The Concept of Human Milk Donation and Milk

Kinship in Islam

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ABSTRACT

Breastfeeding is the initial and the best feeding to infants after birth. Breast milk has countless benefits to children and mothers in matter of health, education, economy, social, and psychology. The aim of this paper is to generally discuss the point of brief concept of human milk donation and milk kinship in Islam. Despite this, the World Health Organization (WHO) recommends the duration of 6 months for exclusivity of breastfeeding and continues up to two years old. This is in line with the statement in Quran that mothers should breastfeed their children for two years [al Baqarah 1: 233]. However, not every mother may succeed to breastfeed their children up to two years and the infants are exposed to many risks with the introduction of infant formula milk. With that, WHO and UNICEF had made a joint statement to suggest on human milk banks development to fit infants need in appropriate situations. In Islam, breastfeeding is virtue and milk sharing practice will lead to a new milk kinship called "Rada" or "Milk-Suckling Mahram". The milk kinship make the infants are forbidden to marriage with the donors and donors relatives. The concept of Islam would make the operation of milk bank complex, but with some precautions it is still likely that also in Muslim communities a human milk sharing initiative can be successfully established.

Keywords: Breastfeeding, Breast Milk, Donor Milk, Human Milk Bank, Muslim

INTRODUCTION

Breastfeeding is the initial and the best feeding to infants after birth. Breast milk has countless benefits to children and mothers in matter of social, health, education, economy, psychology. Despite this, the World Health Organization (WHO) recommends the duration of 6 months for exclusivity of breastfeeding and continues up to two years old with the introduction of complementary feeding at the age of 6 months old (1,2). This recommendation has been used as reference to set up the National Breastfeeding Policy in Malaysia (3). Breastfeeding also a key element in achieving the 17thSustainable Development Goals (SDGs), including goals on poverty, hunger, health, education, gender equality and sustainable consumption (4).

Exclusive Breastfeeding Practice

Breast milk is the gold nutrition for the infants as the first feeding after birth. The uniqueness of breast milk is due to the dynamic characteristic of the liquid whereby the composition of breast milk can be changes over single feed and over the period of lactation as well. There are three types of breast milk that will be changes throughout different stages of postnatal period, which are: i) colostrums, ii) transitional milk, and iii) mature milk.

Breast milk contains complex proteins, lipids, carbohydrates and other biologically active components that suit for infants' growth and development (5). Even though a lot of studies have been done to formulate the exact content in breast milk, but up to date it still cannot be replicated. Breast milk contains strong antibodies and antitoxins as Immunoglobulin A (IgA) in breast milk that are high at day 10 until 8 months PP. Besides that, breast milk also contains a type of sugars called human milk oligosaccharides (HMOs), which are not present in infant formula.

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HMOs itself will not be digested by the infants but will help to make up the intestinal flora that block the attachment of disease causing pathogens, which may help to prevent infectious diseases (5).

For the uniqueness, WHO recommends to practice exclusive breastfeeding for the first six months of life, with solids gradually being introduced around this age when signs of readiness are shown and continue breastfeeding up to two years (6). Allah also mentioned in Al-Quran that mothers should breastfeed their children for two years as "Mothers shall suckle their children for two full years, - that for such as desire to complete the suckling" [al-Baqarah 1: 233]. In another verse, Allah mentioned "And his gestation and weaning take thirty months" [al-Ahqaf 15:46]. Therefore, as referred to the above verses, the duration of two years for breastfeeding is recommended in both Islam and western perspectives. In Malaysia, breastfeeding was dominantly practiced among Malay whose deeply believe in Islam and any decision should abide by Islamic teachings (7). Breastfeeding difficulties was another significant whereby variable those who had breastfeeding difficulties were more likely to unable to exclusive breastfeed up to six months. The difficulties found among Malay mothers were defined as maternal that experience sore nipple, cracked nipple, breast engorgement, poor latching technique, perception of inadequate milk and hungry infant (8). Studies found that breastfeeding difficulties had significant relationship to early discontinuation of exclusive breastfeeding (9). The result shown, the women had 1.15 times odds of early discontinuation of exclusive breastfeeding

Major declines in exclusive breastfeeding rates are worrying since it will give critical impact to children's survival, cognitive development, and bad impact to the economic development in the region (2, 10). A study found non-breastfed infants are more likely to suffer from serious illnesses including gastroenteritis, asthma, eczema, and respiratory and ear infections (11). The infants who were not breastfed also tend to develop risk factors for heart disease such as obesity and high blood pressure in later life. In addition, women who do not breastfeed have increased risk of developing heart disease, hypertension, diabetes, high cholesterol, breast cancer, ovarian cancer and hip fractures in later life (11).

with every one unit increase in breastfeeding

difficulty score (OR = 1.15, p < 0.001) (9).

In Malaysia, even though many women accepted breastfeeding practice but they agreed that they were facing big challenge to breastfeed exclusively their infants due to confronted with the feeling of low milk production and perceived low nutritional quality breast milk (8,9). In the context, the concept of human milk sharing is an important way to overcome the insufficient milk availability to the infants and people's understanding on Islamic teaching in regards to breastfeeding is the integral factor in the success of this practice (12).

Donor Human Milk

History of Breast Milk Donation

The history of human milk donation began since long time ago. The first human milk bank was established at 1990 in Vienna, Austria. After ten years, another two milk banks were opened-in Boston and Germany. The Human Milk Banking Association of North America (HMBANA) was established in 1985 in order to establish the standards for all North American milk banks (13). In conjunction to the association, the International Milk Banking Initiative (IMBI) was founded at the International HMBANA Congress whereby it lists up to 33 countries with milk bank programs. Up to date, there are hundreds of milk bank in more than 35 countries. However, in the middle of 20th century, cultural changes had resulted in the replacement of human milk by artificial feeding and increase the risk of formula milk feeding to the infants making human milk bank gain back the popularity nowadays (14).

Human Milk Bank

In western countries, the milk sharing donors and recipients use both formal and informal channel to facilitate the milk sharing practice as an alternative to infant formula (15). The informal channel can be through online such using internet or by recipient-donor self-agreement. However, the informal channel leads to the controversies surrounding milk sharing. There are potential risks involved in feeding an infant with human milk donated by individuals who are not systematically screened by a trained health professional (15, 16). Poor handling during milk collection and storage can cause contamination that lead to adverse effects to the infants.

In the other hand, the formal channel that involves a proper system to collect with well screening donors is through the human milk bank. A human milk bank is a service established for collecting, screening, processing, storing and distributing donated human milk (18). Many associations such HMABA, IMBI, United Kingdom Association of Milk Banking (UKAMB) and International Breast Milk Projects (IMBP) are examples of associations that are established to help promote, established

the usage of milk donations. Human milk banks are relatively rare in African and Asian developing nations and Kuwait is the only Muslim country documented to have milk sharing activities (16).

Islamic View on Milk Kinship

History of Prophet Muhammad p.b.u.h. Wet Nursing

The human milk sharing among women have been increasingly regaining considerable interest. The term milk sharing refers to the practice in which a donor gives expressed breast milk directly to a recipient family for the purpose of infant feeding breastfeeds a recipient infant. Prophet Muhammad p.b.u.h. has also been breastfed by three women thorough out his early life until reached age of four years old. The women are: i) Thuwayba, who was the slave of Abu Lahab; ii) Halimatus Saadiah from Saa'd family; and iii) Ummu Ayman, who was become the slave of Prophet Muhammad p.b.u.h. in later life. This milk sharing involves milk bond and responsible among Muslims as in Islam as milk sharing from another woman creates a new milk kinship called as "Rada" or "Milk-Suckling Mahram". When a woman acts as a wet nurse, she becomes the child's mother and everything concerning blood mahrams applies here including father, mother, sister, brother, aunt, uncle and so on. Even it is stated that our Prophet Muhammad p.b.u.h. also being devoted and contributing continously to all his rada mothers even after Prophet Muhammad p.b.u.h married to Siti Khadijah and immigrated to Medina until his rada mothers all passed away.

Concept of Mahram

Allah mentioned in the Quran about the concept of mahram which Allah say: "Forbidden to you (are) your mothers and your daughters and your sisters and your father's sisters and your mother's sisters and daughters (of) brothers, and daughters (of) sisters and (the) mothers who nursed you and your sisters from the nursing and mothers (of) your wives and your step daughters who (are) in your guardianship of your women whom you had relations with them, but if not you had relations with them, then (there is) no sin on you. And wives (of) your sons, those who (are) from your loins and that you gather together (between) two sisters except what has passed before. Indeed, Allah is Oft-Forgiving, Most-Merciful" [An-Nisa 4:23].

The milk kinship and rada mahram concept as Prophet Muhammad p.b.u.h. said: "What is haram (forbidden) through birth is haram through breastfeeding". Milk kinship is established if the child receiving the milk of another woman at below of two years of age and amount of milk is sufficient to reach the stomach and build flesh and bone (12, 14). However, the requirements and establishment of milk kinship is interpreted differently by religious scholars of different school.

Arguments in Milk Kinship Establishment

According to Abu Hanifa, a woman who breastfeeds or gives milk to a child at most two and a half years (30 months) after birth is regarded a wet nurse. The is similar to the interpretation by Imam Muhammad and Imam Abu Yusuf that stated two years of breastfeeding duration is regarded a wet nurse. However, According to Imam Shafii and Imam Hanbali, kinship through breastfeeding does not occur when a baby is breastfed once, but it is necessary to be breastfed at least five times by the same mother. However, despite different thought in different schools, majority of the scholars interpret and agreed that the breast milk must reach the infant's stomach and thereby build flesh and bone to establish milk kinship (14, 17).

With this breastfeeding, kinship occurs between the child and the wet nurse and the mahram relatives of the wet nurse and the other children who were breastfed by the same wet nurse. It is enough for a little amount of milk to go down the stomach for kinship. Therefore, it is very important in Islamic concept to really get know from whom and to whom the milk sharing happen whereby milk kinship are regarded as mahram, and it is forbidden to marry them.

CONCLUSION

Even though donation of human milk is allowed by many western countries regulations, however there are some other aspects that been debatable in Islamic perspective. In Islam, any child aged less than 2 year-old and who was given breast feeding by a donor mother more than 5 times, is considered to be brothers with the donor mother's children though they are not originally blood related. This means that, being brothers or sisters, they cannot marry each other.

The milk bank that may plan to be implemented in Islamic country but it will need to a complex discussion in order to avoid the misconception in the relatives and relationship issues. Whereby, the milk sharing practice among donors and recipients will lead to new relationship called the milk kinship (rada). The concept of Islam would make the operation of milk bank complex, but with some

precautions it is still likely that also in Muslim communities a human milk sharing initiative can be successfully established.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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