


Maqasid al-Shariah as a Complementary Framework for Conventional Bioethics: Application in Malaysian Assisted Reproductive Technology (ART) Fatwa

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Abstract Rapid development in the area of assisted reproductive technology (ART), has benefited mankind by addressing reproductive problems. However, the emergence of new technologies and techniques raises various issues and discussions among physicians and the masses, especially on issues related to bioethics. Apart from solutions provided using conventional bioethics framework, solutions can also be derived via a complementary framework of bioethics based on the Higher Objectives of the Divine Law (*Maqasid al-Shariah*) in tackling these problems. This approach in the Islamic World has been applied and localised in the Malaysian context. Thus, this paper highlights a conceptual theoretical framework for solving current bioethical issues, with a special focus on ART in the Malaysian context, and compares this theory with conventional theories of bioethics.

Keywords Assisted reproductive technology · ART · Reproductive · Genetics · Maqasid al-Shariah · Bioethics

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Introduction

The world is witnessing rapid development and growth in the medical field because of on-going research and development (R&D) activities. New medical technologies and advancements have been discovered through the development of new methods, technologies and medications which treat and cure various diseases, including reproductive health problems. These medical developments, especially in the area of assisted reproductive technology (ART), are able to improve human health and quality of life. ART, intertwined with genetic engineering, refers to a suite of medical solutions for couples who are unable to reproduce normally due to their reproductive health problems. However, like other technologies, ART also creates issues and discussions among experts, scholars, and public about its religious, ethical and moral status. Is this technology permitted? Should this technology be permitted? What is the status of technology which offers benefits while having the potential for harmful effects? These issues are global bioethical dilemma experienced by every country, including Malaysia. These questions must be addressed and solved by considering local conditions, or in other words, providing local solutions to a global bioethical dilemma.

In discussing the implementation of Maqasid al-Shariah in Malaysia in complementing the conventional bioethics, this article is divided into five main sections. The overview discussion in this article will be presented in the introduction. The second section touches on the overview of bioethics, including four main conventional bioethical approaches, namely the utilitarianism, deontological, virtue theory, and pluralistic approaches. The next section provides an elaboration of Maqasid al-Shariah as Islamic bioethical approach conceptually. The fourth section discusses the Malaysian experiences in the implementation of Maqasid al-Shariah in overcoming the assisted reproductive technology (ART) bioethical related issues. Finally, all the discussions presented in this article will be reviewed and wherever possible resolved in the final section of this article.

Bioethics: An Overview

Bioethics plays a role in solving medical related issues, including ART and its applications. The term 'bioethics' has been discussed as early as the 1970's especially with regards to the medical ethics. The term was used for the first time in the publication by Van Rensselaer Potter of Wisconsin University in 1970, while André Hellegers of Georgetown University was the first person to who used the term in the name of an organisation (Reich 1994, 1995). Bioethical discussions involve a variety of knowledge disciplines, and have evolved from merely conventional discussion to discussions that are more inclusive, taking into account cultural and religious perspectives (including the Islamic perspective), particularly in countries such as Malaysia (Saifuddeen 2013). Bioethical discussions involving religious perspective emphasizes on harmony between body and mind, material and spiritual aspects, as well as ethical and legal aspects (Chamsi-Pasha and Albar 2013).

Bioethics, in practice, assist physicians and medical practitioners to tackle the arising dilemma. Bioethics guides discussions by helping determine rightness and wrongness and establishing permitted and prohibited actions in terms of the application of science and the use of technology (Saifuddeen et al. 2014). Thus, bioethics is part and parcel of medicine, because the medical world is constantly generating new issues in bioethics which need to be resolved.

There are several approaches to conventional bioethics, including utilitarianism, deontology, virtue theory and pluralistic theory. Utilitarianism is a doctrine emphasizing consequence or implication of actions (Häyry 2006), while bioethical theory that looks at the most useful or beneficial results which are 'products' of certain actions (Mepham 2013; Borchert 2006). Deontological theory concerns human rights and responsibilities as individuals and at the same time respecting the rights of other individuals and closely linked with common sense (Mepham 2013). This theory includes three main elements, which are option, special relationship and constraint (Mcnaughton and Rawling 2007). The goodness or badness of an act will be determined based on the intention and the act itself. An individual must act with a sense of responsibility towards themselves and others (Mepham 2013; Saifuddeen et al. 2014). The rightness or wrongness of an action in virtue theory is evaluated based on a person's actions and traits such as courage, generosity, malice. This contrasts with utilitarianism and deontology, which emphasize a situation rather than a person (Mepham 2013). Such evaluation will also consider personal tendencies and motives (Oakley 2007). The pluralistic approach is a combination of various approaches to bioethics, especially utilitarianism and deontology, and is widely accepted among medical practitioners today. Among the widely-used pluralistic approach is principlism, which was introduced by two American bioethicists, Beauchamp and Childress. They introduced the principle of *prima facie*; principles developed from the idea of David Ross, an Oxford philosopher. This principle consists of four items: (1) non-maleficence, (2) beneficence, (3) autonomy, and (4) justice (Mepham 2013).

These conventional approaches of bioethics are primarily based on human experience and common sense in determining the right or wrong of an action by prioritizing individual rights over the rights of society. Ethical principles are normative and cannot be self-applied or self-interpreted. Moral traditions which include religious moral teachings play their role in interpreting and applying these normative ethical principles (Campbell 1990). Therefore, the theory of the Higher Objectives of Divine Law (Maqasid al-Shariah) is proposed as a complementary framework for conventional bioethics.

Maqasid al-Shariah: The Theory of the Higher Objectives of Divine Law

Maqasid al-Shariah is an approach utilized in the Muslim world. It is useful for dismantling complex medical problems because of its comprehensiveness (Raquib 2014), rather than finding the solution based merely on the principle of *prima facie* (Saifuddeen et al. 2013). Maqasid al-Shariah is defined as the objectives, goals, intentions of the goals and principles of the Islamic Divine Law (Kamali 2008; Auda 2014). In the Islamic knowledge tradition, Maqasid al-Shariah, is a bioethical

approach which includes two different discourses in Islam, namely juridical-moral discourse (*'ilm al-fiqh*) and ethico-moral discourse (*'ilm al-akhlaq*) (Abdullah 2014). Therefore, this theory is a pragmatic approach which is suitable as a framework which is complementary to bioethics. The theory aims to preserve orderliness and regulate the conduct of mankind in preventing them from committing corruption and destruction (Ashur 2006), to preserve interest (*maslahah*), to avoid harm (*darar*) and corruption (*mafsadah*), to preserve justice and remove hardship (*raf'u al-haraj*), and to facilitate improvement and perfection of human life (Kamali 2008, 2012). This approach balances physical and spiritual needs (Raquib 2015).

The need for this application in solving bioethical dilemma can be traced to the 15th century Hijri when technological changes and development have brought new and complicated problems that require a bird's eye view for finding solutions based on Islam when there are no clear and specific reference in the primary sources of Islamic law (Kasule 2015). Generally, human interest can be categorised into three levels of priority: essentials (*al-daruriyyat*), exigencies (*al-hajiyat*), and embellishments (*al-tahsiniyyat*) (Kamali 2008). The essentials are the most important level in preserving human interest. This level forms the foundation for exigencies and embellishments. Any disorder in relation to the essentials will lead to disorder in the other two levels. However, exigencies and embellishments must be preserved for the sake of the essentials (al-Raysuni 2011).

Five human interests are preserved under the essentials: faith (*hifz al-din*); life (*hifz al-nafs*); progeny (*hifz al-nasl*); intellect (*hifz al-'aql*); and property (*hifz al-mal*) (Saifuddeen et al. 2014), showing that the theory of the Higher Objectives of Divine Law is concerned with protection of basic values of interest to all human beings (Kamali 2012). The violation of any one of these interests would result in an application or technology being classified as unethical and should not be permissible (Saifuddeen et al. 2014). Maqasid al-Shariah is also strengthened by the five principles of the Islamic Divine Law, namely intention (*qasad*); confidence (*yaqin*); harm (*darar*); difficulty (*mashaqqah*); and custom (*'uruf*). In some cases, there is a chance of conflict between different interests of the essentials. This conflict can be solved through deliberations based on legal maxim (*qawa'id al-fiqh*) (Kasule 2005). For instance, if a particular technology brings benefit and harm at the same time, the assessment of the technology should be based on the legal maxim of 'warding off corruptions/evils takes precedence over bringing benefits' (*dar'u al-mafasid muqaddam 'ala jalb al-masalih*) (al-Yubi 2011).

Maqasid al-Shariah is adopted and adapted in the context of local customs (*'uruf*) in Malaysia, whose population consists of more than 60% Muslims. In Malaysia, there are authorities related to bioethics including the Malaysian Medical Council (MMC) which is responsible for controlling and regulating ethical conduct within the medical profession; the National Bioethics Council of Malaysia, which plays a role as an advisory panel on bioethical issues that may have an impact concerning the environment, society, health, culture, laws and religions and Malaysian society in general; and the Institute of Islamic Understanding Malaysia (IKIM), which is a think tank that proactively discusses emerging bioethical issues (Isa 2013). Malaysia tends to practice collective *ijtihad* rather than individual *ijtihad*. In Malaysia,

Islamic affairs are under state jurisdiction. Thus, each state has its own fatwa committee which is responsible with the task of issuing fatwa on bioethical issues (Isa 2015).

Application of the Maqasid al-Shariah in Malaysian Assisted Reproductive Technology (ART) Fatwa

Assisted reproductive technology encompasses modern medical technologies that can prevent or cure reproductive problems, thus fulfilling the objective of preserving the progeny. Some examples of the ART applications today are *in vitro* fertilisation (IVF), gamete intrafallopian transfer (GIFT), and gestational surrogacy. (Zegers-Hochschild et al. 2009). Therefore, there are some guidelines outlined by the theory of Maqasid al-Shariah. Any procedure or treatment of ART is permissible if that treatment does not violate any essentials of the Maqasid al-Shariah, does not endanger life, does not cause chaos and immorality in society (Yepprem 2007), must use gamete cells derived from a married couple within the valid marital period, and is free from third party intervention (Serour 2008).

Islam is very particular about lineage. This is demonstrated through statutes of waiting period for divorced women or women who lost their husbands. One of the main objectives of this waiting period is to avoid interference of lineages from a previous husband and a new husband (Syed Husin and Azahari 2010). This is because in Islam, authenticity and sanctity of lineage is a central feature of Muslim identity and family structure (Serour 2008). Lineage affects other matters related with socio-ethical status of a Muslim, such as property inheritance and marriage (Omar 2013).

How can this theory be applied to ART related bioethical issues? Preservation of faith will be accomplished by permitting only application that conforms to the Quran and the Sunnah, which are the two primary sources of Islamic Divine Law. Any application that threatens religious establishments such as family, inheritance and others would be prohibited. Preservation of life is fulfilled by practicing healthy lifestyle and avoid any harmful act. Treatment of human diseases using ART is also an act of preserving human life. Preservation of progeny in the context of ART is carried out by permitting procedures which are free from any intervention of parties other than married couples and performed within the valid marital period. Thus, ART procedures such as germline therapy that involves egg and sperm of donors are prohibited. All medications during any ART treatment must be administered as prescribed by medical practitioners in preservation of intellect. Information about side effects should be conveyed to patients before administering the medications. In the context of preserving property, all matters pertaining to ART including processes, procedures, appliances and so on are categorized as intellectual property. Monopoly and intrusion of intellectual property are actions that violate the preservation of property (al-Raysuni 2011).

In Malaysia, a number of ART related bioethical issues have been discussed and resolved by Malaysian authorities based on Islamic law principles and the theory of the Higher Objectives of Divine Law.

Surrogacy

The 80th Muzakarah (Conference) of the Fatwa Committee of the National Council of Islamic Religious Affairs Malaysia, held in February 2008, discussed the ruling of obtaining the service of a surrogate mother to have a child. The Committee decided that surrogacy is forbidden in Islam, even if the sperm and ovum were taken from a married couple, as this will bring genetic confusion to the unborn baby (Jabatan Kemajuan Islam Malaysia 2015a, b, c, d, e, f, g). This is because the baby would be carried by another woman during pregnancy, and not by her genetic mother whose ovum is used. Surrogacy contradicts the definition of motherhood in Islam, where a mother is the person who produces the ovum, goes through the pregnancy period, and gives birth to the baby (Hashi 2015; Uthman 2012). In surrogacy, the surrogate mother is not the owner of the ovum, while the genetic mother (the ovum's owner) does not go through the pregnancy period and does not give birth to the baby. As such, Islam views this as a violation of the Higher Objective of preserving progeny. Confusion of lineage from Islamic perspective will bring bigger negative implications, such as a violation of faith. This is because the preservation of the lineage is very important for purposes of inheritance, marriage and others.

Human Cloning

The 51st Muzakarah (Conference) of the Fatwa Committee of the National Council for Islamic Religious Affairs Malaysia, held in March 2002, discussed human reproduction and cloning from the Shariah point of view. The Committee decided that human cloning, for whatever reasons is prohibited, because it is against the nature of human creation as decided by God (Jabatan Kemajuan Islam Malaysia 2015a, b, c, d, e, f, g).

Human cloning is seen as a contradiction to the wisdom of human procreation as described in the Quran. Natural human procreation requires the presence of a man and a woman. Human cloning would eliminate the function of the male in human reproduction. Therefore, there are many negative implications if human cloning were to be allowed, and this includes the increasing number of unmarried women, which in turn will increase the problem of single mothers as well as children growing up without a father. In the long term, the situation will worsen as men are likely no longer required in reproduction because the process will no longer be dependent on the male sperm. This situation will further threaten the institution of marriage and violate the preservation of faith and religion. Cloned children have no kinship and are not entitled to an inheritance or a reason to obtain inheritance, because there is no legislation that can be made to the cloned child in order to obtain inheritance (Jabatan Kemajuan Islam Malaysia 2015a, b, c, d, e, f, g).

Test Tube Baby and In Vitro Fertilization

The 5th Muzakarah (Conference) of the Fatwa Committee of the National Council of Islamic Religious Affairs Malaysia was held in November 1982 discussed the

issue of test tube baby. The Committee decided that test tube baby from the ovum of a wife and sperm of a husband that have been fertilized using respectable means and conceived by the wife is valid in Islam. On the other hand, if the eggs were not from legally married couples, or involved surrogacy, the test tube baby is illegitimate. Baby born through test tube method can be a guardian and is entitled to receive inheritance from the rightful family. The respectful method of test tube baby is when the eggs were taken from husband and wife using methods that are not contradictory to Islam (Jabatan Kemajuan Islam Malaysia 2015a, b, c, d, e, f, g). The test tube baby is permitted in Islam if this application does not violate the Higher Objective of preserving the progeny which is important in ensuring that faith and property are preserved. The violations of faith and property in this context happen when there is confusion in the lineage. The lineage is very important in Islam because it plays a role in matters such as marriage, social boundaries, inheritance and so on.

The 55th Muzakarah (Conference) of the Fatwa Committee of the National Council of Islamic Religious Affairs Malaysia, held in April 2003, discussed *in vitro* fertilization as an effort for conception. The Committee decided that transferring fertilized egg (zygote) into the wife's uterus after the death of the husband or after divorce is forbidden (Jabatan Kemajuan Islam Malaysia 2015a, b, c, d, e, f, g). The 56th Conference (*muzakarah*) of the Fatwa Committee of the National Council for Islamic Religious Affairs, held in May 2003, discussed *in vitro* fertilization. The Committee decided that the fertilization of eggs extracted before the solemnization of marriage is forbidden, even if the fertilization process were conducted during the marital period, but fertilizing eggs extracted during marital period is permissible (Jabatan Kemajuan Islam Malaysia 2015a, b, c, d, e, f, g). In this context, preservation of progeny is protected because one of the permissible conditions of ART is the fertilisation of gamete cells must be from a husband and wife during their valid marital period.

Apart from the aforementioned issues, other aspects are still in the research stage in Malaysia. One example is the issue of mitochondrial replacement therapy or 'tri-parent baby' technology. The application of this technology was permitted by the United Kingdom in February 2015 (Human Fertilisation and Embryology Authority 2015). This technology is a new ART treatment using IVF techniques, aiming to replace the mitochondria or mitochondrial DNA (mtDNA) disorders by replacing dysfunctional mitochondria of a patient with healthy and normal of a donor. This therapy is beneficial in helping women with mitochondrial disorders to have healthy children without those disorders. The first tri-parent baby boy was born in April 2016 in Mexico. His mother is a Leigh Syndrome carrier whom experienced four miscarriages and the death of two young children (Zhang et al. 2016, 2017). This new technology, like other technologies, has raised many bioethical and religious issues and requires thorough and detailed research. Looking at the bioethical and religious implications using the framework of Maqasid al-Shari'ah is a practical way in dealing with such complex and complicated issues.

Conclusion

Maqasid al-Shariah, as a complementary framework to conventional bioethics, is an approach that has been accepted and practised in Malaysia. Its discussions complement conventional bioethics discourse. The theory emphasises the greater good of the community and is not limited to purely individual interests, while balancing physical and spiritual needs. It also preserves human interests, at the same time maintaining the relationship between mankind and God, as well as with the environment. In Malaysia, Maqasid al-Shariah plays a significant role in developing and implementing guidelines and policies related to ART in Malaysia. Bioethical issues are addressed by the relevant authorities, such as the Ministry of Health, if the matters pertain to medical or health issues. ART is under the purview of this ministry. Therefore, the application of the theory in Malaysia provides guidelines from the Islamic perspective concerning bioethical issues related to ART. All relevant ART issues are discussed thoroughly by experts in various related fields and are decided based on the Islamic legal maxims. Because of its innovative approach and flexibility, this theory assists Muslim jurists in issuing fatwa on bioethical issues, which remain complex and complicated matters.

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