ANAESTHESIA, PAIN & INTENSIVE CARE
www.apicareonline.com

EDITORIAL VIEW

Religious belief as determinant of animal derived medications in health care: how much is fairly good?

Habib Md Reazaul Karim[1], Tariq Hayat Khan, MCPS, FCPS[2]

[1]Department of Anesthesiology & Critical Care, All India Institute of Medical Sciences, Raipur-92099, (India)
[2]Consultant Anesthesiologist & Pain Specialist, Aga Khan Family Welfare Center, Islamabad-44000, (Pakistan)

Correspondence: Dr Habib Md Reazaul Karim, All India Institute of Medical Sciences, Raipur-92099, (India); Mobile: 91 9612372585; E-mail: drhabibkarim@gmail.com

Received: 14 July 2018
Reviewed: 14 July 2018
Corrected & Accepted: 18 July 2018

ABSTRACT

Various social, cultural, and ethnic factors can play a role even in the use and availability of medical resources; religious belief, although less reported, is one such strong factor. Not much scientific literature is available regarding the use of porcine and bovine derived medications and medical devices for patients practicing Judaism, Islam, and Hinduism. Consideration and knowledge of these issues is necessary to facilitate successful communication with a diverse patient population and respect her religious convictions. The anesthesiologist may also have to face this situation, albeit rarely. To play safely, one needs to have a sound knowledge about the origin of the medications intended to be used and adequate interview with the patient or his attendants to avoid any untoward event. This editorial compliments a case report being published in this issue on a similar topic.

Key words: Porcine-derived medications; Bovine-derived products; Religions; Religious convictions; Jehovah's Witnesses; Total parenteral nutrition

Citation: Karim HMR, Khan TH. Religious belief as determinant of animal derived medications in health care: how much is fairly good? Anaesth Pain & Intensive Care 2018;22(2):151-154

The complexity of healthcare delivery is multidimensional and various obstacles play an important role in it. The obstacles can be administrative, organizational or financial, and availability of proper medications, manpower and infrastructure as well as affordability of the same is a strong determinant of the healthcare delivery in general.[1] While availability is strong determinant, the social, cultural, and ethnic reasons can play a role even in the settings of availability. Religious belief, although less reported, is one such factor. In this issue, a very enlightening case report highlights the same.[2] It brings forth an important aspect in healthcare delivery, where the patient refuses the use of low molecular weight heparin (LMWH) in view of its being an animal origin, despite the fact that the patient was in very much need of deep vein thrombosis prophylaxis. Although, the denial of taking LMWH did not lead to a major problem and the case was successfully managed by the authors; it may not always be the case. This is because; a wide variety of medications is being derived from animals or animal tissues. The scenario becomes more important from the fact that; a) nearly 84% of the population of the world is affiliated to one or another religion,[3] b) the culture and belief is different among different religions, and c) the alternative medication may not always be available or accessible or even affordable. To compound the problem, the information about the origin of the medications may not be easily accessible, as it is not usually mentioned in the drug labels.

A study on the acceptability of animal derived products showed that, while Christians (including Jehovah's Witnesses), Jews and Buddhists had no objection in the use of all animal and human derived products; Muslims did not accept the porcine derived drugs, dressings or implants; Hindus and Sikhs objected the use of bovine or porcine derived products.[4] A nearly

same result was also found in a study conducted in Australia, a country with developed economy and found that Jews accepted porcine or bovine surgical implants, the Muslims only accepted porcine products in a dire situation, but Hindus refused to use bovine products in any situation.[5] The scenario becomes more complicated when the situation arises during perioperative, emergency and/or intensive care. The anesthesiologist may land up in an unprecedented situation, while standing on a fine line between life and death of the patient. While the consent for use of a potentially lifesaving medication / intervention may also be different, and a previous study also found that all animal derived products were accepted by people of all religions in case of an emergency and if alternatives were not available.[4] The problems may, however, arise especially when not informed beforehand. Even lifesaving interventions, e.g. emergency tracheostomy in perioperative period, have caused chaos and an ethical dilemma due to non-acceptance.[6] The informed consent, therefore, becomes an integral part of peri-operative care.

The guidelines on personal beliefs and medical practice (2013) given by the General Medical Council, United Kingdom states that spiritual, religious, social and cultural factors should be assessed while taking a history.[7] Therefore, personal beliefs of every patient must be recorded. The statement also indicates that the physicians must not put pressure on a patient to discuss or justify their beliefs.[7] Dietary preferences are many a times decided by religious beliefs. For example, Muslims do not eat pork as it is considered as Haram (prohibited), while Hindus do not eat beef (cow) as cow is regarded as sacred. Many Hindus do not take any meat and even eggs may be on the prohibited list of some of them. The Jains are usually strict vegetarian and do not accept even the eggs. Some people however, take eggs in the form of cake etc. Although, it might be difficult to determine whether the drug meets the patient's dietary requirement,[8] doctors should consider it while delivering healthcare in a patient who informs about his dietary preferences and prohibitions during history taking. This statement is part of the informed consent where the patient should be informed about the procedure / treatment, and alternatives available etc. Although for routine type of treatment an implied consent will suffice; for a complex treatment, a written expressed consent should be taken.[9] Even if the patient needs a simple treatment and patient disapproves medications to be used, the autonomy of the patient should always be respected. Countries like India also give legal rights to autonomy and self-determination to the patients. Therefore, both routine as well as an emergency situation should be discussed and preferably a written consent should be obtained. The compliance for the treatment is likely to be more if the patient is an active partner in the decision making process and his preferences and views have been recognized. A guidance statement from the Document Number # QH-GDL-954:2013, issued by Queensland Ministry of Health states that patients who want to avoid certain animal products for religious beliefs may need to know about the source of medications and excipients contained within their medicines.[10]

The dietary preferences may even be different within the same religion and may vary from person to person. Many people do not consider medication as diet. This concept becomes more apparent when the medication is given by parenteral route. Moreover, the concept of 'istihalah' (the process of change of a substance into one with different characteristics) also renders a Haram (forbidden) substance into a Halal (permitted) substance, a guidance statement by the Islamic Organization for Medical Sciences in Kuwait in 1995 states.[11] It is also stated that treatment with Haram medication is permissible when one is certain of being cured.[12] Although a cure cannot be guaranteed in many diseases, but the effects are certainly proven most of the registered drugs and prostheses, as are the drugs and implant / prostheses used by anesthesiologists and surgeons in the perioperative period. Even though beef has been reported as a prescribed medicine in Ayurveda (an ancient Indian system of medicine), guidelines for the use of medications derived from animal products, especially cows for the Hindu patients are either scarce or absent.

Another problem, which merits discussion, is that the nature of origin of the drug (i.e. direct or indirect exposure to animal) is usually not written in the drugs label, and it may not be possible for any doctor to remember all animal derived drugs / medications. Some of the alternatives may be less known or even may be non-existent or unavailable in certain places.[13,14] Therefore, an information sheet of such medications can be used by every hospital / intensive care units. A chart can be made available mentioning the alternative drugs for porcine as well bovine derived medications for use in the Muslim and Hindu patients respectively. This can even be extended to contain alternatives for animal derived to vegetable derived drug excipients. Synthetic alternatives are now a days available, for example, Fondaparinux can be used as an alternative to LMWHs e.g. Deltaparin

and Enoxaparin etc.

Many capsule covers contain gelatin from bovine origin. For example, omeprazole, a commonly used drug in medical practice. Alternatives to such capsules can be prescribed (tablet pantoprazole in place of cap omeprazole). Similarly, starch containing volume expanders can be used as an alternative to gelatin based volume expanders.[10]

Pharma industry or lawmakers of countries can make it mandatory to mention a symbol of the animal origin on the drug label, and the information on the animal of origin may be incorporated into the drug information sheet. The same thing can even be done for vegetarian and non-vegetarian categories; for example, total parenteral nutrition (TPN). TPN can be both animal and vegetable origin and this information may help the patients who are strict vegetarians. The vegetarians (mostly Hindu, Jain, Buddhist, etc.) may object to the medications which use animal derived products.[4, 15] The information sheet will help both the patients as well as the doctors in informed decision making.

The problem, however, does not end here. Some religious leaders want the donors' informed consent as amust.[4] It may be feasible when using human tissues (living allograft) or blood products; but it is not possible for animals (xenograft). Even consent for using donor organs from cadaveric allograft is not easy. However, in a country where the local law indicates that every person is a donor, the consent for cadaveric allograft becomes implicit, which is also not unlawful as per Islamic law.[16] Moreover, the statement 'saving one life is like saving whole mankind' and 'necessities overrule prohibitions' also allows using donor organ by Muslim faith, even if it is harvested from Haram animal or Halal animal slaughtered in non-halal way.[17] While some patients may like to take a decision by themselves, many may like to consult their respective religious leaders.[11] Therefore, the statement of these leaders also becomes important and if the patient wants, he or his guardian should be given this opportunity.

To conclude, even though the religion of a patient does not matter much to the doctors, who always put humanity before anything else; religious beliefs and dietary habits of the patient can pose as barriers in healthcare delivery as well as in physicians' decision making. There seems to be not much obstacles in the emergency and life-saving care where mostly the anesthesiologists are involved, but this factor needs to be considered when patient mentions his wish and disapproves the animal derived or specific animal derived drugs. Knowledge about alternative drugs, discussion with the patient and obtaining informed consent can help in case management as well as in medicolegal aspects. In elective situation, when available, it will be a good clinical practice to prescribe a drug / prosthesis / implant as per patient's wish.

Conflict of interest: The authors declare no conflict of interest.

Authors' contribution:

HMRK – literature search, write up, review, correspondence

THK - literature search, review

REFERENCES

1. Kronfol NM. Access and barriers to health care delivery in Arab countries: a review. East Mediterr Health J 2012;18(12):1239-46. [PubMed] [Free full text]
2. Datz H, Syed A, Alsuhebani M, Tumin D, Tobias JD. Religious-related concerns and animal-derived medications during anesthetic care. Anaesth Pain & Intensive Care 2018;22:247-250.
3. Hackett C, Grim BJ; the Pew Forum on Religion and Public Life. The Global Religious Landscape - A Report on the Size and Distribution of the World's Major Religious Groups as of 2010. Washington: Pew Research Centre; 2012 Dec [Cited 2018 June 29]. Available from: http://assets.pewresearch.org/wp-content/uploads/sites/11/2014/01/global-religion-full.pdf
4. Eriksson A, Burcharth J, Rosenberg J. Animal derived products may conflict with religious patients' beliefs. BMC Med Ethics 2013;14:48. [PubMed] [Free full text] doi: 10.1186/1472-6939-14-48.
5. Easterbrook C, Maddern G. Porcine and bovine surgical products: Jewish, Muslim, and Hindu perspectives. Arch Surg 2008;143:366-70; discussion 370. [PubMed] [Free full text] doi: 10.1001/archsurg.143.4.366.
6. Karim HMR, Yunus M, Hmar V, Lyngdoh NM. My most memorable patient- Can't Can't Intubate in a patient with tracheal stenosis. Anaesth Pain & Intensive Care 2013;17(4):296. [Free full text]
7. General Medical Council [http://www.gmc-uk.org/guidance]. Personal Beliefs and Medical Practice. London: General Medical Council; 2013 Mar 25 [Cited 2018 Jun 29] Available from: https://www.gmc-uk.org/-/media/documents/personal-beliefs-and-medical-practice_pdf-58833376.pdf
8. Tatham KC, Patel KP. Suitability of common drugs for patients who avoid animal products. BMJ 2014;348 :g401. [PubMed] [Free full text] doi: 10.1136/bmj.g401.
9. Nandimath OV. Consent and medical treatment: The legal paradigm in India. Indian J Urol 2009;25(3):343-347. [PubMed] [Free full text] doi: 10.4103/0970-1591.56202.
10. Jagels A. Guideline: Medicines/pharmaceuticals of animal origin. Version 2.0. Document Number # QH-GDL-402:2013. Department of Health: Qeeunsland Government; 2013 Nov 1 [Cited 2018 Jun 29] Available from: https://www.health.qld.gov.au/__data/assets/pdf_file/0024/147507/qh-gdl-954.pdf
11. Ogden J. Religious constraints on prescribing medication. Prescriber 2016;27(12):47–51. [Free full text]
12. Rahim A; Sussex Partnership NHS Foundation Trust. Can Muslims use medicines containing animal products? 2017 [cited 2018 Jun 29]. Available from: https://www.sussexpartnership.nhs.uk/sites/default/files/documents/animal_products_in_medicines_can_muslims_use_medicines_containing_animal_products_-_ver_2_-_dec_17.pdf
13. Smith KM, Hoesli TM. Effects of religious and personal beliefs on medication regimen design. Orthopedics 2011;34:292–5. [PubMed] doi: 10.3928/01477447-20110228-17.
14. Mynors G, Ghalamkari H, Beaumont S, Powell S, McGee P. Informed choice in medicine taking: Drugs of porcine origin and clinical alternatives. An introductory guide for patients and carers. 2004.pp1-24 [Cited 2018 Jun 29] Available from: http://archive.mcb.org.uk/wp-content/uploads/2015/12/Drugs-Derived-From-Pigs-and-their-Clinical-Alternatives_Booklet.pdf
15. Mehta N. People have a right to know if their medicines contain animal ingredients. The Pharmaceutical Journal 2017;27ZZZ9:98.
16. Altikriti AO, Al-Ubaydi SN (translators); European Council for Fatwa and Research. Fatwas of European Council for Fatwa and Research. Cairo: Islamic INC Publishing & distribution. 2002.
17. Khan A. Bad deeds, day to day living and common issues. In: Islam, Muslims and America – Understanding the Basis of their Conflict. New York: Algora Publishing 2003.p211.