Original Article

Knowledge, Attitude and Practice of Medical Ethics among Resident Physicians of Specialty Certificate in Aseer Province, Saudi Arabia

Eman Al-Shehri, Aesha Farheen Siddiqui, Shams un Nahar Khalil

ABSTRACT

OBJECTIVE: To assess the knowledge, attitudes and practices of medical ethics among resident doctors under Saudi commission for health specialties.

METHODOLOGY: A cross sectional descriptive study was conducted in June to December, 2016 on a sample of 261 resident doctors, who were available on a predetermined date of interview. A self-administered questionnaire was used to collect data, which was analysed using SPSS 20. Frequencies and percentages were used for descriptive analysis.

RESULTS: More than one third (35.6%) of the respondents have poor knowledge and only 20% had good knowledge of medical ethics. Regarding source of ethics knowledge, 27% residents reported experience and 15 % reported training during residency. More respondents had positive attitude in aspects of purpose of ethics, abandoning confidentiality, reporting examination findings as normal without doing the examination. Most of the respondents exhibited a positive attitude by disagreeing that doctors should accept commission by referring patients for investigations or taking incentives from drug companies. Only 25.6% respondents reported never having encountered unethical practices by team members while a good number reported having faced it sometimes and few (16.9%) reported frequent such encounters.

CONCLUSION: The findings suggest that there are gaps in knowledge attitude and practice of medical ethics among the residents, underlining the importance of strengthening medical ethics education in Saudi Arabia.

KEY WORDS: Medical ethics, Medical education, Awareness, Saudi Arabia.

This article may be cited as: Al-Shehri E, Siddiqui AF, Khalil SN. Knowledge, Attitude and Practice of Medical Ethics among Resident Physicians of Specialty Certificate in Aseer Province, Saudi Arabia. J Liaquat Uni Med Health Sci. 2020;19(01):48-54.
doi: 10.22442/jlumhs.201910661

INTRODUCTION

Medical ethics is a system of moral principles which apply values and judgments to the practice of clinical medicine and scientific research[1]. These principles through professional guidelines and ethics codes can be applied to provide guidance in deciding our moral duties in the practice of clinical medicine as well as in scientific research[2].

In medical practice, ethical dilemmas usually encountered in dealing with issues having religious implications like; contraception and abortion, treatment of terminally ill patients, euthanasia, professional misconduct or negligence, issues of confidentiality, traditional medicine or conflict of interests[3]. Newer technologies such as advanced life support systems, and artificial reproductive methods have brought new ethical predicaments for the medical practitioners.

A recent study this year reported most physicians (77.5%) demanded clear guidelines to help them to take appropriate ethical decisions[4]. An upward trend in type and number of complaints and litigations regarding unethical treatment and behaviours has been noted[5]. A study from Saudi Arabia reported a large number of medico-legal litigations from all provinces of the kingdom[6]. However, with respect to integrating the ethics training with medical education, it appears that medical ethics is not receiving its proper due. In most traditional medical courses, there is little training on ethical dilemmas encountered by healthcare professionals. In most countries if not all, bioethics teaching curricula for undergraduate and post graduate training programs are virtually non-existent[7].

There is evidence that only a small proportion of medical students and residents receive training in this important area of medical practice[8,9]. On qualifying, however, healthcare professionals are expected to practice ethically during application of their skills[10]. To overcome this growing problem in Saudi Arabia, medical ethics has been incorporated in the

undergraduate curriculum of medical course as well as applied medical courses like radiology and laboratory sciences.

There is a crucial need to prepare future doctors who are ethically competent to avoid any medico-legal issues in practice and sufficiently aware to face any medical litigations. In order to devise adequate training programmes in medical ethics there is a pressing need to estimate the current knowledge, understand attitudes and elucidate the practices of the future doctors. Thus, this study was planned with the view to assess the knowledge, attitudes and practices of resident doctors training under the Saudi council for health specialties, Aseer region, Southern Saudi Arabia.

METHODOLOGY

A cross sectional, descriptive study was conducted between June to December 2016 among resident doctors undergoing training in hospitals accredited by Saudi council for health specialties as postgraduate training centres in Aseer region, Southern Saudi Arabia. According to the registry of Saudi council for health specialties, the number of resident physicians attending the training programs in the academic year 2015-2016, in Aseer region was 487. All the residents were informed about the study and a prior date for data collection was intimated to the residents. On the day of data collection, residents who were on duty and agreed to participate in the study were included following a convenience sampling procedure. No resident showed willingness to participate out of the duty hours. This yielded a sample of 261 for the study. The residents belonged to the broad specialties of medicine, surgery, family medicine and community medicine.

A self-administered questionnaire was constructed after thorough evaluation of previous studies concerning this topic[3,11]. The responses were to be chosen from a 3 point Likert scale as; disagree, not sure, agree. The questionnaire contained items in the domains of knowledge, attitudes and practices of the residents on various aspects of medical ethics, and their needs regarding teaching of medical ethics besides the socio-demographic information. For calculating knowledge score, agreement was noted as a correct response for statement numbers 1-7 and disagreement for the statements number 8-14. Each correct response was assigned a score of 1 and incorrect response was assigned as zero. Therefore, from the 14 questions, total knowledge score ranged from 0-14. Total correct responses were judged and the percentage of correct answers was calculated. This knowledge score was further graded as poor knowledge (less than 40 %), fair knowledge (40-70%) and good knowledge (more than 70%).

For the assessment of attitude, there were six statements adapted from a previous study[3]. The responses were to be chosen from a 5 point Likert scale as: strongly disagree, disagree, not sure, agree, strongly agree. For the purpose of analysis these were regrouped as agree and disagree. Attitudes were graded as positive or negative based on the generally agreed concepts of medical ethics. A positive attitude was deduced as disagreement for statements number 1-5 and agreement with statement six[3]. The Statistical Package for Social Sciences (SPSS 20) was used for analysis[12]. Descriptive data is presented as frequencies and percentages. The study was approved by the ethics committee of King Khalid University [REC# 2016-05-16].

RESULTS

Table I presents the basic characteristics of the study population. With an age range of 25-41 years, mean age was 27.9±2.5 years. Most of the residents (80.8%) were less than 30 years of age and majority of them were males (63.6%). Among the specialties, medicine comprised the highest percentage (43.7%), followed by Family and Community medicine (30.3%), surgery (15.3%) and others respectively. First year residents comprised 36.4%and second year 26.4% of the participants. An almost equal proportion of participants had 1-2 years (42.5%) and more than 2 years experience (41.8%) and only (15.7%) had less than one year experience.

TABLE I: DEMOGRAPHIC AND JOB CHARACTERISTICS OF THE RESPONDENTS

Characteristic	N	%
Age		
<30	210	80.8
≥30	51	19.2
Sex		
Male	166	63.6
Female	95	36.4
Specialty		
Medicine	114	43.7
Family & Community Medicine	79	30.3
Surgery	40	15.3
Others (Obs./Gyn., ENT, Urology)	28	10.7
Residency level		
Year1	95	36.4
Year2	69	26.4
Year3	48	18.4
Year4	41	15.7
Year5	8	3.1
Work experience		
Less than one year	41	15.7
1-2 years	111	42.5
More than 2 years	109	41.8

Table II presents details of the participant responses on the statements in the knowledge domain of medical ethics. Knowledge of the principle of autonomy was assessed by asking whether patient's wishes must always be adhered and 41.0% had correct knowledge. When asked whether patient should be informed of wrongdoing by anyone involved in his/her treatment (56.7%) had correct knowledge. More than half of the respondents agreed that doctors should always act in the best interest of patient, even if it is difficult for them. Knowledge of maleficence was assessed with the statement, "It is more important not to harm your patient, than to do them good". It was agreed by a good majority of the respondents (70.1%). About 55% of the respondents were agreed that children should not be treated without consent of parents. For a very important ethical issue of abortion, more than half of the residents had incorrect knowledge (85.1%).

In the aspect of privacy, the refusal of examination of a female patient by a male doctor in absence of a chaperone, most respondents agreed only 26.8 % disagreed. When a statement was posed that suggested non-importance of confidentiality, most had disagreement (84.7%). Paternalistic attitude and disrespect of autonomy was assessed with two statements. The first statement, "Doctors should decide who gets what treatment based on their wish", more than three in four of the respondents (75.9%) disagreed, while to the statement "Doctors should do their best for the patient irrespective of the patient's opinion", (62.1%) respondents disagreed.

For the statement on confidentiality that close relative should be told about patient condition, 55.6% correctly

TABLE II:
PARTICIPANT RESPONSES ON THE STATEMENTS IN THE KNOWLEDGE DOMAIN OF MEDICAL ETHICS

Statements on knowledge of medical ethics	Response	
	No (%)	Yes (%)
Patient's wishes must always be adhered to	154(59)	(41)107
Patient should be informed of wrongdoing by anyone involved in his/her treatment	113 (43.3)	(56.7)148
Doctors should always act in the best interest of patient, even if it is difficult for them	124(47.5)	(52.5)137
It is more important not to harm your patient, than to do them good	78(29.9)	(70.1)183
Children should not be treated without consent of parents	119(45.6)	(54.5)142
If law allows abortion, doctors cannot refuse to do abortion	196(75.1)	(24.9)65
Given a situation, a male doctor need to examine a female patient & female attendant is not available It is okay to refuse the patient?	142(54.4)	(45.6)119
Confidentiality is not so important for treatment	239(91.6)	(8.4)22
Doctors should decide who gets what treatment based on their wish	198(75.9)	(24.1)63
Doctors should do their best for the patient irrespective of the patient's opinion	162(62.1)	(37.9)99
Close relative should be told about patient condition	145(55.6)	(44.4)116
In order to prevent transmission of communicable diseases information should be given to patients neighbours	193(73.9)	(26.1)68
Consent is required only for surgeries, not for tests and medicines	198(75.9)	(24.1)63
If a patient wishes to die, he or she should be assisted in doing so.	221(84.7)	(15.3)40
Statements to assess knowledge of ethics committee		
To ensure standard ethical practices among healthcare personnel	248(95)	13(5.0)
To advise healthcare personnel when they encounter ethical/legal problems	239(91.6)	22(8.4)
To advise the administration on ethics and rules in the institution	239(91.6)	22(8.4)
To approve and guide research	228(87.7)	33(12.7)
To settle conflicts between professionals	233(89.3)	28(10.7)
To settle conflicts between professionals and patient relatives	231(88.5)	30(11.5)
To teach medical ethics to students	192(73.6)	69(26.4)
To conduct medical ethics case conferences	238(91.2)	23(8.8)

TABLE III:
PARTICIPANT RESPONSES ON THE STATEMENTS IN THE ATTITUDE DOMAIN OF MEDICAL ETHICS

Statements to assess attitudes	Strongly Disagree	Disagree	Not sure	Agree	Strongly agree
Ethical conduct is only important to avoid legal action	86(33.0)	81(31.0)	55(21.1)	31(11.9)	8(3.1)
It is very difficult to keep confidentiality so it should be abandoned	77(29.5)	78(29.9)	64(24.5)	27(10.3)	15(5.8)
It is acceptable for doctors to take commission income from referring patients for medical tests.	89(34.1)	72(27.6)	67(25.7)	24(9.2)	9(3.4)
Reporting examination normal when it has not been done is acceptable.	124(47.5)	64(24.5)	33(12.7)	24(9.2)	16(6.1)
It is acceptable for doctors to receive drug company inducement and gifts.	108(41.4)	60(23.0)	46(17.6)	30(11.5)	17(6.5)
Copying answers in examinations is bad.	30(11.5)	43(16.4)	86(33.0)	55(21.1)	47(18.0)

disagreed. In response to the statement, “In order to prevent transmission of communicable diseases information should be given to patients neighbours” 73.9% correctly disagreed. About 76% correctly disagreed that consent is required only for surgical procedures. About euthanasia, majority of the residents correctly disagreed on its advisability (84.7%). When knowledge scores were graded as described in the methodology, most respondents had fair knowledge (44.1% respondents). A large proportion (35.6%) had poor knowledge, while just about one fifth (20.3%) had a good knowledge. Regarding source of ethics knowledge, 27% residents reported experience, and 15 % reported training during residency.

Regarding the knowledge of ethics committee and its role, less than one third of the residents knew about the institutional ethics committee at their place of work. Close to 90% of the respondents could not identify the committee role of ensuring standard ethical practices among healthcare personnel, advising healthcare personnel on encountering ethical/legal problems, advising the administration on ethics and rules in the institution, research approval and guidance, settling disagreements between professionals or with patient relatives, and conducting medical ethics case conferences. That teaching medical ethics to students is not a role of the ethics committee was known by 73.6% residents.

Table III: presents details of the participant responses on the statements in the attitude domain of medical ethics. Majority of the respondents disagreed (64%) that ethical conduct is only important to avoid legal action, and an equal proportion either strongly disagreed or disagreed to the statement that confidentiality should be abandoned. Most of them also disagreed that doctors should receive income by referring patients for investigations (61.7%). Majority disagreed that it is acceptable to report a physical examination finding as normal without doing it for the sake of completing documentation. Majority (64.4%) also disagreed that it is acceptable for doctors to receive drug company inducements and gifts. On proposing that copying during exams is bad, more respondents disagreed or remained neutral.

Table IV: presents participant responses regarding ethical issues in practice and person consulted when facing an ethical problem. Only 25.6% respondents reported never having encountered unethical practices by team members, while almost 3 in four residents reported having had such encounters. On the other hand, when they were asked “How often have you been in a clinical situation in which you had to act unethically”, more than half (64.7%) reported that they had sometimes acted unethically. Eighty-five per cent respondents reported having been spoken to rudely by a senior/consultant. The respondents were also asked about whom they consult in face of an ethical issue in practice. Most commonly consulted person is the supervisor (25.7%), followed by colleague and head of the department. Around ten per cent of the respondents do not consult anyone when faced with an ethical issue in practice.

TABLE IV: RESPONDENT ENCOUNTERS WITH ETHICAL ISSUES IN PRACTICE AND PERSON CONSULTED

Ethical issues in practice	Frequency	Percentage
How often have you witnessed a medical team member acting unethically?		
Yes	194	74.4
No	67	25.6

How often have you been in a clinical situation in which you had to act unethically?		
Yes No	169 92	64.7 35.3
How often have you been spoken to rudely by a senior/ consultant?		
Yes No	224 37	85.8 14.2
Person consulted in ethical issue		
Supervisor	67	25.7
Colleague	60	23.0
HOD	53	20.3
Ethics committee	31	11.8
Friends/Family	25	9.6
Do not consult anyone	25	9.6

DISCUSSION

Effective doctor-patient communication which helps in building a therapeutic doctor-patient relationship is a core function of clinical medicine[11]. Clinical knowledge alone is not sufficient to solve medical problems. Future doctors must be provided scientific knowledge within the context of the ethical basis of their relationship with the patients and they must understand how the human values are rooted in clinical decision making. This would help to have better treatment outcome and enhanced patient satisfaction. It has been found that teaching medical ethics has a deep impact on medical professionals' attitudes and decision making[13].

Though the current Saudi medical curriculum includes medical ethics still the traditional medical training offers little help in resolving the practical ethical problems encountered by them once they start their medical practice. It is important to assess the current status of knowledge attitude and practice of ethics among the residents in this region. Local evidence was lacking for comparing the findings of our study. A study in Saudi Arabia listed ethical challenges faced by the participants, however it also noted that scant attention has been paid to these in Saudi Arabia[14].

Our study findings suggest that there is a gap in the knowledge of medical ethics among residents. The knowledge grades of respondents revealed that more than one third residents had poor knowledge. The aspects of confidentiality, consent, autonomy, beneficence and nonmaleficence were studied in detail. The aspects of confidentiality are generally well understood, as suggested by the responses on questions related to revealing information to family or neighbours. This is an interesting finding, as other studies have reported contrary. A study reported that doctors were inclined to reveal a patient's condition to their close relative, heedless of the patient's approval.[15]These findings reflect the influence of the socio-cultural background of the respondents; perhaps due to the impact of the communitarian concept in eastern cultures. Residents also responded favourably to questions on beneficence and nonmaleficence. This finding is contrary to the findings stated in an Indian study[15]. There were varying responses on questions regarding autonomy, and it came out to be confusing for the residents to decide if it was agreeable to always agree to patient's wishes, or act in the interest of the patient despite their refusal. Similarly, there are different opinions regarding patient autonomy[16]. There are increasing voices in support of the argument that complete autonomy of patient erodes the trust between them and the treating physician[17]. In a study in the Caribbean region, more than 40% of the respondents did not approve of adhering to the patient's wishes in all circumstances[11]. Regarding consent and treating children, most participants supported informed consent. This may be due to the trend of increasing litigation against healthcare personnel by patients[18]. For the important ethical issue of abortion, most residents did not have requisite knowledge. The residents tended to disagree that where legalized, abortion cannot be refused. This lack of knowledge reflects the cultural milieu in Saudi Arabia where abortion is legalized only in certain circumstances[19].

In line with the ethical standards of physical examination for female patients, most of the respondents agreed for refusal of examination of a female patient by a male doctor in absence of a chaperone. A majority of residents were not aware of the existing institutional ethics committee and its role. Similar lack of knowledge about existence, purpose and role of ethics committees has been reported from studies[11,15]. More students had a positive attitude on purpose of ethics, confidentiality, and on reporting examination findings as normal without doing the examination.

Most of the respondents also exhibited a positive attitude by disagreeing with earning commission by referring patients for investigations or taking gifts/ incentives from drug companies. About copying in examinations, more respondents exhibited a negative attitude by disagreeing or remaining neutral on the statement that copying during exams is bad. These findings are exclusive to the current study and no comparable findings were retrieved on extensive literature search. Most of the students reported encounters with unethical practices by self or team

members. These results find resonance across various studies. In a study in Barbados, junior physicians responded that they encountered ethical problems[11].

Ethical misconduct and ethical dilemmas were reported to occur by almost 50% of the respondents in Pakistan who had noted recurrent ethical misconduct by team members or were part of a situation where they were compelled to act unethically[7]. Similarly, in Egypt, majority of residents (98%) reported having encountered ethical issues during their practice[20]. Unethical behaviour is not limited to actions pertaining to patient care. Disrespectful behaviour towards junior doctors appear to be a universal phenomenon as exhibited in the current study as well as in other studies[7,21], as a majority of the residents reported having been spoken to rudely by a consultant.

The respondents in the current study have demonstrated a good practice regarding informing and consulting their supervisor about their ethical dilemmas. Similar results were reported by a study in Barbados[7] where 40 % reported to their supervisor while it was a little lower in Egypt[20] with 30%. On the contrary, in Pakistan and India[7,22] it was observed that physicians try to solve the matters on their own rather than approaching their supervisors or the ethics committee.

CONCLUSION

The findings of this study raise some fundamental and important issues for ethics education in Saudi Arabia. The findings suggest that there are gaps in knowledge attitude and practice of medical ethics among the residents. This reflects that the current undergraduate and post-graduate curricula regarding ethics training may be in-adequate and ineffective. Traditional medical ethics training in Saudi Arabia is limited to didactic teaching in formal ethics during undergraduate training. Thus, it is imperative to strengthen medical ethics education in Saudi Arabia. Ethics teaching in the early years of medical education should be coupled with CME activities including practical education throughout the training period which would help in bridging the KAP Gap of residents.

Limitations and strengths of the study

Limitations of this study include reliance on self-reported knowledge and perceptions. It also involved a sample of residents from one region of Saudi Arabia. Due to these methodological issues, results cannot be generalized to other regions. Nevertheless, the study underscores the need to identify medical residents with unsatisfactory levels of knowledge and poor attitudes towards ethical issues, and to devise methods to sensitize and train them appropriately. This study is first of its kind in the region, and despite its methodological shortcomings, it provides valuable information that can be used to build further knowledge.

ACKNOWLEDGEMENT

The authors would like to express their gratitude to King Khalid University, Saudi Arabia for providing administrative and technical support.

Ethical permission: King Khalid University Ethics committee letter No. REC# 2016-05-16. Dated: 05-05-2016.

Conflict of Interest: There is no conflict of interest.

Funding: There was no any funding agency.

REFERENCES

1. Back T, Braddock C, Diekema D, Edwards K, Kohlwes J, Jecker N, et al. Bioethic Tools: Principles of Bioethics. Ethics in Medicine. 2018. Available from: https://depts. washington.edu/ bhdept/ethics-medicine/bioethics-tools.
2. Moreno JD, Schmidt U, Joffe S. The Nuremberg Code 70 Years Later. JAMA. 2017; 318(9): 795-6. doi:10.1001/JAMA.2017.10265.
3. Janakiram C, Gardens SJ. Knowledge, Attitudes And Practices Related To Healthcare Ethics Among Medical And Dental Postgraduate Students In South India. Indian J Med Ethics. 2014; 11(2): 99-104. doi:10.20529/IJME.2014.025.
4. Abuabah F, Alwan A, Al-Jahdali Y, Al Shaikh A, Alharbi A, Al-Jahdali H. Common Medical Ethical issues faced by Healthcare Professionals in KSA. J Taibah Univ Med Sci. 2019; 14(5): 412-417. doi:10.1016/J._Jtumed. 2019.09.001.
5. Onal G, Civaner M. For What reasons do patients file a Complaint? A Retrospective Study on Patient Rights Units' Registries. Balkan Med J. 2015; 32(1): 17-22. doi:10.5152/ Balkanmedj. 2015.15433.
6. Aljarallah JS, AlRowaiss N. The Pattern of Medical Errors And Litigation Against Doctors In Saudi Arabia. J Family Community Med. 2013; 20 (2): 98-105. doi:10.4103/2230-8229.1147 71.
7. Imran N, Haider I, Jawaid M, Mazhar N. Health Ethics Education: Knowledge, Attitudes And Practice Of Healthcare Ethics Among Interns And Residents in Pakistan. J Postgrad Med Inst. 2014; 28(4); 383-9.
8. Panico L, Jenq G, Brewster U. When A Patient Refuses Life-Saving Care: Issues Raised When Treating A Jehovah's Witness. Am J Kidney Dis. 2011; 58(4): 647-53. doi:10.1053/ J. Ajkd. 2011.05.030.
9. Ghias K, Ahmar S. Guarding the Guardians:

Bioethics Curricula for Psychiatrists-In-Training in Developing Countries. Int Rev Psychiatry. 2010; 22(3): 294-300. doi:10.3109/09540261.2010.482096.
10. Organization WH. Module for Teaching of Medical Ethics to Undergraduates. World Health Organization. 2009. Available from: https://apps.who.int/iris/handle/10665/205534
11. Hariharan S, Jonnalagadda R, Walrond E, Moseley H. Knowledge, Attitudes and Practice of Healthcare Ethics and Law among Doctors and Nurses in Barbados. BMC Med Ethics. 2006; 7: E7. doi:10.1186/1472-6939-7-7.
12. IBM Corp. Released 2012. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp.
13. Fong Ha J, Longnecker N. Doctor-Patient Communication: A Review. Ochsner J. 2010; 10 (1): 38-43.
14. Alkabba AF, Hussein G, Albar A, Bahnassy A, Qadi M. The Major Medical Ethical Challenges Facing the Public and Healthcare Providers in Saudi Arabia. J Family Community Med. 2012; 19 (1): 1-6. doi:10.4103/2230-8229.94003.
15. Chopra M, Bhardwaj A, Mithra P, Singh A, Siddiqui A. Current Status of Knowledge, Attitudes and Practices towards healthcare ethics among doctors and nurses from Northern India- A Multicenter Study. J Krishna Instit Med Sci Univ. 2014; 2(2): 102-7.
16. Edwin A. Don't Lie but don't tell the whole truth: The Therapeutic Privilege - Is It Ever Justified? Ghana Med J. 2008; 42(4): 156-61.
17. Klugman C, Dunn L, Schwartz J, Cohen I. The Ethics of Smart Pills and Self-Acting Devices: Autonomy, Truth-Telling, and Trust at the Dawn of Digital Medicine. Am J Bioethics. 2018. 18(9): 38-47. doi:10.1080/15265161.2018.1498933.
18. Gogos A, Clark R, Bismark M, Gruen R, Studdert D. When informed consent goes poorly: A descriptive study of medical negligence claims and patient complaints. Med J Aust. 2011; 195(6): 340-344. doi:10.5694/Mja11.10379.
19. Hessini L. Abortion and Islam: Policies and Practice in the Middle East and North Africa." Reprod Health Matters. 2007; 15(29): 75-84. doi:10.1016/S0968-8080(06)29279-6.
20. Mohamed AM, Ghanem MA, Kassem A. Knowledge, Perceptions and Practices towards Medical Ethics among Physician Residents of University of Alexandria Hospitals, Egypt. East Mediterr Health J. 2012; 18(9):935-45.
21. Yadav H, Jegasothy R, Ramakrishnappa S, Mohanraj J, Senan P. Unethical Behavior and Professionalism among Medical Students in a Private Medical University in Malaysia. BMC Med Educ. 2019; 19: 218. doi:10.1186/S12909-019-1662-3.
22. Mohammad M, Ahmad F, Rahman SZ, Gupta V, Salman T. Knowledge, Attitudes and Practices of Bioethics among doctors in a tertiary care government teaching hospital in India. J Clinic Res Bioeth. 2011; 2(6): 118. doi:10.4172/2155-9627.1000118.

AUTHOR AFFILIATION:

Dr. Eman Al-Shehri
Final Year Resident
Joint Programme for Post Graduate Studies in Family Medicine
Ministry of health, Saudi Arabia.

Dr. Aesha Farheen Siddiqui *(Corresponding Author)*
Department of Family and Community Medicine
King Khalid University, Abha, Saudi Arabia.
Email: draeshasiddiqui@gmail.com

Dr. Shams un Nahar Khalil
Department of Family and Community Medicine,
King Khalid University, Abha, Saudi Arabia.