

Moral Intelligence in Prehospital Emergency Health Services: Traditional Review

Hastane Öncesi Acil Sağlık Hizmetlerinde Ahlaki Zekâ: Geleneksel Derleme

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ABSTRACT Prehospital emergency health services is one of the important links of the emergency health system chain that are critical for life saving and disability prevention goals. Due to its unpredictable environment-patient profile and its compelling nature to health professionals, fast and accurate decisions should be taken in favor of patients who demand this service in prehospital health services. Ethical problems are frequently encountered in the prehospital fields due to unusual situations in service delivery. Health professionals in this field need to have high ethical sensitivity in order to quickly identify and solve the ethical problems that they encounter. Ethical sensitivity, understood as an individual's ability to identify and attach importance to moral problems when they arise, is often recognized as a key competence and a prerequisite for ethical behavior in professional life. The usage of moral intelligence, which is a significant skill in the realization of ethical sensitivity, is of great importance. Moral intelligence, recently recognized concept in the field of health, consists of several interrelated parameters. It is known that the individuals with high moral intelligence levels exhibit more ethical behaviors. In this study, it is aimed to emphasize the significance of the concept of moral intelligence for the health professionals in the delivery of prehospital emergency health services. It is thought that the operationalization of moral intelligence parameters by health professionals in prehospital emergency health services will positively affect patient-employee interaction and service quality.

ÖZET Acil sağlık sistemi zincirinin halkalarından birini oluşturan hastane öncesi acil sağlık hizmetleri, yaşam kurtarma ve sakatlığı önleme hedefleri bakımından tartışılmaz bir öneme sahiptir. Öngörülemeyen ortam-hasta profiline sahip olması ve sağlık profesyonellerini zorlayıcı yapısı nedeniyle hastane öncesi sağlık hizmetlerinde bu hizmeti talep edenlerin lehine hızlı ve doğru kararlar alınması gerekmektedir. Hizmet sunumunda olağan dışı durumlar yaşanması nedeniyle hastane öncesi alanda etik sorunlarla sık karşılaşılmaktadır. Alandaki profesyonellerin, karşılaştıkları etik sorunları hızla tanımlayarak çözüme ulaştırabilmeleri için yüksek etik duyarlılığa sahip olmaları gerekir. Bireyin ahlaki sorunlar ortaya çıktığı zaman bunları belirleme ve önem atfetme yeteneği olarak anlaşılan etik duyarlılık, genellikle profesyonel yaşamda kilit bir yeterlilik ve etik davranışın bir ön koşulu olarak kabul edilmektedir. Etik duyarlılığın yaşama geçirilmesinde önemli bir beceri olan ahlaki zekânın kullanılması büyük bir öneme sahiptir. Sağlık alanında yeni farkına varılmış bir kavram olan ahlaki zekâ birbiriyle bağlantılı çeşitli parametrelerden oluşmaktadır. Ahlaki zekâ düzeyleri yüksek olan bireylerin daha fazla etik davranışlar sergilediği bilinmektedir. Bu çalışmada, ahlaki zekâ kavramının hastane öncesi acil sağlık hizmetlerinin sunumunda sağlık profesyonelleri için önemini vurgulanması amaçlanmıştır. Hastane öncesi acil sağlık hizmetlerinde ahlaki zekâ parametrelerinin sağlık profesyonelleri tarafından işler hâle getirilmesinin hasta-çalışan etkileşimini ve hizmet kalitesini olumlu yönde etkileyeceği düşünülmektedir.

Keywords: Moral intelligence; prehospital emergency health; ethical sensitivity; professional ethics

Anahtar Kelimeler: Ahlaki zekâ; hastane öncesi acil sağlık; etik duyarlılık; meslek etiği

Rapid developments in science and technology led to increase importance of ethics in health care delivery. Health professionals, who provide increasingly complex services, should have the ability to make ethical decisions for the solution of problems,

as they may encounter different ethical problems in their casual work. Ethics is defined as a set of moral principles or values that regulate the behaviors of an individual or a profession. The ethics, which require a review of all actions, decisions taken, and reasons

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provided, enlightens individuals on how to conduct this review process.¹ In order to complete their work correctly and appropriately, the health professionals need to understand the basic principles that guide their actions and act according to these principles. The general health services are developing rapidly and emergency health services are the part of these development. The ever-increasing population, developments in technology, and the rapid rise in industry cause an increase in the incidence of diseases, accidents and injuries. These increase the demands of individuals for emergency health services. Due to its nature, ethical problems are frequently encountered in the prehospital area. Therefore, the employees in this field are expected to be aware of ethical problems and make quick decisions for their solution. In this context, the prehospital emergency health care workers are required to act in accordance with the ethical codes of their profession in service delivery. In addition, it should be emphasized that the concept of moral intelligence, which is pointed out in the theory of multiple intelligences and recently realized in the field of health, is applied in the prehospital area for better service delivery. In this study, it is aimed to emphasize the significance of the concept of moral intelligence for the health professionals in the delivery of prehospital emergency health services.

EMERGENCY HEALTH SERVICES

Emergency Health Services is defined in the health legislation as *“In case of emergency disease and injury, it includes all health services provided by specially trained teams with the support of medical tools and equipment, at the scene, during transport, in health institutions or organizations”*.² The primary aim in emergency health services is to prevent deaths and to prevent worsening by reducing disability with an urgent and effective intervention in sudden, life-threatening situations. Nowadays, the situations that endanger human life such as emergency diseases, accidents and disasters are frequently encountered. In this aspect, it is agreed how emergency health services are important in terms of increasing the chance of survival of the patient/injured, preventing possible complications and facilitating rehabilitation.³ Considering the development of emergency health ser-

vices in Türkiye, it is seen that the first ambulance service was established in three metropolitan cities (İstanbul, Ankara, İzmir) in 1986 with the name of *077 Hızır Emergency Service*. John R. Fowler, a member of the American College of Emergency Physicians, started working at Dokuz Eylül University in Türkiye in 1989. *Hızır Emergency* continued to serve with the name of 112 between 1991 and 1992. First and emergency technician (paramedic) education was started in 1993 and emergency medicine residency education was started in 1994. The first Emergency Medicine Specialization certificates were achieved in 1998. Emergency Medicine residency training and emergency service standards were published in 2002, firstly. The first associate professorship certificates in the field of emergency medicine were achieved in 2003. Employment of paramedic in ambulances affiliated to the Ministry of Health started in 2004. Emergency medicine residency training was started in 2006 at Training and Research Hospitals.⁴ In addition, the emergency health system in Türkiye is divided into prehospital emergency health system and hospital emergency health system.³

PREHOSPITAL EMERGENCY HEALTH SERVICES

It is noteworthy that there exist some nomenclatures for the prehospital emergency health services in Türkiye, such as prehospital field or ambulance medicine. Also, it is accepted as prehospital emergency medicine in the international community.⁵ Starting with emergency aid and rescue and following with transportation, accident services and rehabilitation, any disorder that may occur in emergency health services may adversely affect others. Therefore, prehospital emergency health services that are the first ring of the chain are critical significance.³ Prehospital emergency health services activated by the phone number 112 in Türkiye are carried out by ambulances directed from Command and Control Centers (CCC). Depending on the type and location of the emergency, transportation is provided by land, air and sea type ambulances, which contain all the necessary equipment for emergency medical assistance. Health staffs including the primary physicians, paramedics, emergency medical technicians and

nurses work in ambulances.⁶ As a result of the emergency calls evaluated in the CCC, the team at the nearest emergency aid station appropriate for the emergency case is reached via radio or telephone and directed.⁷ The delivery of prehospital emergency health services is provided via emergency aid stations.⁸

ETHICS IN PREHOSPITAL HEALTH SERVICES

The field of prehospital emergency health services includes various problems due to the unexpected situations, the unpredictable and uncertain patient/injured profile. Also, some problems associated with the delivery of services in a non-medical field. Various problems may arise during service delivery. These problems require making decisions that also concern the field of ethics. The problems that arise in the delivery of prehospital emergency health services can be classified as four sections: 1-Ethical issues related to the stage before the start of emergency medical care, e.g., fair distribution of emergency health care, 2-Ethical issues at the stage of emergency medical aid, like triage, 3-Ethical issues related to end-of-life and end-of-life care such as cardiopulmonary resuscitation (CPR), 4-Issues related to social perception of ambulance service delivery, e.g., abuse of ambulance.⁹ Service delivery in the prehospital area is provided by health professionals such as physicians, paramedics, emergency medical technicians and nurses. Due to its dangerous and unpredictable nature, professionals in this field often face with ethical dilemmas. They have also difficulties in making the right decision in favor of the situation that they are in.¹⁰ Ethical conflict is inevitable since health professionals and patients have different sight and value in some cases. Likewise, the urgency of the situation may prevent healthcare professionals from thinking about ethical behavior.¹¹ Recently, ethical dilemmas, especially initiating/ending CPR, and making a death decision, are frequently encountered in cardiac arrest cases frequently encountered in the prehospital area.¹² Instant decisions responsibility, limited resources and the unpredictable nature of the field make the triage process difficult in the prehospital area and these cause ethical dilemmas. Prehospital employees work

in an environment where extraordinary situations (accident, disaster, etc.) are experienced and people who need help and their relatives are present. They make decisions under these conditions and continue the health services. In addition to the negative conditions they are in, the limited medical resources cause emergency health employees to experience another ethical dilemma.¹³ Compared to other healthcare professionals, decision-making conditions in the field of medical care are different for those working in the prehospital field. The evaluation and decision-making process become difficult for those working in this field due to some conditions specific to the prehospital area, such as medical interventions at the scene, the expectation of the patient/injured, non-case audience, and intervention with a small team. It is seen that the principle of respect for patient autonomy is often ignored in order to benefit the patient in the prehospital area. Health professionals in this field try to make decisions based on their own beliefs, values and conscience in solving the ethical problems that they encounter during medical interventions. However, sometimes making decisions on the basis of belief, value and conscience may conflict with the values of the patient or the organization. In this case, it would be more correct to make a decision in a way that preserves the most value by adopting a consistent and ethical approach.¹¹ It is important to be able to make ethical decisions in the provision of prehospital emergency health services and solving the above-mentioned problems. Hence, besides the various directives and ethical codes that determine the duties, authorities and responsibilities, professionalism also contributes. These include prioritizing the patient, honesty, professional competence, justice, humility and compassion, avoidance of prejudice and safe driving, as well as personal factors such as communication skills, empathy, problem solving ability, knowledge and experience.⁵ In addition, the presence of secondary factors such as the opinions and wishes of others also affect the ethical behavior of prehospital service providers.

ETHICAL DILEMMA

People struggle to find the truth by being caught between various situations that they can define as good

or bad in their lifetime. Ethical problems that leave individuals in a dilemma are complex structures. Thus, it does not have a simple and distinct solution that can be described as a definite right or wrong. This ambiguity forces the individual to make a choice depending on the moral evaluation.¹⁴ Ethical dilemmas arise in the presence of two or more options, as it is difficult to decide which one is better and existing problem cannot be solved with the available options.¹⁵ Although, different concepts are used to describe ethically problematic situations, the concept of ethical problem refers to a situation where values, norms or principles are threatened or in conflict and it is necessary to decide how to act. Thus, ethical issues involve conflicts about the right thing to do based on an ethical conflict, that is, a conflict between legitimate values or norms.¹⁶ Healthcare professionals often encounter ethical dilemmas in the delivery of healthcare services. Universal ethical concepts used in the solution of ethical dilemmas constitute the focus of service of healthcare professionals.¹⁷

ETHICAL DECISION-MAKING

Decision-making refers to making a definite judgment by thinking about an issue or problem. Decision-making is a process that requires thinking from a multidimensional perspective, taking into account different possibilities, considering the situations of those who may be affected by the decision, and taking into account group views.¹⁸ Berggren et al. defines the ethical decision-making as the logical process that includes deciding on the morally right action with a systematic way of the thinking in a situation where there are conflicting options.¹⁹ Ethical decision-making is crucial in terms of recognizing the ethical problems arising from the provision of the health services and displaying a professional approach to these problems. Ethical problems may arise due to the patient-health employee relationship, medical procedures or individual behavior during health care. All of the issues related to the life and integrity of the individual may cause ethical problems and therefore require ethical decision-making.²⁰ Personal and professional experiences, education, opinions, values and cultural characteristics are among the factors that affect the ethical decision-making process.

Professional principles should be at the forefront instead of individual values in the ethical decision-making process.²¹ In the ethical decision-making process: ethical problems should be identified, detailed information based on ethical facts and ethical rules that guide moral decisions should be obtained.²² In addition, alternatives should be evaluated and an alternative that is compatible with ethical rules should be selected.²³ Ethical codes, critical perspective, clinical experiences, academic contributions, the ability of the individual to prediction on the results and the courage to take action are effective for acting ethically during decisions. Ethical decision-making is related to the development of ethical sensitivity.²⁴ Ethical sensitivity includes recognizing the ethical problem, understanding the vulnerable situation of the patient, and having an idea about the ethical consequences of the decisions to be taken for the person.²⁵ Ethical sensitivity is crucial in terms of revealing and solving the ethical problem or justifying the action, as well as preventing ethical problems. Acting in accordance with ethical principles during decision-making in the face of ethical problems or ethical dilemmas depends on the development of ethical sensitivity.²⁶ With the purpose of a person with moral competence to have the capacity to distinguish the wrong directly in this regard, the person must have developed his/her self-awareness and understood what his/her worldview is. The first mental activity required to use and develop intelligence skills by gaining awareness is moral intelligence. Moral intelligence is the guide for distinguishing-decision making and post-action decisions.²⁷

THE CONCEPT OF INTELLIGENCE AND THE THEORY OF MULTIPLE INTELLIGENCES

Studies on intelligence, which have different definitions and explanations during its history, increase towards the end of the 19th century. Francis Galton laid the foundations of the idea of intelligence in novel sense. Alfred Binet developed the first sample of the modern intelligence test in 1905. Conceptually, intelligence expresses the ability to learn and think. It is generally used in the application and definition of learning abilities and facts.²⁸ In terms of meaning, in-

telligence varies between individual disciplines and societies. Therefore, there is no consensus on the definition of intelligence. The individual variability of the definitions of intelligence shows that intelligence is the subject of study which is not only in the field of psychology but also in all disciplines that concern one's intellectual activities. In addition, the semantic and value-based variation of intelligence from society to society is one of the most important factors that affecting the formation of intelligence theories. The definitional differences in intelligence are based on the years when scientific studies on this subject just started. Spearman, who was the first to use the General Theory of Intelligence, defined intelligence as a mental energy that affects all mental functions of the individual, while David Wechsler defined it as a general capacity that affects individuals' ability to act purposefully, think logically, and communicate effectively with the environment.²⁹ Gardner's Multiple Intelligence Theory claims that intelligence does not consist of a single structure and that people have at least seven different intelligences which are independent of each other and can be developed over time. Multiple intelligence theory, which is a model suggesting that intelligence consists of various special dimensions, has the potential to change the thoughts about human competences. The seven main intelligences in Multiple Intelligence Theory are listed as; 1. Verbal/Linguistic Intelligence, 2. Logical/Mathematical Intelligence, 3. Musical/Rhythmic Intelligence, 4. Spatial/Visual Intelligence, 5. Bodily/Kinesthetic Intelligence, 6. Interpersonal Intelligence, 7. Inner Intelligence. In addition to these seven different intelligences found in the Theory of Multiple Intelligences, Goleman proposed the existence of an intelligence called Emotional Intelligence, which appears to be a combination of Gardner's Interpersonal and Intrinsic Intelligences. In parallel with these initial thoughts, Gardner put forward two new candidate intelligences described as Naturalistic Intelligence and Existential Intelligence. In his book "*Frames of Mind: The Theory of Multiple Intelligences*", Gardner emphasizes that one of the main goals in the new century is not only to combine our different intelligences but also use them properly. Gardner emphasizes the necessity of thinking and

questioning how intelligence and morality can be brought together to create a world. Thus, different people can live together peacefully. Such an approach leads to discussion of the existence of a different intelligence, which is described as moral intelligence.³⁰

MORAL INTELLIGENCE AND MORAL INTELLIGENCE PARAMETERS

The concept of moral intelligence is defined by Borba as the capacity to distinguish right from wrong, while widely known concept refers to as managerial intelligence and accepted within it. It was defined by Lennick and Kiel as the mental capacity to determine how universally accepted principles should be applied to our aims, values and actions.³¹ Moral intelligence is a reference to living a more virtuous life and making conscious choices that prioritize universal human values. It is a concept that emphasizes the individual's own internal dynamics as motivating attitudes and behaviors that prioritize morality in whatever happens. Since moral intelligence is a concept that contains two important values such as intelligence and morality that can be associated with individuals' emotions, beliefs and social aspects, it is thought that it can be used as a tool to combat negative actions such as addiction, crime, inequality, etc. Moral intelligence also refers to internal discipline in virtuous choices and sheds light on the effects of morality on human psychology.³² Considering to Borba, it is necessary to have seven essential virtues or parameters for moral intelligence capacity. These parameters are empathy, conscience, self-control, respect, kindness, tolerance, and justice.³³ Lennick and Kiel have also added integrity, responsibility, compassion and forgiveness into the parameters of moral intelligence in their study entitled as "*Moral Intelligence, Increasing Business Performance and Leadership Success*".³⁴ Bhagyalakshmy included the dimensions of empathy, conscience, self-control, respect, kindness, tolerance and fairness in the moral intelligence scale.³⁵ Khampa has examined moral intelligence in five dimensions listed as integrity, respect, kindness, conscience and self-control in his scale study.³⁶ Ozturk et al. have studied to raise awareness regarding moral intelligence and abilities

for healthcare professionals. They used these parameters as “equality”, “empathy”, “moral intelligence”, “justice”, “tolerance”, “self-control” and “politeness” in the 7 dimensions.³⁷

Moral Intelligence Parameters;

Empathy is the ability of sensing other people’s emotions and looking at the event from their perspective, understanding their feelings and conveying this affair to that individual.³⁸ **Conscience** is humane and moral feelings that describe how an individual should behave in situations where people are faced with things that are should and should not do. While the conscience that guides the moral decision-making process is effective and prominent in some people, it is not clearly revealed in others.³⁹ **Self-control** helps an individual rein in their impulses and thinks before they act. Thus, it will be less for the individual to make the right choices in their behavior and to make rapid choices that may pose a possible danger.³⁵ **Respect** encourages the individual to behave respectfully towards other individuals for the reason that one sees it as valuable. Peoples should treat each other carefully and measurably, in order to live together in peacefully. Therefore, respect within the light of universal ethical principles is great importance for individuals. The fact that individuals exhibit careful behavior between each other is one of the vital indicators that they do not value their common living spaces.⁴⁰ **Kindness** is defined as the practical application of etiquette. Kindness, which is a cultural reality, may show differences between societies, i.e., a specific behavior that can be accepted as polite in one culture, while it may also be considered rude in another culture. Kindness aims to make the communicating parties comfy.⁴¹ **Tolerance** is the state of being respectful to others, understanding the situation of the other person and not reacting to their realities, even if they do not agree with the opinions of others.⁴² **Justice** means the attitude of being just, etymologically. Being just means observing the right, not doing injustice, giving everyone their rights. The common point of these three terms is the concept of rights. Right means truth and honesty. In this way, justice means exhibiting righteousness, not departing from righteousness. Hence, the first commandment of jus-

tice is that everyone should do what is right in their dealings with others and not do wrong to others. The essence of this truth is to recognize the human values of all people and never treat them as tools.⁴³ It is of great consequence for people such as company managers, doctors, and psychologists to have this type of intelligence, which requires many individual and experiential skills.²⁷ Moral intelligence has a vital place as a concept that has been studied in different fields before and has just been realized in the field of health.^{27,31}

MORAL INTELLIGENCE IN PREHOSPITAL EMERGENCY HEALTH SERVICES

Prehospital emergency health services are the field where medical conditions of patients may momentarily change. This unexpected variations cause addition stress due to its nature and require urgent intervention aimed at saving life. Owing to its unique characteristics, employees at the prehospital emergency health services are likely to encounter ethical problems frequently. Various negative factors including unexpected deaths, long working periods, insufficient number of employees, unsafe working environment, the necessity of working constantly and difficulties in communicating with the patient causes specific ethical problems in health services.⁴⁴ Stressors and pressures such as turmoil at the scene, ongoing potential dangers and difficulties in accessing the patient/injured would affect the efforts of the employees to help and not harm the patient/injured by implementing the right decisions in a very short time. However, delays in the decision-making and implementation process increase life-threatening risks, and this may cause death or disability. Unless a fair approach is not performed in the interventions to more than one patient, this may result in the death of the patient. Prehospital emergency care environments are much more challenging for paramedics than the controlled environment on hospital emergency rooms. The implications for prehospital emergency medicine in all cases are unique and no any quick formulas exist for right action. It is important to recognize ethical conflicts and then take action to provide appropriate care. Professionals in this field are expected to

have sufficient ethical knowledge in order to make the best right decision in difficult situations in pre-hospital emergency health services. The more complex the ethical issue in prehospital settings, the harder it is to find a solution. Hence, it is extremely important to create protocols to address ethical challenges.⁹ Professional ethics for prehospital emergency health care workers consist of ethical principles and rules that they are obliged to comply with in their professional life. The employees should have ethical attitudes and behaviors as well as professional knowledge and skills in order to be successful in their challenging service life. While providing emergency medical aid and care, action should be taken by avoiding harm in the most beneficial way. One should be taking into account the existing risks and considering the benefit-harm balance. Except for the requirements of emergency medical care, each patient/injured should be treated equally and existing evaluation criteria should be used in prioritization decisions. Employees have an obligation to listen carefully to patients, answer their questions, and give them information about the disease in a way that they can understand. Patients should be honest in every matter and they always provide correct information.⁴⁵ Ethics in healthcare is concerned with decision making at the interpersonal level as well as involving a systematic approach to identify, analyze and resolve ethical issues that may arise in patient care and treatment. Health professionals should have sufficient cognitive capacity to identify the needs of the individuals for whom they are responsible for their care and treatment. In this perspective the professionals should to recognize patients, interpret their behavior and solve their problems. Hence, it is emphasized that emergency health care workers, for whom correct and quick decision-making is of great importance, should have high ethical sensitivity.⁴⁶ It is significant to use moral intelligence, which is a crucial skill in the implementation of ethical sensitivity. It is accepted that people with moral intelligence, who are seen as a guiding skill in making decisions about discrimination and action, evaluate their decisions in their minds prior to take their mental activities into action.²⁷ Individuals with a high level of moral intelligence also have a high level of

ethical decision-making. Ethical behaviors can be also improved by focusing on the development of moral intelligence.^{27,31} The moral intelligence level of health care employees, who are in contact with patients every day, will increase the quality of the relationship with patients. Due to the complexity of health services, a worthy communication can eliminate numerous deficiencies in the field of health. Great requirements for the concepts of equality-empathy-justice-tolerance-self-control-politeness exist for establishing good relations in the provision of health services. Moral intelligence is not only crucial between healthcare professionals and patients, but also in the relationships between healthcare professionals. Careful monitoring of moral intelligence parameters, providing clear and understandable information, will increase the confidence and participation of patients in treatment. Thus, with the patient-centered health care to be provided, the contentment rate of both the patient and the institution will increase. Also, clinical skills and health care quality will be strengthened.³¹ Since intelligence is one of the essential elements in the ethical decision-making process, it is predicted that the improvements moral intelligence and the determination of this level will be important in solving the ethical problems. In the context of pre-hospital emergency health services, making moral intelligence parameters operational by emergency health workers will provide a positive increase in health worker-patient interaction and service quality.

CONCLUSION

Prehospital emergency health services are indispensable elements of health services. The moral intelligence is a recently recognized concept in prehospital emergency health services. It is thought that providing clear and understandable information in the aspect of moral intelligence will increase the confidence and participation of patients in treatment. This will contribute also solution ethical problems that professionals face with in this field. It can be concluded that the moral intelligence can be promising tool for improving healthcare particularly in the pre-hospital emergency health services.

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

All authors contributed equally while this study preparing.

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