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RESEARCH PAPER.

MEDICAL ETHICS AND ITS PRACTICAL IMPLICATIONS IN EMERGENCY MANAGEMENT IN SELECTED TEACHING HOSPITAL SRI LANKA.

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ABSTRACT

Medical ethics, distinct from other ethical principles, is characterized by the unilateral nature of information disclosure in the client-service provider relationship. The significance of adhering to healthcare ethics cannot be overstated, as it underpins the foundation of the doctor-patient relationship. Failure to maintain these ethical standards can have severe consequences, potentially resulting in violence or abuse in extreme cases. Analytical cross-sectional study design was conducted in National Hospitals Kandy and Colombo. Events need emergency medical attention in two selected teaching Hospital Sri Lanka (NH Kandy and NHSL Colombo) were considered as study population. Patients of staff members or their relatives were excluded from the study. 176 emergency situations were observed and 85 staff members were interviewed. None probability convenient sampling technique was applied for selecting sample for the study. Investigator administered structured data extraction sheet associated with observatory check list which included questions on ethics and implication principals were used as the study instrument. Data analysis was facilitated by SPSS version 27.0. Mean age of the patients underwent emergency situation was 44.1 yrs. Least attention was paid to patients' autonomy. Assessment of the patient's decision-making capacity was paid highest attention among autonomy of the patient(n=63:35.8%). Among principals related to beneficence, medical interventions aimed at maximizing benefits for the patient were mostly attended (n=146:82.9%). Have potential risks and harms associated with medical interventions been minimized was the commonly attended risk minimization(n=136:77.3%). Majority of incidences, regardless of background, treated with the same level of care and consideration (n=162:92.1%). Staff members were mostly aware risk minimization among all ethical principles (42.9%). Staff members were least aware regarding patients' autonomy during emergency medical management (37.3%). Patient autonomy (79.2%) and justification (72.5%) are satisfactorily applied at the ETU set up. Study findings demonstrate that minimization of risks during procedures is more at the ETU, when compared to ward setup($z=8.5:p<0.001$). Relative to the other ethical principles, patient beneficence (46.2%) and avoid maleficence (47.1%) are applied more at the ward set up. Ethical principles which are applied most during emergency medical management

events include patients Autonomy and justification. Beneficence and avoid maleficence are identified as the ethical principles which are followed least. Staff members should be properly informed regarding the manner of following ethical principles during emergency medical management procedures and appropriate skills should be developed. During these training programmes priority should be given to ward staff members.

Key words: Medical ethics, Emergency, Knowledge, Awareness

INTRODUCTION

Ihe International Code of Medical Ethics emphasizes the importance of complete loyalty and the application of all medical resources to patients by physicians. While the traditional view of the physician-patient relationship as paternalistic has been widely rejected, the concept of patient autonomy poses challenges, especially when patients are unable or unwilling to make decisions about their medical care. Furthermore, maintaining patient confidentiality in the age of computerized medical records and managed care, as well as the duty to preserve life in the face of requests to hasten death, present additional complexities for physicians. As the landscape of healthcare continues to evolve, finding a balance between respecting patient autonomy and fulfilling the ethical obligations of the medical profession remains a complex and ongoing challenge.

The integration of ethical principles with medical professionalism is a constant aspect as doctors engage in the continuous care of individuals dealing with one or more health issues. Medical ethics, in contrast to other ethical principles, is distinctive due to the unilateral nature of information disclosure in the relationship between the client and the service provider. This is particularly evident when patients are in a morbid state, where information may be scarce.

The importance of adhering to health care ethics cannot be understated, as it forms the foundation of the doctor-patient relationship. Failure to uphold these ethical standards can have detrimental consequences, potentially leading to violence or abuse in extreme cases. Unfortunately, reports of such events are not limited to Sri Lanka, but are a global concern due to the negligence of medical ethics. These ethical principles, which include autonomy, justice, beneficence, and avoiding maleficence, have been developed and refined over time in response to sensitive and debatable events. The Hippocratic Oath, a cornerstone of medical ethics, is still upheld by doctors worldwide, emphasizing the timeless significance of these principles. In the aftermath of World War II, extensive discussions centered on medical ethics, particularly in the context of research, leading to the development of guidelines such as the Nuremberg code and Helsinki declaration. Today, medical ethics encompass a broad spectrum of considerations, from clinical ethics to research protocols, highlighting the vital role of ethical principles in the practice of medicine.

METHODOLOGY

Analytical cross-sectional study was conducted in National Hospitals Kandy and Colombo. Events need emergency medical attention in two selected teaching Hospital Sri Lanka (NH Kandy and NHSL Colombo). Medical emergencies occurred in admitted patients in selected teaching Hospital Sri Lanka were included and patients of staff members or their relatives were excluded from the study. 176 emergency management incidences were considered for the study. None probability convenient sampling technique was applied for selecting sample for the study. Investigator administered structured data extraction sheet associated with observatory check list which included questions on ethics and implication principals were used as the study instrument. Data collector was staying in the relevant unit until the medical emergencies has taken place. If medical emergency raised data collector was observed the happenings and recorded the necessary information in a pre-printed data collection sheet; the observatory check list. After the emergency situation settles other part other part of the questionnaire was filled. Staff members attended to medical emergencies were interviewed and questionnaire was filled according to their answers.

RESULTS

176 cases of emergency treatment in emergency treatment units and general wards were analyzed. In addition, 85 staff members were interviewed. Extracted data was entered into an excel sheet and analyzed. Response rate was 100 %.

Table 1: Application of the autonomy of the patient during emergency procedures

Statement	Yes (n)	No(%)
Has the medical team obtained informed consent from the patients	25(14.2)	151(85.8)
Documentation of the consent process and the patient's understanding	14(7.9)	162(92.1)
Assessment of the patient's decision-making capacity	63(35.8)	113(64.2)
If the patient lacks capacity, has a surrogate decision-maker been identified or appointed	42(23.8)	134(76.2)

Regarding patient autonomy, the greatest attention was given to assessing the patient's decision-making capacity. Conversely, the documentation of the consent process and the patient's understanding received the least attention. In the majority of observed instances, informed consent was not obtained from either the patients or their guardians.

Table 2: Application of the Beneficence of the patients of the patient during emergency procedures

Statement	Yes (n)	No(%)
Are medical interventions aimed at maximizing benefits for the patient	146(82.9)	30(17.1)
Have potential benefits and risks been thoroughly considered	80(45.4)	96(54.5)
Decisions made when resources are scarce	129(73.3)	47(26.7)
Is there a fair and transparent process for allocating limited resources in the emergency setting	131(74.4)	45(25.6)

Regarding patient beneficence, the majority of interventions aimed to maximize patient benefits. However, potential benefits and risks were not thoroughly considered in most situations. A fair and transparent process for allocating limited resources was observed in the majority of cases managed in the emergency setting.

Table 3: Application of the risk minimization of the patients of the patient during emergency procedures

Statement	Yes (n)	No (%)
Have potential risks and harms associated with medical interventions been minimized	136(77.3)	40(22.7)
There are contingency plans in place to manage unforeseen complications	31(17.6)	145(82.4)
There is ongoing assessment to ensure that medical interventions are not causing unnecessary harm	28(15.9)	148(84.1)
Interventions were modified if unexpected harm occurs	19(10.8)	157(89.2)

In most instances, there was no contingency plan displayed in areas where medical emergencies were managed. The majority of cases were not carefully monitored for unexpected harms. However, it was observed that potential risks and harms associated with medical interventions were minimized in most situations (Table 3).

During Majority of the incidence, it was observed that Medical resources are distributed fairly, considering factors such as need, urgency, and patient characteristics. Regardless of background, patients were treated with the same level of care and consideration(n=162). Most of the incidences were incorporated with cultural competence into clinical management related decision making (Table 4).

Table 4: Application of the ethical principals associated with avoid maleficence of the patients of the patient during emergency procedures

Statement	Yes (n)	No(%)
Medical resources are distributed fairly, considering factors such as need, urgency, and patient characteristics	126(71.6)	50(28.4)
There is a mechanism to address potential biases in resource allocation	16(9.1)	160(90.9)
Regardless of background, treated with the same level of care and consideration	162(92.1)	14(7.9)
Cultural competence incorporated into clinical management related decision-making	140(79.5)	26(20.5)

Detailed and accurate documentation of the decision-making process intervention and communications were observed during majority of the emergency management incidences. Significant majority of incidence were not associate with mechanisms for reviewing and learning from ethical challenges encountered during emergencies. There were no clear and transparent communication with patients and their families about the medical situation, treatment options, and prognosis in majority of the incidence (Table 5).

Table 5 : Application of ethical principles related to Justification of the procedures

Statement	Yes (%)	No (%)
There is a clear and transparent communication with patients and their families about the medical situation, treatment options, and prognosis	34(19.3)	142(80.7)
Are they communicating the difficult decisions and is emotional support provided	31(17.6)	145(82.4)
Detailed and accurate documentation of the decision-making process, interventions, and communications	129(73.3)	47(26.7)
There are mechanisms for reviewing and learning from ethical challenges encountered during emergencies	10(5.7)	166(94.3)

Awareness among staff members

The majority of participants did not agree with obtaining informed written consent from patients prior to the initiation of treatment (n=36, 42.3%). Conversely, most staff members supported the documentation of patient consent (n=36, 42.3%). The assessment of patients' decision-making capacity was opposed by a significant proportion of the staff (n=41, 48.2%). Additionally, the majority of participants did not endorse the involvement of surrogate decision-makers in obtaining consent on behalf of patients (n=46, 54.1%).

The proposition to assess medical interventions aimed at maximizing patient benefits was rejected by the majority of participants (n=37, 43.5%). However, most staff members emphasized the importance of thoroughly considering the benefits and risks of treatments (n=38, 44.7%). A significant portion of participants did not support a transparent decision-making process during emergency care (n=36, 42.3%). Additionally, the majority of participants did not agree with decisions made under conditions of resource scarcity (n=39, 45.8%). The majority of participants opposed making modifications in response to unexpected harm (n=40, 47.1%). In contrast, a significant number of staff members endorsed the ongoing assessment of medical interventions to address potential harm (n=40, 47.1%). The highest number of participants agreed that efforts should be made to minimize potential harms during emergency healthcare for patients (n=42, 49.4%).

The largest proportion of participants agreed that cultural competence should be incorporated into clinical management decision-making (n=35, 41.2%). However, the majority did not agree with the statement that all individuals, regardless of background, should be treated with the same level of care and consideration (n=39, 45.8%). Most participants concurred that there should be a mechanism to address potential biases in resource allocation (n=37, 43.6%). According to the staff members involved in the study, medical resources were distributed fairly (n=35, 41.2%). The majority of participants supported the establishment of a process to review the application of ethical principles (n=39, 45.8%). However, accurate documentation during emergency management was not considered a practical intervention by 40% of the study participants (n=34). Additionally, 42.3% of participants indicated that there was a lack of clear and transparent communication with patients and their families regarding the medical situation (n=36).

Table 6: Comparison of application of ethical principals between emergency treatment units and ward settings

Ethical principal	ETU %(n)	Ward %(n)	Z value	p
Autonomy	79.2(114)	20.8(30)	9.9	<0.001
Beneficence	53.8(261)	46.2(224)	2.4	0.02
Risk Minimization	70.5(151)	29.5(63)	8.5	<0.001
Avoid Maleficence	52.9(235)	47.1(209)	1.7	0.08
Justification	72.5(148)	27.5(56)	9.1	<0.001

When emergency management procedures conducted at the ward setup and at the ETU are considered; according to the study findings, ethical principals are applied in a higher

percentage at the ETU when compared to the ward set up. Normally the ethical principals patient autonomy and justification are satisfactorily applied at the ETU set up. Study findings demonstrate that minimization of risks during procedures is more at the ETU, when compared to ward setup. Relative to the other ethical principles, patient beneficence and avoid maleficence are applied more at the ward set up.

DISCUSSION

According to the study findings, patients individual's right to make informed decisions about their own healthcare, was not given precedence in the decision-making processes. Studies often highlight that in emergency settings, the urgency and critical nature of medical interventions can lead to the deprioritization of patient autonomy. For instance, a review by Schiff et al. (2020) in the *Journal of Emergency Medicine* indicates that emergency physicians frequently face situations where immediate action is required, making it challenging to fully engage patients in decision-making processes.

During present study, the potential benefits and risks of medical interventions were not thoroughly evaluated, resulting in decisions that may not adequately consider the possible outcomes and consequences for the patient. It is well-documented that emergency care often necessitates rapid decision-making, which can limit the thorough evaluation of benefits and risks. According to Berglund et al. (2018) in the *Journal of Patient Safety*, the time-sensitive nature of emergencies can compromise the depth of risk-benefit analyses performed by healthcare providers.

Although healthcare professionals were found to have a satisfactory understanding of ethical principles during the present study, implementing these principles in the context of emergency medical management proved to be extremely challenging. Smith et al. (2019) in *BMC Medical Ethics* discuss that while healthcare professionals are generally well-versed in ethical principles, the high-pressure environment of emergency departments creates significant barriers to their application. This includes factors such as limited time, resource constraints, and the need for rapid decision-making.

Of the various ethical principles, those aimed at preventing harm to patients were implemented most effectively. Conversely, the principle of patient autonomy, which involves respecting patients' rights to make informed decisions about their care, received the least attention and was frequently overlooked. The prioritization of non-maleficence over patient autonomy is a common theme in emergency care literature. Jones et al. (2020) in the *Annals of Emergency Medicine* found that emergency medical practitioners often focus on immediate harm prevention due to the nature of their work, which can inadvertently lead to the neglect of patient autonomy.

According to the present study findings, the main obstacles to applying ethical principles were found to be the lack of sufficient staff and space for patient management. These limitations greatly hindered the ability to maintain ethical standards. Furthermore, patients' relatives were frequently left waiting outside during management, leading to inadequate communication regarding the patients' conditions. The issues of staff shortages and space constraints are widely recognized in emergency care literature. White et al. (2017) in the Journal of Healthcare Management highlight that these factors contribute to ethical dilemmas by limiting the ability of healthcare providers to engage in comprehensive communication and ethical decision-making processes. Furthermore, O'Malley et al. (2018) in Patient Experience Journal emphasize the need for dedicated personnel to communicate with patients' families to ensure transparency and support.

Improving knowledge and awareness among healthcare staff in a developing country like Sri Lanka can be approached through a combination of strategies that leverage education, technology, policy, and community engagement. Organizing workshops and seminars provides a dynamic and interactive platform for healthcare professionals to engage with new information, share experiences, and discuss the practical applications of ethical principles and patient care techniques. However, the effectiveness of these initiatives can be limited by logistical challenges, such as scheduling conflicts and geographic barriers, which may hinder widespread participation. Additionally, the retention of knowledge and its translation into practice are contingent upon the quality and relevance of the content presented.

Online courses and webinars offer flexible learning opportunities that can accommodate the busy schedules of healthcare professionals. This approach can significantly increase access to education, especially in remote or underserved areas. Nevertheless, the success of these programs relies on reliable internet access and the digital literacy of participants. Furthermore, the engagement and interactivity levels of online learning may be lower compared to in-person sessions, potentially impacting the depth of understanding and retention. Participation in international conferences and training programs exposes healthcare professionals to global best practices, fostering knowledge exchange and professional development. While these opportunities can significantly enhance the skills and perspectives of participants, they are often limited to a select few due to high costs and travel requirements. Additionally, the challenge remains in ensuring that the knowledge gained is effectively disseminated and applied within the local healthcare context.

Integrating comprehensive modules on medical ethics, communication skills, and patient rights into medical and nursing curricula ensures that these critical areas are addressed from the beginning of professional training. This foundational knowledge is essential for developing competent and ethically aware healthcare providers. However, the challenge lies in continuously updating the curriculum to reflect evolving ethical standards and practices, as well as ensuring that these modules are given sufficient emphasis alongside clinical and

technical training. Case studies and role-playing exercises are effective educational tools that provide hands-on experience in navigating ethical dilemmas. These methods can enhance critical thinking and decision-making skills in real-world scenarios. However, the effectiveness of these exercises depends on the realism and complexity of the scenarios presented. There is also a need for skilled facilitators who can guide discussions and provide constructive feedback.

E-learning platforms can democratize access to a wealth of educational resources, allowing healthcare professionals to learn at their own pace. These platforms can include a variety of content formats to cater to different learning preferences. However, the challenge lies in maintaining the quality and relevance of the content, as well as ensuring that users are engaged and motivated to complete the modules. Additionally, continuous technical support is necessary to address any issues that may arise. Mobile applications provide healthcare professionals with convenient access to quick references, guidelines, and updates, which can be particularly useful in fast-paced clinical settings. These apps can enhance decision-making and ensure adherence to ethical standards and care protocols. However, the development and maintenance of such applications require significant resources, and there is a need to ensure that the information provided is accurate, up-to-date, and easily navigable.

Mandatory training sessions on medical ethics and patient care ensure that all healthcare staff receive consistent and comprehensive education on these crucial topics. These sessions can help to establish a baseline level of knowledge and reinforce the importance of ethical practices. However, mandating such training can be met with resistance, especially if staff perceive it as an additional burden. Ensuring that these sessions are engaging and relevant is key to their success.

Hospital ethics committees play a vital role in providing guidance and support for ethical decision-making in complex cases. Strengthening these committees can enhance their ability to address ethical issues effectively and foster a culture of ethical awareness within the institution. However, the effectiveness of these committees depends on their composition, the level of support they receive from hospital leadership, and their ability to remain impartial and evidence-based in their deliberations. Healthcare policymakers in Sri Lanka should prioritize the establishment and support of hospital ethics committees. Linking professional accreditation and certification to the completion of ethics training programs incentivizes healthcare professionals to prioritize ethical education. This approach can ensure that ethical principles are consistently integrated into clinical practice. However, it is important to ensure that the training programs are of high quality and that the accreditation process is transparent and fair.

Establishing feedback mechanisms where patients and their families can report on their experiences and suggest improvements can enhance transparency and accountability in healthcare settings. These mechanisms provide valuable insights into the patient experience and can highlight areas for improvement. However, it is essential to ensure that the feedback collected is acted upon and that patients and their families feel their voices are heard and valued. Ensuring anonymity and protection from retaliation for negative feedback is also crucial.

CONCLUSION

When handling emergency situations, adhering to ethical principals appears challenging, up to a certain extent. A satisfactory knowledge is observed among the working staff regarding management of emergency situations according to the ethical principals. But certain deficiencies are identified with the awareness and the application of ethical principals. It is observed that ethical principals are properly followed while managing patients at emergency treatment units, when compared to the general ward setup. Ethical principals which are applied most during emergency medical management events include patients Autonomy and justification. Beneficence and avoid maleficence are identified as the ethical principals which are followed least. Staff members should be properly informed regarding the manner of following ethical principals during emergency medical management procedures and appropriate skills should be developed. During these training programmes priority should be given to ward staff members. According to the observations it is more appropriate to pay attention on establishment of hospital ethical observatory committees. Conducting clinical audits regarding emergency case management can be identified as a productive approach.

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