

Research Article

Top Ethical Issues Concerning Healthcare Providers Working in Saudi Arabia

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ABSTRACT

Background: Healthcare providers working in Saudi Arabia come from various nationalities, cultures, and training backgrounds. This study aimed to assess the perceptions of healthcare providers working in Riyadh hospitals about ethical dilemmas and solutions.

Methods: This is a cross-sectional study among physicians working in Riyadh's private and governmental hospitals between June and December 2017. The study collected information on demographics, knowledge about medical ethics, the sources of such knowledge, and common ethical issues in general and the top ethical issues and dilemmas encountered in their daily practice.

Results: A total of 455 physicians from government and private hospitals were enrolled in the study. The mean age of the participants was 34.29 ± 10.5 years, females were 29.7% and mean years of practice was 13.0 ± 11.5 . The top ethical issues identified by the participants were "disagreement with the patients' relatives about treatment" (91%), patient disagreement with decisions made by professionals (84%), treating the incompetent patient (79%), conflict with administration policy and procedures (77%), scarcity of resources (72%), and making decision about do-not-resuscitate or life-sustaining treatment (68%). There were significant differences in dealing with ethical issues in relation to gender, confidence about ethical knowledge, nationality, seniority, training site, and private or government hospitals academic and nonacademic.

Conclusion: Healthcare providers in Riyadh hospitals face multiple ethical challenges. In addition to improvement in ethics knowledge through educational program among healthcare professional, there is a valid need for healthcare professionals and other sectors within society to engage in serious and continuous dialogue to address these issues and propose recommendations.

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1. INTRODUCTION

Healthcare professionals frequently encounter moral dilemmas during their daily practice [1,2]. Previous studies have explored major ethical dilemmas faced by healthcare professionals in different cultures and countries [3–8]. For example, the top three ethical issues for Canadian healthcare professionals were disagreement between patients/families and healthcare workers regarding treatment decisions, waiting lists, and access to needed resources, whereas impaired capacity for decision making, caregiver's disagreement, and end-of-life treatment limitation were the top for European doctors [6,9].

Previous studies among a small sample of Saudi physicians found the major ethical challenges for healthcare specialists were patients' rights, equitable resource allocation, and patients' confidentiality [10]. There were also studies addressing ethical issues in specific situations such as dealing with physician's behavior or treating patients with do-not-resuscitate (DNR) status [11–13]. However, these studies did not assess other related factors such as knowledge of physicians

about medical ethics, professional codes of ethics, ethics guidelines and their gender, nationality, and years of experience.

Because healthcare professionals in Saudi Arabia originate from various nationalities, cultures, and training backgrounds and the healthcare delivery systems also differ between private and government hospitals, there is need to assess how these might result in differences in the perception of ethical dilemmas by physicians.

This study aims to identify the major ethical challenges and issues facing the physicians in general, in terms of possible differences between ethical issues among physicians working in government and private hospitals, and in assessing the association between healthcare professionals' perception of ethical issues and their background, education, nationality, and specialty.

2. MATERIALS AND METHODS

This is a cross-sectional descriptive study conducted using a self-administered questionnaire. The study objectives were explained to the participants and their agreement to complete the questionnaires

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was considered consent to participate. This study was approved by King Abdullah International Medical Research Center Institutional Review Board (SP/17/137//R). We distributed 600 questionnaires, 455 respondents agreed to participate and completed the questionnaires, giving 76% response rate.

The questionnaire was distributed directly to physicians ranked as senior residents (third year of training or higher) and consultants across six government and three private hospitals in Riyadh. This was a convenient sampling by distributing questionnaire directly to physicians during general symposia, conferences, and clinics between June and December 2017.

The questionnaire consisted of three sections. The first section covered demographic data including, age, gender, country of origin, specialty, religion, years of experience, and type of hospital in which the participant works (government or private). The second section listed 20 common healthcare ethical issues/dilemmas and the participants were asked to rank them as per their frequency and importance. The third section requested that participants rank the top 10 most common ethical issues and most difficult-to-resolve ethical issues or dilemmas that they faced from the listed 20 common ethical challenges or moral dilemmas.

The list of ethical issues and dilemmas or difficulties generated in the questionnaires were established after reviewing published studies about ethical issues in Saudi Arabia and other countries.

2.1. Data Analysis

The data were entered and analyzed by IBM SPSS (IBM SPSS Statistics 22; SPSS, Chicago, IL, USA) to measure the frequencies and percentages, and a scoring system was used to assess the most frequent ethical issues encountered by healthcare workers according to the following scoring system: rare/seldom = 0 points and sometime/often = 1 points. We assessed the effect on responses of gender, seniority of physicians, practicing in private or government hospitals, nationality, and training. Chi-square tests were used to assess difference in the proportion of respondents who sometimes or often encountered each ethical dilemma by demographic and vocational factors. Tests were repeated to assess significant differences in confidence in ethical knowledge and referral of cases to ethical committees by these factors as well. Significance for chi-square tests was set at $p < 0.05$.

3. RESULTS

A total of 455 participants were analyzed. The mean age of the participants was 34.29 ± 10.5 years, females were 29.7%, and mean years of practice was 13.0 ± 11.5 . Saudi physicians accounted for 82% of participants. Participants from medical specialties represented 35.2%, surgical specialties 23.1%, and general and family medicine specialties 30.1%. The majority of participants (76.2%) received their knowledge of ethics in medical college, 59.3% through self-teaching means, and 78.5% felt confident about handling ethical issues in their practice. Ethics committees were available in 73% of the hospitals and 11.8% of the physicians consulted their ethics committees. Other demographics are shown in Table 1.

The most commonly encountered ethical issues were: disagreement among patients/family and healthcare professionals about treatment

decisions (91%), patients' disagreements with decisions made by professionals (84%), treating patients with impaired or uncertain decision-making ability (79%), disagreement with administration policies and procedures (77%), and other major ethical issues as shown in Table 2. Three most important ethical dilemmas listed by

Table 1 | Demographic characteristics and knowledge about ethics

	N (%)
Gender	
Female	135 (29.7)
Male	320 (70.3)
Saudi nationality	
Yes	361 (82.0)
Religion	
Muslim	425 (98.8)
Location of training/education	
Local	327 (71.9)
International	128 (28.1)
Current position	
Consultants	109 (23.9)
Associate/Assistant consultant (Senior Registrar/Registrar)	94 (20.7)
Resident/Fellow	252 (55.4)
Primary practice site	
Hospital	406 (89.2)
Clinics	49 (10.8)
Admitting hospital	
Government/teaching	345 (75.8)
Non-government (private)	110 (24.2)
Participant specialties	
Medical specialties	160 (35.2)
Surgical specialties	105 (23.1)
General/family medicine	137 (30.1)
Others	54 (11.6)
Knowledge about ethics	
Through medical college curriculum	347 (76.2)
Attended ethics conference/courses	119 (26.1)
Self-teaching	270 (59.3)
Confident about handling ethical issues in medical practice?	
Confident	357 (78.5)
Availability of ethics committee in your hospital	
Yes	335 (73.6)
Have you ever referred a case to an ethics committee	
Yes	54 (11.8)

Table 2 | Top ethical issues facing healthcare providers

Rank	Top ethical issue as ranked by participants	N (%)
1	Disagreement among patients/family and healthcare professionals about treatment decision	414 (91)
2	Patient disagreement with decision made by professional	382 (84)
3	Treating patients with impaired or uncertain decision making	359 (79)
4	Conflict with administration policies and procedures	350 (77)
5	Scarcity of resources in the clinic	372 (72)
6	Making decisions about life-sustaining treatment or do-not-resuscitate order	309 (68)
7	Uncertainty whether to disclose diagnosis to the patient/delivering "bad news"	304 (67)
8	Handling end-of-life issues in general	300 (66)
9	Conflict on the appropriateness deciding on a "no code status" with family or colleagues	295 (65)
10	Improperly taken informed consent	287 (63)

participants were DNR, “improperly taken consent”, and “relationship with the drug industry”. The most difficult-to-resolve ethical issues were DNR and “handling end-of-life issues”.

Ethical issues commonly seen in practice include: disagreement among patients/family and healthcare professionals about treatment decision (91.1%), patient disagreement with decision made by professional physicians (84.4%), treating patients with impaired or uncertain decision-making ability (79.1%), conflict with administration policies and procedures (77.3%), scarcity of resources in the clinics (72.8%), making decision about life-sustaining treatment or DNR order (67.9%), disclosing the diagnosis or delivering “bad news” to the patients (67.4%), and disclosing medical errors made by others (66.6%). Other common ethical issues are shown in Table 3.

Female physicians were less confident about their knowledge in ethics ($p = 0.026$), had more difficulties handling end-of-life issues in general ($p = 0.021$), making decisions about life-sustaining treatment or a DNR order ($p = 0.007$), and having conflicts with families and colleagues about the appropriateness of “no code status” decisions ($p = 0.002$). Furthermore, female physicians were less likely to disregard formally specified clinical privilege ($p = 0.003$), to adopt a new untested therapy or procedure ($p = 0.002$), or to have a professional relationship with the drug industry ($p = 0.050$). Other variables are shown in Table 4.

Saudi physicians state that they are more confident about their knowledge in ethics ($p = 0.001$). Non-Saudi physicians making decision about life-sustaining treatment or DNR orders consulted with the ethical committees in their hospitals more frequently than Saudi physicians ($p = 0.001$ and 0.009 , respectively; Table 5).

Physicians who received their education and postgraduate training abroad were confident about their ethics knowledge in medical practice ($p = 0.001$) but had less confidence in making decisions about life-sustaining treatment or DNR orders ($p = 0.001$) and referred more cases to the ethics committee ($p = 0.002$). Also, international trainees surpassed the requirements for formally specified clinical privilege ($p = 0.001$) or had a professional relationship with drug industry ($p = 0.001$) compared with local trainees (Table 6). When we adjusted our analysis as shown in Table 6, no predictor was correlated with knowledge about ethics and common ethical issues they face in daily ($p > 0.05$).

Physicians practicing in private hospitals faced more cases that offered unnecessary use of futile therapy ($p = 0.003$) or premature cessation of therapy ($p = 0.027$), and they had more relationships with the pharmaceutical industry compared with physicians working in government hospitals ($p = 0.011$). There were no significant differences regarding confidence about knowledge in ethics, treating incompetent patients, or making decisions regarding DNR (Table 7).

Consultants compared with non-consultants had significantly more knowledge about ethics, less conflict with family, and were at ease in making decisions about DNR or end-of-life issues ($p < 0.05$). Furthermore, consultants compared with non-consultants faced a scarcity of resources ($p = 0.049$), had more relationship with the pharmaceutical industry ($p = 0.001$), and surpassed requirements for formally specified clinical privileges ($p = 0.007$).

4. DISCUSSION

Ethical issues and dilemmas are frequently encountered in daily medical practice. The spectrum of these dilemmas varies across cultures and specialties [3–8,14]. These issues have an impact on physicians by creating moral distress when making or avoiding or uncertainty about choosing the appropriate management or making the right decision for their patients [3–8].

In this study we found that Saudi healthcare providers face important ethical challenges during their daily practice. These issues pose challenges to healthcare providers and may cause moral distress to physicians and effect on their quality of care. The advantage of this study is addressing the real and common ethical issues faced in daily practice by physicians. Although these challenges have been addressed in the literature as isolated ethical issues in healthcare, no attempt has ever been made to collate and prioritize them in our community [10–12,15–24]. This study encompasses a different spectrum of physicians regarding gender, different subspecialties, training level, and whether they practiced in private or government hospitals. However, it is still limited to Riyadh, which may not be generalized to other regions within Saudi Arabia or other countries. Ethical issues facing healthcare providers differ from one country to another. For example, among European physicians, Hurst et al. [25] reported uncertain or impaired decision-making capacity, disagreement among caregivers, and limitation of treatment at the end-of-life ethical difficulties were the most often encountered ethical issues. Among Australian physicians, majority reported the most common ethical concerns related to issues of “not for resuscitation orders”, the treatment of patients with HIV and AIDS, interprofessional conflict, and the allocation of resources [26], whereas discharge against medical advice and confidentiality were recognized as major ethical issues facing Nigerian physicians [23].

Comparing our results (which concluded that the top three were disagreement among patients/family and healthcare professionals, treating patients with impaired or uncertain decision-making, and conflict with the administration policy) with the only local study done by Alkabba et al. [10], which showed the top three ethical issues were patients’ rights, equity of resources, and patients’ confidentiality. Disagreement among patients/family and healthcare professionals about treatment decisions, handling end-of-life issues or DNR decisions, and disclosing the diagnosis were commonly reported ethical issues in other countries as well [3,6,9]. Small number of physicians (11%) referred consult ethics committee when faced with ethical dilemma or concerns. DuVal et al. [22] reported most of the physicians consult colleagues or discuss with patients family when faced with ethical issues rather than consulting ethics committee.

The role of ethical committees in hospitals is not clear and needs to be explored in further studies. Although more than two-thirds of the hospitals have such committees, only 11% of physicians consulted them. Either the objectives of these committees were not clear for physicians or the committee was not actively engaged. Ethical committees can engage in helping physicians make decisions in cases of ethical dilemma by promoting ethics discussions, education, resolution of dilemmas, and establishing guidelines.

Table 3 | Common ethical issues in daily practice

	N (%)
Disagreement among patients/family and healthcare professionals about treatment decision	
Rare/seldom	34 (8.9)
Sometime/often	346 (91.1)
Patient disagreement with decision made by professional physicians	
Rare/seldom	59 (15.6)
Sometime/often	319 (84.4)
Treating patients with impaired or uncertain decision-making	
Rare/seldom	79 (20.9)
Sometime/often	299 (79.1)
Conflict with administration policies and procedures	
Rare/seldom	86 (22.7)
Sometime/often	293 (77.3)
Scarcity of resources in the clinic	
Rare/seldom	102 (27.2)
Sometime/often	273 (72.8)
Making decision about life-sustaining treatment or do-not-resuscitate order	
Rare/seldom	121 (32.1)
Sometime/often	256 (67.9)
Uncertainty whether to disclose diagnosis to the patient/delivering “bad news”	
Rare/seldom	123 (32.6)
Sometime/often	254 (67.4)
Disclosure of medical error by others	
Rare/seldom	125 (33.4)
Sometime/often	249 (66.6)
Conflict on the appropriateness deciding on a “no code status” with family or colleagues	
Rare/seldom	132 (34.8)
Sometime/often	247 (65.2)
Handling end-of-life issues in general	
Rare/seldom	128 (34.4)
Sometime/often	244 (65.6)
“Withdrawal” versus “withholding” of therapy	
Rare/seldom	130 (34.7)
Sometime/often	245 (65.3)
Disclosure of medical error by yourself	
Rare/seldom	137 (36.5)
Sometime/often	238 (63.5)
Improperly taken informed consent	
Rare/seldom	136 (36.7)
Sometime/often	235 (63.3)
Uncertainty whether to maintain confidentiality	
Rare/seldom	143 (38.2)
Sometime/often	231 (61.8)
Perceived unnecessary use of futile therapy	
Rare/seldom	164 (43.5)
Sometime/often	213 (56.5)
Perceived premature cessation of therapy	
Rare/seldom	178 (47.6)
Sometime/often	196 (52.4)
Favored care for only some groups of patients above others	
Rare/seldom	186 (49.3)
Sometime/often	191 (50.7)
Relationship related to drug industry	
Rare/seldom	227 (60.7)
Sometime/often	147 (39.3)
Surpassing formally specified clinical privilege	
Rare/seldom	199 (52.9)
Sometime/often	177 (47.1)
Using/adopting a new untested therapy or procedure without prior formal arrangement agreed on	
Rare/seldom	274 (72.7)
Sometime/often	103 (27.3)

Globally, there is documented shortage in the teaching of ethics to undergraduate students and knowledge about ethics issues and how to deal with them among practicing physicians [27–30].

The study by DuVal et al. [22] revealed the source of physicians' knowledge about ethics to be through attendance of bioethics rounds (53%), attendance at a bioethics conference (55%), and serving on an ethics committee (21%). In this study, 76% of respondents received their knowledge in medical college curriculum; this is probably because most of them are junior staff and new graduates, and because there has been more emphasis recently in teaching ethics in medical colleges [24].

There are limited studies comparing physicians by gender regarding how they handle ethical issues and dilemmas. In our study, female physicians expressed concerns regarding making decisions about end-of-life issues and DNR, which is probably because female participants were less confident about ethical knowledge in their daily practice compared with male physicians, and most of the female physicians in our study were not consultants and with limited experience. However, this issue needs to be studied in greater depth to determine how much gender affects decisions for handling ethical issues and dilemmas in daily practice, and why.

Physicians working in private compared with government hospitals were perceived to unnecessarily use futile therapy and were perceived to have premature cessations of therapy. Although this sounds contradictory, it is known that not all patients managed at private hospitals are insured, which may entail more costs for therapy, and there may be hesitation to proceed with more expensive and prolonged therapy, particularly in cases that are chronic but not futile, in contrast to patients who are insured and may receive unnecessary futile therapy. This is documented by Weiner, who revealed that the insured patients receive better medical coverage and therefore their physicians deal with fewer ethical issues and dilemmas compared with the self-paid patients [31].

Our study has a number of limitations. This is a self-report study that may lead to under- or over-reporting of ethical difficulties or even the priority of ethical issues. However, our results are consistent with other international literature indicating the legitimacy of the findings. Also, we did not assess the reasons for such difficulties that face physicians at different facilities or their level of training and experience. The list of top ethical issues and dilemmas or difficulties that we generated in our study questionnaire is based on reviewing the limited published studies about ethical issues in Saudi Arabia and other countries, and is based on the experiences and interest in the ethics of investigators. One other limitation: we did not assess the influence of religion of physicians regarding these ethical issues and dilemmas. Religion and culture of both physicians and patients may play a major role in handling ethical issues. Studies have shown that religion affects physicians in their relationship with patients and their medical decisions, and this may ultimately affect treatment decisions [5,32]. In our sample, the majority of the patients encountered in practices, as well as treating physicians, were Muslims. Also, one of the limitations is that the response rate from private hospitals was low due to the fact that most private hospitals lacked research infrastructure to review and approve our research proposal, and this affected their willingness to participate in our study. This study affirms previous national and international documented urgent need for continuous education on medical ethics specially after graduating from medical schools [10,14,27,28,30,33–37]. Our findings indicate that healthcare

Table 4 | Knowledge confidence about ethics and common ethical issues they face in daily practice according to gender

	Female, N (%)	Male, N (%)	p-value
How confident are you about your knowledge about ethics in medical practice? Confident/not confident			
Confident	107 (72.3)	250 (81.4)	0.026*
Not confident	41 (27.7)	57 (18.6)	
Disagreement among patients/family and healthcare professionals about treatment decision			
Rare/seldom	10 (9.3)	24 (8.8)	0.86
Sometime/often	97 (90.7)	249 (91.2)	
Making decision about life-sustaining treatment or do-not-resuscitate order			
Rare/seldom	45 (42.5)	76 (28.0)	0.007*
Sometime/often	61 (57.5)	195 (72.0)	
Treating patients with impaired or uncertain decision-making			
Rare/seldom	20 (26.7)	57 (19.5)	0.18
Sometime/often	55 (73.3)	235 (80.5)	
Conflict on the appropriateness deciding on a “no code status” with family or colleagues			
Rare/seldom	50 (46.7)	82 (30.1)	0.002*
Sometime/often	57 (53.3)	190 (69.9)	
Handling end-of-life issues in general			
Rare/seldom	46 (43.4)	82 (30.8)	0.021
Sometime/often	60 (56.6)	184 (69.2)	
Perceived unnecessary use of futile therapy			
Rare/seldom	51 (47.7)	113 (41.9)	0.30
Sometime/often	56 (52.3)	157 (58.1)	
Perceived premature cessation of therapy			
Rare/seldom	55 (51.4)	123 (46.1)	0.35
Sometime/often	52 (48.6)	144 (53.9)	
“Withdrawal” versus “Withholding” of therapy			
Rare/seldom	39 (36.8)	91 (33.8)	0.587
Sometime/often	67 (63.2)	178 (66.2)	
Patient disagreement with decision made by professional “physicians”			
Rare/seldom	16 (15.1)	43 (15.8)	0.863
Sometime/often	90 (84.9)	229 (84.2)	
Improperly taken informed consent			
Rare/seldom	41 (38.7)	95 (35.8)	0.609
Sometime/often	65 (61.3)	170 (64.2)	
Uncertainty whether to maintain confidentiality			
Rare/seldom	47 (44.3)	96 (35.8)	0.127
Sometime/often	59 (55.7)	172 (64.2)	
Uncertainty whether to disclose diagnosis to the patient/delivering “bad news”			
Rare/seldom	34 (32.4)	89 (32.7)	0.950
Sometime/often	71 (67.6)	183 (67.3)	
Disclosure of medical error by yourself			
Rare/seldom	41 (38.7)	96 (35.7)	0.588
Sometime/often	65 (61.3)	173 (64.3)	
Disclosure of medical error by others			
Rare/seldom	33 (31.1)	92 (34.3)	0.555
Sometime/often	73 (68.9)	176 (65.7)	
Conflict with administration policies and procedures			
Rare/seldom	31 (29.0)	55 (20.2)	0.067
Sometime/often	76 (71.0)	217 (79.8)	
Scarcity of resources in the clinic			
Rare/seldom	33 (31.7)	69 (25.5)	0.222
Sometime/often	71 (68.3)	202 (74.5)	
Favored care for only some groups of patients above others			
Rare/seldom	53 (49.5)	133 (49.3)	0.962
Sometime/often	54 (50.5)	137 (50.7)	
Relationship related to drug industry			
Rare/seldom	72 (68.6)	155 (57.6)	0.051
Sometime/often	33 (31.4)	114 (42.4)	
Surpassing formally specified clinical privilege			
Rare/seldom	69 (65.1)	130 (48.1)	0.003*
Sometime/often	37 (34.9)	140 (51.9)	
Using/adopting a new untested therapy or procedure without prior formal arrangement agreed on			
Rare/seldom	90 (84.1)	184 (68.1)	0.002*
Sometime/often	17 (15.9)	86 (31.9)	

*The Chi-square statistic is significant at the 0.05 level.

Table 5 | Knowledge about ethics and common ethical issues they face in daily practice according to nationality

	Saudi, N (%)	Non-Saudi, N (%)	p-value
How confident are you about your knowledge about ethics in medical practice: confident/not confident			
Confident	343 (95.0)	14 (14.9)	0.001*
Not confident	18 (5.0)	80 (85.1)	
Have you ever referred a case to an ethics committee? Y/N			
Yes	34 (9.4)	18 (22.8)	0.001*
No	327 (90.6)	61 (77.2)	
Treating patients with impaired or uncertain decision-making			
Rare/seldom	57 (19.5)	20 (26.7)	0.18
Sometime/often	235 (80.5)	55 (73.3)	
Disagreement among patients/family and healthcare professionals about treatment decision			
Rare/seldom	24 (8.2)	8 (10.5)	0.519
Sometime/often	269 (91.8)	68 (89.5)	
Making decision about life-sustaining treatment or do-not-resuscitate order			
Rare/seldom	104 (35.7)	15 (20.0)	0.009*
Sometime/often	187 (64.3)	60 (80.0)	
Conflict on the appropriateness deciding on a “no code status” with family or colleagues			
Rare/seldom	105 (36.0)	22 (28.9)	0.252
Sometime/often	187 (64.0)	54 (71.1)	
Handling end-of-life issues in general			
Rare/seldom	101 (35.2)	24 (32.4)	0.656
Sometime/often	186 (64.8)	50 (67.6)	
Perceived unnecessary use of futile therapy			
Rare/seldom	131 (45.0)	29 (38.7)	0.323
Sometime/often	160 (55.0)	46 (61.3)	
Perceived premature cessation of therapy			
Rare/seldom	144 (50.0)	30 (40.0)	0.123
Sometime/often	144 (50.0)	45 (60.0)	
“Withdrawal” versus “withholding” of therapy			
Rare/seldom	108 (37.2)	20 (27.0)	0.100
Sometime/often	182 (62.8)	54 (73.0)	
Patient disagreement with decision made by professional “physicians”			
Rare/seldom	45 (15.4)	12 (16.0)	0.900
Sometime/often	247 (84.6)	63 (84.0)	
Improperly taken informed consent			
Rare/seldom	100 (35.1)	32 (42.7)	0.226
Sometime/often	185 (64.9)	43 (57.3)	
Uncertainty whether to maintain confidentiality			
Rare/seldom	109 (37.3)	32 (45.1)	0.230
Sometime/often	183 (62.7)	39 (54.9)	
Uncertainty whether to disclose diagnosis to the patient/delivering “bad news”			
Rare/seldom	95 (32.8)	26 (34.2)	0.811
Sometime/often	195 (67.2)	50 (65.8)	
Disclosure of medical error by yourself			
Rare/seldom	107 (36.9)	25 (33.8)	0.619
Sometime/often	183 (63.1)	49 (66.2)	
Disclosure of medical error by others			
Rare/seldom	96 (33.2)	26 (35.1)	0.755
Sometime/often	193 (66.8)	48 (64.9)	
Conflict with administration policies and procedures			
Rare/seldom	65 (22.3)	19 (25.0)	0.612
Sometime/often	227 (77.7)	57 (75.0)	
Scarcity of resources in the clinic			
Rare/seldom	78 (27.0)	21 (28.0)	0.861
Sometime/often	211 (73.0)	54 (72.0)	
Favored care for only some groups of patients above others			
Rare/seldom	139 (47.6)	43 (58.1)	0.106
Sometime/often	153 (52.4)	31 (41.9)	
Relationship related to drug industry			
Rare/seldom	183 (63.3)	38 (50.7)	0.046*
Sometime/often	106 (36.7)	37 (49.3)	
Surpassing formally specified clinical privilege			
Rare/seldom	161 (55.5)	32 (42.7)	0.047*
Sometime/often	129 (44.5)	43 (57.3)	
Using/adopting a new untested therapy or procedure without prior formal arrangement agreed on			
Rare/seldom	212 (72.9)	54 (72.0)	0.883
Sometime/often	79 (27.1)	21 (28.0)	

*The Chi-square statistic is significant at the 0.05 level.

Table 6 | Knowledge about ethics and common ethical issues they face in daily practice according to nationality, education local vs international

	Local, N (%)	International, N (%)	p-value
How confident are you about your knowledge about ethics in medical practice (confident/not confident)			
Confident	244 (74.6)	113 (88.3)	0.001*
Not Confident	83 (25.4)	15 (11.7)	
Have you ever referred a case to an ethics committee? Y/N			
Yes	29 (8.9)	25 (19.5)	0.002*
No	297 (91.1)	103 (80.5)	
Disagreement among patients/family and healthcare professionals about treatment decision			
Rare/seldom	25 (9.3)	9 (8.1)	0.713
Sometime/often	244 (90.7)	102 (91.9)	
Making decision about life-sustaining treatment or do-not-resuscitate order			
Rare/seldom	101 (38.0)	20 (18.0)	0.000*
Sometime/often	165 (62.0)	91 (82.0)	
Conflict on the appropriateness deciding on a “no code status” with family or colleagues			
Rare/seldom	102 (38.1)	30 (27.0)	0.040*
Sometime/often	166 (61.9)	81 (73.0)	
Handling end-of-life issues in general			
Rare/seldom	96 (36.6)	32 (29.1)	0.162
Sometime/often	166 (63.4)	78 (70.9)	
Perceived unnecessary use of futile therapy			
Rare/seldom	124 (46.3)	40 (36.7)	0.089
Sometime/often	144 (53.7)	69 (63.3)	
Perceived premature cessation of therapy			
Rare/seldom	131 (49.4)	47 (43.1)	0.266
Sometime/often	134 (50.6)	62 (56.9)	
“Withdrawal” versus “withholding” of therapy			
Rare/seldom	94 (35.2)	36 (33.3)	0.730
Sometime/often	173 (64.8)	72 (66.7)	
Patient disagreement with decision made by professional “physicians”			
Rare/seldom	39 (14.5)	20 (18.3)	0.350
Sometime/often	230 (85.5)	89 (81.7)	
Improperly taken informed consent			
Rare/seldom	92 (34.7)	44 (41.5)	0.220
Sometime/often	173 (65.3)	62 (58.5)	
Uncertainty whether to maintain confidentiality			
Rare/seldom	98 (37.0)	45 (41.3)	0.436
Sometime/often	167 (63.0)	64 (58.7)	
Uncertainty whether to disclose diagnosis to the patient/delivering “bad news”			
Rare/seldom	88 (33.0)	35 (31.8)	0.830
Sometime/often	179 (67.0)	75 (68.2)	
Disclosure of medical error by yourself			
Rare/seldom	105 (39.3)	32 (29.6)	0.077
Sometime/often	162 (60.7)	76 (70.4)	
Disclosure of medical error by others			
Rare/seldom	92 (34.6)	33 (30.6)	0.454
Sometime/often	174 (65.4)	75 (69.4)	
Conflict with administration policies and procedures			
Rare/seldom	63 (23.5)	23 (20.7)	0.556
Sometime/often	205 (76.5)	88 (79.3)	
Scarcity of resources in the clinic			
Rare/seldom	79 (29.7)	23 (21.1)	0.089
Sometime/often	187 (70.3)	86 (78.9)	
Favored care for only some groups of patients above others			
Rare/seldom	129 (48.3)	57 (51.8)	0.536
Sometime/often	138 (51.7)	53 (48.2)	
Relationship related to drug industry			
Rare/seldom	177 (66.8)	50 (45.9)	0.000*
Sometime/often	88 (33.2)	59 (54.1)	
Surpassing formally specified clinical privilege			
Rare/seldom	155 (58.3)	44 (40.0)	0.001*
Sometime/often	111 (41.7)	66 (60.0)	
Using/adopting a new untested therapy or procedure without prior formal arrangement agreed			
Rare/seldom	198 (74.2)	76 (69.1)	0.316
Sometime/often	69 (25.8)	34 (30.9)	

*The chi-square statistic is significant at 0.05 level.

Table 7 | Knowledge about ethics and common ethical issues they face in daily practice according to private and government hospitals

	Government, N (%)	Private, N (%)	p-value
How confident are you about your knowledge about ethics in medical practice: 455			
Confident	267 (77.4)	90 (81.8)	0.33
Not confident	78 (22.6)	20 (18.8)	
Have you ever referred a case to an ethics committee?			
Yes	39 (11.3)	15 (13.6)	0.517
No	305 (88.7)	95 (86.4)	
Treating patients with impaired or uncertain decision-making			
Rare/seldom	151 (39.9)	51 (13.5)	0.66
Sometimes/often	135 (35.7)	41 (10.8)	
Disagreement among patients/family and healthcare professionals about treatment decision			
Rare/seldom	25 (8.7)	9 (9.7)	0.777
Sometime/often	262 (91.3)	84 (90.3)	
Making decision about life-sustaining treatment or do-not-resuscitate order			
Rare/seldom	95 (33.3)	26 (28.3)	0.365
Sometime/often	190 (66.7)	66 (71.7)	
Conflict on the appropriateness deciding on a “no code status” with family or colleagues			
Rare/seldom	99 (34.6)	33 (35.5)	0.879
Sometime/often	187 (65.4)	60 (64.5)	
Handling end-of-life issues in general			
Rare/seldom	98 (34.9)	30 (33.0)	0.739
Sometime/often	183 (65.1)	61 (67.0)	
Perceived unnecessary use of futile therapy			
Rare/seldom	136 (47.9)	28 (30.1)	0.003
Sometime/often	148 (52.1)	65 (69.9)	
Perceived premature cessation of therapy			
Rare/seldom	143 (50.9)	35 (37.6)	0.027
Sometime/often	138 (49.1)	58 (62.4)	
“Withdrawal” versus “withholding” of therapy			
Rare/seldom	100 (35.3)	30 (32.6)	0.633
Sometime/often	183 (64.7)	62 (67.4)	
Patient disagreement with decision made by professional “physicians”			
Rare/seldom	47 (16.4)	12 (13.0)	0.436
Sometime/often	239 (83.6)	80 (87.0)	
Improperly taken informed consent			
Rare/seldom	105 (37.8)	31 (33.3)	0.436
Sometime/often	173 (62.2)	62 (66.7)	
Uncertainty whether to maintain confidentiality			
Rare/seldom	105 (37.0)	38 (42.2)	0.732
Sometime/often	179 (63.0)	52 (57.8)	
Uncertainty whether to disclose diagnosis to the patient/delivering “bad news”			
Rare/seldom	94 (33.1)	29 (31.2)	0.732
Sometime/often	190 (66.9)	64 (68.8)	
Disclosure of medical error by yourself			
Rare/seldom	104 (36.9)	33 (35.5)	0.808
Sometime/often	178 (63.1)	60 (64.5)	
Disclosure of medical error by others			
Rare/seldom	96 (34.2)	29 (31.2)	0.597
Sometime/often	185 (65.8)	64 (68.8)	
Conflict with administration policies and procedures			
Rare/seldom	68 (23.8)	18 (19.4)	0.377
Sometime/often	218 (76.2)	75 (80.6)	
Scarcity of resources in the clinic			
Rare/seldom	76 (26.9)	26 (28.3)	0.792
Sometime/often	207 (73.1)	66 (71.7)	
Favored care for only some group of patients above others			
Rare/seldom	140 (49.3)	46 (49.5)	0.978
Sometime/often	144 (50.7)	47 (50.5)	
Relationship related to drug industry			
Rare/seldom	181 (64.4)	46 (49.5)	0.011*
Sometime/often	100 (35.6)	47 (50.5)	
Surpassing formally specified clinical privilege			
Rare/seldom	152 (53.7)	47 (50.5)	0.595
Sometime/often	131 (46.3)	46 (49.5)	
Using/adopting a new untested therapy or procedure without prior formal arrangement agreed on			
Rare/seldom	206 (72.3)	68 (73.9)	0.760
Sometime/often	79 (27.7)	24 (26.1)	

*The chi-square statistic is significant at 0.05 level.

providers need more teaching and training in practical ethical dilemmas to face them in their daily practice. Similarly, in a study from USA, it was reported that medical students and residents supported ethics teaching initiatives in various topics using clinically based teaching rather than theoretical ethics narratives [22].

5. CONCLUSION

Saudi healthcare providers face important ethical challenges during their daily practice. These issues pose challenges to healthcare providers and may cause moral distress to physicians. We recommend further study of ethical issues specific to each specialty as they differ in their environment and perception of ethical dilemmas. Furthermore, medical colleges and residency training programs should act in response to these issues and prepare their students to deal with these dilemmas, as they are the future for healthcare workers.

CONFLICTS OF INTEREST

The authors declare they have no conflicts of interest.

AUTHORS' CONTRIBUTION

AMA, MAA, YHA and HA participated in the study concepts, design of the study, developing the questionnaires, and data acquisition and entry. YHA and AEA contributed in data analysis and statistical analysis of the data. HA, Al-Shaikh A, AlHarbi A and SB participated in the intellectual content, reviewing and summarizing the published literature search, clinical studies, outlining the result themes and manuscript preparation, manuscript editing, and manuscript review. YHA takes the responsibility of the integrity of the work as a whole and he is the point of correspondence.

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