African Journal of Biological Sciences

Research Paper Open Access

Knowledge, Attitude and Practice towards Clinical Ethics among Resident Doctors, Karbala – Iraq, 2022

Yusra Noori Asslan[1], Yousif AbdulRaheem[2]

[1,2]Specialist physician, Specialist in Community Medicine & Medical education, Kerbala Health Directorate, Karbala, Iraq.

Corresponding Author: Yusra Noori Asslan
E-mail: yusrasslan@gmail.com

Article Info

Volume 6, Issue 8, April 2024
Received: 12 Feb 2024
Accepted: 13 March 2024
Published: 07 April 2024

Abstract

Background: Medical ethics is a subfield of applied ethics that examines the conduct of clinical care and the associated scientific research. The performance of junior physicians on ethical issues is heavily influenced by the curriculum from which they graduated.Objectives: To assess Knowledge, Attitude, and Practice (KAP) toward clinical ethics among resident doctors in Karbala Province, IraqMethods: From December 2021 to September 2022, a cross-sectional study was carried out at the hospitals of the Karbala Governorate. A practical sample of 337 resident doctors working in seven hospitals around the governorate comprised the target population. A self-administered questionnaire was employed, which included questions and statements about 30 factors broken down into knowledge, and attitude in addition to the actual application of medical ethics.Results: Of the participants, good knowledge score was achieved by 66 (20%) of the participants, while 217 (64%) and 54 (16%) had fair and week knowledge respectively. For the practice domain, good scores were found among 14.5% (19) of participants. 60% (204) of participants received fair ratings, while 25% received poor ratings. In the attitude domain, only 17% (57) of participants scored good. In this domain, 69% (232) of participants' scores were considered fair, while 14% (48) were considered poor. Conclusion: Undergraduate ethics programs may be insufficient to bridge the gap between the actual and desired outcomes. Emphasis on medical ethics education and its significance in medical institutions will undoubtedly affect practitioners' knowledge, attitude, and practice.

Keywords: Ethics, Medical Education, Residents.

Introduction

In today's highly sophisticated and expensive medical intervention, medical ethics; knowledge, practice, and attitude, among healthcare professionals are critical issues (Jatana et al., 2018). Teaching medical ethics is an essential component of medical education that prepares healthcare professionals to make ethical decisions in complex clinical situations. Ethical `principles and codes have been globally applied in many clinical and social settings that require a solid understanding of ethical ideas, throughout

the long history of medical education (Imran et al., 2014; Rani, 2022). These principles focus on the obligations and responsibilities of healthcare professionals to their patients and coworkers. As a result, a healthy doctor-patient relationship and interprofessional relationships that promote the highest level of clinical care are founded in healthcare settings (Imran et al., 2014; Shrestha et al., 2021).

Medical education could be one of the causes of the prevalent difficulties in Iraqi medical practices (Shrestha et al., 2021). And, as one solution to such difficulties, Iraqi medical schools have been implementing student-centered, integrated curriculum since 2012. Iraqi colleges like Baghdad Medical Colleges (both the Mother College and AL Kindy College), Kufa Medical College were the pioneers in these changes (Zaidi & Abutiheen, 2019). Then other colleges started to follow suit, including Karbala Medical College. In this new curriculum, the four fundamental principles of ethics; autonomy, justice, beneficence, and non-maleficence, that form the basis of clinical care, as well as other ethical issues are expected to be addressed in all the years of study in horizontal and vertical integration to ensure that the doctor's fundamental duty to the patient are met in ethical manner (Razooqi et al.; Shrestha et al., 2021; Zaidi & Abutiheen, 2019). However, ethical quandaries are regarded as complicated occurrences because they are associated with decision-making and specific nuances of health care management and administration (Rabbani et al., 2014).

The majority of studies in countries with unregulated healthcare systems discovered that the primary reason for noncompliance with ethical standards is the medical caregiver's lack of knowledge (Barnett-Vanes et al., 2016). Furthermore, because of insufficient ethics training for dealing with ethical conflicts, understanding of such medical ethics principles increased public awareness and exacerbated the handling of ethical quandaries (Adhikari et al., 2016; Ahmer et al., 2021). The goal of this research was to bring focus to the issue of ethical-based healthcare practice among resident doctors and formal medical ethics training in one of Iraq's provinces. Resident doctors, who are often consulted first for all new patients and are responsible for monitoring and managing ward patients, work in coordination with specialist doctors who are the diagnostic and management decision-makers. This issue improves patient outcomes by providing patient-centered healthcare (Mohamed et al., 2012). No prior scholarly studies, to our knowledge, have chosen the three learning domains as broadly and comprehensively as this one to assess the level of ethical principles for health personnel.

The objectives of this study were to assess resident doctors' knowledge, attitude, and practice of healthcare ethics as a proxy indicator for medical ethics teaching in the new undergraduate integrated medical curriculum.

Materials and Methods

This descriptive cross-sectional study was conducted among resident doctors, six months to two years residency, at the largest and most prestigious medical institutions in Kerbala Province, Iraq (Al Hussein Medical City, Maternity and Children's Teaching Hospitals, Al Hindyah Hospital, Al Husseinyah Hospital, Al Safeer Hospital, and Ain al Tamer Hospitals), from December 2021 to September 2022. Kerbala is a city in central Iraq, located about 100 km southwest of Baghdad, and has an estimated population of 1,218,732 people [(5)].

Upon fulfilling administrative and ethical obligations with the Kerbala Health Directorate and the relevant hospital authorities, resident doctors with a minimum of six months and a maximum of five years of experience were eligible to participate in the study. At the beginning of the interview and prior to distributing the questionnaire, verbal consent was obtained from all resident doctors after providing them with a detailed form outlining the study's objectives. There were no monetary incentives for taking part in the study.

A specially prepared questionnaire, from previous researches, was used to accommodate our objectives and culture. The 30-item self-administered questionnaire (Knowledge 10 items, attitude 10 items and practice 10 items) variables in details. was designed to assess doctors' knowledge, attitudes, and practices in healthcare ethics. A committee of six professors from different medical colleges approved the content's validity and the applicability of the questionnaire. The Face Validity of the questionnaire was piloted by twenty residents, they were subsequently excluded from the final analysis. Cronbach-Alpha test, which initially measured 0.672, validated the questionnaire's reliability; and after modifying two items from the Knowledge domain, the result climbed to 0. 725. The original copy was written in English and distributed to doctors during their rest period; sometimes, while performing their duties in any hospital section, it takes about five minutes to fill out the form.

For the knowledge domain, ten questions with five ordinal answers (one to five) were provided. Ten statements with five Likert scale choices (strongly disagree, disagree, agree, strongly agree, and no opinion) were provided for the practice and attitude domains. For the positive item, strong agree scored five while strong disagree scored one; however, for negative items, strong agree scored one and strongly disagree scored five.

To score each answer for each question in the domain, the following equation was used: the difference between five (the highest value of answer) and one (the lowest value of answer) = 4, the 4 divided by 3 = the category length, which is equivalent to 1.3. By using a tertile statistical cutoff point, the responses for each item on the questionnaire were ranked as follows: mean scores between 1 and 2.3 were classified as "weak," scores between 2.4 and 3.7 were classified as "fair," and scores between 3.8 and 5 were classified as "good". The final domain score was calculated by finding the mean score of total questions in knowledge domain and the mean score of statements in practice and attitude domains.

The study employed version 24 of the Social Sciences Statistical Package (SPSS 24) for statistical analysis. Frequencies, percentages, and tables were used for descriptive statistics. Cronbach's alpha was used to measure the average inter-item covariance and variance. The formula for Cronbach's alpha is: $\alpha = \frac{Nc}{v+(N-1)c}$. The symbol N represents the number of test items, c represents the average covariance among the items, and v represents the average variance.

Presents the locality of the investigation, if any, and describes especially new procedures in detail. Previously published procedures should be referenced. Modifications of previously published procedures should not be given in detail except where necessary to repeat the work should be labeled sequentially, numbered, and cited in the text. Figure legends should be brief, specific, and appear in its right position in the manuscript file. Refer to (and cite) figures and tables specifically in the text of the paper or in a parenthesis (Table x, Fig. x). If a table or figure has been published before, the authors must obtain written permission to reproduce the material in both print and electronic formats from the copyright owner and submit it with the manuscript. Do not use three-dimensional histograms when the addition of the third dimension gives no extra information. Scale markers should be used in images taken on a microscope and indicate the type of stain used. Please note that red and green must not be used together in a figure as some readers cannot perceive the difference between them. Figures and tables legend should be center-aligned using time new Romans 11 font.

Results and Discussion

The study initially involved 341 residents, but four were excluded due to incomplete registration, resulting in a final sample size of 337 residents and response rate of 98.82%. Out of the total sample, 147 (43.6%) were male physicians and 190 (56.4%) were female physicians. Among the sample, 138 (42.95%) residents had been practicing for two to five years, while the remaining 199 (59.1%) had less than two years of experience, ranging from six months to just under two years.

Good knowledge score was achieved by 66 (20%) of the participants, while 217 (64%) and 54 (16%) had fair and week knowledge respectively. The total score for knowledge domain is fair (mean =3.16). Although ethics are important to 85.7% of physicians in medical practice, only 7.4% are aware of the Hippocratic Oath, the Nuremburg Code, and the Helsinki Declaration, and only 1.5% understand their contents. 51.3% of participants had above-average knowledge about the four pillars of ethics (beneficence, non-maleficence, autonomy, and justice). 60.6% obtained their knowledge through formal education in college or through formal education and self-directed learning. Despite the fact that 63.55 percent of them think this is a worthwhile goal, 66.4% attend no or only one ethics discussion.

Although 68.5% said they encounter ethical issues in their line of work on a daily to weekly basis, only 46.7% said they discuss the issue frequently and 42% said they discuss it all the time. Surprisingly, only 21% thought it was important to give patients the opportunity to ask questions about their diagnosis and treatment during a consultation (Table 1).

Table 1: Physicians' distribution according to their responses to knowledge questions and final domain scores.

Knowledge assessment questions	Answer No (%)	Final score Mean (description) N= 337
How important is ethics in your work?		
o Not important	0 (0.0)	4.31 (Good)
o Little bit important	6 (1.8)	
o Indifferent	42 (12.5)	
o Important	129 (38.2)	
o Very important	155 (47.5)	
Are you aware of the following?		
None	26 (7.7)	2.58 (Fair)
Hippocratic Oath	177 (52.5)	
Hippocratic Oath +Nuremburg Code	71 (21.1)	
Hippocratic Oath +Helsinki Declaration	38 (11.3)	
Hippocratic Oath +Nuremburg Code + Helsinki Declaration	25 (7.4)	
Which of the above do you know the content of?		
o None	41 (12.2)	2.27 (Week)
o Hippocratic Oath	192 (57.0)	
o Hippocratic Oath+ Nuremburg Code	80 (23.7)	
o Hippocratic Oath +Helsinki Declaration	19 (5.6)	
o Hippocratic Oath +Nuremburg Code + Helsinki Declaration	5 (1.5)	
What do you know about the four pillars of medical ethics (Beneficence, Non-maleficence, Autonomy & Justice)?		
o No thing	24 (7.1)	3.32 (Fair)
o Little	43 (12.8)	
o Average	97 (28.8)	
o A lot	144 (42.7)	

o Much more	29 (8.6)	
How did you acquire your knowledge of bioethics? (one choice; the most important one) None Colleagues Formal training (through institution) Formal training + Self-directed learning Formal training+ Self-directed learning + experience at work	 12 (3.6) 96 (28.5) 159 (47.2) 45 (13.4) 25 (7.4)	2.92 (Fair)
Did you take medical ethics as lesson of aspirational goal? o No o Little o Indifferent o A lot o Much more	 9 (2.7) 38 (11.3) 76 (22.6) 168 (49.9) 46 (13.6)	3.60 (Fair)
Have you attended discussion session in bioethics? o No o 1 time o 2 times o 3 times o > 3 times	 82 (24.3) 142 (42.1) 54 (16.0) 48 (14.2) 11 (3.3)	2.29 (Week)
How often do you come across ethical issues in your line of work? o Seldom o Rarely o Monthly o Weekly o Daily	 10 (3.0) 21 (6.2) 75 (22.3) 144 (42.7) 87 (25.8)	3.82 (Good)
How often do you discuss your daily ethical labeled cases with your Colleagues? o Never o Sometimes o Frequently o Usually o Always	 11 (3.30) 24 (7.1) 15 (46.6) 98 (29.1) 47 (13.9)	3.43 (fair)
How important is it to you to allow for patients to ask questions about their diagnosis and treatment during a consultation? o Not important o Little bit important o Indifferent o Important o Very important	 5 (1.5) 59 (17.5) 201 (59.6) 48 (14.2) 24 (7.1)	3.08 (Fair)
Total domain score 3.16 (Fair)		

For the practice domain, good scores were found among 14.5% (19) of participants. 60% (204) of participants received fair ratings, while 25% (84) received poor ratings, the total domain label is fair (mean 3.27).

In 83.97% of cases, physicians agree or strongly agree to introduce themselves to patients. However, 36% believed that examination records should be kept even if the patient is not examined because the documentation process should continue. Only 38.8% of physicians believe it is unethical for a male doctor to examine a female patient without the presence of a female attendant. And 37% of participants, unfortunately, agree to favor pharmaceutical companies that provide endorsements and gifts. The continuation of patient medication to relieve suffering, even if it gave the patient no more chance of survival, was considered ethical by 53.3% of participants. It is unethical for caregivers to

allow their patients to choose the best treatment for themselves, as agreed upon by 61.6% of physicians.

Even if patients want to know, 60.2% of doctors believe it is unethical to tell them they are dying. Also, 68% of them disagreed that patients with capacity, even if they are not terminally ill, have the right to refuse life support, even if doing so may result in death.

Only 12.5% of physicians thought that doctors should be compensated for referring patients for medical tests. However, only 19.5% believe that healthcare professionals who cause harm or death to patients will face imprisonment, fines, or suspension of their license to practice (Table 2).

Table 2: Physicians' distribution according to their responses to practice questions and final domain scores.

Practice assessment statements	Answer No (%)	Final score Mean (description) N= 337
*Doctors must properly introduce themselves to Patients o Strongly Agree o Agree o No Opinion o Disagree o Strongly Disagree	 97 (23.4) 204 (60.5) 39 (11.6) 15 (4.45) 0 (0.0)	4.03 (Good)
Writing examination findings, such as blood pressure or nervous system examination, as normal when they have not been performed is acceptable because it is important for documentation. o Strongly Agree o Agree o No Opinion o Disagree o Strongly Disagree	 0 (0.0) 21 (6.2) 101 (30.0) 168 (49.9) 47 (13.9)	3.71 (Fair)
It is ethical for a male doctor to examine a female patient even if a female attendant is not available. Strongly Agree Agree No Opinion Disagree o Strongly Disagree	 28 (3.8) 39 (11.6) 137 (40.8) 109 (32.3) 22 (6.5)	3.15 (Fair)
It is ethical for a doctor to favor pharmaceutical companies that provide endorsements and gifts. Strongly Agree Agree No Opinion Disagree Strongly Disagree	 38 (11.4) 87 (25.8) 77 (22.8) 81 (24.0) 54 (16.0)	3.32 (Fair)
*It is sometimes ethically appropriate to continue a patient's medication in order to relieve suffering, even if doing so gives the patient no more chance to survive. Strongly Agree Agree No Opinion Disagree Strongly Disagree	 38 (11.3) 145 (43.0) 28 (8.3) 81 (24.0) 45 (13.4)	3.14 (Fair)
*It is unethical for caregivers to let their patients choose the best treatment for themselves.		3.3 (Fair)

o Strongly Agree o Agree o No Opinion o Disagree o Strongly Disagree	29 (8.5) 179 (53.1) 25 (7.4) 82 (24.3) 22 (6.5)	
It's ethical not to tell patients they are dying even if they want to know. o Strongly Agree o Agree o No Opinion o Disagree o Strongly Disagree	 15 (4.5) 100 (29.7) 19 (5.6) 145 (43.0) 58 (17.2)	3.38 (Fair)
*All patients with capacity even if they are not considered terminally ill have the right to refuse life support even if that refusal may ultimately lead to death o Strongly Agree o Agree o No Opinion o Disagree o Strongly Disagree	 12 (3.5) 51 (15.1) 45 (13.4) 198 (58.8) 31 (9.2)	2.36 (Week)
It is accepted that doctors are entitled to or should be compensated for referring patients for medical tests. o Strongly Agree o Agree o No Opinion o Disagree o Strongly Disagree	 4 (1.2) 38 (11.3) 16 (4.7) 201 (59.6) 78 (23.1)	3.92 (Good)
*Healthcare professionals who cause harm or death to patients will face the following penalties: imprisonment, fines, or suspension of their license to practice. o Strongly Agree o Agree o No Opinion o Disagree o Strongly Disagree	 8 (2.4) 58 (17.1) 42 (12.5) 199 (59.1) 30 (8.9)	2.36 (Week)
Total domain score 3.27 (Fair) * Reverse scoring order question		

In the attitude domain, only 17% (57) of participants scored good. In this domain, 69% (232) of participants' scores were considered fair, while 14% (48) were considered poor. The mean domain score was 3.32 (Fair)

Medical ethics teaching is an important part of undergraduate medical education as well as for graduates, according to 68.3% of the physicians in the study sample, because it influences doctors' attitudes and behavior and improves the patient-doctor relationship. The statement "Doctors should not criticize another physician in front of patients or other personnel" received a good score in the evaluation. 74.2% of physicians agreed not to do so, but 66.5% thought it was unnecessary to disclose all treatment information to patients, and 57.3% had no opinion on how to treat violent patients.

Surprisingly, 62.7% of participants agreed that doctors, regardless of patient opinion, are the most knowledgeable about their management. 56 percent of them believed patients should always be informed of wrongdoing.

In the same domain, 33.6% of physicians believed that with modern care and technology, confidentiality could not be maintained and should be abandoned. Furthermore, 23.7%

believed that consent is only required in cases of operation, and 23.1% believed that ethical behavior is only important to avoid legal action (Table 3).

Table 3: Physicians' distribution according to their responses to attitude questions and final domain scores.

Attitude assessment statements	Answer No (%)	Final score Mean (description) N= 337
*Medical ethics teaching is an important part of undergraduate medical education as well as for graduates. Strongly Agree Agree No Opinion Disagree Strongly Disagree	 62 (18.4) 168 (49.9) 47 (13.9) 47 (13.9) 13 (3.9)	3.65 (Fair)
Medical ethics teaching would neither influence the attitude and behaviour of doctors nor improve patient- doctor relationship Strongly Agree Agree No Opinion Disagree Strongly Disagree	 21 (6.2) 48 (14.2) 36 (10.7) 213 (63.2) 19 (5.6)	3.48 (Fair)
It is not important to disclose all the information to the patients regarding their treatment Strongly Agree Agree No Opinion Disagree o Strongly Disagree	 62 (18.4) 162 (48.1) 35 (10.4) 68 (20.1) 10 (3.0)	2.34 (Week)
Violent patients should not be treated o Strongly Agree o Agree o No Opinion o Disagree o Strongly Disagree	 58 (17.2) 34 (10.1) 193 (57.3) 45 (13.3) 7 (2.1)	2.73 (Fair)
*Doctors should not criticize another physician in the presence of patient or other personnel. o Strongly Agree o Agree o No Opinion o Disagree o Strongly Disagree	 158 (46.9) 92 (27.3) 42 (12.5) 40 (11.9) 5 (1.5)	4.06 (Good)
Doctors, regardless of patient opinion, are the most knowledgeable about their management. o Strongly Agree o Agree o No Opinion o Disagree o Strongly Disagree	 48 (14.2) 197 (58.5) 35 (10.4) 46 (13.6) 11 (3.3)	3.36 (Fair)
*Patient should always be informed of wrongdoing o Strongly Agree o Agree o No Opinion o Disagree	 17 (5.0) 75 (22.3) 53 (15.7) 155 (46.0)	2.64 (Fair)

o Strongly Disagree	37 (11.0)	
Confidentiality cannot be maintained in modern care & technology, it should be abandoned o Strongly Agree o Agree o No Opinion o Disagree o Strongly Disagree	 39 (11.6) 74 (22.0) 38 (11.3) 178 (52.8) 8 (2.4)	3.12 (Fair)
Consent is required only in case of operation. o Strongly Agree o Agree o No Opinion o Disagree o Strongly Disagree	 28 (8.3) 52 (15.4) 25 (7.4) 216 (64.2) 16 (4.7)	3.46 (Fair)
Ethical conduct is important only for avoiding legal action o Strongly Agree o Agree o No Opinion o Disagree o Strongly Disagree	 31 (9.2) 46 (13.9) 51 (15.1) 190 (56.4) 19 (5.6)	3.36 (Fair)
Total domain score 3.22 (Fair) * Reverse scoring order question		

Discussion

Physician criticism is increasing as the public becomes more aware of the ethical behavior of healthcare practitioners. Patients, their families, and the communities in which they live have the right to comprehensive care delivered in an ethical manner by their healthcare practitioners (Jatana et al., 2018; Karthikeyan et al., 2020).

We had high expectations for the KAP scores of our graduated physicians, especially after implementing an integrated, problem-based curriculum in their medical education, and based on prior research in the field (Rabbani et al., 2014; Razooqi et al.; Santen et al., 2008). However, our findings were not in line with our expectations. Only a small proportion of participants achieved good scores; 20% in the knowledge domain, 14.5% in the practice domain, and 17% in the attitude domain, resulting in a fair overall score for all domains. This less-than-satisfactory outcome could be partly attributed to the Theory-Practice Gap, or the divergence between medical education in the Ministry of Higher Education and clinical practice in the Ministry of Health. When beginning their clinical practice, junior physicians may notice a difference between what they were taught (e.g., history-taking, examination techniques) and how experienced physicians actually practice (Jayalath et al., 2021; Zaidi & Abutiheen, 2019).

On the other hand, there are no ethical experts or ethical committees at the hospital or ministry level to solve ethical quandaries and protect patients' fundamental rights if a medical error occurs or if doctors or other health personnel abuse them. Furthermore, the lack of a printed and official medical ethics guide issued by the ministry or any other competent authority that could be used as a reference in the event of an ethical difficulty (Barnett-Vanes et al., 2016; Makoul et al., 2007).

Only two of the questions in the knowledge domain received good responses from the physicians: "How important is ethics in your work?" and "How frequently do you encounter ethical issues in your line of work?" This finding is consistent with the findings of several studies conducted among doctors and medical students, all of whom agreed on the importance of including medical ethics instruction in undergraduate and continues

medical education (Afshar, 2019; McDaniel et al., 2013). However, 12.5% of physicians responded "no opinion" when asked about the importance of ethics in clinical practice.

In the practical domain, the same number of questions, two, were found with a good score. 89.9% of physicians agreed that "Doctors must properly introduce themselves to Patients" and 81.7% disagreed that "It is accepted that doctors are entitled to or should be compensated for referring patients for medical tests".

Aside from the explanation that they are well trained and teaching and assessing communication skills highlight the importance of greeting patients and introduction of one self appropriately, one explanation for the answer to the initial query regarding practical applications is that young medical professionals enjoy being recognized as physicians by their patients, and this observation is corroborated by previous research (Althobaiti et al., 2021; Mohamed et al., 2012; Tahira et al., 2013).

Physicians' disagreement over compensation for referring patients to medical tests may be related to the social stigma associated with this issue in general, and in medical society in particular (Ahmer et al., 2021).

Unsatisfactory (fair) total score was achieved in attitude domain. “Doctors should not criticize another physician in the presence of patient or other personnel” is the only statement that received good score in attitude domain. By passing this attitude, the junior physicians might achieve the concepts of effective teamwork in their medical education, or they may believe this behavior can affect patient satisfaction and quality of care (Ngan & Sim, 2021; Shetty & Vaswani, 2022). On the other hand, it is also disappointing to achieve a low score for the question "It is not important to disclose all the information to the patients regarding their treatment," as withholding medical information from patients without their knowledge or consent is ethically unacceptable (Nassar & Salama, 2022; Walrond et al., 2006).

According to a qualitative study done in 2021, doctors exhibit favorable and unfavorable attitudes toward patients when recording their medical histories. Even though these sentiments are frequently implicit, they may still convey prejudice, potentially impacting the level of treatment that patients receive in the future (Park et al., 2021).

One of the primary limitations of this research is that it focuses on just a single medical college in Iraq out of a total of 25 medical colleges. While the questionnaire used in this study is valid and reliable, it is still subjective, and there is a need for more objective and comprehensive assessment methods to determine the level of medical ethics acquisition among medical students.

Conclusion

In conclusion, the study highlights the need for improved medical ethics education in Iraq. Despite the implementation of an integrated, problem-based curriculum in medical education, the scores achieved by the physicians were only fair in all domains. This indicates a significant gap between medical education and clinical practice. The study emphasizes the importance of including medical ethics instruction in undergraduate education and clinical training, as well as the need for continued ethical education even after graduation. Further research with a larger sample, that represents all medical colleges, is necessary to identify the current ethical practices among physicians in Iraq and to develop effective solutions to improve ethical standards in healthcare. A comparison of medical colleges that have implemented the new integrated curriculum and those that have not should be conducted in order to improve the basic understanding of medical ethics education to meet the needs of physicians in dealing with patients. There

is no doubt that ethical education is necessary in all medical courses, along with clinical training, and even after graduation (Ashfaq et al., 2021; Tafesse et al., 2022) .

References

Adhikari, S., Paudel, K., Aro, A. R., Adhikari, T. B., Adhikari, B., & Mishra, S. R. (2016). Knowledge, attitude and practice of healthcare ethics among resident doctors and ward nurses from a resource poor setting, Nepal. BMC Medical Ethics, 17, 1-8.

Afshar, L. (2019). Comparative study of medical ethics curriculum in general medicine course in 10selected universities in the world. Journal of Medical Education, 18(1).

Ahmer, Z., Fatima, R., Sohaira, R., & Fatima, M. (2021). How important is medical ethics? descriptive cross-sectional survey among medical students of Karachi. European Journal of Environment and Public Health, 5(2), em0083.

Althobaiti, M. H., Alkhaldi, L. H., Alotaibi, W. D., Alshreef, M. N., Alkhaldi, A. H., Alshreef, N. F., Alzahrani, N. N., & Atalla, A. A. (2021). Knowledge, attitude, and practice of medical ethics among health practitioners in Taif government, KSA. Journal of Family Medicine and Primary Care, 10(4), 1759.

Ashfaq, T., Ishaq, A., Shahzad, F., & Saleem, F. (2021). Knowledge and perception about bioethics: A comparative study of private and government medical college students of Karachi Pakistan. Journal of Family Medicine and Primary Care, 10(3), 1161.

Barnett-Vanes, A., Hassounah, S., Shawki, M., Ismail, O. A., Fung, C., Kedia, T., Rawaf, S., & Majeed, A. (2016). Impact of conflict on medical education: a cross-sectional survey of students and institutions in Iraq. BMJ open, 6(2), e010460.

Imran, N., Haider, I. I., Jawaid, M., & Mazhar, N. (2014). Health ethics education: knowledge, attitudes and practice of healthcare ethics among interns and residents in Pakistan. Journal of Postgraduate Medical Institute, 28(4).

Jatana, S. K., Soe, H. H. K., Phyu, K. L., Lwin, H., & Than, N. N. (2018). A survey on knowledge and attitudes towards medical ethics among undergraduate medical students. Education, 8(3), 48-53.

Jayalath, M., Nanayakkara, R., Jayasundara, K., Abeysekara, C., & Abeynayake, A. (2021). Knowledge, Attitudes and Practices towards Medical Ethics among Specialist Medical Officers of Selected Allopathic Healthcare Institutions in Sri Lanka: Conocimiento, actitudes y prácticas hacia la ética médica entre los funcionarios médicos especialistas de instituciones sanitarias alopáticas seleccionadas en Sri Lanka. South Florida Journal of Health, 2(3), 318-329.

Karthikeyan, K., Kanagaraj, D., Karthikeyan, V., & Devandiran, S. (2020). Knowledge, attitude, and practice of health-care ethics among doctors in Tamil Nadu–A cross-sectional study.

Makoul, G., Zick, A., & Green, M. (2007). An evidence-based perspective on greetings in medical encounters. Archives of internal medicine, 167(11), 1172-1176.

McDaniel, S. H., Morse, D. S., Reis, S., Edwardsen, E. A., Gurnsey, M. G., Taupin, A., Griggs, J. J., & Shields, C. G. (2013). Physicians criticizing physicians to patients. Journal of General Internal Medicine, 28, 1405-1409.

Mohamed, A., Ghanem, M., & Kassem, A. (2012). Knowledge, perceptions and practices towards medical ethics among physician residents of University of Alexandria Hospitals, Egypt. Eastern Mediterranean Health Journal, 18(9).

Nassar, A. A., & Salama, R. I. (2022). Medical Ethics Knowledge and Attitude Among Dental Students from Two Universities in The Middle East. The Open Dentistry Journal, 16(1).

Ngan, O. M. Y., & Sim, J. H. (2021). Evolution of bioethics education in the medical programme: a tale of two medical schools. International Journal of Ethics Education, 6(1), 37-50.

Park, J., Saha, S., Chee, B., Taylor, J., & Beach, M. C. (2021). Physician use of stigmatizing language in patient medical records. JAMA Network Open, 4(7), e2117052-e2117052.

Rabbani, M. W., Mujtaba, M., Naeem, F., & Ullah, E. (2014). Knowledge and awareness of medical ethics among medical graduates from two medical colleges in Lahore, Pakistan. Rawal Medical Journal, 39(3), 341-343.

Rani, V. (2022). Knowledge and attitude about medical ethics among undergraduate medical students-A cross sectional comparative study. Indian Journal of Health Sciences and Biomedical Research kleu, 15(2), 131-136.

Razooqi, M. M., Hasan, L. A., & Ridha, A. Knowledge of Undergraduate Medical Students of College of Medicine/University of Baghdad Regarding Medical Ethics 2021.

Santen, S. A., Rotter, T. S., & Hemphill, R. R. (2008). Patients do not know the level of training of their doctors because doctors do not tell them. Journal of General Internal Medicine, 23, 607-610.

Shetty, A. K., & Vaswani, R. (2022). Knowledge, attitude and practice of healthcare ethics among final year medical and nursing students at a college in South India. Biomedicine, 42(3), 511-516.

Shrestha, C., Shrestha, A., Joshi, J., Karki, S., Acharya, S., & Joshi, S. (2021). Does teaching medical ethics ensure good knowledge, attitude, and reported practice? An ethical vignette-based cross-sectional survey among doctors in a tertiary teaching hospital in Nepal. BMC Medical Ethics, 22, 1-16.

Tafesse, N., Samuel, A., Geta, A., Desalegn, F., Gebru, L., Tadele, T., Genet, E., Abate, M., & Jemal, K. (2022). Clinical ethical practice and associated factors in healthcare facilities in Ethiopia: a cross-sectional study. BMC Medical Ethics, 23(1), 61.

Tahira, Q. A., Lodhi, S., Haider, T., & Abaidullah, S. (2013). The study of knowledge, attitude and practice of medical law and ethics among doctors in a tertiary care hospital. Annals of King Edward Medical University, 19(1), 55-55.

Walrond, E., Jonnalagadda, R., Hariharan, S., & Moseley, H. (2006). Knowledge, attitudes and practice of medical students at the Cave Hill Campus in relation to ethics and law in healthcare. West indian medical journal, 55(1), 42.

Zaidi, S. H., & Abutiheen, A. (2019). Medical Education in Iraq: The cradle of Civilisation. Pakistan Journal of Medical Sciences, 35(3), 868.