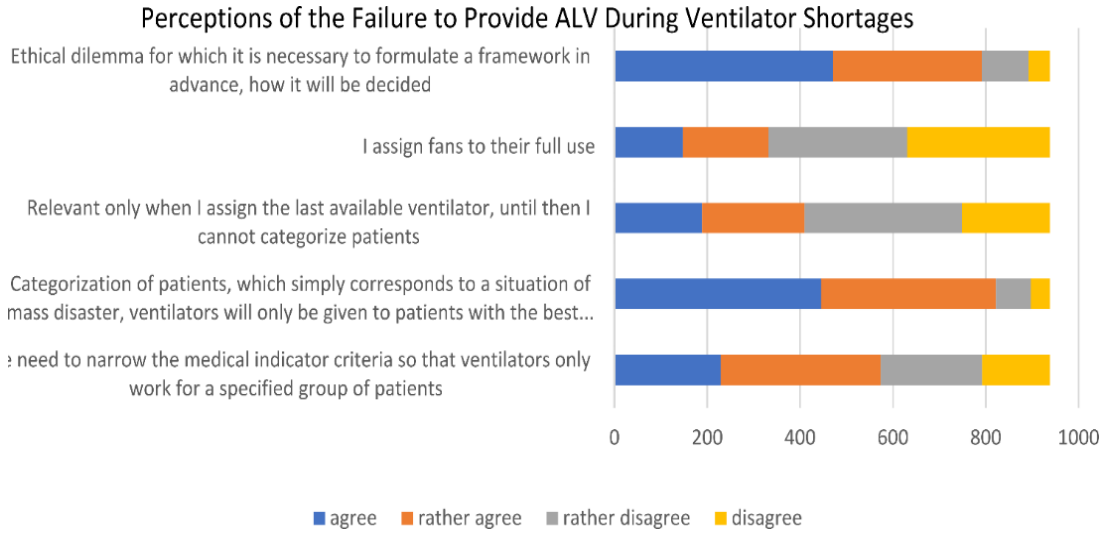

Figure 3. Physicians' perception of the failure to provide ALV during ventilator shortages. From: Decision-making and ethical dilemmas experienced by hospital physicians during the COVID-19 pandemic in the Czech Republic.

Notably, female doctors demonstrated a greater willingness to accept tighter selection standards for mechanical ventilation ($P = 0.001$). When facilities were compared, staff from regional hospitals showed stronger agreement that ventilators should be reserved solely for individuals with the best prospects of recovery than

physicians in teaching or university hospitals (P = 0.035) and those in other regional or district-level hospitals (P = 0.014). The same trend was observed when residents were compared with fully qualified specialists. On the other hand, doctors practicing in ordinary non-intensive wards expressed greater support for running ventilators at full capacity (P = 0.004).

Regarding decisions to restrict medical treatment, the main routes were collective agreements reached by the physicians currently on duty (54.4%) or by interdisciplinary teams (24.3%). Alternative routes included rulings by shift leaders — either the department head or the unit's chief medical officer — (15.6%) and purely personal decisions by individual doctors (5.7%). According to 70.9% of participants, the decision to withhold artificial lung ventilation or to avoid ICU admission was made jointly by the responsible ward physicians and the intensive care team, with no input whatsoever from the patient or relatives. This shared approach occurred only sporadically, according to 21% of the doctors surveyed. Female physicians reported this collaborative style more often than their male colleagues (P = 0.027). The leading justifications cited for recommending against ICU entry, artificial lung ventilation, or ECMO were multiple co-existing illnesses combined with a predicted brief remaining lifespan (60%) — where the exact meaning of "brief" was not specified in the survey — advanced age (40%), cancer diagnosis (31%), and excess body weight (9%) **(Figure 4).**

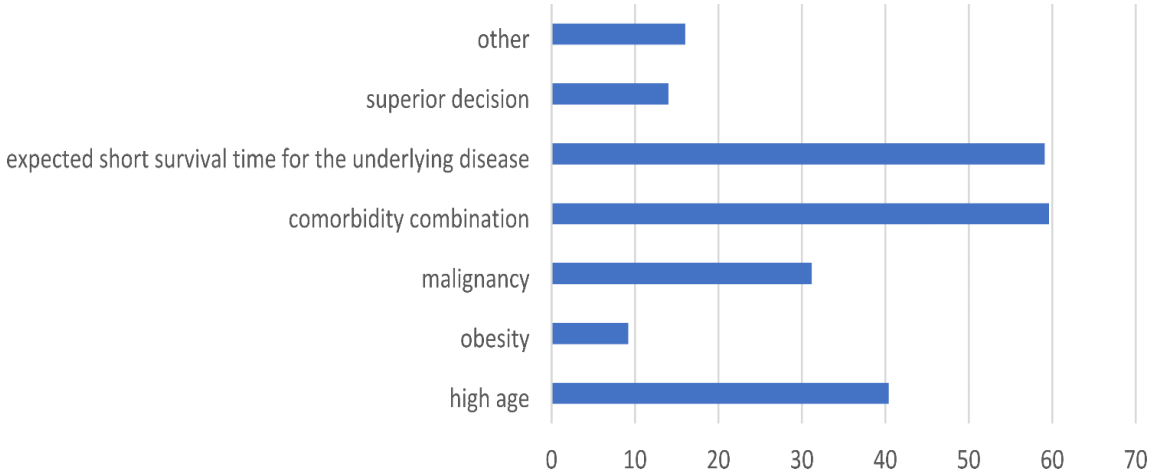

Figure 4. Reasons for advising against intensive care, artificial lung ventilation, or extracorporeal membrane oxygenation. From: Decision-making and ethical dilemmas experienced by hospital physicians during the COVID-19 pandemic in the Czech Republic

Residents and fellows in anaesthesiology and intensive care, together with board-certified doctors working in standard non-intensive wards, more commonly backed the idea of employing every available ventilator to its limit (P = 0.004). Exactly half of the participating physicians (50.2%) had encountered cases in which patients were denied transport to facilities with superior resources.

Throughout the pandemic, the frequency with which doctors spoke to patients about treatment limitations due to resource shortages varied widely **(Table 2).** Almost half of those who reduced care due to scarcity informed the affected patients of the restriction **(Table 2).** In comparison, 25.4% stated they never disclosed this information, even when the patient had the capacity to comprehend it. Furthermore, only 26.6% reported sharing the details on rare occasions.

Doctors based in anaesthesiology units, where care levels are typically higher, held such conversations with patients less regularly than colleagues in standard wards. This gap proved meaningful because the clear majority of physicians in non-intensive departments — including residents, fellows, and board-certified staff —adhered to the reduced care standard more often. In reality, only 42% of anaesthesiology or ICU physicians participated in these discussions.

Newly qualified doctors from every specialty engaged in these conversations with patients at noticeably higher rates than board-certified physicians (P = 0.0001) and also exceeded the frequency seen among other board-

certified colleagues (P = 0.014). The pattern highlights promising opportunities for development among early-career doctors and raises expectations for future progress. At the same time, the results underscore the ongoing need to enhance communication skills across all medical disciplines, regardless of professional experience.

Anaesthesiology residents, who had comparatively limited specialty experience, reported lower care standards with patients more frequently than anaesthesiology fellows (P = 0.0001) or board-certified anaesthesiologists (P = 0.014). This suggests that less seasoned specialists may feel more comfortable raising these sensitive topics directly with patients.

In addition, roughly two-thirds of the physicians passed this information on to family members or other close persons. Still, 18.7% did so only in exceptional circumstances, and 14.7% refrained entirely from informing relatives, judging it unsuitable **(Table 3).** No information was gathered regarding how consistently patients themselves received updates or how actively they joined in the decision-making process.

Table 3. The extent of communication of physicians with patients (between physicians and patients) during the pandemic. From: Decision-making and ethical dilemmas experienced by hospital physicians during the COVID-19 pandemic in the Czech Republic

Patient notification	No.	%	Family notification	No.	%
The patient was not informed at any time about the care limitation, despite being capable of receiving the information.	166	25.4	The patient's family was not informed of the situation, which I considered inappropriate.	97	14.7
The patient was informed only in exceptional cases of care limitations when able to receive the information.	174	26.6	The patient's family or a close relative was informed only in exceptional circumstances.	124	18.7
The patient was generally informed about the care limitations whenever they were able to receive the information.	313	47.9	The patient's family or close relative was usually informed beforehand.	441	66.6

Amid the COVID-19 outbreak, we prepared a detailed questionnaire for hospital doctors to gain insight into their clinical judgment processes and the constraints on available treatments. The instrument explored the pandemic's impact on daily workloads, occasions when substandard care became necessary, the pathways used to reach decisions, the degree of involvement by patients and families, and the use of ethical advisory services.

A central element of the project involved recording demographic details so that differences in experience could be examined by hospital category, medical specialty, and length of professional service. Beyond that, the study focused on capturing the viewpoints and judgment patterns of qualified specialists and intensive care staff when caring for patients under severe resource constraints during the COVID-19 crisis. The outcomes may offer practical guidance for designing targeted measures to improve care standards and interaction practices during emergencies, ultimately benefiting the entire healthcare landscape.

Drawing on the findings, the following discussion focuses on three main areas: awareness of care-limitation decisions as an ethical matter; the role of open dialogue and joint decision-making; assistance to medical staff; and the importance of public conversation on these issues.

Sensitivity to decision-making in care as an ethical issue

The COVID-19 pandemic posed major ethical challenges in healthcare, particularly in communication and in decisions about restricting patient care due to limited resources. Differences in the way doctors disclosed these limitations were particularly striking. Almost half of the physicians told patients directly about the restrictions affecting their care. Nevertheless, 25.4% decided not to share this information with patients, even when the patients could understand it. In addition, only 26.6% of physicians informed patients in exceptional cases, whereas two-thirds chose to discuss the matter with the patient's family members or close relatives. At the same time, a considerable number of physicians—18.7%—informed the family only in exceptional situations, and 14.7% refrained from informing the family entirely, considering it unsuitable. Such inconsistencies raise serious questions about the openness and inclusivity of the decision-making process throughout the pandemic.

In the Czech Republic, where healthcare has traditionally followed a paternalistic model, clinical decision-making is often regarded as the exclusive domain of medical professionals, who place great importance on retaining authority over these choices. Yet ethical, legal, and professional standards—including the Council of Europe's recommendations on end-of-life decisions and the guidelines issued by the European Resuscitation Council (ERC)—strongly advocate reassessing care practices in this context. The pandemic did more than draw attention to the issue; it clearly demonstrated the pressing requirement for decision-making processes that are both more inclusive and transparent, particularly in situations where resources are scarce and the consequences are critical.

The research conducted by Zielina *et al*. [19] highlights the difficulties involved in fostering moral competence in Czech medical training. According to their results, moral competence decreases substantially between the first and fifth years of medical studies, and even targeted educational approaches such as problem-based learning and the Konstanz Method of Dilemma Discussion failed to produce any meaningful recovery. This downward trend implies that existing teaching methods are insufficiently equipping future doctors to manage the complex ethical issues they will encounter in practice, especially during large-scale crises such as a pandemic. The consequences for the healthcare system are substantial, underscoring the need to thoroughly review current medical curricula and introduce more effective methods to strengthen moral competence in future generations of healthcare workers.

Ethical challenges related to the allocation of scarce resources, including ventilators and advanced interventions such as artificial lung ventilation (ALV) and extracorporeal membrane oxygenation (ECMO), further complicate decision-making. Approximately half of those surveyed felt that categorizing patients should be considered only when the final ventilator is about to be assigned, indicating a tendency to postpone such decisions until absolutely unavoidable. Varied opinions on improving medical standards for prioritizing specific patient groups reveal just how divisive these issues remain. This lack of agreement underscores the importance of incorporating ethical and communication skills training into professional development, as these abilities are key to alleviating moral distress and the overall ethical strain experienced by healthcare staff.

During the pandemic, access to bioethics consultations proved essential for professionals to address complex ethical questions. However, the availability of these consultations varied considerably, affected by both regional differences and broader systemic issues [14, 15]. Within the Czech healthcare system, formal ethical support services are rarely provided on an institutional basis, although palliative care teams sometimes offer limited assistance. Several approaches could be adopted to overcome this gap:

1. Establishing Clinical Ethics Committees (CECs): Hospitals could create dedicated committees to deliver consultations and develop ethical policies that assist medical teams [14, 15].
2. Implementing Ethics Training Programs: Embedding ethics education within both undergraduate and postgraduate medical training would improve providers' ethical capabilities and better equip them for future challenges [20, 21].
3. Developing a Centralized Ethical Guideline Document: A unified national document would promote uniform ethical decision-making throughout the healthcare system and help maintain consistent standards in every institution [22].
4. Creating an Online Ethics Consultation Platform: An accessible digital platform could supply prompt advice for difficult cases, especially in settings with limited resources, thereby improving access to ethical expertise.
5. Expanding the Role of Palliative Care Teams: Since palliative care teams already deliver some ethical guidance in the Czech Republic, formally strengthening and recognizing their contribution could significantly enhance ethical decision-making in times of crisis.

In addition, individual consultations provided vital support to healthcare workers as they faced the moral and emotional pressures of the pandemic. These sessions were not merely helpful but truly essential, contributing both to the mental health and resilience of professionals and to the preservation of ethical standards in patient care [23].

The survey also revealed notable gender differences, with male physicians tending to concentrate more on biomedical factors while female physicians placed greater emphasis on ethical dimensions. These variations indicate that individual backgrounds and viewpoints play an important part in shaping how clinicians respond to ethical dilemmas. Furthermore, the lack of a unified ethical framework in the Czech Republic intensifies these

difficulties. It underscores the immediate need for well-defined guidelines to help healthcare providers manage such dilemmas effectively while minimizing emotional strain [24, 25].

Communication and shared decision-making

The survey results offer valuable insights into the difficulties hospital physicians faced throughout the COVID-19 pandemic, especially when delivering care amid limited resources. The findings show that more than half of the physicians faced circumstances in which they were forced to provide a "lower standard of medical care" compared with pre-pandemic norms. At the same time, a small proportion experienced such situations daily. The causes of these reductions in care quality were diverse, ranging from resource shortages and insufficient preparation to procedural errors. These difficulties proved especially severe during the worldwide health emergency, as inferior care frequently resulted from postponed treatments, inadequate ongoing monitoring, and a lack of essential supplies [6, 10, 26, 27]. The effects of this diminished healthcare quality were serious for patients, commonly resulting in poorer health outcomes and possible injury [28].

The research reveals clear distinctions in communication and decision-making approaches between doctors working in anaesthesiology units and those in general hospital departments. Anaesthesiology physicians, who are recognized for maintaining elevated standards of care, discuss the delivery of lower-standard care less often than their colleagues in other departments. Specifically, only 42% of anaesthesiology and ICU physicians participate in these conversations, whereas a larger share of doctors in standard departments do.

Newly qualified doctors, irrespective of their field, communicate more regularly about providing a lower standard of care to patients than do fully certified specialists. This pattern points to opportunities to strengthen communication skills among early-career professionals. Within the anaesthesiology group, residents showed a greater tendency to address lower standards of care than fellows or board-certified physicians, suggesting that less experienced clinicians are more open to this form of dialogue.

The survey further uncovered meaningful variations in viewpoints linked to the kind of hospital and the physicians' level of experience. For instance, doctors practicing in regional hospitals showed stronger support for prioritizing patients with the greatest likelihood of survival than those in teaching or university hospitals. This contrast could stem from differences in resource levels and patient populations across various healthcare environments. Similarly, board-certified physicians, along with those employed in intensive care units, showed greater willingness to make full use of existing ventilators, which mirrors their hands-on experience with critical care and their deeper understanding of the difficulties involved in distributing scarce resources.

The factors most often mentioned for declining to suggest ICU admission or advanced treatments such as ECMO included comorbidities, expected brief survival period, advanced age, cancer, and obesity. These elements illustrate the intricate clinical judgments physicians needed to make when weighing the potential benefits of intensive measures against the likelihood of a worthwhile recovery.

Moreover, approximately 46% of anaesthesiology physicians make care-limiting decisions with a multidisciplinary team. This figure is considerably higher than the 11.4% recorded in standard departments and demonstrates a stronger emphasis on teamwork within anaesthesiology.

The COVID-19 pandemic had a substantial effect on interactions among healthcare staff, patients, and relatives, particularly when discussing care restrictions imposed due to resource shortages [29, 30]. Survey results reveal wide differences in how physicians conveyed these restrictions. Almost half of the physicians notified patients of the restricted level of care they would receive, yet a substantial share (25.4%) withheld this information, even though patients could comprehend it. In addition, only 26.6% of physicians shared details with patients under exceptional circumstances, indicating the need for more uniform communication standards.

Discussions with patients' families or close contacts occurred somewhat more frequently, as two-thirds of physicians shared information about care limitations. Even so, 18.7% of physicians did this only in exceptional cases, and 14.7% elected not to contact the family at all, frequently viewing it as unsuitable. These inconsistencies in communication methods raise concerns about the openness and inclusiveness of decision-making during the pandemic. It is evident that improvements are needed, and the moment to enhance communication standards has arrived.

The pronounced absence of patient and family participation in vital decisions, such as withholding artificial lung ventilation or ICU transfers, points to a major communication shortfall [29, 30]. Leaving out the voices of those directly impacted by these choices may foster perceptions of paternalistic practices in medicine and weaken trust between healthcare teams and patients. This reality demands swift steps to close the existing communication divide [29, 30].

The pandemic brought about deep shifts in how healthcare workers interact with patients and families, mainly because of the limitations imposed by the global emergency, which sharply reduced face-to-face contact. These barriers made it harder to convey intricate medical details and heightened worry and apprehension among both patients and medical staff [29, 30]. Tackling these communication obstacles is essential for elevating patient care and enabling healthcare professionals to reach ethical, well-informed decisions in times of crisis.

Even though patient self-determination is strongly promoted in end-of-life care decisions, the pandemic exposed significant shortcomings in its application. Numerous decisions about the suitability of care were made without genuine input from patients or their families, especially when resources were scarce. This limited engagement underscores the immediate need to upgrade communication methods in healthcare and emphasizes the criticality of this matter.

The swift uptake of digital tools during the pandemic added further complications to collaborative decision-making. The missing elements of non-digital interaction have obstructed meaningful conversation. Although technology enabled contact from a distance, it often fell short of conveying the subtlety and compassion that characterize in-person exchanges, which are especially important in end-of-life care and other delicate medical contexts. This situation highlights the importance of adopting a thoughtful strategy toward digital communication in healthcare.

Support for professionals and societal debate

Established protocols and standard care practices serve as essential resources for delivering the professional backing that health workers require. This backing provides reassurance and strengthens confidence during the decision-making process. Nevertheless, the COVID-19 pandemic exposed wide-ranging global health and ethical issues, reintroducing the possibility of mass fatalities into public awareness and questioning societal attitudes toward death.

By comparison, in the Czech Republic, guidance on handling the pandemic and allocating resources was introduced without extensive discussion among professionals or the wider public [31]. This absence of dialogue minimized the problem of resource shortages, leaving certain physicians feeling that the official recommendations lacked adequate and clear justification. The burden of making initial ethical choices in emergencies fell heavily on doctors in regional hospitals, underscoring the importance of creating a more open, collective decision-making approach at the national level to ensure clarity and support for everyone involved.

On the other hand, global guidelines stress that inclusive societal discussions can strengthen all participants and produce procedures that enjoy broader respect and greater transparency [32]. For example, open discussion of resource allocation can lead to agreement on equitable distribution, while dialogue on public health measures can yield a more comprehensive and successful plan. Such discussions would engage and commit all interested parties to the process, thereby ensuring that the ethical and professional support available to healthcare providers is solid and clearly conveyed.

In upcoming situations, it would be advantageous to prepare framework guidelines for care-related decisions quickly, drawing input from a wide range of relevant parties (including healthcare providers, government bodies, public health specialists, international bodies, community representatives, private industry, ethical and legal authorities, academic and research organisations, media and communication professionals, civil society and public representatives, policymakers and politicians, as well as economic and financial specialists) [33]. In addition, addressing the difficulties and concerns identified through cross-disciplinary examination and review is vital to improving readiness and handling future worldwide health emergencies, while offering reassurance and a sense of preparedness [34-36].

Strengthening the role of civil society and local communities, alongside open and responsible leadership, will be key to building inclusive approaches to health emergencies [34-36]. By implementing these measures, communities can enhance their resilience and promote fairness in the face of future pandemics [34-36]. These suggestions might serve as the basis for more detailed instructions tailored to specific scenarios, thereby

ensuring that healthcare providers receive strong ethical and professional support.

Conclusion

In conclusion, the present study describes the obstacles encountered by hospital physicians during the COVID-19 pandemic. It stresses the value of ethical consultations and clear communication in healthcare, especially in emergencies. It lays the groundwork for a deeper examination of the problems, interrelationships, and potential enhancements to decision-making ahead of future crises, while presenting an optimistic vision for the field. The research emphasizes the importance of maintaining ongoing ethical sensitivity among all physicians, regardless of their training background, years of practice, or organizational position. Moreover, the study demonstrates the need for an extensive societal conversation that brings together the public, interested parties, and decision-makers to ensure responses to future healthcare emergencies are well-informed, ethically robust, and consistent with society's principles and requirements.

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Ethics Statement: The study conformed to the provisions of the Declaration of Helsinki. The research project was approved by the Ethics Committee of the Czech Medical Chamber. Only physicians were included in the research, not patients or family members. All participants (physicians) provided informed consent to participate in the study.

References

1. WHO Official COVID-19 info. https://covid19.who.int/
2. McGuire AL, Aulisio MP, Davis FD, Erwin C, Harter TD, Jagsi R, et al. Ethical challenges arising in the COVID-19 pandemic: an overview from the Association of Bioethics Program Directors (ABPD) Task Force. Am J Bioeth. 2020;20(7):15–27. doi:10.1080/15265161.2020.1764138
3. Emanuel EJ, Persad G, Upshur R, Thome B, Parker M, Glickman A, et al. Fair allocation of scarce medical resources in the time of COVID-19. Mass Med Soc. 2020;382:2049–55. doi:10.1056/NEJMsb2005114
4. Marckmann G, Neitzke G, Schildmann J, Michalsen A, Dutzmann J, Hartog C, et al. Decisions on the allocation of intensive care resources in the context of the COVID-19 pandemic. Med Klin Intensivmed Notfmed. 2020;115(3):115–22. doi:10.1007/s00063-020-00709-9
5. White DB, Lo B. A Framework for Rationing Ventilators and Critical Care Beds during the COVID-19 pandemic. JAMA. 2020;27:E1–2. doi:10.1001/jama.2020.5046
6. Oliveira HC, Sauthier M, Silva MMD, Crespo MDCA, Seixas APR, Campos JF, et al. Do-not-resuscitate order in COVID-19 times: bioethics and professional ethics. Rev Gaúcha Enferm. 2021;42(spe):e20200172. doi:10.1590/1983-1447.2021.20200172
7. White FJ. The prioritization of life-saving resources in a pandemic Surge Crisis. Issues Law Med. 2020;35(2):99–116.
8. Giannini A. Who gets the last bed? Ethics criteria for scarce resource allocation in the era of COVID-19. Minerva Anestesiol. 2021;87:267–71. doi:10.23736/S2724-4407.20.15345-8
9. Dao B, Savulescu J, Suen JY, Fraser JF, Wilkinson DJC. Ethical factors determining ECMO allocation during the COVID-19 pandemic. BMC Med Ethics. 2021;22(1):70. doi:10.1186/s12910-021-00638-y
10. Dufner A. Withdrawal of intensive care during times of severe scarcity: triage during a pandemic only upon arrival or with the inclusion of patients who are already under treatment? Bioethics. 2020;35:118–24. doi:10.1111/bioe.12837
11. Hasselkusaand A, Moxley AD. Communicating with patients and families during COVID-19. Perspectives. 2021;6(4):924–32. doi:10.1044/2021
12. Bernild C, Missel M, Berg S. COVID-19: lessons learned about communication between Family members and Healthcare professionals - a qualitative study on how close family members of patients

hospitalized in Intensive Care Unit with COVID-19 experienced communication and collaboration with Healthcare professionals. Inquiry. 2021;58:469580211060005. doi:10.1177/00469580211060005

13. Rose L, Yu L, Casey J, Cook A, Metaxa V, Pattison N, et al. Communication and Virtual Visiting for Families of Patients in Intensive Care during the COVID-19 pandemic: a UK National Survey. Ann Am Thorac Soc. 2021;18(10):1685–92. doi:10.1513/AnnalsATS.202012-1500OC
14. Dittborn M, Cave E, Archard D. Clinical ethics support services during the COVID-19 pandemic in the UK: a cross-sectional survey. J Med Ethics. 2022;48:695–701. doi:10.1136/medethics-2021-107818
15. Moodley K, Kabanda SM, Kleinsmidt A, Obasa AE. COVID-19 underscores the important role of clinical Ethics committees in Africa. BMC Med Ethics. 2021;22(1):131. doi:10.1186/s12910-021-00696-2
16. Černá Pařízková R, Šustek P, Prudil L, Těšinová J, Šolc M, Cvachovec K, et al. Stanovisko výboru ČSARIM 13/2020: Rozhodování u pacientů v intenzivní péči v situaci nedostatku vzácných zdrojů. MZCR 13/2020. https://www.mzcr.cz/wp-content/uploads/2021/01/Stanovisko_CSARIM_CSIM_SIL_CPFS_Omezene_zdroje_casopis_AIM_2020.pdf
17. Conradi E, Biller-Andorno N, Boos M, Sommer C, Wiesemann C. Gender in medical ethics: re-examining the conceptual basis of empirical research. Med Health Care Philos. 2003;6(1):51–8. doi:10.1023/A:1022514821765
18. Bilwani S, Anjum G. Gender differences in making Moral decisions: the Ethics of Care Perspective in Pakistan. Eth Soc Wel. 2022;16(1):73–89. doi:10.1080/17496535.2021.1937264
19. Zielina M, Škoda J, Ivanová K, Dostál D, Juríčková L, Anthony Procházka D, Straka B, Doležal A. Exploring moral competence regression: a narrative approach in medical ethics education for medical students. BMC Med Ethics. 2024;25(1):73. doi:10.1186/s12910-024-01073-5
20. Hong DZ, Goh JL, Ong ZY, Ting JJQ, Wong MK, Wu J, et al. Postgraduate ethics training programs: a systematic scoping review. BMC Med Educ. 2021;21:338. doi:10.1186/s12909-021-02644-5
21. Roberts LW, Warner TD, Hammond KA, Geppert CM, Heinrich T. Becoming a good doctor: perceived need for ethics training focused on practical and professional development topics. Acad Psychiatry. 2005;29(3):301–9. doi:10.1176/appi.ap.29.3.301
22. Saxena A, Bouvier PA, Shamsi-Gooshki E, Köhler J, Schwartz LJ. WHO guidance on ethics in outbreaks and the COVID-19 pandemic: a critical appraisal. J Med Ethics. 2021;47:367–73. doi:10.1136/medethics-2020-106959
23. Santana-López BN, Santana-Padilla YG, Bernat-Adell MD, González-Martín JM, Santana-Cabrera L. The Need for Psychological Support of Health Workers during the COVID-19 pandemic and the influence on their work. Int J Environm Res Pub Health. 2022;19(15):8970. doi:10.3390/ijerph19158970
24. Dunham AM, Rieder TN, Humbyrd CJ. A bioethical perspective for navigating Moral dilemmas amidst the COVID-19 pandemic. J Am Acad Orthop Surg. 2020;28(11):471–6. doi:10.5435/JAAOS-D-20-00371
25. Vittone S, Sotomayor CR. Moral distress entangled: patients and providers in the COVID-19 era. HEC Forum. 2021;33(4):415–23. doi:10.1007/s10730-021-09450-y
26. Cheung ATM, Parent B. Mistrust and inconsistency during COVID-19: considerations for resource allocation guidelines that prioritise healthcare workers. J Med Ethics. 2021;47(2):73–7. doi:10.1136/medethics-2020-106801
27. Street AE, Street DJ, Flynn GM. Who gets the last Bed? A discrete-choice experiment Examining General Population preferences for Intensive Care Bed Prioritization in a pandemic. Med Decis Mak. 2021;41(4):408–18. doi:10.1177/0272989X21996615
28. Ismail H, Marshall VD, Patel M, Tariq M, Mohammad RA. The impact of the COVID-19 pandemic on medical conditions and medication adherence in people with chronic diseases. J Am Pharm Assoc. 2022;62(3):834–9. doi:10.1016/j.japh.2021.11.013
29. Schlögl M, Singler K, Martinez-Velilla N, Jan S, Bischoff-Ferrari HA, Roller-Wirnsberger RE, et al. Communication during the COVID-19 pandemic: evaluation study on self-perceived competences and views of health care professionals. Eur Geriatr Med. 2021;12(6):1181–90. doi:10.1007/s41999-021-00532-1

30. Díaz-Agea JL, Orcajada-Muñoz I, Leal-Costa C, Adánez-Martínez MG, De Souza Oliveira AC, Rojo-Rojo A. How did the pandemic affect communication in clinical settings? A qualitative study with critical and Emergency Care nurses. Healthcare. 2022;10(2):373. doi:10.3390/healthcare10020373
31. Galvagni L, Nicoletti M. Facing a pandemic outbreak: global health, ethics, and technology issues. Theor Med Bioeth. 2024;45(3):159–65. doi:10.1007/s11017-024-09668-0
32. Ho A, Dascalu I. Relational solidarity and COVID-19: an ethical approach to disrupt the global health disparity pathway. Glob Bioeth. 2021;32(1):34–50. doi:10.1080/11287462.2021.1898090
33. Aguilera B, Donya RS, Vélez CM, Kapiriri L, Abelson J, Nouvet E, Danis M, Goold S, Williams I, Noorulhuda M. Stakeholder participation in the COVID-19 pandemic preparedness and response plans: a synthesis of findings from 70 countries. Health Policy. 2024;142:105013.
34. https://www.who.int/publications/i/item/WHO-2019-nCoV-Policy_brief-pandemic_preparedness-2022.1
35. https://www.niaid.nih.gov/grants-contracts/peruse-pandemic-preparedness-plan
36. https://www.ecdc.europa.eu/en/seasonal-influenza/preparedness/why-pandemic-preparedness