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Motivating Factors to Breastfeed an Adopted Child in a Muslim Community in Malaysia

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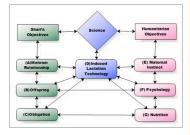
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Graphical abstract



Abstract

Breast milk is the best milk for babies. Breastfeeding is not exclusive to biological mothers only, it is relevant to adoptive mothers too. Women who have never given birth are also able to produce breast milk by following induced lactation method. According to Islamic fiqh law (jurisprudence), woman who breastfeed a child who is not her biological child will be mahram to her nurse child. Therefore the aim of this study is to examine the motivating factors to breastfeeding a foster child in a Muslim community in Malaysia. This is a qualitative study using case studies and grounded theory. A total of 12 foster-mothers whom have successfully breastfed their foster children by induced lactation method were involved in this study. The method of collecting data is semi-structured interviews. Qualitative data were analyzed using QSR NVivo Version 10 software using the techniques of content analysis, word based analysis and code based analysis. This study found, the main motivating factor for a foster-mothers to breastfeed her foster child is to build a mahram relationship with her foster child, followed by the maternal instinct, psychology, nutrition, technology, offspring and obligations. Breastfeeding a foster child in the context of a Muslim community in Malaysia aims to achieve two objectives: Islamic tenet (syariat) and goals of humanity. Both of these goals are linked by science i.e. induced lactation technology. This study proves that a Muslim foster-mother can apply induced lactation as a way to build a fosterage (milk kinship) relationship with her foster child which ultimately facilitate in their family life.

Keywords: Induced lactation; adoptive breastfeeding; qualitative data; Islamic jurisprudence; milk kinship in Islam

Abstrak

Susu ibu ialah susu yang terbaik untuk bayi. Penyusuan susu ibu tidak dikhususkan untuk ibu kandung sahaja bahkan penyusuan susu ibu juga relevan untuk ibu angkat. Perempuan yang tidak pernah melahirkan anak juga mampu untuk menghasilkan susu ibu menggunakan kaedah cetusan laktasi. Menurut hukum fiqh Islam, perempuan yang menyusukan selain anak kandungnya akan menjadi mahram kepada anak yang disusukan itu. Oleh yang demikian matlamat kajian ini adalah untuk mengkaji faktor pendorong penyusuan anak angkat dalam komuniti Muslim di Malaysia. Kajian ini merupakan kajian kualitatif dengan menggunakan kajian kes dan teori grounded. Seramai 12 orang ibu angkat yang telah berjaya menyusukan anak angkat masing-masing dengan kaedah cetusan laktasi terlibat dalam kajian ini. Kaedah pengumpulan data adalah temu bual separa berstruktur. Data kualitatif dianalisis menggunakan perisian QSR NVivo Versi 10 menggunakan teknik analisis kandungan (content analysis), analisis berasaskan perkataan (word based analysis) dan analisis berasaskan kod (code based analysis). Kajian ini mendapati faktor utama yang mendorong ibu angkat untuk menyusukan anak angkat adalah untuk membina hubungan mahram dengan anak angkat, diikuti dengan faktor naluri keibuan, psikologi, nutrisi, teknologi, zuriat dan kewajipan. Penyusuan anak angkat dalam konteks masyarakat Muslim di Malaysia bertujuan untuk mencapai dua matlamat iaitu matlamat syariat dan matlamat kemanusiaan. Kedua-dua matlamat ini dihubungkan oleh Sains iaitu teknologi cetusan laktasi. Kajian ini membuktikan bahawa ibu angkat Muslim boleh melaksanakan cetusan laktasi sebagai jalan untuk membina hubungan sepersusuan dengan anak angkat yang akhirnya akan memberi kemudahan dalam kehidupan bekeluarga.

Kata kunci: Cetusan laktasi; penyusuan anak angkat; data kualitatif; perundangan Islam; hubungan sepersusuan dalam Islam

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1.0 INTRODUCTION

Nowadays awareness about nursing an adopted child progressively increases with the practice of adoption. Research on breastfeeding an adopted child has begun to be documented since the mid-20th century with keywords such as non-puerperal lactation, abnormal lactation in the virgin, breastfeeding without pregnancy, breastfeeding adopted children, extraordinary breastfeeding, wet nursing and induced lactation. Writing and publishing articles focused on the overall review of this practice and also included case studies about breastfeeding without birth. However, research on why such practices are done or simply what factors motivate breastfeeding of an adopted child is still less research particularly involving Muslim community.

The issue of breastfeeding a foster child is a very relevant issue in a Muslim community because Islamic law outlines specific rules involving the issue of breastfeeding by women other than the birth mother. Breastfeeding by woman who is not the birth mother would raise the legal prohibition of marriage between this woman and her nursing baby. In fact, this breastfeeding practice put the nursing child at the same status as her other children in terms of the limits awrah (body parts which must be covered from others), touch and interaction. Legal prohibition on married between milk siblings is clearly stated in the Ouran (Surah 4, verse 23) that says: "Forbidden unto you your mothers... and your foster-mothers, and your foster-sisters..." In addition to the arguments of the Quran, there are hadiths that prove the relationship is equal to mothers lineage relationship as recorded by Imam Bukhari (Al-Bukhari: 5099), which means: "the milk relationship will create mahram relationship just like relationship because of the birth".

In addition to the arguments from the Qur'an and hadith, fiqh scholars such as Al-Kasani, Al-Nawawi, Al-Sharbini, Al-Usayli, Ibn Qudamah, Wahbah Al-Zuhayli, and Zaydan (Al-Kasani, 2004; Al-Nawawi, 2003; Al-Sharbini, 1997; Al-Usayli, 2005; Ibn Qudamah, 1997; Wahbah Al-Zuhayli, 1985; Zaydan, 1997) do discussed the law pertaining to breastfeeding by other women who are not biological mothers in classical manuscripts. Among the discussions in classical manuscripts include the concept of breastfeeding, law of breastfeeding, fosterage/mother milk, law and practice of fosterage, the history of fosterage in Islam, conditions that to be *mahram* (generally means: one to whom marriage is absolutely and permanently prohibited), those who are forbidden to married due to fosterage and so on. Each debate is based on the views of different sects in Islam.

Millennium era is now witnessing the development of breastfeeding practices by non-biological mother and Islam allows this practice. There is a suggestion/idea to make breastfeeding a fosterage child as an alternative to create a family relationship between foster-mothers with her foster child. Therefore, the aim of this study is to identify motivating factors to breastfeed foster child by foster Muslim mothers which was implemented in Malaysia.

2.0 LITERATURE REVIEW

Some writings about breastfeeding that arouse family relationship to occur (الرضاعة أوالرضاعة) have been reported by researchers such as Altorki (1980); Fortier (2007); Parkes (2004, 2005a, 2005b) and Carsten (2012). Altorki in his article asserts that the milk kinship relationship still receive less attention from anthropological researchers even though its importance is recognized in Islamic family law as a form of ban marriage in complex situation (Altorki, 1980). According to Frontier (2007), mother's milk is not merely to meet the nutritional needs, in fact it is very significant in shaping the institutional of milk kinship in Islam. Clarke (2007) in a series of writings about milk kinship in Islam raises the question 'how does mother's milk able to make someone to be part of a family' in the belief that the reason for the problem is going to be proven by science in the future''. Carsten (2012) asserts that milk kinship is the impact of emotional and physical relationship between nursing mothers with the babies she breastfed, although the relationship is not an easy relationship.

Debate on the issue of mother's milk and milk kinship, has been followed by a debate about the practice of breastfeeding a foster child. For Muslim community, a foster child reared by foster families still has certain limitations because he/she is a stranger (أجنبي) in the family (not a blood relationship). Consequently, this gap will lead to a foster child having a conflict within oneself while grows up in the family. Hence, based on the concepts and principles of 'breastfeeding creates the relationship of *mahram*', the foster-mothers then applied induced lactation program to stimulate the production of breast milk even though she is not pregnant or going to give birth.

Western researchers have pioneered the field of nursing an adopted child from various aspects of discussion among them are the protocol in induced lactation by Goldfarb and Newman (2009), galactagogues to stimulate feeding by Bryant (2006), Cheales-Siebenaler (1999) and Gupta (1985), review on induced lactation by Wittig et al. (2008), research on actual experiences of women undergoing induced lactation as by Abejide et al. (1997); Auerbach and Avery (1981); Biervliet et al. (2001); Chaturvedi and Dubey (1985); Elizabeth Hormann (1977); Kathleen (1981); Kuria Nemba (1994); Szucs et al. (2010); Thearle and Weissenberger, (1984); Wittig et al. (2008) and differences in the composition of breast milk which was stimulated as study by Campbell-Yeo et al. (2006). In short, the research that has been carried out is focused on how to implement induced lactation to an adopted child and what benefit derive from it. Induced lactation has been embraced as a way to provide an enhanced love bonding experience for women fostering babies. Breastfeeding an adopted child is an attempt to ensure the quality of attachment between them as proposed by Gribble (2005, 2006). Gribble suggests physical contact between mother and baby through breastfeeding to ensure secure feeling to the baby who is suffering from trauma of separation from his birth mother. This recommendation is rooted in dependency theory (Attachment Theory) founded by John Bowlby and Mary Ainsworth in 1950, which defines the dependency with the mother or mother figure in four key words of acceptance, protection, security and caring (Bowlby, 1958). Based on these four key words, the love relationship can begin as early as birth of the baby i.e. breastfeeding.

However, for Muslim community breastfeeding is not just to create bonds of affection and emotional ties, but it stretches more than that because breastfeeding will create *mahram* relationship that will have a direct impact on family relationships between the mother, her foster child as well as other members of the family.

3.0 METHOD

This study is a qualitative research design using case studies carried out on 12 women who had been nursing their foster child (12 cases). The method of collecting data is semi-structured face to face interview with the participants. Data was collected for a period of six months from December 2012 to June 2013. Information on these fosterage mothers (milk mothers) were

obtained through lactation centres which conduct consultations on breastfeeding of adopted child in the capital, Kuala Lumpur. Participant's selection procedure is based on the following criteria: Muslim woman; married; have biological child or have not; adopt a child; and successfully nurse the child until he is fully satisfied for five sessions or more (based on Islamic laws which proclaim relationship of mahram). Semi-structured interviews were carried out with written consent from participants and maintain the confidentiality and anonymity of ethics. The interview data were recorded, and next verbatim transcription is done and coded using NVivo Version 10 software. Qualitative data analysis involves three techniques: content analysis, word based analysis and based code analysis. Use of NVivo software has helped researchers save and encode the data, build system of classification, enumeration, looking for relationships and generate graphics. Next, triangulation of data includes a pilot study on fosterage mothers and subject matter experts, multiple case study triangulation, triangulation between case study interview data with other informant interviews data in the focus group discussions, and participant confirmation of interview data.

4.0 RESEARCH PARTICIPANTS PROFILE

A total of 12 women were selected to be interviewed after they have finished nursing the infants for five times or more. The infants that they fostered must be below two years old during induced lactation. Five times breastfeeding sessions and infant age less than two years are requirements set by Islamic law to create *mahram* relationship between the child and his/ her fosterage parents (milk kinship).

Dentisier			Duration of	Biologi	ical child	Foste	r child	 Induced Lactation
Particip ants	Age	Occupation	Marriage (year)	No.	Sex	No.	Sex	Year
Group 1: Has nev	er been pregna	ant (n=7)						
A*	43	Teacher	19	-	-	3	^[i] F	^[i] 2001
							^[ii] F	^[ii] 2006
							^[iii] F	^[iii] 2012
В	34	Accountant	7	-	-	1	М	2011
C*	33	Administrative	12	-	-	2	^[i] F	^[i] 2006
		Officer					^[ii] M	^[ii] 2012
D	31	Accountant	6	-	-	1	F	2012
E**	33	Lecturer	4	-	-	2	^[i] M	2012
						(twin)	^[ii] M	
F	35	Lawyer	9	-	-	1	М	2011
G	44	Teacher	20	-	-	1	М	2006
Group 2: Has bee	en pregnant an	d give birth before fostering (n	=3)					
Н	40	Air Hostess	10	1	F	1	F	2011
Ι	32	Lawyer	9	2	F	1	М	2011
					F			
J	41	Teacher	16	1	М	1	F	2008
Group 3: Pregna	nt and give birt	th after fostering (n=2)						
K	40	Teacher	16	2	F	1	F	2002
					F			
L	30	Medical	7	1	F	1	М	2010
		Laboratory						
		Technologist						

Table 1 Research participants profile

Note: '*' Mother who foster more than one child. '** Mother who foster twin, ^[1] First foster child; ^[ii] Second foster child; ^[iii] Third foster child ^[a] First biological child; ^[b] Second biological child; 'F': Female. 'M': Male.

Source: Field Study, December 2012-June 2013

Table 1 shows the profile of the study participants. The mean age of participants is 36 with a range between 31 to 44 years old. All participants are career women, i.e. 42% in the education sector, 17% in the accounting sector, 17% in the legal sector, 17% in the administrative sector and 8% in the services sector. Mean age of marriage is 11 with a range between 4 to 20 years. Participants were divided into three (3) groups representing the history of pregnancy and birth. A total of 58% of participants included in the Group 1 i.e. women who have never been pregnant, 25% of participants included in Group 2 i.e. women who become pregnant and give birth before fostering, while 17% of participants included in gGoup3 i.e. women who are pregnant and gave birth to a baby after the fostering.

5.0 RESEARCH FINDINGS

Based on the interviews with 12 participants, this study found that there are seven factors to breastfeed fosterage child among Muslim women in Malaysia, i.e.; (1) The relationship of *mahram*; (2) Maternal instinct; (3) Relationship; (4) Nutrition; (5) Technology; (6) The Offspring; and (7) Obligation. It should be noted that the determination of rank of these factors is determined by the amount of code generated for each factor, as is done by NVivo.

5.1 Mahram Relationship

Mahram is derived from Arabic word which means a person (male or female) who cannot solemnize in marriage (according to Islamic law) due to family relationship, fosterage relationship, and in-law relationship (Zaydan, 1997). This study found the main factors that motivate women to breastfeed her foster child is to create *mahram* relationship between the child and her family through breastfeeding. Sub-theme for *mahram* relationship factors are (1) *Awrah*; (2) Touch; and (3) Marriage as shown in Table 2.

No.	<i>Mahram</i> Relationship	f	%	Repeated words	Example of statements
1.	Awrah	11	92	'difficult' 'worry' 'limit' 'scary'	"When we foster a child, the most worrying thing is in terms of awrah"
2.	Touch	9	58	'touching' 'invalidate ablution' 'shaking hands' 'hug' 'kiss' 'interaction'	"Like my husband says, why not one's daughter kiss her father, a girl ought kiss her father too"
3.	Marriage	3	25	'cannot married'	"She is still our daughter, and she cannot marry her brother i I've a son later. She is a sister and the eldest"

Table 2 Factors to breastfeed an adopted child - mahram relationship

Note: 'f' means participant's frequency. '%' means participant's percentage. Source: Field Study, December 2012-June 2013

Based on Table 2, *awrah* sub-factors is the most emphasized item by 11 participants. One participant did not mention the issue of *awrah* because she herself does not cover her *awrah* properly. However, other participants are very seriously on issue of *awrah* among foster children with themselves or with their husbands or their other biological children.

Next, touch sub-factors is also considered important by the participants. Touch issues involving acts referred to by participants as 'contact', 'invalidate ablutions', 'shake hands', 'hug', 'kisses and 'interaction. In addition to the issue of *awrah* and touch, marriage is also considered important by three (3) participants when they mention that 'a biological child should not marry his fosterage brother'. Legal prohibition marrying a

fosterage brother means a fosterage child has become a *mahram* to her foster-mothers and her other biological children.

5.2 Maternal Instinct

The second motivating factor to breastfeed a foster child is maternal instinct. Although most of the participants do not experience pregnancy or childbirth, they still want to enjoy motherhood by breastfeeding their foster child. Sub-theme derived from the maternal instinct factors are (1) The nature of women; (2) The desire to be a mother; (3) Become a true mother; and (4) Enjoy breastfeed a baby; as shown in Table 3.

Table 3 Factors to breastfeed an adopted child - maternal instinct

No	Maternal instinct	f	%	Repeated words	Example of statements
1.	Learn to be a mother	8	67	'I'm a mother' 'able to feel like a mum' 'same feeling as a pregnant mother and giving birth'	"Same feeling as a pregnant mother. Even though not pregnant but able to feel how it is like to be pregnant"
2.	Pleasure of breastfeeding	8	67	'satisfied' 'relieved' 'enjoy' 'pleasure' 'indescribable feeling'	'We saw it drips from our breast so, became very emotional, because we have never been pregnant, and then milk flows from breast. Can suckle my baby properly. Very amazing''
3.	Woman instinct	7	58	'Women sure want (to have baby). 'No mother wants to give away her baby.'	"An experience and feelings of how people who want a child, to have a child. Even though we have never been pregnancy or giving birth, at least we can experience breastfeeding a child"
4.	Desire to be a mother	7	58	'been longing to have a baby' 'want so much' 'want to feel how to be a mum' 'inadequate feeling' 'need an offspring' 'fosterage mother nature'	"Longing for a child it's normal, a mum sure want (to have baby), a woman sure want"

Note: 'f' means participant's frequency. '%' means participant's percentage.

Source: Field Study, December 2012-June 2013

Based on Table 3, as for maternal instinct sub-factors, the first is prepared to be a mother. The majority of participants affirmed that through breastfeeding, they can feel how to be a mother. This issue is mentioned by eight (8) participants. The second sub-theme is the pleasure of breastfeeding, when baby is suckling and this has been agreed by eight (8) participants. Phrases such as 'satisfaction', 'relieved', 'fun, 'enjoy', 'pleasure', and 'indescribable feeling' symbolizes gratefulness to be able to breastfeed fosterage child. Next, third sub-theme is woman instinct to be able to experience pregnancy and childbirth as mentioned by seven (7) participants. The fourth sub-theme is the desire to be a mother is very deep. This aspect is also addressed by seven (7) participants. Participants mentioned that as a mother in need of an offspring but were tested with the inability to conceive one, thus make them more determined to breastfeed their foster child.

5.3 Psychology

Third motivating factor to breastfeed a foster child is psychological factor. Some participants stressed they wanted to breastfeed their foster child because they wanted to establish a love bonding between mother and child. Sub-themes of psychological factors are (1) Love and affection; and (2) Touching.

Table 4 Factors to breastfee	ed an adopted	child - ps	sychology
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No.	Psychology	f	%	Repeated words	Example of statements
1.	Love and affection	12	100	'fall in love' 'affection' 'connection' 'bonding' 'attachment'	"I noticed that breastfeeding is important because he is attaching to us. Like now, when he wants to sleep he must look for me. If he's with his father, he'll still look for me"
2.	Touching	7	58	'hugging' 'stick to the body' 'look at' 'lying on the chest' 'skin-to-skin'	"He lies and always sleeps on my chest. Put him to sleep on my chest"

Source: Field Study, December 2012-June 2013

Based on Table 4, the first sub-theme of psychological factors is love and affectionate which is agreed by all 12 participants. By breastfeeding, actions such as hugging and touching are able to generate love and implies the feeling as though the child is her own flesh and blood.

The second sub-theme is touch, which is skin to skin contact. Act of touching is vital during the process of breastfeeding since a mothers skin act as stimulus on the baby's skin that cause a sense of calm and affection thus stimulate oxytocin hormone to be secreted. For this sub-theme, a total of seven (7) participants mentioned it.

5.4 Nutrition

The fourth motivating factor to breastfeed a child is nutrition. It means the benefit of breast milk. For these factors, there are five sub-themes arising from the study as shown in Table 5.

Table 5 Factors to breastfeed an adopted child - nutrition

No.	Nutrition	F	%	Repeated words	Example of statements
1.	Mother's milk is the best	5	42	'mother's milk is the best'	"I believe that breast milk is the best"
2.	Mother's milk comes from her blood	4	33	'mother's milk from her blood' 'flesh and blood'	"This milk is blood, isn't it? So this child has drank our milk which is also part of our blood"
3.	Natural antibodies	4	33	'infant antibody' 'immunity' 'immunity system'	"I think other reason is about antibody. Maybe my antibody isn't that strong, but this antibody is from human body and not from a cow"
4.	Pity for unable to taste own mother's milk	2	17	ʻpity'	"Pity her unable to get milk ok, I said that I will try whatever mean to breastfeed her"
5.	Different from formula milk	2	17	'different' 'would never be the same'	"No matter how many kilos of formula milk, it would never be the same as mother's milk. It is original"

Note: 'f' means participant's frequency. '%' means participant's percentage.

Source: Field Study, December 2012-June 2013

First sub-factor is the expression 'breast milk is the best' has been mentioned by five (5) participants. Second sub-factor is the expression 'breast milk comes from mother's blood' mentioned by four (4) participants while the third sub factor is the expression 'infants antibodies' cited by four (4) participants. For the fourth sub-factor, the expression 'pity for not having mother's milk' mentioned by two (2) participants. One participant expressed deep sympathy to her foster son for not able to breastfeed from his birth mother, makes her determined to suckle him by induced lactation method. The last sub-factors for nutritional factor is the expression 'difference from formula milk' mentioned by two (2) participants. Participants stressed that difference between breast milk and formula milk most significantly in terms of 'bonding experience between mother and child'. In addition, participants described that 'it would never be the same when compared breast milk with formula milk'.

5.5 Technology

The fifth motivating factor to breastfeed a foster child is technological factors. Technology is meant as modern medical methods which are introduced to mothers to aid induce lactation without pregnancy. There are two sub-themes of technology, i.e. (1) Exposure; (2) Tools.

No.	Technology	F	%	Repeated words	Example of statements
1.	Exposure	11	92	'awareness' 'information' 'modern technique' 'friend success'	"Moreover this is not new to me because my aunt she had experience adopting and breastfeed the child. We know about this story about 4, 5 years ago"
2.	Tools	6	50	'tool' 'product' 'modern gadget'	"She said she has to pump, and this is done for a few hours in a hospital that was 5 years ago, know just that Nowadays, pump can be bought, so pumping (of milk) can be done at home and also bring pump to office"

Table 6 Factors to breastfeed an adopted child – technology

Note: 'f' means participant's frequency. '%' means participant's percentage. Source: Field Study, December 2012-June 2013

Based on Table 6, exposure sub-theme about technique of induced lactation is among the factors that the participants want to breastfeed their foster child. This exposure is obtained from various sources, such as from shelters home for teenage girls, lactation consultant, experiences from oneself, mother, husband, friends, religious teacher, aunt, doctor and nurses.

The second sub-theme for the technology is in terms of tools. These tools are intended to speed up the process of induced lactation such as supplementary feeding system and breast pump. According to the participants these special tools help accelerate the production of breast milk while they are nursing their foster child.

5.6 Offspring

Sixth motivating factor for nursing an adopted child is the issue of offspring. This factor is closely related to desire to be a mother. Table 7 shows causes for not having any offspring i.e. (1) Ovaries have been removed; (2) Ovaries are damaged; (3) Ovarian cyst; (4) Thyroid; and (5) No problem and has been certified by doctor.

Table 7 Factors to breastfeed an adopted child - offspring

No.	Offspring	f	%	Repeated words	Example of statements
1.	Ovary has been removed	1	8	'complication after delivery' 'confirm cannot deliver a baby'	"Because after gives birth to Ahmad, it is confirmed cannot deliver anymore . Then, it's ok, we foster a child we breastfeed"
2.	Ovary is damaged due to chemotherapy	1	8	'leukaemia' 'chemotherapy ' 'bone marrow transplant' 'sure cannot get pregnant'	"I have done bone marrow transplant which is transferring of bone marrow, for this regime using a very strong chemotherapy, he called it factory dose, very high doses, so with this factory dose, causes damage to ovary and menses stop coming, and the doctor says, definitely cannot be pregnant "
3.	Ovarian cyst	1	8	'medication for removing cyst' 'surgery' 'failure because many cyst' 'difficult to conceive'	"One year after married and still not pregnant, went to see a doctor When checked, cyst were detected. So, the doctor gave medication to flush out the cyst. Took all the medication until high dose, but still couldn't so I had to do an operation. So, went through cyst operation. My cyst were many not just one, dozens of it. On my left and right, there were more than 60"
4.	Thyroid	1	8	'miscarriages three (3) times in a row ''difficult to conceive''difficult to accept the truth'	"I had thyroid for some time. Since 2001, it was confirmed autoimmune This autoimmune is the opposite of Hashimoto's thyroiditis. Among the causes when we conceived, the baby is like a strange thing. Because of this autoimmune will go against our own body"
5.	No problem and has been certified by doctor	8	67	'sense of deprivation' 'No health problems' 'No luck' 'Make IVF and IUI treatment'	 "Feel like fortune. I've been married for four (4) years and still have no child" "I won't stop, if Allah has not given my own child, <i>insya-Allah</i> (God willing) I will foster a child. I won't stop"

Note: 'f' means participant's frequency. '%' means participant's percentage. Source: Field Study, December 2012-June 2013

According to Table 7, it shows that only four (4) participants have health issues which causes for failure to conceive a baby. The rest eight (8) participants stated that they do not have any health issues and have been certified healthy by doctors. As a Muslim, the participants are *redha* (pleased) and always hoped to conceive later even after fostering a child.

Participants described the feeling of not having any child as a 'something is missing', 'tiada rezeki' (no luck), 'sadness', 'stay both alone (with her husband)' and 'nature of a woman'. For example, one participant said: "We begin to feel something is missing. Not that we are not happy, we are happy. But we already start feeling like having a child".

Since not having any child yet and some friend have successfully breastfeed an adopted child, this has give a morale booster to start on induced lactation. Loneliness experience by participants who are yearning for a child had made them determine to adopt, followed by breastfeeding the child.

5.7 Obligations

The seventh motivating factors for breastfeeding a foster child is obligation. After Allah bestowed the long awaited foster child, there comes the feeling to nurse the infant. It is now a responsibility and obligation that must be discharge. Based on Table 8, the sub-theme of obligation factor is divided into two, i.e. (1) Implement Shari'a law; and (2) Benefit/public interest.

Table 8	B Factors t	o breastfeed	an adopted	child –	obligation
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No.	Obligation	f	%	Repeated words	Example of statements
1.	Implement Shari'a law	7	58	'solved problem ' 'done the obligation' 'has implemented'	"From a legal perspective we have implemented, it is mandatory"
2.	Benefit/Public interest	7	58	'facilitate' 'easy' 'religious duty'	"Anyway, glad she can touch her father, right hmm, in the future if she has a baby brother, it would be easy"

Source: Field Study, December 2012-June 2013

'Implement Shari'a law' sub-theme was mentioned by seven (7) participants. One of the research participants described how she had been advised by her friend to immediately breastfeed her foster child to carry out Shari'a law: "before this child two years old, please breastfeed him, do not be like that because when we foster while he is small, we sure love him already. Otherwise when he grows up, cannot shake hands (with us), if he want to hug and kiss, but he cannot".

The 'Benefit/Public interest' sub-theme is also mentioned by seven (7) participants. Benefit or public interest means well-being of foster babies whom the participants fostered be it nutritional needs of breast milk or benefit of child in the future in terms of relationships, interaction and *awrah* with his foster family.

6.0 DISCUSSION

The question of intent and purpose of breastfeed a foster child directly related to adoptions. In view of women have strong desires to have child, while they are hindered to achieve it, then adoption is an alternative that is easy and fast (compared to others such as in vitro fertilization procedures). Accordingly, the focus of this study is to determine motivating factors or the women's intention for nursing their foster child. The study found there are seven (7) factors that motivate participants to breastfeed these children, i.e. create relationship of *mahra*m, maternal instinct, psychology, nutrition, fertility, technology and obligations. Table 9 shows a comparison of these findings with two other studies conducted by Auerbach and Avery (1981) and Lenore Goldfarb (2009).

Based on Table 9, both studies by Auerbach and Avery and Lenore Goldfarb found that relationship factors between mother and baby along with enhancing the bond and nurturing love is the key factor in breastfeeding an adopted child. Whereas in this study, those factors lie at third place in priority for these research participants. This study establishes that the main purpose of the participants undergoing induced lactation is to create a *mahram* relationship with the foster child whom they cared.

The limitation on *awrah* and interaction are not an issue for non-Muslims (who were participants in both comparison studies). However, they highly value the development of love and affectionate relationship with the foster child as the child is not born from their wombs. Efforts to establish bonding between the adoptive mothers with her adopted child is equal to the effort to establish a *mahram* relationship in a Muslim community, albeit in a different perspective. The goal is the same, i.e. an attempt to accept an adopted child be a part of their family so there is no issue of segregation and differences even though this is not a biologically connection.

The study found that the effects of induced lactation undertaken by them have led to a unique feeling, i.e. maternal instinct inside these foster-mothers. After experiencing induced lactation, all participants agreed that it has prepared them to be real mothers and breastfeeding is a pleasurable experience. For this reason, the study found consecutive factors after *mahram* relationship factor is maternal instinct and psychological factors. All participants agreed breastfeeding has a positive impact in the aspect of affection and touch. It is timely and consistence with the Theory of Dependency by Bowlby (1958) and Adoption Care Model proposed by Gribble (2007).

Next, nutritional factors is fourth in this study and in line with study by Auerbach and Avery, but study by Goldfarb found that nutritional factors in breast milk is still the most important factor. The study by Goldfarb shows that foster-mothers are confidence to give immunity protection through breast milk, so they sought to induce lactation. This is in contrast to the findings of this study, in which although a majority of participants believe that breast milk is the best milk for babies, but the goal to get exclusively nutrients from breastfed is difficult to achieve because the quantity of milk produced is little.

The next factor identified in this study is the existence of technology in terms of exposure and tools for aiding induced lactation mother to produce breast milk without prior pregnancy and birth. These factors is in line with the other two studies where Auerbach and Avery is at sixth rank while the study by Goldfarb ranked second in which the ability to produce milk as a reason for these women want to breastfeed their adopted child.

Next, the sixth factor that motivates breastfeeding of a foster child is offspring factor. This factor is closely related to maternal instinct where participants desire to have their own child and become a mother. These factors are similar to the findings of the study by Goldfarb where breastfeeding an adopted child is a 'healer grief' because of infertility faced by research participants. The last factor that motivates breastfeeding a foster child among the participants of this study is obligations factor. The majority of participants agreed that their goal engaging in induced lactation is to implement Shari'a law and maintain the benefits of this child in the future. All participants considered that nurturing a child is a heavy trust, thus it is their duty to provide the best in nutrient and the future of the foster child. In the context of non-Muslim communities, the responsibility of foster-mothers is seen in providing full care, and part of it is through breastfeeding.

Based on the discussion of the findings and comparison with previous studies, this study concludes that through breastfeeding a foster child, Shari'a and humanitarian objectives can be achieved with the help of science and technology. Figure 1 illustrates the position of the goals and sub-categories, respectively.

Table 9 Compar	rison of breastfeeding	factor of an adopted child
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No.	Findings from this study	Comparison with previous studies					
	(2014)	Auerbach & Avery (1981)	Goldfarb (2009)				
1.	 (1) Mahram relationship Awrah Touch Marriage 	-Nil-	-Nil-				
2.	 (2) Maternal Instinct Woman instinct Desire to be a mother Prepare to be a real mother Pleasure of breastfeeding 	(7) Breastfeeding as a reflection of femininity(9) Mother's physical changes	(3) Breastfeeding as a reflection of femininity(3) Mother's physical changes				
2.	 (3) Psychology Love and affection Touching 	(1) Mother-infant bonding(2) Fulfil emotional needs of babies(3) Body contact with the baby	 (1) As a bond, closeness, attachment and relationship (1) Fulfil emotional needs of babies (1) Body contact with the baby 				
4.	 (4) Nutrition Mother's milk is the best Mother's milk comes from her blood Infant antibody Pity for unable to taste own mother's milk Different from formula milk 	(4) The nutritional benefits for infants	 (1) Milk production Nutrition mother's milk Mother's milk is the best Mother's milk is good for infant health. As immunity for babies. 				
5.	(5) TechnologyExposureTools	(6) The ability to produce breast milk	(2) The ability to produce breast milk				
6.	 (6) Offspring Ovary has been removed Ovary is damaged due to chemotherapy Cyst Thyroid No medical problem and certified by doctor 	-Nil-	(1) Heal grief due to infertility				
7.	 (7) Obligation Implement Shari'a Law Benefit/Public interest 	(5) Care by the mother	(1) Meet the needs of babies who need care by a mother				
8.	-Nil-	(8) Total milk produced	(2)Total milk produced				

Note: Numbers in brackets '()' indicates the priority in sequence for each study. The study by Goldfarb (2009) has priority only 1-3 because is measured by (1) Most important; (2) It is important; (3) Less important.

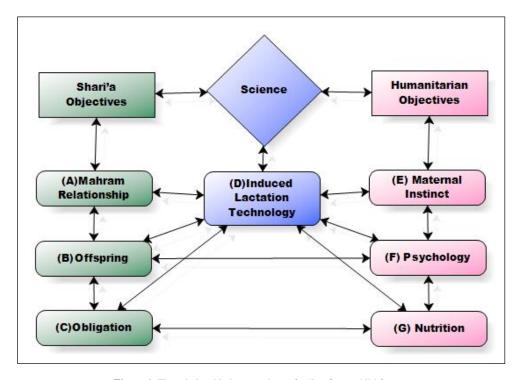


Figure 1 The relationship between breastfeeding foster child factors

Figure 1 illustrates the reciprocal relationship of breastfeeding foster child goals which is called Shari'a objectives and humanitarian objectives. Both of these goals are linked by science factor.

7.0 CONCLUSION

The findings explain that religion is a motivating factor in breastfeeding a foster child. Islam is not a religion of monkhood which separates world of reality and the development of science and technology. Islam is a complete way of life and a comprehensive system (Abu Urwah, 2004). The concept of human being on this earth is to worship Allah in all behaviour and actions. Such is the case in building and preservation of family lineage. There are a number of women who are tested without any offspring whether due to reasons of health or other, then an easy way to add a family member is to foster a child. Fosterage is an act of worship and rewards in the Hereafter because looking after orphans or abandoned children are a very high status and rewarding based on the hadith of the Prophet (Al-Bukhari: 137; Ibn Majah: 3679). Thus, nurturing foster child should be conducted in a way that pleases Allah. As a foster child who grew up in foster families need to take care limit of awrah and social boundaries, especially at the age of puberty then the best way to establish a mahram relationship with the child is through breastfeeding before the child is two years old. The research finding shows that one of the factors that motivate participants to breastfeed foster child are to create mahram relationship with the child while keeping rule and regulation outlined by Islam.

In addition to achieving the goals of religious, breastfeeding foster children also benefited from humanitarian aspects. The role of breastfeeding build affection, bonding of mother and child dependency has been proved by Muslim scholars such as Abdullah (1999); Al-Barr (2009); Al-Nawawi (2003); Danial Zainal Abidin (2002); al-Qaradhawi (1993) and non-Muslim like Dalzell *et al.* (2010); Diana West and Lisa Marasco, (2009); Storr

(2003); Kent (2006); Klaus (1998); Newman and Pitman (2006); and Uruakpa *et al.* (2002). In the context of this study, the role of breastfeeding a foster child is considered very important because the baby is not born to these mothers. Both of them are foreign individuals brought together to meet the needs of *insaniyah* (soft skills), i.e. a mother hoping to procreate and the baby needs love and caress. These requirements can be connected through breastfeeding as proposed by Bowlby and Ainsworth (1950) and Gribble (2007).

Hence, this study states that to achieve the religious and humanity goal in the context of breastfeeding foster child, induced lactation using medical protocols and breast stimulation techniques may be a liaison to both of these goals. It merged into three components, namely 'shari'a-humanitarian-science'.

In conclusion, the issue of breastfeeding a foster child in the Muslim community is an important role in the formation of a blessed family and meets the demands of Shari'a. In the current context, foster-mothers can use this opportunity to create a *mahram* relationship with her foster child. This is due to the power of mother's milk, which remains a secret why it can establish family relationship equal to biological family. Further study should be open widely about this issue.

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References

- Abdullah, A. H. A. S. 1999. Air Susu Ibu Fadhilat dan Keutamaannya. Surabaya: PT Bina Ilmu.
- [2] Abejide, O. R., M. A., T., DE, B., SE, T., AA, D.A., & RO, M. 1997. Non-puerperal Induced Lactation in a Nigerian Community: Case Report. *Annals of Tropical Paediatrics*. 17(2): 109–114. Retrieved from http://www.popline.org/node/268926.
- [3] Abu Urwah. 2004. *Risalah Usrah 3: Sistem-sistem Islam*. Selangor: Focus Approach Sdn Bhd.
- [4] Al-Barr, M. A. 2009. Air Susu Ibu dan Imuniti Anak. In Ensiklopedia Kemukjizatan Sains dalam Al-Quran & Sunnah. Al-Hidayah.
- [5] Al-Kasani, A.D. A. B. ibn M. 2004. *Badai' al-Sanai' fi Tartib al-Sharai'*. Al-Qahirah: Dar al-Hadith.
- [6] Al-Nawawi, A. Z. M. Y. ibn S. 2003. Rawdah at-Talibin. al-'Ulya: Dar'Alam al-Kutub.
- [7] Al-Sharbini, A.K. S.D. M. ibn A. 1997. Mughni al-Muhtaj ila Ma'rifah Ma'ani Alfaz al-Mihaj. Bayrut: Dar-al-Ma'rifah.
- [8] Altorki, S.(1980. Milk-Kinship in Arab Society: An Unexplored Problem in the Ethnography of Marriage. *Ethnology*. 19(2): 233–244. Retrieved from http://www.jstor.org/discover/10.2307/3773273?uid=3738672&uid=2 &uid=4&sid=21104525803617.
- [9] Al-Usayli, 'Abdullah 'Abdul-Mun'im 'Abdul-Latif. 2005. al-Rada' al-Muharrim fi al-Fiqh al-Islami. Al-Qahirah: Dar Ibn Jawzi.
- [10] Auerbach, K. G., & Avery, J. L. 1981. Induced Lactation A Study of Adoptive Nursing by 240 Women. *Am J Dis Child*. 135(4): 340–343. doi:10.1001/archpedi.1981.02130280030011.
- [11] Biervliet, F. P., Maguiness, S. D., Hay, D. M., Killick, S. R., & Atkin, S. L. 2001. Induction of Lactation in the Intended Mother of a Surrogate Pregnancy. *Human Reproduction*. 16(3): 581–3. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/11228232.
- [12] Bowlby, J. 1958. The Nature Of The Child's Tie To His Mother 1 By. 350–373.
- [13] Bryant, C. a. 2006. Nursing the Adopted Infant. Journal of the American Board of Family Medicine: JABFM. 19(4): 374–9. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/16809652.
- [14] Campbell-Yeo, M. L., Allen, A. C., Joseph, K. S., Ledwidge, J. M., Allen, V. M., & Dooley, K. C. 2006. Study Protocol: A Double Blind Placebo Controlled Trial Examining the Effect of Domperidone on the Composition of Breast Milk. *BMC Pregnancy and Childbirth*. 6(17). doi:10.1186/1471-2393-6-17.
- [15] Carsten, J. 2012. The substance of Kinship and the Heat of the Hearth: Feeding, Personhood, and Relatedness among Malays in Pulau Langkawi. 22(2): 223–241.
- [16] Chaturvedi, P., & Dubey, A. P. 1985. Induced Non-peurperal Lactation. *The Indian Journal of Pediatrics*. 52(3): 319–320. Retrieved from http://link.springer.com/article/10.1007/BF02754873.
- [17] Cheales-Siebenaler, N. J. 1999. Induced Lactation in an Adoptive Mother. *Journal of Human Lactation*. 15(1): 41–43. doi:10.1177/089033449901500111.
- [18] Dalzell, J., Rogerson, E., & Martindale, L. 2010. Breastfeeding: Contemporary Issues in Practice and Policy. UK: Radcliffe Publishing Ltd.
- [19] Danial Zainal Abidin. 2002. *Quran Saintifik*. Kuala Lumpur: PTS Millennia.
- [20] Diana West & Lisa Marasco. 2009. The Breastfeeding Mother's Guide to Making More Milk USA: The McGraw-Hill Company. 278.
- [21] Elizabeth Hormann, E. M. 1977. Breast Feeding the Adopted Baby. Birth and the Family Journal. 4(4): 165–173. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/6914431.

- [22] Esterik, P. Van. 2002. Contemporary Trends In Infant Feeding Research.
- [23] Fortier, C. 2007. Blood, Sperm and the Embryo in Sunni Islam and in Mauritania: Milk Kinship, Descent and Medically Assisted Procreation. *Body & Society*. 13(15). doi:10.1177/1357034X07082250.
- [24] G. B. Storr. 2003. It Takes Three To Breastfeed: Uncovering The Role Of The Father. *Expert Information Ltd.*
- [25] Goldfarb, L. 2009. An Assessment of the Experiences of Women Who Induced Lactation. Union Institute & University Cincinnati, Ohio.
- [26] Goldfarb, L., & Newman, J. 2009. asklenore.info. Retrieved January 22, 2014, from http://www.asklenore.info/index.shtml.
- [27] Gribble, K. D. 2005. Breastfeeding of a Medically Fragile Foster Child. Journal of Human Lactation: Official Journal of International Lactation Consultant Association. 21(1): 42–6. doi:10.1177/0890334404272392.
- [28] Gribble, K. D. 2006. Mental Health, Attachment and Breastfeeding: Implications for Adopted Children and Their Mothers. *International Breastfeeding Journal*. 1(1): 5. doi:10.1186/1746-4358-1-5.
- [29] Gupta, a P., & Gupta, P. K. 1985. Metoclopramide as a Lactogogue. *Clinical Pediatrics*. 24(5): 269–72. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/3987166.
- [30] Ibn Qudamah, M. 'Abdullah ibn A. ibn M. al-M. al-H. 1997. Al-Mughni. Riyad: Dar 'Alam al-Kutub.
- [31] Ibn Rushd, Abu al-Walid, M. ibn A. ibn M. ibn A. al-Q. 2004. *Bidayah al-Mujtahid wa Nihayah al-Muqtasid*. Al-Qahirah: Dar al-Hadith.
- [32] Kathleen, G. A. 1981. Extraordinary Breast Feeding: Relactation/Induced Lactation. J Trop Pediatr. 27(1): 52–55. doi:10.1093/tropej/27.1.52.
- [33] Kent, G. 2006, January. Child Feeding and Human Rights. International Breastfeeding Journal. doi:10.1186/1746-4358-1-27.
- [34] Klaus, M. 1998, November. Mother and Infant: Early Emotional Ties. *Pediatrics*. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/9794962.
- [35] Kuria Nemba. 1994. Induced Lactation: A Study of 37 Non-puerperal Mothers. J Trop Pediatr. 40(4): 240–242. doi:10.1093/tropej/40.4.240.
- [36] Newman, J., & Pitman, T. 2006. The Ultimate Breastfeeding Book of Answers. 3rd ed. New York: Three Rivers Press.
- [37] Parkes, P. 2004. Milk Kinship In Southeast Europe. Alternative Social Structures and Foster Relations in the Caucasus and the Balkans. *Social Anthropology*. 12(3): 341–358. doi:10.1017/S0964028204000540.
- [38] Parkes, P. 2005a. Fosterage, Kinship, and Legend: When Milk Was Thicker than Blood? *Comparative Studies in Society and History*. 46(03): 587–616. doi:10.1017/S0010417504000271.
- [39] Parkes, P. 2005b. Milk kinship in Islam. Substance, structure, History. Social Anthropology. 13(03): 307. doi:10.1017/S0964028205001564.
- [40] Qaradhawi, Y. 1993. Halal Dan Haram Dalam Islam. PT. Bina Ilmu.
- [41] Szucs, K. A., Axline, S. E., & Rosenman, M. B. 2010. Induced Lactation and Exclusive Breast Milk Feeding of Adopted Premature Twins. *J Hum Lact.* 26(3): 309–313. doi:10.1177/0890334410371210.
- [42] Thearle, M. J., & Weissenberger, R. 1984. Induced Lactation in Adoptive Mothers. Australian and New Zealand Journal of Obstetrics and Gynaecology. 24: 283–286.
- [43] Uruakpa, F., Ismond, M. a., & Akobundu, E. N. 2002, June. Colostrum and Its Benefits: A Review. *Nutrition Research*. doi:10.1016/S0271-5317(02)00373-1.
- [44] Wahbah Al-Zuhayli. 1985. Al-Fiqh al-Islami wa Adillatuh. Dimasyq: Dar-ul-Fikr.
- [45] Wittig, S. L., Nurse, S., & Spatz, D. L. 2008. Induced Lactation: Gaining a Better Understanding. 33(2).
- [46] Zaydan, A. K. 1997. Mufassal fi Ahkam al-Mar'ah wa Bayt al Muslim fi al-Syari'ah al-Islamiyah. Bayrut: Mu'assasah ar-Risalah.
- [47] Mausu'ah al-Hadith http://library.islamweb.net/hadith/hadithsearch.php.