

What are Moslem Women's Activities During Pregnancy?

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ABSTRACT

Background: Pregnancy is a natural process which is experienced by a mother-to-be. Changes during pregnancy may limit women's activities. Being non-active during pregnancy is an apprehensive condition since it may give negative effects both for the mother and her fetus. This study is meant to comprehend Moslem women's activities during pregnancy.

Method: Qualitative study with phenomenological approach was used and data collecting was carried out in June 2016 in Bojong Kulur village. Sample selection was done using purposive sampling technique. Thorough interviews involved 32 Moslem women who had given birth. Data verification was done using triangulation method.

Results: Findings of this study discussed women's activities during pregnancy, such as 1) *jima'* during pregnancy; 2) keeping personal hygiene; 3) taking a rest; 4) on time praying; 5) reading and listening to Al-Qur'an; 6) *Dzikrullah*; 7) praying more; 8) nutrition consumption; and 9) fasting. Pregnant Moslem women make use of the time during pregnancy for beneficial activities with the hope that they can introduce religious value to their babies since they are still in the intrauterine. Midwives need to comprehend and investigate the safe activities done by Moslem women during pregnancy and facilitate their patients' activities during pregnancy in accordance with Islamic Shari'ah.

Keywords: Activity, Moslem women, pregnancy, *jima'*, personal hygiene, taking a rest, praying, reading Quran, *dzikrullah*, nutrition, fasting

INTRODUCTION

The preliminary stage of pregnancy is conception, that is the meeting of ovum with sperm, which then forming zygote, and developing into a fetus. The most astonishing thing is that all process of human creation has been explained in Al-Qur'an (Surah Al-Mu'min verse 12-14 and 67) long before the development of technology and research. Many scientists have proved the truth stated in Al-Qur'an. As explained in Al-Qur'an, pregnancy is a natural process which is experienced by a mother-to-be. It is not an easy process but it is full of risk, even a mother has to take the death risk. Estensen revealed that pregnancy is a stressing period in women's life which gives more burden to the cardiovascular system¹. Therefore, Islam places a mother in the most particular position.

There will be both social and psychological changes, and behavioural and biological changes during pregnancy.² It is not surprising if pregnancy is identified as a factor contributing to the decrease of woman's activity. Many women decide to limit their activities during pregnancy. Being non-active during pregnancy is an apprehensive condition which may give negative effects both for the mother and her fetus. Therefore, it is of vital importance for a pregnant woman to keep doing her activities and getting to know the beneficial factors of physical activities which may give mental and physical health during pregnancy.³ All activities and processes done during pregnancy will increase the feeling of love between parents and babies,

especially between the mother and her baby. Pregnancy process will also influence the characters and development of the baby after birth. Therefore, Islam has explained how a pregnant woman should behave and how she must be treated. Various activities are suggested in Islam, with the hope that the mother will have a qualified baby who is *shalih/shalihah* (godly).

Midwives are accountable and responsible professionals who work as women's partner in providing with supports, cares and advices during pregnancy, giving birth and after childbirth, and in facilitating responsible childbirth and taking care of the new born baby. Midwives must have a strong belief that each woman has a unique personality and that midwives need to support each woman by fulfilling her biological, psychological, social, spiritual and cultural needs. Therefore, treatments given by midwives must be suitable with and based on the mother's needs. Besides, midwives must also have a strong belief that each woman has the right to get safe and satisfying health treatment based on the woman's needs, culture and faith so that there should be no discrimination in giving proper treatment. To be able to provide women with safe and comfortable treatment, midwives should know each patient's faith by doing an investigation related to their choice for the mother and baby's health. Patient's comfort and satisfaction will give a nice pregnant experience to the patient. Next, the mother's psychology during pregnancy will influence the baby's psychology. This study is meant to know and comprehend the Moslem women's activities during pregnancy.

METHODS

It is a descriptive study using qualitative method with phenomenological approach where the truth is gained by studying the phenomenon or symptoms reflected from the studied objects. Data collecting was carried out in June 2016 in Bojong Kulur village, Gunung Putri district, Bogor,

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West Java, Indonesia. Sample selection was done using purposive sampling technique, meaning that participants' selection was based on researchers' consideration which was in line with the needs and purposes of the study. The number of samples was determined by the surplus data gained. Thorough interviews involved 32 Moslem women who had given birth, using interview guidance resulted from previous interviews. Thorough interviews were done face-to-face for 30 to 50 minutes in participants' houses, or the houses of participants' relatives, and in participants' workplaces, based on each participant's decision and will.

Records of interviews were then transferred in the form of transcript. Important transcript data was classified into more focused data which was called coding data. Narration based on the result of interviews was made in the form of coding. Coding and categorization were presented in the form of theme. The results of data analysis were verified using data triangulation. Data triangulation was done by comparing participants' information and re-examining each participant's data. The data were verified by checking them out with some resources. These steps were carried out in order to know how valid the data were. Data verification was also carried out by checking them with participant's husband and parents (participant's mother)

RESULTS

Sexual Intercourse (*jima'*) during pregnancy: Sexual intercourse is safe and normal during pregnancy, but the frequency varies and tends to decline in compliance with the age of pregnancy.⁴⁻⁶ However, sexual intercourse is not recommended for those with history of miscarriage, premature childbirth, or antepartum bleeding caused by placenta previa.⁶ In Islam, *jima'* is allowed and even recommended during pregnancy, but *fuqohah* (expert in fiqh) is not permitted to do *jima'* if it endangers the fetus. It is in accordance with the Fatwa (opinion or interpretation in Islamic law) Al-Lajnah Ad-Daimah (Fatwa committee in Saudi Arabian) "It is allowed if this means a husband who has sexual intercourse with his pregnant wife. Because Allah does not prohibit sexual intercourse between a husband and wife except during menstrual period, postpartum and *ihram* (put on the white garb of holiness)." (Fatwa number 16591)

Islam has also regulated the proper way of having sexual intercourse in order to prevent evil's interference. The most important thing a couple must do before having sexual intercourse is praying. Sexual intercourse should be done in a closed room (not in an open air); doing flirtatious flattery and behaving romantically, stimulating sexually by rubbing, watching and kissing the wife's sensitive body parts; blanket is not an obligatory (*hadith* which obligates the use of blanket is considered weak by some ulemas); *jima'* can be done in various styles but anal sex is not permitted according to Hadith narrated by Abu Dawud and An-Nasaa'i "Those who commit anal sex to women will be cursed", and Hadith narrated by Imam At-Turmodzi and An-Nasaa'i "Allah curses a man who has sexual intercourse with another man or a man who commits anal sex to a woman". A man or a woman should not leave his or her partner as soon as having finished their sexual intercourse.

After some time, they must have a *janabah* shower (shower after making love of husband and wife) or at least washing their genitals and performing ablutions before going to sleep or having another sexual intercourse. The couple should have a *janabah* shower before performing ritual prayer. In Hadith from Abu Rofi' radhiyallahu anhu (R.a), he said, "One day, Mohammed the Prophet Shalallahu 'Alaihi Wassalam (S.A.W.) consecutively slept with His different wives. He took a bath each time he finished his sexual intercourse with his different wives. I asked Him, "Rasulullah, do you think that having a bath just once is not enough?" He answered, "Like this is holier, better and cleaner." (Hadith narrated by Abu Dawud number 219 and Ahmad 6/8. Syaikh Al Albani said that this is Hasan's hadith).

All Moslems are obliged to have a *janabah* shower after having sexual intercourse. Pillars of Islam which must be obeyed in *janabah* shower is that the entire body should be splashed with water. The proper way of *janabah* shower has been explained in Hadith narrated by Al Bukhari "From 'Aisyah the wife of the Prophet shallallahu 'alaihi wasallam, when the Prophet shallallahu 'alaihi wasallam is having a shower after *janabah*, He starts from washing His palms, then performing the same ablutions like when He wants to perform ritual prayers, then dipping His fingers into the water and rubbing His head scalp. After that, He pours the water on His head three times using His palms, then He pour the water on His entire body skin." A slight difference way is quoted from hadith narrated by Muslim, from Aisyah she said, "When Rasulullah shallallahu 'alaihi wasallam is having a shower after *junub*, he will start from washing His hands. **Using His right hand, He pours the water onto His left hand, then He washes His genital and performs the same ablutions like when He wants to perform ritual prayers.** Next, He dampens His hair evenly by way of combing His hair using His wet fingers. After that, He washes His head three times, then washes the entire body and **finally He washes His legs**".

Findings of this study showed that all participants had sexual intercourses during pregnancy, and most participants admitted that the frequency was decreasing due to the age of pregnancy. The things done by participants were 1) before having sexual intercourse, they were performing ablutions, offering prayers, saying romantic words, having some foreplay, offering ritual *sunnah* prayer; 2) when having sexual intercourse, they did not do it nakedly without a blanket, they did not face towards the direction of Mecca, and no anal sex; 3) after having sexual intercourse, they had a *janabah* shower or perform ablutions. "my husband and I had sexual intercourses during my pregnancy and Alhamdulillah my pregnancy was fine. We always made efforts to obey the proper way of having sexual intercourse applied in Islam in order that our children were protected from evil's interference. (participant 16)

Personal Hygiene: Many changes happen during pregnancy as a result of pregnancy hormonal changes and increase of body metabolism, such as sweating more frequently and increase of vaginal secretion, so that a pregnant woman is susceptible to infection. To anticipate this, a pregnant woman should take good care of her personal hygiene. Personal hygiene means taking care of

oneself to maintain good health by having regular shower, dental and gums care, and especially genital health care because during pregnancy a woman has an increase of mucus secretion. This condition is caused by an increase of estrogen hormone which triggers the production of mucus by endocervical gland. If a pregnant woman's personal hygiene is not well maintained, this condition may give a potential pathological leucorrhea. Besides having shower, changing clothes (loose and absorbing clothes), maintaining genital health care, drying out the genital after urinating or defecating, a pregnant woman must also pay attention to her underwears. The recommended underwears for a pregnant woman are the ones made from cotton (more absorbent compared to other materials). Avoid underwears made from nylon, and never wash the vagina using chemical soap or other chemical stuff.⁷ This is in line with Islam teachings which suggest that Moslems should take care of their personal hygiene in accordance with the utterance of the Prophet (S.A.W.) as quoted in hadith narrated by Ahmad, Muslim, and Tirmidzi "*Ath-thahuuru syatruul iimaan*" which means that holiness is half of faith. *Thaharah* (cleanliness) can be done by bathing, performing ablutions and wearing clean clothes.

Results of the study showed that most participants took a bath more often than usual (more than 2 or 3 times a day) and performed more ablutions, changed clothes and underwears. However, some participants admitted that their activities related to their personal hygiene did not change. "*I wear hijab, everyday I wear loose clothes, so there is no change in my performance, but since I sweat a lot, I take a bath more often.*" (participant 9)

Taking a rest: Pregnant woman is expected to take a rest for 7 to 8 hours at night and 1 to 2 hours during the day. Pregnant woman is not recommended to sleep in a supine position because it can increase the risk of supine hypotension. Besides, pregnant woman should be careful when she wants to get up from bed. She needs to move her body to the edge of the bed, bends her knees and lifts her body slowly using two hands, moves around and places down the legs slowly, then sits for a while before standing.⁸

Islam also regulates the proper and detailed ways of sleeping, 1) Hadith narrated by Bukhari and Muslim "*Whenever someone wants to lay down on the bed, he/she has to flap the bed back and forth using his/her sarong because he/she does not know what has happened to his/her bed after he/she left it.*"; 2) Hadith narrated by Bukhari Number 5017 "*When the Prophet shallallahu 'alaihi wa sallam is going to sleep at night, He raises his palms and blows on them while reading the surah Al-Ikhlash, Al-Falaq and An-Naas. Then He rubs His both palms on His body parts within His reach, starting from His head, face and front body parts. He does this three times.*"; 3) Hadith narrated by Bukhari number 247 and Muslim number 2710 "*Whenever you want to get to bed, perform ablutions like when you want to perform ritual prayer, then lay down on your right side of the body*"; 4) Hadith narrated by Bukhari number 6324 "*When the Prophet shallallahu 'alaihi wasallam wants to sleep, He says: 'Bismika allahumma amuutu wa ahya (In Your name, Oh My Allah, I die and live).' And when He gets up, He says: 'Alhamdulillahilladzi ahyaana ba'da maa amatana wailaihi nusyur (all praises for*

Allah who gives me a new life after an artificial death, and to Him all will be back)."; 5) After waking up, it will be better to pray first, then doing *istinsyaq* (sniffing water into the nose) and *istintsar* (letting the sniffed water out of the nose). This is meant to clean the nose, Hadith narrated by Bukhari and Muslim "*And when one of you performs ablutions, one should put the water into the nose and let it out again.*"

Some courtesies which have been explained previously are in line with the findings of the study where most participants admitted that they read several short *surah* in the Quran and blew it on their palms, then rubbed all the body parts within their reach; praying before sleeping; starting to sleep by laying on the right slanted position with the right hand under the right cheek. However, few participants did the things differently. Some performed ablutions and 2 *rakaat* of repent ritual prayer (*taubah* prayers) before sleeping, some other slept with the legs in straight position, and not facing the direction to Mecca, and reading Fatimah's recite of laudation (*tasbih Fatimah*). "*Before sleeping, I usually read tasbih Fatimah (Subhanallah 33 times, Alhamdulillah 33 times, Allahuakbar 33 times until lahaul walakuata illabillah). After that, I read surah Al-Fatihah once, Al-Ikhlash once, Al-Falaq once, and An-Naas once, then I blow them on all of my body parts except my genital area and bottom part of the foot. I always sleep on the right slanted position with the right hand under the right cheek. I never sleep in a position of laying flat on the stomach because it is the evil's sleeping position.*" (participant 2)

On time prayer: Performing ritual prayer is an obligarory for all Moslems, Quran, Surah Thaha verse 14 "*Truthfully, I am Allah, and there is no God but Me, so worship Me and perform ritual prayers to adore Me*". Performing ritual prayer in accordance with the guidance of Islamic shari'ah (both obligatory prayer and *sunnah*) will gain a huge contribution to the brain activities because it is a media to sharpen spiritual intelligence and develop one's mind broadly and unlimitedly. Besides, during the praying, there will be an increase of parasympathetic nerve and a decrease of sympathetic nerve which will result in the declining of anxiety, risk of cardiovascular disorder, and create relaxation effect.⁹

Performing ritual prayer is a form of meditation¹⁰ which will not only influence the autonomy nervous system^{11, 12} but also the central nervous system.^{13, 14} Performing ritual prayer influences the autonomy nervous system by an increase and decrease of parasympathetic and sympathetic activities consecutively.⁹ Alpha wave is the most dominant brain wave in meditation. The activity of alpha wave can be measured in all parts of the brain. But the highest amplitude of alpha wave is in the occipital and parietal areas.¹⁵ Increasing frequency of meditation band induces response of human relaxation.^{16, 17} Generation of alpha wave is generally related to a stimulation of parasympathetic activity and a decrease of sympathetic activity from the autonomy nervous system¹⁸ which results in the declining of anxiety, and the gaining of calm and positive feelings.^{19, 20} Findings of the study showed that the high alpha level of activity during ritual prayer was related to the increasing relaxation, relieval, sustainable focus and balanced condition of human mind and body.^{13, 14, 21}

Performing ritual prayer results in positive changes of brain function and human wealth. Application of on time praying also teaches the baby in the intrauterine discipline values. Findings of this study showed that all participants performed ritual praying as soon as they heard *adzan* from the mosque. *"InsyaAllah I always perform ritual prayer on time. I firmly believe that performing ritual prayer in the right time will be blessed by Allah (swt) in the form of having prosperously, being hindered from interment torture, and in the future in mahsyar field I will be given notes of good deed on my right hand, passing as quick as lightning the syirat which has a length of 1500 travels, then in the hereafter 1 year in the world 1000 years in the hereafter, and entering the heaven without hisab (reckoning)"* (participant 2)

Reading and listening to Al-Qur'an: Pregnant woman should read Al-Qur'an in a sweet and melodious voice or *tartil* (the right way) so that the baby in the intrauterine can enjoy the mother's sweet voice. Sweet voice is like musical sound that calms down the soul. Reading and listening to Al-Qur'an will influence both the mother and baby's souls, and bring peace into the mother's heart. Other benefits for the baby are stimulating the baby's intelligence and introducing the baby to Allah since earlier period. Other than reading Al-Qur'an, the mother should make efforts to comprehend its meanings so that she will be able to apply them in real life. Findings of the study proved that the mother's condition and activities will influence the condition of the baby in the intrauterine. Listening, and reading Al-Qur'an will make the mother and baby feel comfortable and influence the baby's intelligence quotient (IQ), emotional quotient (EQ) and spiritual quotient (SQ).²² Results of the study showed that Moslem women during pregnancy used their mind body and spiritual methods by reading several *juz* (chapter) of Al-Qur'an or other texts related to religious values. Application of spiritual method done by the mothers during pregnancy was meant to calm down themselves, reduce anxiety, and facilitate a peaceful childbirth. Other indication of a mother's action related to her baby was that the mother wish a healthy, smart baby who has high tolerance and good behavior.^{23, 24} In Islam, there is no stipulation that a pregnant woman should read certain *surah* because all *surah* in holy Quran are equally good.

All participants admitted that they read and listened to Al-Qur'an during pregnancy. The *surah* frequently read by the participants were *surah* Yusuf, Yunus, Yasin, Muhammad, Maryam, al-Ashr, al-Insyirah, and Al-zalzalah. The reading of *surah* Yusuf dan Maryam during pregnancy was believed to have a purpose for the baby's beauty. *"In my leisure time, I always read Al-Qur'an at least 1 juz every day. There are special surahs which I read more often, such as surah Yasin to expedite the childbirth, and surah Yusuf and Maryam to get a handsome or beautiful baby. When I feel that I will give birth soon (contraction), I read surah Al-Zalzalah with the hope that the childbirth will be successful"* (participant 2)

Dzikrullah: *Zikr* means "to mention" or "to remember" Allah verbally through *thayyibah* sentences. Allah decrees in Al-Qur'an *surah* Ar-Ra'du verse 28 *"Understand that by Zikr to Allah, your heart will be peaceful"*. *Zikr* which is uttered or pronounced by a pregnant mother will give a stimulus to the baby in the intrauterine and stimulate the development

of the brain and increase the memory when it is done in *istiqamah*. Besides, it is also meant to teach the baby in the intrauterine on the existence of Allah. There is no stipulation on the pronouncing of *Zikr* and certain amounts of *Zikr* which should be pronounced. However, some Moslems often pronounce *Zikr* with *tasbih* (*"Subhanallah"* means The Holliest Allah), *tahmid* (*"Alhamdulillah"* means all admiration for Allah), *tahlil* (*"Laa ilaaha illallah"* means there is no God but Allah), *takbir* (*"Allahu Akbar"* means Allah The Greatest), and there is also morning and evening *Zikr*. All participants admitted that they did *Zikr* every day. Some did it every morning and evening, some other did it all the time. But there were different findings of the study showing that some participants did it in a certain amount of *Zikr* pronouncing. *"Alhamdulillah, I do the Zikr all the time. In one day, at least I do morning Zikr 300 times, evening Zikr 300 times, salawat 100 times, istighfar 100 times."* (participant 2)

Offering more prayer: One of the most glorious acts of devotion to Allah is prayer. Prayer is a form of begging to Allah (swt) who has the ability to change the fate. In Islam, there is no stipulation regulating certain prayers which must be read by pregnant women. Generally, pregnant women pray for health, successful pregnancy and childbirth, having *shalih* or *shalihah* children. This is in line with the findings of the study where all participants admitted that they always prayed to Allah (swt) especially after performing ritual prayer, and that there was no special prayer that they read. The prayers they often read were related to health, successful pregnancy and childbirth, and having *shalih* and *shalihah* children. *"I did not have any special prayer. What I prayed during pregnancy was asking to have shalih and shalihah children"* (participant 25)

Nutrition: Pregnant women need more nutrition compared to those who are not pregnant. More nutrition is very important for the development of the fetus and for the pregnant women to prepare the childbirth. In Islam, good parents are expected to select food which can be consumed (*halal*) and the ones that can not be consumed (*haram*). Moslem community firmly believes that consuming *haram* food will affect behavioural deviation of the children in the future. Sumari, et.al reported, Moslem parents believe that giving good food has an influence on good academic achievement and morality of their children²⁴.

Some recommended nutritions to be consumed by pregnant women are honey, zam-zam water, olive oil, and goat milk. Honey is a natural nutrition which contains sugar and other compositions such as enzyme, amino acid, organic acid, carotenoid, vitamin, mineral, and aromatic substances. Honey is rich of flavonoid and phenolates which cause various biological effects and act as natural antioxidant,²⁵⁻²⁷ bacteriostatic, anti-inflammation and antimicrobe, wound and sunburnt healer.^{28, 29} Compounds found in honey, processings and consumption of honey will influence the stability of honey, degradation of product, and the possibility of secondary reaction.³⁰ HMF (5-hydroxymethylfurfural) is considered an important parameter to value the quality of honey related to chemical characteristics, such as pH, free acid, total acidity and lactase. Honey can be consumed directly or mixed with warm water (not hot water) because heating will influence the composition of honey, especially pH and acidity.³¹

Honey can also be used for treatment in which the healing time is explained by the multiple effects on response of inflammation. First, honey prevents continuous response of inflammation by suppressing the production and spreading of inflammation cells in the wound area; secondly, stimulating the production of citoxin proinflammation, enabling normal healing³², and stimulating proliferation fibroblas and ephytel cells^{33,34} effects of honey and its compounds in the production of citoxin proinflammation have been evaluated in human primary monosite cells³⁵.

In addition to honey, zam-zam water is primarily recommended to be consumed by pregnant women. Rasulallah (s.a.w) proclaims *"The best water that can be found in the Earth is zam-zam, because the water is like food and it can heal various diseases"* (Hadith narrated by At-Thabrani). But it is difficult to get zam-zam water, therefore pregnant women can substitute it with mineral water. Sufficient consumption of mineral water is highly recommended for pregnant women³⁶. The reason is that human body consists 55%-65% of water³⁷. Sufficient consumption of water is very necessary because the body can not produce water by itself. To maintain the balance of the body, pregnant women should maintain the balance between intake and output³⁸. The need for body liquid is generally increasing during pregnancy in order to support the blood circulation of fetus, amnion liquid, and increasing blood volume. Recommended water intake for pregnant woman is 8 to 10 glasses every day. Besides, sufficient liquid is necessary for fulfilling the needs of liquid volume. Water contains fluoride at most, which helps the growth and development of fetus' bones and teeth³⁹, and reduces constipation which becomes women's general complaint during pregnancy. A decrease of intestine motility and ferrous tablet supplement also contributes to the problem. Increasing intake of liquid can help reduce constipation. Adequate supply of liquid will ensure that the mother has liquid stock enough to tolerate lost of blood during childbirth³⁵.

Next, olive oil also gives a lot of benefits to the health of pregnant women and their babies⁴². Olive oil has been considered a health product because it contains oleat acid, palmitate acid and other fatty acids. Consumption of olive oil is beneficial to maintain the health of the heart, especially in regulating the cholesterol and oxidizing bad cholesterol or Low Density Lipoprotein (LDL), as an anti-inflammation, anti-thrombotic, anti-hypertensive and gives vasodilatation effect both to animals and human.⁴¹ Olive oil is also the best supplement for pregnant women because it ideally maintains fat balance which is very necessary for the development of fetus in uterus and the development of optional fatty tissues during early period of fetus⁴².

The benefits and availability of goat milk have not been well recognized by Moslem community. In fact, goat milk has the most benefits compared to horse, buffalo, cow, sheep, and camel milks. In the time period of Rasulallah (s.a.w), goat milk was popularly consumed as food material. Results of studies show that goat milk contains higher calcium, magnetium, and phosphor compared to cow milk. Medium chain triglycerides and protein in goat milk have been claimed as unique lipid and protein which give unique health benefit. Soft curd of goat milk gives benefits to adults who suffer from digestive disorders and

ulkus. Goat milk is very effective to prevent problems of cardiovascular, cancer, alergy and microorganism, and it is used for stimulating immunity. Goat milk is recommended to be consumed by babies, pregnant women, old people, people who are in recovery condition, and people who are allergic to cow milk^{43,44}. Generally, goat milk is used to produce cheese, with or without thermal treatment, but relatively, only few studies on cheese bacterial flora of goat milk which have been published.⁴⁵ However, pregnant women **are not recommended** to consume soft cheese made from goat and sheep milk, because there is a risk of being contaminated by *Listeriamonocytogenes*, which may live for a maximum of 18 weeks. This shows that *L. monocytogenes* has the ability to hold out in unpasteurized semi soft cheese made from goat milk for two normal processes of three-month healing. *Listeria*, a bacterial type which is able to perforate the placenta, may cause fetus infection, miscarriage, premature birth, and poisoned in blood. Other bacteries which may contaminate sheep and goat milk as well as their processed products are *Escherichia coli*, *Salmonella* species, *Staphylococcus aureus*^{44,45}. *Escherichia coli* is a dominant organism in two weeks old cheese. This shows that *E. coli* is one of the most resistant species in cheese maturation⁴⁵. According to the findings of this study, almost all participants admitted that they consumed honey and only few had consumed olive oil. However, not even a single participant had consumed zam-zam water and goat milk since it was difficult for them to find these two products. Besides, some small number of participants consumed dates and *habatussauda* during pregnancy. *"From the beginning of pregnancy, I consumed habbatussauda and dates"* (participant 2).

Fasting: Pregnant women are given a kind of privillage for not doing the fasting if they think that they are not able to do the fasting, or they worry about their health or the babies' health. However, most Moslem women (70-90%) prefer to do the fasting during their pregnancy. This case also happens in some countries like in villages of West Africa⁴⁷, England⁴⁸, Iran⁴⁹ and Singapore⁵⁰. Women who are not doing fasting during the month of ramadhan may do it as a substitute (*qadha*) in other months or pay it by giving food to the poor, Quran, Surah Al Baqarah:184 *"And it is an obligatory for those who find it hard to do the fasting (if they are not fasting) by paying fidyah, (that is): giving food to one poor man/woman (not fasting for one day). Those who do good things from the bottom of their heart, that is the better thing for them. And fasting is better for you if you understand it."* Fasting substitution has been explained in QS. Al Baqarah:185 *"(Days which have been determined are) month of Ramadhan, the month (beginning) in which Al-Qur'an is revealed for the first time as a guidance for human being together with its explanation on the guidance and the distinguishing unit (between the right and wrong). Therefore, those who see hilal, they have to do fasting during the month. And those who are sick or travelling (then they break the fasting), then (it is an obligatory for them to substitute the fasting), as many as the number of days they do not fast, in other days. Allah wishes you ease, and not difficulties for you. And take what He gives, and honor Allah for what guidances He gives to you, so that you are grateful for Allah blessings."*

In this study, all participants had the same faith that pregnant women were allowed not to fast in the month of Ramadan fasting and they could substitute it in other months. However, the participants had different opinions on how to pay the fasting. Some said that they could just pay *fidyah* or substitute the fasting (*qadha*). But some others believed that they have to do both (paying *fidyah* and substituting the fasting). *Fidyah* is replacement by feeding a poor person throughout the month of Ramadan. *“Indeed, there are two opinions concerning the way to pay the fasting for pregnant women. Some people agree that they can just pay fidyah, but some others insist that they must pay fidyah and do qadha. Just choose one of them. I agree to do both”* (participant 3)

DISCUSSION

Decreasing sexual activities during pregnancy is caused by queasy, lack of interest, discomfort feeling, physical clumsiness, easy to feel tired, worry about miscarriage, endanger the fetus, burst of fetal membrane, and infection.⁵ Libido and sexual satisfaction may negatively influence women's self-perception towards the declining sex appeal. Usually, in mature pregnancy, there is a decline of orgasm achievement and sexual satisfaction, and sexual intercourse is painful.⁵¹ Therefore, the right position plays an important role in having sexual intercourse during pregnancy so that the sexual activity is not painful for pregnant women^{6,52}. Findings of study find that sexual frequency changes and tends to decline from the first three-semester to the third three-semester, but there is no significant change in the sexual position related to the age of pregnancy. The most common position in sexual intercourse is man on top, facing his partner. However, many women with high sexual desire choose woman on top position, facing her partner, and this sexual position is suitable with the woman belly that is getting bigger.⁵² It is important to make a pregnant woman feel comfortable during sexual intercourse in order that the couple can always have sexual intercourse until the last days of birth. When having sexual intercourse, it is highly recommended to stimulate nipples and genital in order to increase natural release of endogen oxytocin and prostaglandin which will be released later in the sperm as cervix maturity method⁶.

In addition to sexual intercourse, during pregnancy Moslem women do similar activities as other pregnant women, but they also do more religious activities. This is meant to introduce and implant religious values to the babies in their intrauterine. They are aware that parents play an important role in leading their children to get satisfying academic achievement and good moral.⁵³⁻⁵⁶ Religious devotion is an important factor in determining successful academic achievement and good moral. Generally, parents want their children to follow their religion and become religious, even more religious than the parents are. Moslem community believes that religious devotion can be implanted to the children since they are still in the intrauterine so that parents start communicating with their babies by imposing Islam teachings during pregnancy.²⁴ This is in line with the results of study by Maya, et.al that mother's physical activities during pregnancy influence the autonomy nervous system development of the baby's heart

which becomes the target of fetus programming. This study proves that mother's physical activities influence the autonomy control of the baby's heart who is identified to be one month old.⁵⁷ The fetus will record all of the mother's activities during pregnancy and imitate them after he/she was born.

The nutritions consumed by Moslem women during pregnancy are also recommended to be consumed by all Moslems. However, there are some arguments concerning dates consumption and Nigella sativa supplement by pregnant women. In Islam, N. sativa is the only plant containing special substances to fight against all diseases, except death. (HR. Bukhari Number 5255) *“Eat this Habbatussauda, It really contains medicines that heal all diseases, except death.”* Hadith history of Imam Ahmad, Muoslem, Ibnu Majah and Al Bukhari. This Hadith can be found in the compilation of hadith *sahih* number 857. It is also supported by results of study showing that consumption of Nigella sativa twice a day may increase the function of body immune. This is indicated by the increase of helper T cell (T4) to suppressor T cell (T8) ratio and increase of killing cell activity naturally. However, there is a declining level of immune globulin (IgA, IgG and Igm).⁵⁸ Besides, N. sativa increases the production of interleukin-3 by human lymphocyte when cultured with combined alogenic cell or without adding stimulator. The increase of interleukin-1 beta (IL-1 β) shows that N. sativa also affects the macrophage.⁵⁹ However, recommendation of consuming N. sativa during pregnancy is still debatable among researchers. El-Naggar and El-Deib⁶⁰ reported that crude oil of N. sativa might induce in vivo uterus contraction of pregnant rabbits and in vitro uterus of mice which were not pregnant. It is in line with study by Keshri et.al⁶¹ which found that hexane extract from N. sativa showed light uterotrophic activity preventing mice from being pregnant when applied on day 1-10 pasca-coitum. On the contrary, Aqel and Shaheen⁶² found it different that the volatile oil of Nigella sativa might hinder spontaneous contraction on plain muscle uterus of mice and rabbits which were induced by oxytocin. Other studies showed that the application of N. sativa oil for 2 weeks significantly suppressed prostaglandin E2 (PGE2) and uterus contraction of mice which were induced by oxytocin. This shows the potential use of N. sativa oil on uterus disorder related to prostaglandin and oxytocin which induce the increase of contraction such as dysmenorrhoeas, premature birth and habitual abortion.⁶³ Meanwhile, results of study by Salarinia et.al reported that phytovagex (N. sativa) did not affect significantly to the duration of pregnancy, number of childbirth, weight of the baby and stillbirth. There was no general defect or behavioural deviation on neonatus that were observed for 30 days after birth. N. sativa extract did not significantly affect the live perpetuity of ovarium cell at concentration of 12,5-200 μ g/mL⁶⁴.

Pregnant women are recommended to consume dates because dates contain saturated fatty acid and unsaturated fatty acid such as oleat acid, linoleat acid and linolenat acid. Fatty acid does not only supply and store energy, but also contribute to the increase of prostaglandin,⁶⁵ and help save energy as well as strengthen uterus muscles and contain hormone which helps the stretching of uterus in

order to get ready for childbirth. Results of studies show that cervix dilatation is quicker for pregnant women who consume dates compared to those who do not consume dates. Dates influence the oxytocin receptor, stimulate the uterus muscles to respond oxytocin more comfortably, prepare the uterus and cervix for childbirth.^{66, 67} Also, dates have the same effects as oxytocin in reducing the case of postpartum bleeding.⁶⁸ However, dates consumption is only recommended in the end of pregnancy or before childbirth. This is quoted in QS Maryam:23-26 *"The indescribable pain before giving birth forced her to lean on the date tree trunk, and she said: "Ouch, it will be better if I die and become an invaluable and forgotten dead body. Then Jibril said from the lower place: Don't be sad, because your God has created a tributary underneath. And sway the base of the date tree towards you, surely the tree will drop ripe dates, then eat, drink and be happy. If you see someone, say: Truthfully I have sworn a vow to do fasting for God The Most Generous, therefore I will not talk to anybody today. Mother's nutrition consumption during pregnancy will support the growth and development of fetus in the intrauterine.*

In relation to fasting, there is an argument on fasting recommendation for pregnant women in the month of ramadhan based on the consideration that pregnant women need to pay attention to the nutrition consumed, because the nutrition consumed by pregnant women has a long term effect towards the baby in their intrauterine. Ewijk revealed that Ramadhan fasting during pregnancy gives negative effects to the mother and baby's health. This is generally because the mother does not eat and is starving during pregnancy. The long term effects caused by lack of nutrition are obstruction of fetus development and damage of fetus body.⁶⁹ Different opinions were stated by Joosop et.al and Robinson et.al that fasting during pregnancy does not endanger the mother and her baby, even it gives beneficial effects to both of them. Therefore, the decision whether she will do fasting or not is on the mother herself.^{50, 70} Moslem pregnant women believe that fasting will not give any negative effect to the mother and her baby. Even it will give beneficial effect to both of them^{47,48,49,50}.

CONCLUSION

Moslem pregnant women make use of their time during pregnancy by doing useful activities with the hope that they can introduce religious value to their babies since they are still in the intrauterine. Midwives need to understand and investigate the safe activities of Moslem women during pregnancy and facilitate proper application during pregnancy to their patients in accordance with Islamic Shari'ah.

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