



FASTING BY MUSLIM PREGNANT WOMEN DURING RAMADAN: A CROSS-SECTIONAL SURVEY STUDY

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Article Received on 21/11/2019

Article Revised on 21/12/2019

Article Accepted on 01/01/2020

ABSTRACT

Purpose/ Objectives: There is a mixed opinion regarding fasting by pregnant women during Ramadan. This study was carried out to examine the knowledge, beliefs, attitude and practices of pregnant Muslim regarding fasting during the month of Ramadan. **Methodology:** Using convenient sampling, 200 pregnant women visiting 3 Basic Health Units were targeted in a 1 month (July 2019) observational descriptive cross-sectional survey study. A self-designed questionnaire was used as data collection tool. Data was analysed using SPSS-22. Chi-square test was applied to check the association between different demographic variables and fasting frequency. P-value less than 0.05 was considered significant. **Results:** The overall response rate was 95% (190/200). 77% fasted during Ramadan, out of which 50% fasted for a duration of 11 to 20 days and 95% considered fasting in pregnancy difficult than otherwise. 72% consulted a doctor for decision regarding fasting. 94% considered it "Wajib" with 90% being aware of fasting compensation after delivery. 47% perceived 'feeling of weakness due to lack of nutrition' as the main risk of fasting. Educational status, presence of co-morbidity, duration of pregnancy and husband's restriction were positively associated with fasting (p-value <0.05). **Conclusion:** Fasting by pregnant women during Ramadan is associated with certain variables. There is need for health care providers to assess the pregnant women's status to decide whether to fast in Ramadan or not and increase their knowledge of health issues related to it.

KEYWORDS: Pregnancy, Ramadan, Fasting.

INTRODUCTION

Whatever deed is performed by any Muslim is classified according to Islamic law as either essential (Wajib), recommended (Sunnah), permissible (Harus), offensive (Makruh) or unlawful (Haram). He/she gets reward accordingly.^[1] Fasting in the month of Ramadan, the ninth month of the Islamic calendar is one of the five fundamental pillars of Islam and is an essential (Wajib) act whose performance is rewarded by Allah and non-performance punished.^[2] However, there are a few categories of people who are exempted from this religious obligation which include children under the age of puberty, mentally incapacitated, old frail elderly, acutely unwell, travellers, menstruating women and

pregnant and nursing women. An exception is laid on pregnant women if they have the fear of negative affect on their health or the health of the foetus/baby. However, they are expected to observe compensational fasting ("Qada") after the pregnancy is over.^[3, 4, 14] The decision to fast during Ramadan is governed by many factors which include personal reasons as well as society constraints. The reasons many include false beliefs, co-existing medical problems, daily commitments or other family reasons like husband's restrictions.^[5, 6, 7, 8] There is evidence that many pregnant Muslim women opt to fast during some part of Ramadan while other studies show that they remain more cautious about this practice.^[9, 10] A cross-sectional study was conducted in Pakistan in the

year 2012 to find out the incidence of fasting, the duration of fasting, and the beliefs/knowledge regarding fasting among pregnant Muslim women.^[11] A very similar study was conducted in Thailand in the year 2018 which had the same outcome measures.^[12]

The present study was carried out to examine the knowledge, beliefs, attitude and practices of pregnant Muslim regarding fasting during the month of Ramadan and to determine the association of demographic variables (Age, Parity, Educational Status, Duration of Pregnancy, Co-morbidities) with the frequency of fasting.

METHODOLOGY

Study Design: Observational descriptive cross-sectional study.

Study Population: Pregnant Muslim women visiting basic health units for antenatal checkups.

Study Area: Three Basic Health Unit (BHUs) from the Tehsils of Gujranwala, Noshehra Virka and Narowal, Punjab were randomly selected.

Sampling Technique: Non-probability convenient sampling.

Study Duration: One month (1st July to 31st July 2019)

Sample Size: 200 pregnant Muslim women with 7.5% margin of error and 10% non-Response Rate.

Data Collection procedure

After the approval of institutional ethical review board, the research work was started. The respondents were told about the objectives of the study and were asked to fill the questionnaire after informed consent giving them full liberty to accept or reject to participate in the study.

Data Collection Tool

A self-designed questionnaire was used which was constructed based on similar studies conducted locally as well as internationally. The questionnaire was translated

into Urdu language for ease of understanding and administration to study population. The questionnaire comprised of two parts, 1st part contained the demographic variables (age, parity, educational status, duration of current pregnancy, co-morbidities (diabetes, asthma, hypertension or IHD)) and the second part contained the research variables (knowledge regarding fasting during pregnancy, observation of fasting during Ramadan, knowledge about “fasting compensation” after delivery, consultation with doctor before deciding to fast during pregnancy in Ramadan, reason for not fasting during pregnancy, possible harms of fasting in pregnancy, adversities encountered during fasting, is fasting in pregnancy difficult than without pregnancy).

Data Analysis

The data was entered and analyzed in SPSS version 22. Frequencies and percentages were tabulated for demographic characteristics and their relation to fasting and their beliefs. Cross tabulation was used to compare the association between different demographic variables and fasting during pregnancy. Chi-square test was used to analyze this association with p-value <0.05 considering statistically significant.

RESULTS

The overall response rate was 95% (190/200). The responses given to the questionnaire are given in the tables. 77% fasted during Ramadan, out of which 50% fasted for a duration of 11 to 20 days and 95% considered fasting in pregnancy difficult than otherwise. 72% consulted a doctor for decision regarding fasting. 94% considered it “Wajib” with 90% being aware of fasting compensation after delivery. 47% perceived ‘feeling of weakness due to lack of nutrition’ as the main risk of fasting. Educational status, presence of co-morbidity and duration of pregnancy were positively associated with fasting (p-value <0.05).

Table 1: Demographic Variables.

Demographic Variables	N	%
Age		
15-25 Years	38	20%
26-35 Years	119	62.63%
36-45 Years	22	11.57%
More Than 45 Years	11	5.78%
Gravida		
One	10	5.26%
Two To Five	166	87.36%
More Than Five	14	7.36%
Parity		
Zero	11	5.78%
One	27	14.21%
Two To Five	145	76.31%
More Than Five	7	3.68%
Educational Status		
Illiterate	40	21.05%
Matric	109	57.36%

Intermediate	31	16.31%
Bachelors And Above	10	5.26%
Co-Morbidities		
Diabetes	2	1.05%
Asthma	8	4.21%
Hypertension	10	5.26%
IHD	0	0%
None	170	89.47%
Duration Of Pregnancy		
1-3 Months	59	31.05%
4-6 Months	90	47.36%
7-9 Months	41	21.57%
Monthly Income		
Less Than Rs. 10,000	13	6.84%
Rs. 11,000 – Rs. 50,000	168	88.42%
More Than Rs. 50,000	9	4.73%
Place Of Living		
Village	123	64.73%
City	67	35.26%
Source Of Income		
Husband's Income	176	92.63%
Self-Earning	4	2.10%
Both	10	5.26%

Table 2: Responses of the Participants to Different Questions.

Belief Of Fasting During Pregnancy	N	%
Wajib	4	2.10%
Fardh	178	93.68%
Sunnah	2	1.05%
Makrooh	6	3.15%
Haraam	0	0%
Knowledge Regarding Fasting Debt		
Yes	171	90%
No	12	6.31%
Not Sure	7	3.68%
Observed Fasting During Pregnancy		
Yes	145	76.31%
No	45	23.68%
Is Fasting In Pregnancy Difficult Than Without Pregnancy?		
Yes	180	94.73%
No	10	5.26%
More Eating During Non-Fasting Hours In Ramadan During Pregnancy?		
Yes	157	82.63%
No	33	17.36%
Consultation With Doctor Regarding Fasting During Pregnancy?		
Yes	135	71.05%
No	55	28.94%
Husbands' Restriction To Fast During Pregnancy		
Yes	170	89.47%
No	20	10.52%

Table 3: The Reasons for Not Fasting.

Reason	N	%
Weakness	168	88.42%
Daily Commitments	28	14.73%
Pregnancy Itself	66	34.73%
Family Pressure	45	23.68%
Personal Reasons (Work And Activities)	11	5.78%

Table 4: The Nullifying Factors during Fasting.

Nullifying Factor	N	%
Severe Vomiting	177	93.15%
Taking Medication	153	80.52%
Bleeding Per Vaginum	178	93.68%
Vaginal Examination	28	14.73%
No Nullifying Factor	0	0%

Table 5: The Possible Harms of Fasting In Pregnancy.

Harm	N	%
Feeling Weak Due To Lack Of Nutrition	162	85.26%
Adverse Effect On Fetus	41	21.57%
Fear Of Inability To Perform Daily Activities	58	30.52%
No Risk Involved	15	7.89%

Table 6: The Adversities Encountered During Fasting.

Adversities	N	%
Hunger/Thirst	149	78.42%
Nausea/Vomiting	87	45.78%
Giddiness	59	31.05%
Weakness And Fatigue	151	79.47%
Fever/Headache	25	13.15%

Table 7: Cross-Tabulation of Demographic Variables with Frequency of Fasting.

Association Of Age With Fasting					
Age	N	%	Fasting Yes N=145	Fasting No N=45	P-Value
15-25 Years	38	20	22(58%)	16(42%)	Not Significant P-Value 0.089
26-35 Years	119	63	98(82%)	21(18%)	
36-45 Years	22	12	18(82%)	4(18%)	
More Than 45 Years	11	5	7(64%)	4(36%)	
Association Of ‘Gravidity’ With Fasting					
Gravidity	N	%	Fasting Yes N=145	Fasting No N=45	P-Value
Primi-Gravida	10	6%	7(70%)	3(3%)	0.08
Two to Five	166	87%	131(79%)	35(21%)	
More Than Five	14	7%	7(50%)	7(50%)	
Association Of Educational Status With Fasting					
Educational Status	N	%	Fasting Yes N=145	Fasting No N=45	P-Value
Illitrate	40	21%	22(55%)	18(45%)	0.024
Matric	109	57%	97(89%)	12(11%)	
Intermediate	31	16%	21(68%)	10(32%)	
Bachelors And Above	10	6%	5(50%)	5(50%)	
Association Of Duration Of Pregnancy With Fasting					
Duration Of Pregnancy	N	%	Fasting Yes N=145	Fasting No N=45	P-Value

1-3 Months	59	31%	33(56%)	26(44%)	0.034
4-6 Months	90	47%	81(90%)	9(10%)	
7-9 Months	41	22%	31(76%)	10(24%)	
Association Of Presence Of Co-Morbidities With Fasting					
Co-Morbidities	N	%	Fasting Yes N=145	Fasting No N=45	P-Value
Diabetes	2	1.5%	0(0%)	2(100%)	0.01
Asthma	8	4.5%	5(62.5%)	3(37.5%)	
Hypertension	10	5%	0(0%)	10(100%)	
IHD	0	0%	0(0%)	0(0%)	
None	170	89%	140(82.5%)	30(17.5%)	

DISCUSSION

In the religion Islam, every Muslim is obliged to fast during the holy month of Ramadan. Fasting involves abstaining from eating or drinking from the crack of dawn till sunset. However, certain people are exempted from fasting who have a reason to believe that fasting many have ill effects on their health; pregnant women fall under this category. According to a Hadith, the prophet Muhammad (PBUH) is reported to have said, 'Allah has relieved the traveller of obligation of fasting & half of the prayers and he has relieved the pregnant and nursing women from the obligation of fasting'.^[13] It is up to the pregnant women if she decides to fast or not. However, if she does not fast, she is bound to observe compensational fasts ("Qada") after the delivering.^[14]

In our study, 77% of the respondents fasted during Ramadan out of which 50% fasted for 11 to 20 days. Mubeen at all. Reported that 12.5% of pregnant women did not fast at all while 87.5% fasted, 42.5% of the women fasted for the whole month.^[11] Similarly a research concluded that 87.5% fasted with average fasting days of 24.56 ± 5.66 where 63% of the pregnant women fasted for 21-30 days.^[15]

In our study 72% of the respondents consulted their doctors before making the decision of whether to fast during Ramadan or not. 89% of the husbands forbade their wives to observe fasting during Ramadan out of which 12% still opted to fast despite husband's restriction. According to previous studies, there are many predictors which influence the fasting behaviours of the pregnant women, doctors' and hundreds' decision being the top of the list.^[5,6,7] 7% of the spouses restricted their wives from fasting during Ramadan according to Singaporean research.^[16] In contrary to our results, 72.4% never consulted their doctors for pre-Ramadan Advice in a research.^[4]

In our study, 94% were aware of the religions obligation regarding Ramadan fasting as an essential act and a similar percentage were aware about the fasting compensation ("Qada") with a percentage of 90%. According to a study carried out in Thailand to assess the basic knowledge of pregnant women regarding Islamic law, attitude and practices of Ramadan fasting during pregnancy, most of the participants (85.5%) reported to

have knowledge regarding the clear exemption of the Islamic law from fasting for pregnant women and the missed fasts must be completed later.^[12]

58% of the non-fasting women were worried about the weakness they may face during the fasting hours. 95% said that fasting during pregnancy is more difficult than in non-pregnancy state and 48% of the respondents faced hunger/thirst as the most common adverse effect of fasting. 47% considered feeling weak due to lack of nutrition as a risk due to fasting while 25% considered fasting during the state of pregnancy as risk-free. Lou A et al reported that 62% of the pregnant women believed that fasting was harmful to themselves, their foetus, on both.^[9] In contrary to this, a Thailand based research concluded that majority of the pregnant women believed that fasting during pregnancy did no harm to maternal health.^[12]

There was positive correlation of fasting with duration of pregnancy, educational status and co-morbidities while no relationship with age and parity was seen. Many previously conducted researches show similar trends with positive correlation of fasting gestational age and educational status^[17] presence of co-morbidities in form of either debates mellitus, hypertension, asthma or ischemic heart disease also showed significant correlation with the frequency of fasting.^[5,6,8,18] a limitations of our study was that it did not check the association of socioeconomic status with the fasting frequency as was seen by studies carried out previously in this domain.^[5,6]

CONCLUSION

Majority of the participants observed fasting during Ramadan with half of them fasted for 11 to 20 days. Three forth of the pregnant women received pre-Ramadan consultation. More than 90% knew about the Islamic ruling regarding fasting and knew about the concept of Qada. Majority of them felt fasting was difficult during pregnancy and were afraid of the harms of fasting to themselves and the foetus. The fasting frequency was positively associated with gestational age, educational status and presence of comorbidities. Health care providers must assist the pregnant women in assessing then capability to fast during Ramadan and

provide the basic knowledge regarding the effects of fasting.

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