The perceived role of Islam in immigrant Muslim medical practice within the USA: an exploratory qualitative study

A I Padela,[1] H Shanawani,[2] J Greenlaw,[3] H Hamid,[4] M Aktas,[5] N Chin[6]

[1] Department of Emergency Medicine, University of Rochester Medical Center, Rochester, New York, USA; [2] Division of Critical Care, Wayne State University School of Medicine, Detroit, Michigan, USA; [3] Center for Palliative Care and Clinical Ethics, University of Rochester Medical Center, Rochester, New York, USA; [4] Department of Psychiatry and Neurology, New York University, New York, USA; [5] Department of Cardiology, University of Rochester Medical Center, Rochester, New York, USA; [6] Department of Community and Preventive Medicine, University of Rochester Medical Center, Rochester, New York, USA

Correspondence to:
Aasim I Padela, University of Rochester Medical Center, Department of Emergency Medicine, 601 Elmwood Avenue, Box 655, Rochester, NY 14642, USA;
aasimpadela@yahoo.com

Received 1 May 2007
Revised 4 August 2007
Accepted 9 August 2007

ABSTRACT

Background: Islam and Muslims are underrepresented in the medical literature and the influence of physician's cultural beliefs and religious values upon the clinical encounter has been understudied.

Objective: To elicit the perceived influence of Islam upon the practice patterns of immigrant Muslim physicians in the USA.

Design: Ten face-to-face, in-depth, semistructured interviews with Muslim physicians from various backgrounds and specialties trained outside the USA and practising within the the country. Data were analysed according to the conventions of qualitative research using a modified grounded-theory approach.

Results: There were a variety of views on the role of Islam in medical practice. Several themes emerged from our interviews: (1) a trend to view Islam as enhancing virtuous professional behaviour; (2) the perception of Islam as influencing the scope of medical practice through setting boundaries on career choices, defining acceptable medical procedures and shaping social interactions with physician peers; (3) a perceived need for Islamic religious experts within Islamic medical ethical deliberation.

Limitations: This is a pilot study intended to yield themes and hypotheses for further investigation and is not meant to fully characterise Muslim physicians at large.

Conclusions: Immigrant Muslim physicians practising within the USA perceive Islam to play a variable role within their clinical practice, from influencing interpersonal relations and character development to affecting specialty choice and procedures performed. Areas of ethical challenges identified include catering to populations with lifestyles at odds with Islamic teachings, end-of-life care and maintaining a faith identity within the culture of medicine. Further study of the interplay between Islam and Muslim medical practice and the manner and degree to which Islamic values and law inform ethical decision-making is needed.

Clinicians are working with an increasingly diverse patient population. Providing culturally competent care in this setting requires negotiating differences in culture and held values. These differences often create challenges to cooperative decision-making and in ethical conflict resolution. Solving these dilemmas collaboratively is made easier when clinicians and patients understand the moral codes and ethical constructs that inform their differing views.[1] Morals and ethical codes are shaped, in part, from religious beliefs. Religious beliefs are a common part of a larger world view through which members of the same faith adapt and negotiate their identity within multicultural societies.[2] This adaptation occurs in medicine for both physician and patient. There are many studies that focus on the role of religious beliefs and values upon patients' healthcare decisions. Less attention has been paid to how physicians' particular cultural and religious values may influence the clinical encounter.[3–6] Yet, according to a large US-based cross-sectional survey, 55% of physicians agree that their religious beliefs influence their practice of medicine.[7]

Although Muslims constitute over 1 billion of the world's population and in the USA constitute a potential healthcare consumer population of approximately 7 million, Islam and Muslims are underrepresented in the medical literature.[2 8 9] Most empiric studies pertaining to Islamic medical ethics are country- or topic-specific.[8] For example, attitudes towards organ donation among Muslim medical practitioners, laymen and scholars have been studied separately in Saudi Arabia, Turkey and England. Yet no similar investigation within the USA exists.[10–15] Furthermore, almost a quarter of the US physician workforce consists of international medical graduates, and a significant percentage of these come from Muslim-majority nations.[16] Hence, it is important to start to understand the practice patterns and held values of these providers. This pilot study sought to generate hypotheses about the perceived influence of Islam upon the practice patterns of immigrant Muslim physicians in the USA. Its specific aim was to identify ethical challenges and value conflicts in this population. Such identification can increase our understanding of cultural and ethical conflicts faced by Muslim American physicians, and may lead to the development of targeted, culturally sensitive approaches in treating Muslim patients.

METHODS

Study design

The design is a qualitative, semistructured interview of immigrant Muslim physicians practising in the USA.

Sampling strategy and subjects' characteristics

For this study we sampled Muslim physicians who had immigrated to the USA after receiving their medical school training in a Muslim-majority nation. As the goal of a qualitative study is not to gauge the prevalence of a trait in a population but to ascertain the range of experiences possible within a population, the sample population was purposely constructed to represent the diversity in the population. Thus, this group was chosen for its

unique perspective in having trained in an environment influenced by Islamic values and are currently practising in a pluralistic Western medical culture. Participants were recruited from a convenience sample of local physicians known to the investigative team and through fliers in local Islamic centres. Ten physicians, seven men and three womn, were interviewed (table 1).

Data collection

A diverse, interdisciplinary investigative team that included physicians from various clinical disciplines (AIP, HS, HH, MA), a bioethicist (JG) and a medical anthropologist (NC) was assembled. Data were collected through face-to-face interviews lasting about 45 minutes using a semistructured interview guide by NC, AIP, MA, JG and another physician, all of whom were trained in qualitative interviewing. Interviews were conducted at a site chosen by the person being interviewed and were digitally recorded and transcribed verbatim. The University of Rochester Research Review Board approved this as a minimal-risk study. Participant confidentiality has been maintained and pseudonyms are used in this paper.

Data analysis

Initial domains of interest were identified through a literature review on Islamic ethics and medical practice and through team discussions and were then incorporated into the interview guide. The domains included content and length of prior religious training; content and length of bioethical training in medical school and residency; respondents' views of the central tenets of Islamic ethics; respondents' views on the interactions between Islamic precepts and medical practice; and strategies and social networks that respondents have used in addressing ethical dilemmas, with follow-up probes designed to elicit specific examples. Investigators independently reviewed the transcripts, identifying recurring ideas, events, social actors and metaphors through an iterative process of repeated comparison between interviews and domains. Using a modified grounded-theory approach, in which additional categories of significance emerge from the data, two additional domains, "physician–patient interactions" and "maintaining a faith identity" were added to the analysis. Domains, quotations and themes were placed into tables for the purposes of cross-case and within-case display and analysis. Matrices were created juxtaposing participants' characteristics and demographics to further identify patterns, in the manner recommended by Miles and Huberman.[17] Matrices were also used to explore the interplay between themes.

The internal validity of the data set was strengthened in part by the use of a diverse, interdisciplinary analytic team. Through several team meetings, a consensus process was used to identify key themes; conflicts over themes were resolved by placing direct quotations from interviews within a framework to see if the quotations supported the theme; disconfirming cases were noted and incorporated into the data interpretation; and individual disciplinary or cultural biases in interpretation of themes were reflected upon and discussed.

Table 1 Characteristics of study participants (n = 10)

Characteristic	Data
Sex (No)	
Male	7
Female	3
Age in years, mean (range)	47.4 (27–64)
Years in US practice, mean (range)	16.25 (0–34)
Ethnicity (No)	
Bangladeshi	3
Pakistani	3
Jordanian	1
Turkish	1
Egyptian	1
Sudanese	1
Medical specialty (No)	
Internal medicine and subspecialties	5
Surgery and subspecialties	2
Physical medicine and rehabilitation	1
Anaesthesiology	1
Psychiatry	1
Practice setting (No)	
Private	2
Hospital-based	5
Both	3
Religious studies (No)	
Qur'anic studies*	5
Elementary and secondary Islamic studies†	5
Biomedical ethics training (No)	
Didactics in medical school and/or residency‡	3
None, but served on hospital ethics committee	2
None	5

*Learning the recitation of the Qur'an and the basic thematic meanings of the passages. †A curriculum of classes during elementary and secondary education on the history of Islam, the biography of the Prophet Muhammad and similar subjects, without advanced studies (exegesis, legal maxims, etc). ‡Based on the current Western biomedical ethics paradigm.

RESULTS

Data from the central domains of interest focused on three main areas: (1) the influence of Islam on professional behaviour, medical decision-making and doctor–patient relationships; (2) maintaining a faith identity; and (3) identifying a support system for negotiating ethical dilemmas. Multiple themes were identified under each of the domains as described below. A key finding was that there was great variation in how physicians translated their understanding of Islam into practical action, even within this small sample. This was anticipated by Nazar, who said, "You're going to see a lot of variability in [the] Muslim religion and Islamic doctors because of their background and the way they were brought up and educated."

The perceived effect of Islam on practice patterns and the patient–doctor relationship

Despite the small number of participants, there was a wide variety of views on how Islam affected physicians' practice of medicine; these crossed several different topic areas, including personal character development, interpersonal relationships and medical practice.

The most consistent theme across interviews was that virtues taught by an Islamic upbringing were perceived to uphold the professional ethics of medicine. That is, physicians felt that their Muslim background enhanced their work by providing a spiritual dimension to their practice. Two Bangladeshi physicians—Ameera and Omair—both referenced the teachings of a Qur'anic verse stating that God says if you save one life, it's as if you saved the whole of humanity, implying that Islam requires physicians to practise within an exemplary moral realm. Echoing this, Neda noted that Islam makes one "[be] honest and be [God]-conscious", while Bilal felt that Islam led to a belief in "accountability". Ibrahim summarised the Islamic

calling by stating, "believing [that] to perfect your work is [worship] pushes you to do your best in any job you do."

Several participants felt that Islam played a personal role by informing a physician's character development or by shaping doctor–patient interactions through an Islamic value system. In a comment that reflected the sentiments of several respondents, Luqman said:

> Islam is all about being helpful to others, and medicine is just full of these opportunities to be helpful to mankind and people. If you follow your faith well it teaches you how to be patient … how to deal with people who would choose to act inappropriately … how to be just to people and eliminate prejudice.

Some subjects felt that religious physicians may be less comfortable interacting with patient populations that have lifestyles at odds with Islamic teachings, but that the Islamic exhortation to "treat everybody equally" would overcome any bias in treating such patients. For example Ibrahim stated:

> [Homosexuality is an issue] not just for Islam, [but] for most religious people … it is a sin. At the same time ... I don't let my religious values interfere … I tend to treat the patient as a patient and … forget about that part.

Similarly, Luqman hypothesised that sexual orientation would not affect his treatment of a patient:

> Homosexuality, which Islam is completely against, you would get a feeling of discomfort with the whole issue [but] I would treat them in the same way.

By contrast, Neda used an avoidance strategy. She states:

> I left psychiatry because most of the problems that the patients that I had to deal with were either in drugs or alcohol and I could not find myself it was okay. I just could not accept that deviation from my Islamic teaching.

Several participants suggested that Islam profoundly influenced their practice of medicine, including the specialty they pursued, the type of patients they feel most comfortable managing, and the types of procedures they perform. Neda noted how Islam may affect specialty choice: "Muslim (male) doctors, not necessarily me … would not go and do obstetrics or gyn[aecology] because they would not really want to see an exposed patient … Muslim women doctors would not go into urology." Multiple participants commented on prohibited medical procedures—for example Neda listed "abortion", "[purely] cosmetic procedures" and "sex change" in this category. Furthermore, several respondents mentioned clinical situations where ethical dilemmas would arise due to their adherence to Islam, specifically relating to end-of-life care. Muhammad felt that "some Muslim physicians … feel that if we are taking any part in decision making of ending somebody else's life, that's not right. That would be against the religion." Basheer said, "We do not do [that] which would terminate their life quickly. We do not take the patients off the ventilator just because the chance is low for their survival."

Maintaining a faith identity

Several interviewees noted discomfort with maintaining their faith identity during what are perceived to be routine social interactions in the USA. Aaleeyah noted, "[I feel] guilty [touching males] … I'm sort of forced to shake their hand, especially if it's somebody in a position of authority, like a program director … If they put out their hand, you know, I don't want to not shake their hand. That's [a] big issue for me." Ameera, who chose of her own volition to wear a religiously prescribed head covering, stressed that the biggest barrier she had to negotiate in medical practice was the assumptions of non-Muslims that her religion was oppressive and restrictive. She told of one encounter with a patient that made her uncomfortable:

> I was seeing a male patient. He was in his 40s probably and some kind of engineer. As I entered through the door …. he said, "How the hell did you get your education? … We see day and night on TV … the ladies in Afghanistan are tortured. They don't have any rights. They cannot go out. They cannot do this or that." I say, "Okay …. Islam doesn't teach that … I said, "I got my medical degree back home. My parents sent me to medical school." He became quiet but I couldn't really believe the way he did talk to me at the beginning.

When describing their interactions with peers, two of our interviewees (Neda and Omair) noted that they were called upon by their respective institutions to provide their input as "experts" on Muslim patients in their hospital, despite the fact that they had no formal training in Islamic law or medical ethics. Omair told us:

> There was a Muslim lady who was on mechanical support for close to about 18 months … There was a lot of discussion that there is no quality of life and what should we do because the family was from a Muslim background … they were prepared to sustain the life regardless of what she is like … So there was a point where they brought me purely from the background of a Muslim as for what should we do.

Some participants noted that Islamic values continued to be an integral part of the way they interacted in social settings, particularly in areas outside the workplace. A few subjects expressed their discomfort with some social interactions that they perceived conflicted with their Islamic values. For example, Omair noted, "When there were parties for the residents and everybody was out drunk … I used to be a single individual staying behind, never picked up a glass of wine, never picked up a dance course … I may be an odd ball … but so be." A few interviewees noted appreciatively that when their colleagues became cognisant of their Islamic values they would make accommodations.

Sources of support

The physicians interviewed did not find a well-developed support structure to refer to when facing ethical challenges. Some found support from their Muslim medical peers, and one found support from a national Islamic medical organisation. For example, Aaleeyah stated that when she faced an ethical dilemma she would ask "(my) brother-in-law who is a physician … I'll just call him." Basheer said "after I started private practice, I was very fortunate to be closely involved with the Islamic Medical Association, so my mentorship … came from the organisation itself; what to do, how to handle a situation and if there were any ethical question, it would be taken up by the Islamic Medical Association." When seeking advice from individuals, the choice of whom to ask for assistance seemed to be based on the religious knowledge/understanding of the stated individual. Illustrating this, Ameera related that she usually did not come across many ethical challenges, "but my husband is a physician and he's knowledgeable in Islam. If I ever have to face anything like that, I can talk with him." Similarly, Muhammad would ask his mother for aid, since she "has read a

lot about this religion … she's not a physician, but my father is and she has a lot of second-hand knowledge about (medicine) … I would probably refer to her first and then … seek advice from fellow Muslim physicians that I know."

When asked about the role of religious experts within ethical decision-making in medicine, most physicians delineated a large one. Ibrahim said, "I think their roles might be important, especially in a way of … pointing out some of the conflicts that we might not see. I'm sure that sometimes things happen, even in my daily practice that I miss the point that this … conflicts with my religion." Muhammad said, "I think it is a very important role … There are various issues … such as … abortion … in-vitro fertilisation, surrogate motherhood. I think the religious scholars really have to start thinking about these things and try to come up with a consensus among Muslims so we can say this is … our practice." Neda reported that religious scholars are needed to inform both physicians and patients; as she said, "With so many dilemmas these days about organ transplants, about artificial insemination, [test] tube baby … you really need someone who is a scholar, knows about the religion so they can provide them with the proper guidance, the patients and the doctors." Neda also felt the specific need for guidance from religious experts during her time on the hospital ethics committee, as she faced a case where "I had a lady … for 4 or 5 months on a respirator … and if there was any religious scholar to guide these people, that would have been wonderful. But sometimes we don't have …(I was) the Islam expert."

A few physicians did not see a role for religious experts within ethical-decision making in medicine, as they did not see much difference between Islamic ethics and medical ethics. As Bilal put it, "The guidelines for how you treat within Islamic ethical guidelines are not too much different from regular ethical guidelines."

DISCUSSION

This is the first work to elicit the views of Muslim practitioners as to how Islamic values manifest themselves in their daily practice of medicine in a multicultural Western society. This qualitative study provides a narrative of the religious values and constructs that inform medical decision-making among a group of immigrant Muslim physicians practising in the USA. A British study of similar scope elicited the opinions of Muslim practitioners to a variety of standard bioethical dilemmas; the study we present here, however, is more open-ended, allowing practitioners to establish the flow of inquiry.[18] Hence, our report of the perception of Islam enhancing professional virtues and defining clinical practices is novel.

Several themes emerge from our interviews, such as the trend to view Islam as enhancing virtuous professional behaviour; the perception of Islam as influencing the scope of medical practice through setting boundaries on career choices, defining acceptable medical procedures and shaping social interactions with physician peers; and a perceived need for expertise in Islamic medical ethics grounded in Islamic studies and law. With regard to physicians' adaptation to a professional medical culture, the majority of our study participants felt that Islamic ethics and values supported the medical ethics espoused by US professional bodies. These physicians felt that being Muslim in this setting was an asset and enhanced good medical practice.

A large cross-sectional survey of American physicians found that differences between physicians' religious and spiritual characteristics are associated with differing attitudes and behaviours regarding religion and spirituality in the clinical encounter.[19] Yet the relationship between religious beliefs of practitioners and discomfort with particular clinical circumstances is under-studied. This study attempts to characterise areas of practice that are challenging to Muslim practitioners. Critics might argue that conflicts a Muslim physician might face are similar to those faced by any physician raised in a similar socioreligious society, regardless of the particular faith. They may question why studying one particular group might offer insight into our general knowledge of medical practice. We think, however, that focusing on members from any group, be it ethnic, geographic or religious, will offer insight and will challenge our practice of medicine, our values and our interactions with members of such communities. Studying the attitudes of Muslim physicians, we argue, has the potential to offer as much insight as studying physicians of any other ethnicity, nationality or religion.

In this study, some Muslim practitioners reported feeling ill at ease with gay and lesbian patients, although they noted a strategy to overcome their objections to lifestyle, while another respondent left psychiatry due to discomfort with a population replete with substance abuse. Further exploration into how this population negotiates conflicts that arise from catering to a population with lifestyles at odds with an Islamic value system is necessary.

Of particular interest is the reported expectation of non-Muslim peers and ethics committees that Muslim physicians may provide "the Islamic position" on ethical dilemmas in spite not having had formal training in Islamic law and theology, Muslim culture or general medical ethics. The assumption that any Muslim physician has the knowledge or skills to be a cultural and religious broker for Muslim patients concerns the authors. There is potential for a Muslim physician, granted the authority of "Islamic medical ethics expert", to misrepresent their patients' interests and impose a cultural bias and personal religious interpretations or opinions about bioethical matters, without formal training in clinical ethics and Islam. This potential reliance on "any" Muslim physician is also worrying because in our sample none of the physicians referenced any of the medical literature on Islamic bioethics, although not much has been written on the subject (see box 1). Conversely, subjects in our study were very sensitive to the differences in their own lifestyle choices and value systems compared with those of their non-Muslim patients, and for the most part they recognised the need to respect the differences and treat patients with good will.

The Muslim physicians of this study maintained their faith identity among their fellow physicians by abstaining from alcohol and dancing at social functions and conferences. For two of the three women physicians, however, maintaining their faith identity through the use of religiously prescribed head coverings or by observing the injunction to refrain from physical contact with men outside their family proved to be a more difficult negotiation that left them frustrated.

An interesting negative finding in this pilot study is the lack of subjects' interest in issues such as research ethics, the role of the pharmaceutical industry and informed consent. For instance, only a few subjects reported concern about issues such as the Islamic positions on abortion, cosmetic surgery and organ transplantation. The lack of formal training in medical ethics may contribute to the lack of concern about these issues. It is also possible, given that some respondents felt Islamic values to play a role in their selection of medical field, that they self-selected out of fields where they faced ethical challenges relating to these issues. Furthermore, the lack of formal training in Islamic studies may preclude them from recognising that the Islamic tradition may take positions on these issues.

Box 1: Further reading on Islamic bioethics in medicine

- Abdel Haleem M. Medical ethics in Islam. In: A. Grubb, ed. *Choices and decisions in health care.* London: John Wiley & Sons Ltd, 1993:1–20.
- Anon. The Islamic code of medical ethics. *World Med J* 1982;**29**:78–80.
- Asman O. Abortion in Islamic countries—legal and religious aspects. *Med Law* 2004;**23**:73–89.
- Brockop JE. Islamic ethics of saving life: a comparative perspective. *Med Law* 2002;**21**:225–41.
- Daar AS, al Khitamy AB. Bioethics for clinicians: 21. Islamic bioethics. *CMAJ* 2001;**164**:60–3.
- Gatrad AR, Sheikh A. Medical ethics and Islam: principles and practice. *Arch Dis Child* 2001;**84**:72–5.
- Padela AI. Islamic medical ethics: a primer. *Bioethics* 2007; **21**:169–78.

Additionally, our line of questioning and relatively short interview time may not have given the subjects adequate opportunity to express their views on these issues.

This qualitative pilot study has clear limitations. We necessarily studied a narrow segment of the immigrant Muslim community; we did not include immigrants from all Muslim-majority countries; and we did not interview physicians primarily involved in non-clinical activities such as research, administration or medical education. These are groups that deserve further investigation, as they will undoubtedly bring a wider variety of experiences and values as immigrant physicians in the USA. However, our initial findings from clinicians suggest that there are themes worth investigating further and yield data that could inform a survey design that may be applied more generally. Again, these findings are not meant to represent the Muslim physician community at large. Rather, they serve to generate hypotheses for further investigation. Furthermore, we attempted to reduce social-desirability bias by using interviewers who were diverse in ethnicity, religion and gender and analysing the data through common themes that appeared in the aggregate of the interviews. However, the possibility of social-desirability and selection bias may limit how far our findings can be generalised.

The results of our pilot study bring forth many questions about how minority physicians interact within a multicultural medical system and how great an effect religious values play in medical practice. These results will help us to construct survey-based studies to gauge areas of ethical challenges to Muslim practitioners and the various response strategies. Further research efforts using other sampling strategies could focus on how religiosity and ethnicity influence adaptation and negotiation in the clinical realm and how different generations of physicians approach the same issues.

Acknowledgements: The authors thank the physicians who participated in the study. They also thank Dr Irfan Galaria for aiding in study development and interviews, Dr Sandra Schneider for encouragement and funding and Brooke Lerner, PhD, for manuscript review and comments.

Funding: Through the Center for Palliative Care & Clinical Ethics and the Department of Emergency Medicine at the University of Rochester Medical Center.

Competing interests: None.

REFERENCES

1. **Betancourt J.** Cultural competence—marginal or mainstream movement? *N Engl J Med* 2004;**351**:953–5.
2. **Bartkowski J,** Read J. Veiled submission: gender, power, and identity among evangelical and Muslim women in the United States. *Qual Sociol* 2003;**26**:71–92.
3. **Koenig HG,** McCullogh ME, Larson DB. *Handbook of religion and health*. New York: Oxford University Press, 2001.
4. **Ellison CG,** Levin JS. The religion–health connection: evidence, theory, and future directions. *Health Educ Behav* 1998;**25**:700–20.
5. **Mueller PS,** Plevak DJ, Rummans TA. Religious involvement, spirituality, and medicine: implications for clinical practice. *Mayo Clin Proc* 2001;**76**:1225–35.
6. **Astrow AB,** Puchalski CM, Sulmasy DP. Religion, spirituality, and health care: social, ethical, and practical considerations. *Am J Med* 2001;**110**:283–7.
7. **Curlin FA,** Lantos JD, Roach CJ, *et al*. Religious characteristics of U.S. physicians: a national survey. *J Gen Intern Med* 2005;**20**:629–34.
8. **Rodríguez del Pozo P,** Fins J. Death, dying and informatics: misrepresenting religion on MedLine. *BMC Med Ethics* 2005 Jul 1;**6**:e6. doi: 101186/1472-6939-6-6 http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool = pubmed&pubmedid = 15992401 (accessed 6 Mar 2008).
9. **Anon**. *American Muslims: population statistics*. Washington, DC: Council on American–Islamic Relations, 2005.
10. **Al-Faqih SR.** The influence of Islamic views on public attitudes towards kidney transplant donation in a Saudi Arabian community. *Public Health* 1991;**105**:161—5.
11. **Keçeçioglu N,** Tuncer M, Yücetin L, *et al*. Attitudes of religious people in Turkey regarding organ donation and transplantation. *Transplant Proc* 2000;**32**:629–33.
12. **Al-Mousawi M,** Hamed T, al-Matouk H. Views of Muslim scholars on organ donation and brain death. *Transplant Proc* 1997;**29**:3217.
13. **Hayward C,** Madill A. The meanings of organ donation: Muslims of Pakistani origin and white English nationals living in North England. *Soc Sci Med* 2003;**57**:389–401.
14. **Al Sebayel M,** Khalaf H. Knowledge and attitude of intensivists toward organ donation in Riyadh, Saudi Arabia. *Transplant Proc* 2004;**36**:1883–4.
15. **Akgün H,** Bilgin N, Tokalak I, *et al*. Organ donation: a cross-sectional survey of the knowledge and personal views of Turkish health care professionals. *Transplant Proc* 2003;**35**:1273–5.
16. **McMahon, G**. Coming to America—international medical graduates in the United States. *N Engl J Med* 2004;**350**:2435–7.
17. **Miles M,** Huberman MB. *Qualitative data analysis: an expanded source book*. 2nd edn. Thousand Oaks: Sage, 1994.
18. **Molloy A.** Attitudes to medical ethics among British Muslim medical practitioners. *J Med Ethics* 1980;**6**:139–44.
19. **Curlin FA,** Chin MH, Sellergren SA, *et al*. The association of physicians' religious characteristics with their attitudes and self-reported behaviors regarding religion and spirituality in the clinical encounter. *Med Care* 2006;**44**:446–53.

The perceived role of Islam in immigrant Muslim medical practice within the USA: an exploratory qualitative study

A I Padela, H Shanawani, J Greenlaw, et al.

J Med Ethics 2008 34: 365-369
doi: 10.1136/jme.2007.021345