

## Original Research Article

# Knowledge, attitude and practices of Ramadan fasting on health and disease among pregnant Muslim women in urban health centre of a medical college

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### ABSTRACT

**Background:** Fasting during the holy month of Ramadan entails abstinence from food, water, smoking and drugs from dawn to sunset. In Islamic religious rule fasting during Ramadan is not mandatory if there is any contraindication such as illness, old age, pregnancy, etc. Many studies have shown that most Muslim women choose to fast during pregnancy because of a sense of religious duty, familial support, positive views on fasting and difficulty in completing the missed fasts at another time.

**Methods:** A cross sectional study was conducted on 124 pregnant Muslim women attending urban health centre for antenatal care during the month of Ramadan at Davanagere city. Data was entered in the Microsoft Excel and presented in the form of frequencies.

**Results:** In this study majority of pregnant women believed that fasting during pregnancy is harmful to mother as well as child. Overall, 80.6% of pregnant women did not observed fasting during pregnancy.

**Conclusions:** In this study majority of the pregnant women did not observed fasting during the month of Ramadan. Health education should be given to all pregnant women and family members regarding adverse effect of fasting on mother and child health.

**Keywords:** Knowledge, Attitude, Practice, Ramadan, Fasting, Davanagere

### INTRODUCTION

Fasting during the holy month of Ramadan entails abstinence from food, water, smoking and drugs from dawn to sunset. Fasting is obligatory for healthy adult individuals according to a strong statement in the holy Quran.<sup>1</sup> Based on geographical area and seasons, duration of fasting varies from 11 to 18 hours in a day.<sup>2</sup> In Islamic religious rule fasting during Ramadan is not mandatory if there is any contraindication such as illness, old age,

pregnancy, etc. Exemption from fasting is permitted for women who are pregnant or breastfeeding, but the missed fasts must be completed before the next Ramadan.<sup>4</sup> Several studies have shown that most of the Muslim women choose to fast during pregnancy because of a sense of religious duty, familial support, positive views on fasting and difficulty in completing the missed fasts at another time.<sup>5-7</sup> Many studies showed that fasting has no effect on intrauterine growth, birth weight, birth-time indices, and amniotic fluid index.<sup>8</sup> In contrast to this

results of several studies showed that fasting during pregnancy increases the risk of low birth weight, increased incidence of ketosis and ketonuria, vomiting, diarrhea, and dizziness<sup>10</sup> and reduced fetal breathing movements.<sup>9,11</sup> Fasting during pregnancy has also been associated with increased frequencies of gestational diabetes, induced labor, cesarean delivery, and neonatal admission to the intensive care unit.<sup>12</sup> This study was conducted with a aim to assess the knowledge, attitude and practices of Ramadan fasting on health and disease among pregnant Muslim women in Urban Health Centre (UHC) of a medical college.

## METHODS

A cross sectional study was conducted among the pregnant Muslim women attending Urban Health Training Centre (Bashanagar) of S.S. Institute of Medical Sciences and Research centre, Davanagere. Those women coming for antenatal care during the month of Ramadan were enrolled for the study. The study was carried out for 2 months from 1<sup>st</sup> June 2017 to 31<sup>st</sup> July 2017 (which coincides with the month of Ramadan). Pregnant Muslim women who were willing to participate were included in the study. The study was carried out after taking Ethical clearance from the institutional ethical review board. Data was collected using questionnaire after taking written informed consent. It contained information on socio

demographic details including education, occupation, type of family and socioeconomic status. Socioeconomic status was classified according to modified B. G. Prasad classification.<sup>13</sup> Knowledge attitude and practices related to Ramadan fasting on health and disease was evaluated using a self-made questionnaire, by referring the various previous articles related to Ramadan fasting.

Data was entered in the Microsoft Excel and presented in the form of frequencies and percentages.

## RESULTS

In this study 124 women were included. Majority of the women were (36%) studied up to high school and belonged to class 4 socioeconomic status. Most of the women (65%) were residing in joint families. Majority of the women were Home makers by occupation. Socio-demographic factors are explained in the Table 1.

In this study most of the pregnant women had knowledge that fasting will produce ill effect to the mother (67.7%) and baby (66.1%), decreases maternal weight (69.3%), birth weight of baby (62%). Majority of the pregnant women has the knowledge that completing the missed fasts after pregnancy due to not fasting in Ramadan. Knowledge was lacking in few women which is explained in the Table 2.

**Table 1: Socio-demographic features of study participants.**

Variables	Frequency (N)	%
<b>Education</b>		
Primary	38	30.6
High school	44	35.4
Pre-university course	30	24.2
Graduate/post graduate	12	9.8
<b>Occupation</b>		
Home maker	112	90.2
Beedi worker	12	9.8
<b>Socioeconomic status</b>		
Class II	85	68.6
Class III	26	21.0
Class IV	13	10.4
<b>Type of family</b>		
Nuclear	78	65.0
Joint	42	35.0
Total	124	100

**Table 2: Knowledge towards fasting among pregnant women.**

Variables	Response	
	Yes (%)	No (%)
<b>Knowledge</b>		
Ramadan fasting will produce ill effect to mother	84 (67.7)	40 (32.3)
Ramadan fasting will produce ill effect to baby	82 (66.1)	42 (33.9)
Fasting decreases maternal weight during pregnancy	86 (69.3)	38 (30.7)
Fasting decreases birth weight during pregnancy	77 (62)	47 (38)
Completing missed fasts due to not fasting in Ramadan	87 (70)	37 (30)

**Table 3: Attitude and practice towards Ramadan fasting among pregnant women.**

Variables	Response	
	Frequency	%
<b>Attitude</b>		
Fasting during Ramadan is harmful	90	73.0
Fasting during Ramadan is healthy	34	27.0
<b>Practice</b>		
Fasting during Ramadan	24	19.4
Consulted a doctor during fasting	10	41.7
Did not consulted a doctor during fasting	14	58.3
Not fasting during Ramadan	100	80.6

In this study the attitude towards fasting was considered harmful by 90 (73%) of women and healthy by 34 (27%) women. 24 (19.3%) women were fasting and 100 (80.7%) were not fasting. In this study 24 (19.4%) of them practiced fasting, among them 14 (58.3%) did not consult a doctor whereas 10 (41.7%) consulted a doctor.

## DISCUSSION

The present study was designed as cross sectional study which was conducted to assess the Knowledge, attitude and practices of Ramadan fasting on health and disease among pregnant Muslim women attending UHC for antenatal care during the month of Ramadan. In this study 124 women were interviewed. Out of 124 pregnant women, 100 (80%) women did not fast during the month of Ramadan because of fear of ill effects to them as well as their babies. 24 (20%) of them practiced fasting, among them 12 (60%) did not consult a doctor whereas 8 (40%) consulted a doctor. This is similar to study done by Lou A et al and Petherick et al.<sup>14,17</sup> In contrast to this a study done by Lily et al, Mubeen et al and Saro et al showed that majority of the study participant practiced fasting during Ramadan.<sup>15-17</sup>

In this study majority of the pregnant women among non-fasting group consulted the doctors because they felt that before fasting the doctors opinion is needed. In contrast to this a study done by Lou et al showed that majority of the pregnant women did not consulted the doctors.<sup>14</sup> In this study among those practiced fasting majority of them did not consult a doctor because of feeling no need to seek advice on fasting. Alternatively, for the women who did seek advice on fasting were influenced by healthcare providers. This is similar to study done by Robinson et al.<sup>19</sup>

## Limitations

The limitation of the present study includes the sample size was small which were pregnant Muslim women attending UHC for antenatal care which might recruit specific population who were educated. Thus it could be less generalized and excluded pregnant women who did not attend antenatal care clinic.

## CONCLUSION

In present study majority of the pregnant women did not fast during the month of Ramadan because of fear of ill effects to them as well as their babies. Among those who practiced fasting, majority of them did not consulted a doctor. Majority of the pregnant women who do not observe fasting during Ramadan had knowledge about repaying it after pregnancy. Health education should be given to all pregnant women as well as their family members regarding the adverse effect of fasting on mother's and child's health.

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