



Ethical dilemmas, perceived risk, and motivation among nurses during the COVID-19 pandemic

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Abstract

Background: Positioned at the frontlines of the battle against COVID-19 disease, nurses are at increased risk of contraction, yet as they feel obligated to provide care, they also experience ethical pressure.

Research question and objectives: The study examined how Israeli nurses respond to ethical dilemmas and tension during the COVID-19 outbreak, and to what extent this is associated with their perceived risk and motivation to provide care?

Research design: The study implemented a descriptive correlative study using a 53-section online questionnaire, including 4 open-ended questions.

Participants and research context: The questionnaire was complete by 231 registered and intern nurses after being posted on nurses' Facebook and WhatsApp groups, and through snowball sampling.

Ethical considerations: The research was pre-approved by the ethics committee of the Faculty of Social Welfare and Health Sciences at the University of Haifa, Israel.

Findings: In all, 68.8% of the respondents had received some form of training about COVID-19. Respondents positioned themselves at perceived high risk levels for contracting the virus. About one-third feared going to work because of potential contraction and due to feeling inadequately protected. While 40.9% were scared to care for COVID-19 patients, 74.7% did not believe they have the right to refuse to treat certain patients. When asked about defining an age limit for providing patients with scarce resources (such as ventilation machines) in cases of insufficient supplies, respondents stated that the maximum age in such scenarios should be 84 (standard deviation (SD) = 19) – yet most respondents (81.4%) believed that every patient has the right to receive optimal treatment, regardless of their age and medical background.

Discussion: Correlating with their strong commitment to care, nurses did not convey intention to leave the profession despite their stress, perceived risk, and feelings of insufficient support and protection at work. The nurses did not hold a utilitarian approach to resource allocation, thereby acknowledging the value of all people and their entitlement to care, regardless of optimal outcomes.

Conclusion: While experiencing significant personal risk and emotional burden, nurses conveyed strong dedication to providing care, and did not regret working in the nursing profession, yet they did seek a supportive climate for their needs and ethical concerns.

Keywords

Allocation of scarce medical resources, COVID-19, duty of care, ethical dilemmas, motivation, risk

Introduction

The significant spread of Covid-19 around the globe has affected people of all nations, races, and socio-economic groups. Moreover, the severity of the disease's symptoms have dramatically increased and challenged the duties of healthcare providers for protecting the health of their co-citizens. The rapid and serious outbreak of this pandemic has resulted in urgent responses for detecting and diagnosing patients, treating and managing their care, and combating further contamination.¹ Positioned at the front lines of the fight against the disease, healthcare providers are at increased risk of infection for themselves, their families, and other people with whom they come into contact. As a result, they may choose or be forced to maintain isolation from their families during this period.

Caring in times of pandemics is extremely stressful.² Nursing care especially is highly demanding, with nurses experiencing a significant increase in the volume and intensity of their work while having to also accommodate new protocols and constant changes in the management of the disease.³ This source of anxiety is exacerbated as more healthcare professionals are required to undergo quarantine during the outbreak.⁴ The combination of high job demands and low resources—including personal protective equipment for healthcare providers, such as respirators, gloves, face shields, gowns, and hand sanitizers⁵—creates significant stress and may affect nurses' health and wellbeing, as they are required to provide immediate care under life-threatening conditions, sometimes even having to make difficult rationing decisions.^{6,7} In addition, as the patient's family cannot be present at the patient's bedside, nurses stand in for family members and facilitate remote access and communications between patients and their loved ones.⁸

A recent study in China that included more than 800 nurses and nursing college students during the pandemic unsurprisingly reveals that the closer the COVID-19 is to the participants, the greater the anxiety and anger that it causes.⁹ Research on previous pandemics also shows that the conflict between the duty of care, especially in times of crisis and high perceived risk of infection combined with low agreement with infection control measures, create more ethical problems and dilemmas for nurses.

The literature suggests that the decision on whether providers will stay and carry out their duties in times of emergency depends on their own risk assessment and value system (personal and professional).¹⁰ In addition, nurses may refuse to care for patients with contagious diseases for fear of stigmatization.¹¹ The most complex dilemma concerns a mind-set of *patient avoidance* and a preference for caring for non-infectious patients.¹²

Background

As nurses are expected and feel obligated to provide care despite health risks for themselves and their loved ones, they feel subject to a greater degree of ethical pressure.¹³ This ethical tension is exacerbated the more patients with COVID-19 symptoms are admitted into hospitals and the more nurses are aware of the lack of professional resources, thereby feeling a strong responsibility not only toward the patients but to society at large.¹⁴ In Israel, as in many other Western countries, a shortage of nurses—becoming even more severe when some become sick or are in quarantine—serves as another considerable factor that weighs in to nurses' unwillingness to come to work.

In general, nurses who report more ethical stress show a lower level of job satisfaction and a greater frequency of intent to leave their current position.¹⁵ They may experience compassion fatigue, characterized by the depleted ability to cope with their environment and resulting in reduced levels of resilience and burnout.¹⁶ The prevalence of these factors, which are related to nurses' intention to leave the profession,¹⁷ may be even higher in times of pandemics, when risk levels are increased, as are the severity and rapid spreading of the disease combined with insufficient information about its source and cures.²

Nurses' ethical conduct is shaped by their personal background, training, experience, and regulations. The Code of Ethics of The National Association of Nurses in Israel does not relate to emergency or pandemic situations. However, it does acknowledge nurses' right to self-care, whereby nurses are encouraged to protect their own health, in time of routines or crisis, while maintaining a balance between their work and their personal life.

Likewise, the Emergency Nursing Scope and Standards of Practice provides ethical guidelines for emergency nursing,¹⁸ stipulating that a nurse's primary commitment is to the patient (section 2.1). However, they also state that "... the emergency nurse has a duty to apply self-awareness and self-care when promoting self-health and safety" (section 5.2). As emergency care settings may be stressful, the code states that nurses have a personal and professional obligation to learn and develop strategies for promoting resiliency (*Ibid.*). It further emphasizes that a work-life balance is paramount for achieving personal growth, thereby requiring structures and processes for enabling such a balance, such as a healthy work environment (section 5.6). These include not only shift preferences and time off, but also means for enhancing personal satisfaction, receiving compensation to ensure financial security, reading to develop a creative mind, and ensuring leisure and recreational activities. By highlighting nurses' higher standards, the code refers to nurses' virtues. These include humanity, compassion, benevolence, and overall moral rectitude (section 6.1). Deriving from the concept of social justice, the code stipulates that emergency nurses must prioritize caregiving based on acuity, not on social status, age, and so on, and that in times of disasters, they must render triage decision making based on the utilitarian principle of doing the greatest good for the greatest number of people (section 9.3). It may therefore be inferred that promoting resilience among nurses, especially in times of pandemic, disasters, or other emergencies, may improve conditions in which nurses' virtues and ethical commitments can be promoted.

Given the grave ethical tension and dilemmas posed by the COVID-19 outbreak and its related caregiving provision, combined with their impact on nurses' job satisfaction and work motivation, exploring and analyzing these tensions and dilemmas is important. It is also valuable to evaluate the relationships between these factors and nurses' motivation to work during the pandemic, their risk perceptions, and their overall value system in light of urgency and potential scarcity of life-saving medical resources. As such, this study focuses on care provided by nurses during the COVID-19 pandemic and the effect of this pandemic on care-providing ethical and motivational aspects.

Research question and objectives

The research examines the following question: How do Israeli nurses respond to ethical tension and dilemmas during the COVID-19 outbreak, and to what extent are their responses related to their perception of risk and their motivation to provide care?

The research has three main purposes: (1) to evaluate nurses' perceived risk and motivation to work during the COVID-19 outbreak, (2) to explore nurses' attitudes toward various ethical dilemmas that are relevant to the pandemic, and (3) to examine motivational factors for working during the pandemic and their implications on the nursing career.

Research design

This descriptive and correlative study utilized a 53-question questionnaire. The first 19 items examined socio-demographic and work-related characteristics, the existence of policy guidelines on COVID-19 in their units, and having close contact with a person who is at high risk for contracting COVID-19. Next, respondents were asked to rate the extent to which they agree with 18 statements using a five-point Likert-type scale (1 = totally disagree; 5 = totally agree). The items were related to the nurses' sense of confidence in caring for sick or carrier patients, ethical dilemmas pertaining to care provision during COVID-19, their compliance with

government guidelines on COVID-19, and the implications of care provision during the pandemic on their career decisions. Examples include “I feel competent and confident in my caring for patients that I am responsible for” and “If I have a choice between caring for a COVID-19 diagnosed patient or another patient, I would prefer to care for the latter”; “Caring for COVID-19 patients or carriers will lead to away friends or family keeping away from me”; and “I am considering changing positions within the nursing profession as a result of the COVID-19 outbreak.” *Third*, respondents were asked to rate the degree in which they perceive that they are at risk for contracting COVID-19: risk of contracting the COVID-19 infection on a 10-point scale (1 = no risk at all; 10 = very high risk). Next, the participants were given *four open-ended questions*, relating to the description of their work during the pandemic, their fears and concerns, and tasks and assignments that they have been asked to perform but that they feel are inappropriate. The fifth part of the questionnaire included *nine items* and a five-point scale (1 = very true; 5 = not at all true). The respondents were asked to refer to the extent to which they agree with various statements that represent ethical dilemmas during COVID-19, especially relating to the rationing of scarce life-saving medical resources based on age, medical background, and personal responsibility, but also statements that refer to nurses’ right to refuse to provide care, ethical climates, and ethical decision-making. Examples of these items include “Nurses have the right to refuse treating certain patients during the COVID-19 outbreak” and “Elderly sick patients should be disconnected from respirators in order to provide younger patients with respirators in cases of a shortage.”

Finally, respondents were asked to rank a range of motivational factors for working in the health system during the pandemic and to rank their importance. These factors included accumulated knowledge and skills, support from colleagues, obligation to treat patients, the need to earn a living, and the status of the nursing profession.

Most of the 53 questions were developed for this research; 18 questions contained items that were taken from an existing validated questionnaire.¹² Based on the participants’ responses, six indices regarding nurses’ attitudes were calculated, including ethics, social influence, guidelines evaluation, confidence in COVID-19 patients, choice of profession, and criteria for prioritizing patients.

1. *Ethics*: Based on nine items (no. 45, 46, 47, 48, 49, 31, 33, and 43). Cronbach’s $\alpha = 0.69$.
2. *Social influence*: Based on two items (no. 28 and 29). Cronbach’s $\alpha = 0.52$.
3. *Guidelines evaluation*: Based on two items (no. 22, 23). Cronbach’s $\alpha = 0.84$.
4. *Confidence in existing treatments for COVID-19 patients*: Based on five items (no. 20, 24, 25, 26, and 27). Cronbach’s $\alpha = 0.76$.
5. *Profession choice*: Based on six items (nos. 32, 34, 35, 36, 37, and 44). Cronbach’s $\alpha = 0.76$.
6. *Criteria for prioritizing patients*: Based on five items (45, 46, 47, 48, 49). Cronbach’s $\alpha = 0.71$.

Data analysis

Various tests were used for conducting inferential statistics, including T-tests for independent samples, F-test for analysis of variance, χ^2 tests for independence, Pearson correlations, and Spearman correlations.

Participants and research context

Between 13 April 2020 and 9 May 2020—and following a pilot testing of 15 nurses aimed at developing the questionnaire and receiving feedback on the items—a link to an online questionnaire was posted on 18 Facebook groups and 1 WhatsApp group for nurses, and through snowball sampling aimed at nurses and healthcare professionals in the nursing community across Israel. In some of these groups, the link was posted twice. The study’s timeframe began at the peak of the COVID-19 outbreak in Israel and ended at a

time when COVID-19 wards in major hospitals were starting to close down following a significant decrease in the number of newly diagnosed patients.

Ethical considerations

This research program was pre-approved by the ethics committee of the Faculty of Social Welfare and Health Sciences at the University of Haifa, Israel (approval # 146/20, dated 10 April 2020). The research participants received a link to the survey with the following message: “We will appreciate your participation in a study carried out at the University of Haifa, which focuses on the work on practicing nurses and nursing interns during the COVID-19 outbreak. To complete a short and anonymous survey please press the following link.” After the potential participants clicked the link they reviewed an explanation sheet detailing about the research purposes and significance, the researcher’s background, the expected structure of the survey, its ethical approval, funding issues, and protection of privacy and anonymity of participants. Participants were asked to give their consent to completing the survey by clicking Yes or No, following a specific acknowledgement that they can stop participation at any time. All information obtained from participants was coded and kept in the researcher’s computer and no other use of the information has been made.

Findings

Respondents’ characteristics

Out of 430 questionnaires submitted online, the 231 that had been completed correctly and in full were analyzed for this research. The research sample was predominantly female (82.5%), Jewish (74.4%), and Israeli born (71.4%). The mean age was 41 (standard deviation (SD) = 12). The majority of the respondents were married (60.7%) and secular (54%), with an average of 17 years of education (SD = 3) and 14 years’ work experience (SD = 12). Most respondents were registered nurses (86.3%) and from various fields of specializations and worked in several departments, mostly in government (42.7%) or public (31.8%) hospitals. The participants’ main characteristics are described in Table 1.

COVID-19 knowledge and experience First, 82.7% of respondents stated that the unit in which they work had clear policy guidelines for treating patients with COVID-19. Only 68.8% of respondents reported they had received some form of training about COVID-19. Half these respondents received the training through a specialized program. The remainder were informed about COVID-19 through formal guidelines and procedures (15.6%), software tutorials (14.6%), lectures (12.2%), and updates (7.6%).

In addition, 54.5% of respondents reported that they had worked with patients with COVID-19 or other contagious diseases. The majority of these respondents (77.1%), referred mostly to treating a patient who was suspected to have COVID-19. Other respondents mentioned that they had previously cared for a patient on a ventilator.

Perceived risk

On average, when asked how they perceive the risk of themselves contracting COVID-19, the respondents positioned themselves at a relatively high level of risk: mean (M) = 6.2; standard deviation (SD) = 2.5 on a scale of 1 (no risk at all) to 10 (very high risk). Moreover, 32.7% ranked the risk of their contracting the virus as very high (810). Nurses who work in intensive care, Internal Medicine or Corona Departments rank their risk perception higher than other nurses ($p = 0.02$). Moreover, the higher their education, the higher their perceived level of risk ($r = .21$; $p = 0.00$). Registered nurses ranked their perceived risk higher than intern nurses ($p = 0.05$). However, no other significant correlations were found between their perceived risk and

Table 1. Participant characteristics.

Gender	82.5% female; 17.5% male.
Age (years)	41 (average); 22–65 (range); 12 (SD).
Country of birth	71.4% (Israel); 22.5% (USSR previously); 6.1% (other countries).
Marital status	60.7% married; 21.5% single; 11.2% divorced; 4.2% in partnership; 1.4% separated; 1% widow.
Nationality	74.4% Jewish; 24.2% Arabs; 1.4% Circassian.
Religiosity	54% Secular; 28.4% Traditional; 13.5% Religious; 4.1% Ultra Orthodox Jews.
Education level (years)	17 (average); 12–30 (range); 3 (SD).
Work experience (Years)	14 (average); 0–50 (range); 12 (SD).
Specialization	55.2% Varied specializations (obesity, psychiatry, risk management, geriatric medicine, oncology, etc.); 31% intensive care (adults, respiratory, children, neonatal); 8.6% emergency medicine; 5.2% public health (infection prevention, epidemiology, etc.)
Type of healthcare organization	42.7% Governmental hospitals; 31.8% public hospitals; 12.7% sickness funds; 7.7% private hospitals; 2.3% family health clinics; 1.8% homes for the elderly; 1% army clinics
Department type	38.4% Varied departments; 14.9% internal medicine; 10.9% intensive care (adults, respiratory, children, neonatal); 9.5% emergency medicine; 6.8% delivery department; 6.8% community clinic; 5.4% chirurgic departments; 4.1% children's departments; 3.2% operating rooms
Department size (number of people)	28 (average); 1–100 (range); 18 (SD)
Geographical area	49.1% Northern area; 24.6% Central area; 10.5% Southern area; 9.6% Hasharon area; 6.2% Jerusalem area
Professional status	86.3% licensed nurses; 23.7% Interns (4th year nursing students)
Ranking of participating nurses	37.5% Staff nurse; 20.8% unit nurse manager; 38.7% clinical specialist/nurse; 3% staff/nurse educator

the respondents' gender, age, marital status, nationality, level of religiousness, work experience, field of specialization, type or size of unit, proximity to at-risk people, or training in COVID-19.

Almost half of the respondents (47.6%) reported that they were not in close contact with someone who is at high risk for COVID-19; 4.3% stated that their only contact with high-risk people was at their workplace (patients or colleagues), and only 1.7% stated that they have high-risk people in their families (such as their spouse or children). However, 43.3% of respondents stated that they were in contact with high-risk people in both to their families and their workplace.

On a scale of 1 (totally disagree) to 5 (totally agree), on average, respondents reported that they personally comply with the guidelines issued by the Ministry of Health guidelines ($M = 4.4$) for preventing the further spreading of the COVID-19—guidelines that they regard as correct ($M = 3.7$) and coherent ($M = 3.4$); however, they felt less confident ($M = 3.1$) in how the pandemic was being managed by the government in general ($SD = 1.2$). In addition, positive correlations were found between perceiving the guidelines as correct and coherent and compliance with these guidelines ($r = 0.3$; $p < 0.00$) and vice versa ($p = 0.00$). Finally, nurses who received training on COVID-19 evaluated these guidelines more positively than those who did not ($p = 0.00$). No such correlation was found regarding nurses who had experience working with COVID-19 or other highly contagious diseases.

Moreover, 28.8% of respondents highly agreed (rated 4 or 5) with the statement that they fear coming to work because of their risk of contracting the virus and 36.4% highly disagreed with the statement that they feel protected in the work environment. The higher the nurses' perceived level of risk, the more they fear coming to work ($r = 0.19$; $p = 0.01$). Moreover, the more educated the nurses, the less they fear coming to work because of potential risk ($r = -0.14$; $p = 0.04$). Finally, nurses who work in units which have clear

COVID-19 policy guidelines, are less afraid to come to work than nurses who work in units that do not ($p = 0.04$). Finally, nurses in private hospitals fear coming to work more than nurses in other work environments ($p = 0.04$).

Nursing during the COVID-19 era

On a scale of 1 (totally disagree) to 5 (totally agree), respondents agreed ($M = 3.8$) with the statement that they feel competent and confident in caring for their patients ($SD = 1.1$) while highly disagreeing ($M = 1$) with the statement that they are scared to care for all patients in the health system during the COVID-19 outbreak. However, a large percentage of respondents (40.9%) greatly agreed with the statement that they are scared to care for sick or carrier patients. This is consistent with an additional finding, whereby 41.1% of respondents highly agreed (rated 4 or 5) that caring for sick or carrier COVID-19 patients entails a significant emotional burden. Moreover, nurses who worked in Intensive Care, Internal Medicine, or Corona Departments were less scared about caring for sick or carrier patients compared to nurses from other departments ($p = 0.01$). Likewise, nurses who had previous work experience with COVID-19 were less fearful to care for such patients compared to those who did not ($p = 0.02$).

Moreover, an even higher percentage (46.8%) of respondents highly agreed (4–5) that caring for sick or carrier COVID-19 patients will keep friends or family members away from them, while few (5.9%) highly agreed that treating these patients would harm their reputation. No specific characteristics were found to be in correlation with this view.

A significant correlation was found between the existence of policy guidelines for treating COVID-19 patients in the respondents' workplace ($p = 0.02$) or having received specific training on the subject ($p = 0.00$) and respondent's overall sense of competence in treating patients during the pandemic. Interestingly, no such correlation was observed with regards to respondents' previous work experience in COVID-19 or other contagious diseases.

As to ethical dilemmas associated with nurses' obligations to provide care during the COVID-19 outbreak, on a 1 (totally disagree) to 5 (totally agree) scale, respondents agreed ($M = 2.6$), yet with high variance ($SD = 1.5$), with the statement that if they have a choice between caring for a diagnosed or suspected COVID-19 patient or someone who has a different medical condition, they would prefer to care for the latter. Moreover, 32.9% of respondents highly agreed (4–5) with this statement. Support for this finding can also be found in a different statement, whereby 37% of respondents highly agreed (4–5) with the statement that they will only assist a sick or carrier COVID-19 patient if they are required to do so.

Ethical dilemmas during the pandemic

This research also examined nurses' responses to various ethical dilemmas that reflect values such as professional autonomy, beneficence, non-maleficence, equality, and justice. The dilemmas are described in Figure 1. First, it is evident from the data that most nurses (74.7%) do not believe they have the right to refuse treating certain patients during the COVID-19 outbreak. In all, 63.7% agreed that neither a registered nurse nor an intern have the right to refuse to treat patients who may place them at risk. A significant negative correlation was found between respondent's sense of competency to treat the patients that they are responsible for and their belief that they have the right to refuse treatment to certain patients because of the COVID-19 outbreak ($r = -0.21$; $p = 0.00$): The more the nurses felt confident and competent to treat these patients, the less they felt that they had a right to refuse treatment of selective patients. Alternatively, a significant positive correlation was found between respondent's fear of treating sick or carrier patients and their belief that they have a right to refuse treatment of certain patients because of the COVID-19 outbreak ($r = 0.19$; $p = 0.00$): the more the nurses feared treating these patients, the more they believed that they have

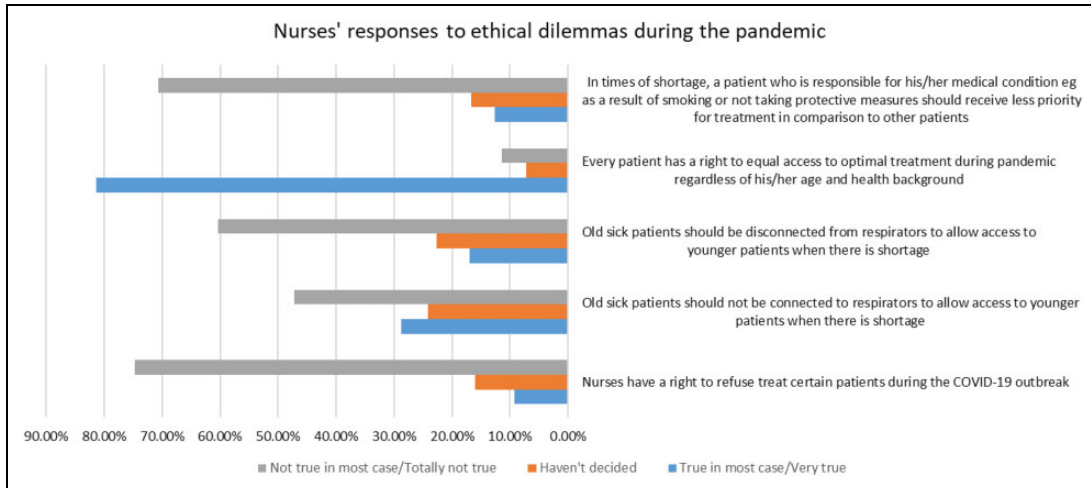


Figure 1. Nurses' responses to ethical dilemmas during the pandemic.

a right to refuse to provide treatment. No significant correlations were found between respondents' sense of being protected from the virus at their workplace or their perceived risk and their view on the having the right to refuse treatment.

Second, on a scale of 1 (very true) to 5 (not at all true), respondents were asked to rate the degree in which their medical team is capable of making ethical decisions including with regard to rationing limited medical resources in difficult situations. Almost half the respondents (49.5%) replied that in such a scenario, their team is highly capable (1–2). About a quarter (24.7%) replied that their team is incapable in most cases (4–5), and the remainder were undecided.

As to nurses' views on rationing resources, the average maximum age of patients who would receive care—if such a decision had to be made—was 84 (SD = 19). While 69.4% of respondents referred to an 80–99 age range, 8% refused to give an age limit (rating either zero or 120). Responses for this question can be seen in Figure 2.

Furthermore, with regard to possible cases of resource shortages, while most respondents (47.2%) did not think that older patients should be connected to respirators, a large majority (60.3%) did not think that older

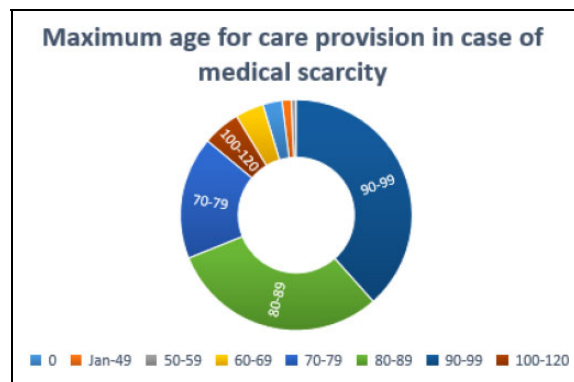


Figure 2. Maximum age for care provision in case of medical scarcity.

patients should be disconnected them from such machines once connected. A large majority (81.4%) believed that all patients have the right to equal optimal treatment during pandemics, regardless of their age and medical background. Similarly, most respondents (70.7%) did not think that patients who are responsible for their medical condition, such as smokers or people who did take protective measures, should receive less priority for treatment compared to other patients in times of shortage.

Overall, no significant correlations were found between respondents' gender, age, nationality, educational level, work experience, type of unit and its geographical location, proximity to at-risk persons, and attitudes regarding various ethical scenarios. However, the level of respondents' religiousness was found to correlate with their responses, but only in two scenarios: The more religious the respondents, the less likely they are to agree that older patients should be disconnected from ventilators for the sake of younger patients ($r = -0.24$; $p = 0.00$), and the more likely they are to agree that every patient has a right to equal and optimal treatment during pandemics, regardless of age and medical background ($r = 0.21$; $p = 0.01$).

Nurses who agreed with the statements that they would prefer to care for non-COVID-19 patients ($r = 0.18$; $p = 0.01$), that they would only care for COVID-19 patients if asked to do so ($r = 0.19$; $p = 0.01$), and that they have the right to refuse treating certain patients during the COVID-19 outbreak ($r = 0.16$; $p = 0.03$), were more likely to agree to stopping or avoiding offering treatment through scarce medical resources based on age or personal responsibility than other nurses. These respondents also tended to refer to younger age levels as the maximum age for offering life-saving medical treatment in times of shortage ($r = -0.25$, $p = 0.000$; $r = -0.23$, $p = 0.00$; and $r = -0.27$, $p = 0.00$, respectively).

Finally, respondents' attitudes regarding ethical scenarios were all inter-correlated, except for respondents' beliefs that their medical team was qualified to make ethical decisions with regard to preferring patients in difficult situations and that patients should be prioritized based on personal responsibility ($r = 0.08$; $p = 0.26$)—or with regard to patients' maximum age for receiving life-saving resources in times of shortage and scarcity ($r = -0.13$; $p = 0.12$).

Implications of the COVID-19 on the nursing profession

On a 1 (totally disagree) to 5 (totally agree) scale, respondents expressed minimal agreement with statements that the COVID-19 increases their consideration of attrition ($M = 1.7$), prevents them from embarking on the nursing profession ($M = 1.3$) (when applicable), and increases their desire to move to another position within the nursing profession journey ($M = 1.4$). Similarly, they greatly disagreed with the statement that the COVID-19 outbreak has made them regret choosing the nursing profession ($M = 1.3$).

No significant correlation was found between respondent's gender, age, marital status, nationality, educational level, type or size of workplace, and their attitudes toward their working in the health system during the pandemic and its effect on the nursing career. Furthermore, the fact that respondents had received some training on COVID-19, had previous relevant experience, or had worked in units that had policy guidelines pertaining to the pandemic did not influence these attitudes.

Nonetheless, two factors were found to contribute to such attitudes: Experience and risk perception. More experienced nurses were happier with their decision to work in the health system during the COVID-19 pandemic compared to less experienced nurses ($p = 0.02$). Moreover, the higher the nurses' perceived personal risk, the less happy they were about their decision to work in the health system at this time and the more concerned they were with the pandemic's impact on their career ($r = 0.22$; $p = 0.00$).

Organizational aspects and motivation to provide care

Almost half the respondents (49.5%) believed that on a scale of 1 (very true) to 5 (not at all true), it is highly untrue (4–5) that their healthcare organization (i.e. employer) respects their work decisions during the

COVID-19, for example, regarding their workload, which department to work in, their desired shifts, and so on. In all, 32% believed that in most cases, this statement was highly true (1–2), while the remaining respondents were undecided. The only factor that influenced these beliefs were nurses' level of experience, whereby nurses with greater work experience felt that their healthcare organization respects their work decisions compared to nurses with less nursing experience ($p = 0.01$).

The three most frequently mentioned motivational factors for working in the health system during the COVID-19 outbreak were respondents' accumulated knowledge and skills (72%), obligation to treat patients (70%), and need to make a living (67%). However, the most important motivational factors included respondents' obligation to treat patients (38%), followed by their obligation to provide help to the Israeli society (22%), and the need to make a living (16%). The least important factors included social pressure (24%), followed by respondents' accumulated knowledge and skills (13%), and their need to make a living (12%).

Interestingly, nurses, for whom the motivational factor regarding their obligation to treat patients was the strongest, were less likely to fear that caring for a sick or carrier patient will keep their friends and family away from them (53%) compared to those (71%) who referred to other motivational factors as most important ($p = 0.02$).

Discussion

This study reflects the conflict between nurses' commitment to patients and society and their right to self-care during the COVID-19 pandemic. In light of their increased risk of contracting COVID-19 infection, and as with any pandemic, nurses have to decide how much care they can provide others with while taking care of themselves at the same.^{11,12,19} It is evident from this research that most nurses do not believe they have the right to refuse to treat certain patients during the COVID-19 outbreak. In correlation with their strong commitment to care for patients during this time, the participants did not agree with ideas such as not embarking on the nursing profession after graduation (i.e. nursing interns), changing to a different position within the nursing profession, or increased burnout, as a result of the stress associated with their providing healthcare during the pandemic. While provision of care at this time is highly stressful and is accompanied with personal risk, they do not regret choosing nursing as their profession. They seem highly motivated and are mostly influenced by their obligation to treat patients, and, interestingly, also by their obligation to provide the Israeli society with help. These findings are in line with previous research on the willingness of Israeli nurses' to work in times of emergencies.^{20,21}

The American Nurses Association acknowledges nurses' right not to volunteer and respond during pandemics in the following circumstances: If they belong to a vulnerable group; if they feel physically unsafe due to lack of personal protective equipment or inadequate testing, if there is inadequate support for nurses' personal and family needs, or if they are concerned about their professional, ethical, and legal protection when providing care during the pandemic.²² In this research, the participants did not refer to such exceptions and were strongly dedicated to providing care.

This strong dedication to providing care is insightful, given that the respondents perceived their risk for contracting the virus as relatively high. In addition, about one-third of respondents feared going to work because of the potential risk, and more than one-third did not feel protected in their work environment. Likewise, almost half the respondents worried about their caring for sick or carrier COVID-19 patients, regarding this as an action which bears a significant emotional burden. Moreover, about one-third would choose another patient to care for rather than sick or carrier COVID-19 patients if they could, and would choose to assist such patients only if required to do so. From this aspect, many of the findings of this research correspond with previous findings regarding healthcare providers' sources of anxiety and key concerns during the COVID-19.²³

The nurses' degree of their perceived risk for contracting COVID-19 is probably incongruent with reality, perhaps as a result of the conflicting messages issued by the Ministry of Health as well as real-time updates about the disease, its progress, the availability of protective measures, and their effectiveness. It seems that at the onset of the COVID-19 outbreak, people (including healthcare providers) exaggerated its associated risk; yet as they became more familiar with the disease, their emotional burden decreased.¹⁰

One could argue that with the exception (perhaps) of military personnel, no person is obliged to respond to life-threatening emergencies. While codes of ethics and professional oaths may guide healthcare providers in addressing these conflicting situations, they do not necessarily require them to respond. Furthermore, some professional codes, for example, *the American Academy of Emergency Medicine*, state that nurses (among other medical personnel) have the

right to be removed from the schedule of work requiring direct contact with patients potentially infected with COVID-19 for issues of personal health, such as being on immunosuppressive therapy or other similar concerns, without the risk of termination of work.²⁴

Indeed, it is their individual behavior and character, as well as their social and organizational surroundings, that may affect nurses' willingness to respond to such emergencies and the content of such a response.^{10,25}

Another conflict discussed in this research relates to the question of how to distribute scarce life-saving medical resources given the extensive and imminent need during the COVID-19 pandemic. Studies conducted outside Israel suggest that nurses working with physicians during the COVID-19 outbreak had to make care-provision decisions which have ethical implications.²⁶ In Israel, thankfully, this is still a theoretical question as the health system has not yet had to face this dilemma in practice—although guidelines on this issue have recently been published.²⁷

This research shows that Israeli nurses tend to postulate a relatively high maximum age (84), if at all, for care provision in case of a shortage in life-saving treatment. Most believe that it is inappropriate not to connect elderly patients to respirators, and even more so to disconnect them from such machines in times of scarcity. A large majority also believes that every patient has the right to receiving equal and optimal treatment during a pandemic, regardless of their age, medical background, or personal responsibility.

The ethical principle for guide rationing is *distributive justice*. According to this principle, medical resources should be distributed fairly based on needs. In case of pandemics, ethicists and policy makers usually argue for a utilitarian framework of allocation, according to which prioritization is based on best outcomes. Specifically, priority should be given to maximize the number of patients who can survive treatment with a reasonable life expectancy. Such an approach assumes that the value of maximizing benefits reflects the importance of responsible stewardship of resources.⁷ However, nurses in this research did not hold such an approach, thereby acknowledging the worth of every human being and their entitlement to healthcare, regardless of its best outcomes. The duty to provide care and abstain from disconnecting life-saving treatments to save others appear was highly perceived among all nurses, yet especially so among those with a high level of religiousness. This view corresponds with the general idea stated in recent national guidelines rejecting chronological age as the sole criterion for triage during COVID-19 in Israel, equally upholding the principle of non-maleficence for frail, very old, or demented people, and so on.²⁷ This derives from a Talmudic principle holding that one person's blood is not redder than that of a fellow human being,²⁸ and supports a more general ethos, also reflected in legal norms expected from nurses in Israel, whereby the ultimate goal of the nursing profession is providing help and avoiding harm.²⁹

It is also evident that nurses who prefer caring for other patients than COVID-19 patients, caring for COVID-19 patients only if asked to do so, or maintaining their right to refuse treating certain patients during the outbreak, are more likely to agree to stop or avoid offering treatment through scarce medical resources

based on the patient's age or personal responsibility, and tend to refer to a lower maximum age for care provision compared to other nurses. That being said, few respondents were included in this category of beliefs.

In this research, a significant portion of nurses attest to the fact that they do not feel sufficiently supported and protected in their work environments. Similarly, a survey of 1215 nurses and social workers, conducted in four states in the United States, found that one out of four respondents did not perceive that ethical conflicts were openly addressed; about 40% of them reported having no organizational resources or processes to help them with their ethical concerns. Moreover, two-thirds of the sample reported that ethical issues exist about which they cannot do anything. More than one-third reported being overwhelmed and fatigued when dealing with ethical problems and making ethical decisions. Respondents who reported higher ethical stress showed lower level of job satisfaction and higher intent to leave their current position.¹⁵ Indeed, research suggests that managing ethical concerns can best be achieved through a positive ethical climate and institutional support.^{30,31} Our research also highlights the importance of policy and clinical guidelines issued within medical units. Existing guidelines on COVID-19 are associated with greater appreciation of the guidelines, greater overall sense of nurses' competency to treat patients during the pandemic, and less fear of coming to work and caring for patients. In addition, given nurses' motivational factors explored, this research also refers to the significance of the value of organizational respect for the professional practice and belief in the institutional—and, in the Israeli context, also the national—mission, rather than salary and monetary benefits.¹⁵

As nurses often experience extensive stress and ethical dilemmas, they may feel frustration, dissatisfaction, physical illness, and so on. They may be more frequently involved in interpersonal conflicts and may contemplate leaving the profession.¹⁵ In addition to supplying appropriate and available personal protective equipment for nurses, to keep them safe and reduce their anxiety and risk perception,³² and monitoring nurses' mental issues and implementing medical interventions as early as possible,³³ it is argued that supporting medical teams in times of pandemics is akin to providing post-traumatic stress disorder treatment for soldiers operating in the frontlines for long periods.¹⁰ Some coping strategies for coping with the psychological outcomes of caring for COVID-19 patients, as demonstrated in the literature, include receiving support from colleagues, relatives friends and other sectors of society; working and living with a state of appreciation and gratitude; and strengthening one's ability to self-reflect, especially on one's will, potential, and courage.³⁴ This research also emphasizes that it is of great importance that nurses be heard, protected from infection, well-prepared for providing care, supported, and cared for—so that even while they still convey a high dedication to providing care, this could be weighed well with other values and considerations that are of special concern.

Limitations

This research has several limitations. First, the research sample may be small compared to other surveys conducted through social media. However, the study focuses on a specific research population of nurses who have been working in the health system during the COVID-19 outbreak, especially in hospitals. We also deliberately only analyzed data from complete surveys and excluded questionnaires which had not been answered in full. Furthermore, the survey completion was not mandatory, thereby providing respondents with the opportunity to not respond if they did not want to do so—as most of the questions presented concern personal situations—rather than receiving fictitious replies that do not correspond with to respondents' true attitudes. In any event, the survey's internal consistency and reliability were calculated and measured to minimize, revise, or delete certain items from analysis, if and when necessary. Finally, as participation was voluntary, there is a possibility of selection bias. However, given the variety in the

respondents' characteristics, geographical regions, experience, specializations, and types of medical units, as well as the large number of social groups in which the survey was posted—the results can be generalized.

Conclusion

This research provides evidence as to nurses' conflicting values while caring for patients during the COVID-19. While experiencing significant personal risk and emotional burden, the nurses presented a strong dedication to continuing to care for sick and carrier patients, did not regret working in the nursing profession, yet did seek a supportive climate for their needs and ethical concerns. Given that the COVID-19 pandemic may last for months to come, and that an additional and perhaps even more serious wave of the outbreak may lie ahead—especially in countries that have returned to some type of routine, including Israel—health managers and policy makers should address these findings for a more successful management of the outbreak.


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References

1. Shah A and Aacharya RP. Combating covid-19 pandemic in Nepal: ethical challenges in an outbreak. *J Nepal Med Assoc* 2020; 58(224): 276–279.
2. Graham Y, Fox A, Scott J, et al. How a pandemic affects the mental health of the nursing workforce. *Nurs Times* 2020; 116(8): 20–22.
3. Lam SK, Kwong EW, Hung MS, et al. A qualitative descriptive study of the contextual factors influencing the practice of emergency nurses in managing emerging infectious diseases. *Int J Qual Stud Health Well-being* 2019; 14(1): 1626179.
4. Gómez-Durán EL, Martín-Fumadó C and Forero CG. Psychological impact of quarantine on healthcare workers. *Occup Environ Med* 2020; 77(10): 666–674.
5. Ranney ML, Griffeth V and Jha AK. Critical supply shortages—the need for ventilators and personal protective equipment during the Covid-19 pandemic. *New Engl J Med* 2020; 382(18): e41.
6. Mo Y, Deng L, Zhang L, et al. Work stress among Chinese nurses to support Wuhan in fighting against COVID-19 epidemic. *J Nurs Manag* 2020; 28: 1002–1009.
7. Emanuel EJ, Persad G, Upshur R, et al. Fair allocation of scarce medical resources in the time of Covid-19. *New Engl J Med* 2020; 382: 2049–2055.
8. Maben J and Bridges J. Covid-19: supporting nurses' psychological and mental health. *J Clin Nurs* 2020; 29(15–16): 2742–2750.
9. Huang L, ming xu F and Liu HR. Emotional responses and coping strategies of nurses and nursing college students during COVID-19 outbreak. *MedRxiv*. Epub ahead of print 8 March 2020. DOI: 10.1101/2020.03.05.20031898.
10. Iserson KV. Healthcare ethics during a pandemic. *West J Emerg Med* 2020; 21: 477–483.
11. Kollie ES, Winslow BJ, Pothier P, et al. Deciding to work during the Ebola outbreak: the voices and experiences of nurses and midwives in Liberia. *Int J Africa Nurs Sci* 2017; 7: 75–81.

12. Choi J-S and Kim J-S. Factors influencing nurses' ethical problems during the outbreak of MERS-Cov. *Nurs Ethic* 2018; 25(3): 335–345.
13. Sperling D. Training nurses to better deal with ethical dilemmas in disasters. *Disas Med Pub Heal Prep*. Epub ahead of print 12 May. DOI: 10.1017/dmp.2020.144.
14. Lake ET. How effective response to COVID-19 relies on nursing research. *Res Nurs Health* 2020; 43(3): 213–214.
15. Ulrich C, O'Donnell P, Taylor C, et al. Ethical climate, ethics stress, and the job satisfaction of nurses and social workers in the United States. *Soc Sci Med* 2007; 65(8): 1708–1719.
16. Cocker F and Joss N. Compassion fatigue among healthcare, emergency and community service workers: a systematic review. *International Journal of Environmental Research and Public Health* 2016; 13(6): 618.
17. Jourdain G and Chênevert D. Job demands–resources, burnout and intention to leave the nursing profession: a questionnaire survey. *Int J Nurs Stud* 2010; 47(6): 709–722.
18. ENA. Nursing code of ethics: provisions and interpretive statements for emergency nurses. *J Emerg Nurs* 2017; 43: 497–503.
19. Lee JY, Hong JH and Park EY. Beyond the fear: nurses' experiences caring for patients with Middle East respiratory syndrome: a phenomenological study. *J Clin Nurs* 2020; 29(17–18): 3349–3362.
20. Kagan I, Itzhaki M and Melnikov S. Patriotism, organizational commitment and nurses' intention to report for work in emergencies. *Int Nurs Rev* 2017; 64(4): 468–475.
21. Melnikov S, Itzhaki M and Kagan I. Israeli nurses' intention to report for work in an emergency or disaster. *Int J Nurs Scholar* 2014; 46: 134–142.
22. ANA. Nurses, ethics and the response to the COVID-19 pandemic, https://www.nursingworld.org/~4981cc/globalassets/covid19/nurses-ethics-and-the-response-to-the-covid-19-pandemic_pdf-1.pdf (accessed 17 June 2020).
23. Shanafelt T, Ripp J and Trockel M. Understanding and addressing sources of anxiety among health care professionals during the COVID-19 pandemic. *J Am Med Assoc* 2020; 323: 2133–2134.
24. AAEM. AAEM position statement on protections for emergency medicine physicians during COVID-19, <https://www.aaem.org/resources/statements/position/protections-for-eps-during-covid-19> (accessed 17 June 2020).
25. Ganz FD, Margalith I, Benbenishty J, et al. A conflict of values: nurses' willingness to work under threatening conditions. *J Nurs Scholarsh* 2019; 51(3): 281–288.
26. Bagnasco A, Zanini M, Hayter M, et al. COVID 19 —a message from Italy to the global nursing community. *J Adv Nurs* 2020; 76: 2212–2214.
27. Clarfield AM, Dwolatzky T, Brill S, et al. Israel ad hoc COVID 19 committee. *J Am Geriatr Soc* 2020; 68(7): 1370–1375.
28. Solnica A, Barski L and Jotkowitz A. Allocation of scarce resources during the COVID-19 pandemic: a Jewish ethical perspective. *J Med Ethics* 2020; 46(7): 444–446
29. Asman O and Tabak N. Professional standards expected of nurses from an Israeli legal perspective. *Med Law* 2017; 36: 53–72.
30. Ali NAE, El-Shanawany SM and Ghazala AMA. Ethico-legal aspects and ethical climate: managing safe patient care and medical errors in nursing work. *Clinical Ethics* 2020; 15: 132–140.
31. Koskenvuori J, Numminen O and Suhonen R. Ethical climate in nursing environment: a scoping review. *Nurs Ethics* 2019; 26(2): 327–345.
32. Resnick B. What have we learned about nursing from the Coronavirus pandemic? *J Am Med Dir Assoc* 2020; 21(7): 997–998.
33. Kackin O, Ciydem E, Aci OS, et al. Experiences and psychosocial problems of nurses caring for patients diagnosed with COVID-19 in Turkey: a qualitative study. *Int J Soc Psych*. Epub ahead of print 16 July 2020. DOI: 10.1177/0020764020942788.
34. Sun N, Wei L, Shi S, et al. A qualitative study on the psychological experience of caregivers of COVID-19 patients. *Am J Infect Control* 2020; 48: 592–598.