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RESEARCH LETTER

Islam and termination of pregnancy for genetic conditions in Pakistan: implications for Pakistani health care providers

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Prenatal diagnosis (PND) services have been available in Pakistan for over a decade, where Islam is the faith of over 95% of the population. This paper presents Islam's stance on termination of pregnancy (TOP), the availability of a fatwa (religious ruling issued by Islamic scholars) in Pakistan for abnormalities, and its implications for health care providers (HCPs).

The Quran (Islamic scripture) does not explicitly address TOP. Therefore, Islam's stance on TOP for abnormalities is open to interpretation. Instead, scholars within different Islamic sects (schools of thought) have various viewpoints on TOP based on their interpretations of related Quranic verses,² such as descriptions of the process of fertilization, development of the fetus and ensoulment (soul-breathing):

'Then we placed him (as a drop of sperm) in a place of rest, firmly fixed. Then we made the sperm into a clot of congealed blood. Then of that clot we made a (foetus) lump. Then we made out of that lump bones and clothed the bones with flesh. Then we developed out of it another creature (by breathing life into it).' (Quran, Surah-23 Al-Mumenoon, Verse-14)

Scholars may also base their interpretation of whether or not TOP is permissible on various Hadiths (recorded sayings of the Prophet Mohammed, PBUH), using information about periods elapsing between the stages mentioned in the above quote:

"...every one of you is collected in the womb of his mother for the first forty days, and then he becomes a clot for another forty days, and then a piece of flesh for another forty days. ... Then the soul is breathed into his body...' Sahih Bukhari (Hadith), Volume-4, Book-55, Number-549.

Identifying Islam's stance on TOP is further complicated because there are over 73 sects worldwide.³ The sects agree that TOP is permissible if there is reasonable certainty that

continuation of pregnancy would endanger the mother's life.⁴ The five largest sects also allow TOP for genetic conditions before ensoulment,⁴ but differ in their interpretations of when ensoulment occurs,² hence when TOP is allowed. Although some sects believe ensoulment occurs around the 40th day of pregnancy, because the fetus remains a 'drop of semen' until then, the majority agree that it occurs at 120 days according to Hadiths.

Hadiths do not explicitly state whether TOP is permissible for fetuses diagnosed with an abnormality. Therefore, fatwas are necessary, because they provide the practical guidance necessary to facilitate decision-making in a world with continuous advances in technology. Fatwas are nonbinding Islamic legal opinions issued by Islamic scholars based on their interpretations of the Quran and Hadiths. A fatwa developed in one country can be used by any Muslim anywhere in the world, because fatwas are not specific to countries. However, a fatwa is considered by Muslims as an interpretation and/or opinion of a scholar or body of scholars. A fatwa may not have the authority of a religious establishment behind it, although some scholars may be so respected that their views have considerable authority.

Fatwas have been developed in various Muslim countries to allow the delivery of prenatal services, ^{1,5–7} including one such fatwa in Pakistan. ¹ We are aware of these fatwas through studies conducted in Muslim countries and published in the Western literature (see Table 1 for a summary). To the best of our knowledge, these fatwas are not publicly available, mainly because they have been developed for use by HCPs in prenatal services. We are not aware of any such fatwas translated into English, although the Urdu version of the Pakistani fatwa is available on request from the corresponding author.

Pakistan's law on TOP only permits TOP if the mother's life is at risk.⁸ This law does not refer to the above mentioned fatwa or TOP for abnormalities. This has created a legal dilemma for HCPs in Pakistan, because they are essentially breaking national laws by

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Carretor	Number of fatwas	Level by	Date first issued	The sect to which the fatwa	Context for the fatwa
Country	raiwas	Issued by	Issuea	applies	Confext for the fatwa
Iran ⁶	One	Ayatullah Sayyid Ali Khamenei	1998	Ithnashari (Shia)	Genetic abnormalities
Kuwait ⁵		High Council for Islamic Legal Opinions	1984	Information not provided, but most likely Hanbli	Severe deformation, or physical or mental deficiency, neither of which can be cured
Pakistan ¹	One	Mohammad Taqi Othmani, Mufti, Jamia Dar ul-Uloom, Karachi	1995	Hanifi	Serious disorder
Saudi Arabia ⁷	Two	Islamic Jurisprudence Council	1990	Information not provided, but most likely Hanbli	Severe malformation
		Associate Professor & head of the department in Imam Mohammed bin Saud University in Riyadh.			

Table 1 Summary of fatwas on termination of pregnancy for use by prenatal services

performing termination of affected fetuses. Therefore, there is a need for debate at the policy level to inform Pakistan's constitution on this issue.

Nevertheless, similar to other fatwas worldwide,9 the fatwa issued in Pakistan gives responsibility of determining the severity of the condition to HCPs, where TOP is allowed if a 'doctor gives advice' to terminate. Therefore, PND services are dependent on HCPs' perceptions about the severity of a condition. Research shows that people's perceptions of severity and normality of the same condition differ depending on various factors including their experiences of that condition.¹⁰ Perceptions of severity, hence attitudes toward termination, may differ between HCPs, and between HCPs and parents with or without experience of parenting an affected child. Consequently, it is essential for HCPs to have a good understanding of parents' perspectives about the severity of particular conditions so that they can facilitate reproductive decisions. While much is known about people's perceptions of the role of HCPs in decision-making, there is a need for such research from both parents' and HCPs' perspectives in Pakistan to inform the development of policy and practice guidelines for PND services.

Moreover, HCPs may experience religious and moral dilemmas themselves, if their own beliefs are in conflict with PND and/or TOP for certain conditions. The first author has 17 years experience of genetic counselling in Pakistan and has experienced demand for PND and TOP for conditions that he does not perceive as severe, including deafness and blindness. With a lack of clear religious and policy guidelines, HCPs face the dilemma of where they should draw the line. There is a dearth of research in Muslim countries exploring how HCPs decide which conditions are severe enough to warrant TOP or the implications of such responsibility on HCPs. Research on experiences and perspectives of HCPs could further inform the development of PND services in Muslim countries.

There is poor awareness of the fatwa in Pakistan amongst HCPs, but those who are aware of it, keep a copy to show to families to facilitate reproductive decision-making. However, these HCPs do not necessarily know the context in which the fatwa was given. Consequently, they are unable to provide comprehensive information about its context, resulting in some families being unsure about its reliability and validity. Also, the

fatwa was given by a religious scholar in a particular sect and its use within various sects has not been debated. These issues highlight again the importance of clarification on Islam's stance on TOP at government and policy level in Pakistan, and the need for HCPs to be trained and better informed to provide potentially religiously and legally controversial advice.

Overall the fatwa for PND services in Pakistan places responsibility on HCPs to advise parents about TOP, without clarity on the degree of severity that warrants TOP and without a legal framework to support them. The role of HCPs in facilitating decisions about PND and TOP is further complicated by the lack of distinction in the community between religious and cultural beliefs,1 and by ambivalent cultural stereotypes. For example, the birth of a child with an abnormality could be perceived as the 'Will of Allah' and being positively associated with being 'chosen parents', but could also be perceived by the community as divine punishment for the parents. Furthermore, in our experience, TOP is culturally perceived as immoral, but showing couples a fatwa may make it easier for HCPs to overcome any guilt associated with religious conviction when providing advice about PND and termination of an affected pregnancy.

In conclusion, the fatwa in Pakistan has various legal, ethical, cultural and religious implications for HCPs. However, the fatwa allows HCPs to deliver comprehensive prenatal services, enabling parents to opt for termination of an affected pregnancy in a Muslim country.

WHAT'S ALREADY KNOWN ABOUT THIS TOPIC?

 Fatwas available in some Islamic countries permit termination of pregnancy for congenital abnormalities.

WHAT DOES THIS STUDY ADD?

- Fatwas place responsibility on health care professionals for determining the severity of conditions for which termination should be offered
- There is no national policy or law governing prenatal diagnosis services in Pakistan
- Such responsibility and lack of national law leaves health care professionals in prenatal diagnosis services facing ethical and legal dilemmas

REFERENCES

- 1. Ahmed S, Saleem M, Sultana N *et al.* Prenatal diagnosis of betathalassaemia in Pakistan: experience in a Muslim country. Prenat Diagn 2000:20:378-83
- Asman O. Abortion in Islamic countries--legal and religious aspects. Med Law 2004;23(1):73-89.
- 3. Abu Dawud. Model behaviour of holy Prophet. Hadith Number 4579: Book 035, 2010.
- 4. Aramesh K. The influences of bioethics and Islamic jurisprudence on policy-making in Iran. Am J Bioeth 2007;7:42-4.
- Abdel Haleem MAS. Medical ethics in Islam. In Choices and Decisions in Health Care, Grubb A (ed.). Chichester, West Sussex: John Wiley & Sons, 1993:1-20.
- 6. Akhlaghpoor S. Chorionic villus sampling for beta-thalassemia: the first report of experience in Iran. Prenat Diagn 2006;26:1131-6.

- Alsulaiman A. Attitudes toward prenatal diagnosis and termination of pregnancy in Saudia Arabia. PhD Thesis, University of Leeds, UK 2004
- Arif MO, Fatmi Z, Pardeep B et al. Attitudes and perceptions about prenatal diagnosis and induced abortion among adults of Pakistani population. Prenat Diagn 2008;28:1149-55.
- Alkuraya FS, Kilani RA. Attitude of Saudi families affected with hemoglobinopathies towards prenatal screening and abortion and the influence of religious ruling (Fatwa). Prenat Diagn 2001;21:448-51.
- Ahmed S, Hewison J, Green JM, Cuckle HS, Hirst J, Thornton JG. Decisions about testing and termination of pregnancy for different fetal conditions: a qualitative study of European White and Pakistani mothers of affected children. J Genet Couns 2008;17:560-72.