

# Cultural practices of food intake during pregnancy: A cross sectional study.

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#### **ABSTRACT-**

**INTRODUCTION:** Food means not only proteins, fat, minerals, vitamins, and other nutrients; more than that, it is a part of security and civilization. It is the main energy source of every human being. Due to their customs and beliefs, people eat and avoid certain foods in certain periods. Food taboos and practices in some cultures and religions play a key role in their people's health. Especially in women's health, food practices and food taboos play a major role. "A women's dietary intake before, during pregnancy and through lactation is influenced by her socio-cultural environment". Cultural beliefs and practices can markedly influence women's health and childbirth experiences. Hence it is important to know the barriers to good maternal nutrition.

#### AIM &OBJECTIVE:

To know the knowledge regarding cultural food practices among pregnant women.

#### **METHODOLOGY:**

**Study type:** Descriptive cross-sectional study

Study area and population: Pregnant women residing under Rural Health Training Centre,

Prathipadu, Guntur.

Sample size: 100

Sampling technique: Simple random sampling.

**Study instrument:** Self-designed semi structured questionnaire.

#### **RESULTS:**

71% of pregnant women know that eating papaya and pineapple doesn't harm foetus. 83% are aware that eating conjoined fruits doesn't cause twin pregnancies or conjoined twins. 45% of pregnant women avoid food or water intake during the time of solar or lunar eclipse.

## **CONCLUSION:**

Our study shows that good percentage of women are aware of cultural misbeliefs and myths that are related to food intake during pregnancy.

**KEY WORDS:** Food, Food taboos, Cultural beliefs, Pregnancy, Child birth.

# Introduction-

Being a man or women has a significant impact on health as result of both biological and gender related differences. Health of women and child is of primary importance as they are disadvantaged due to discrimination rooted in their social and cultural factors<sup>1</sup>. Woman's health during pregnancy is recognized internationally as a chief corner stone to the population's health, but due to certain customs and beliefs the heath of both the mother and child are put at risk. Food taboos and beliefs in some cultures play key role in people's health, especially woman's health.

"A women's dietary intake before, during pregnancy and through lactation is influenced by her sociocultural environment"<sup>2</sup>. Cultural beliefs and practises can markedly influence woman's and child's health.

Maternal malnutrition is a public health concern as it results in increased incidence of maternal morbidity, preterm deliveries and small for gestational age babies. Inadequate nutrition and unsatisfactory weight gain during pregnancy increases the risk of poor foetal outcomes. Hence it important to known the barriers of good maternal nutrition, and one such barrier is food taboos, either self-imposed or imposed by others, the food taboos are causing marked effect on maternal nutrition and in turn may lead to maternal malnutrition.

So, identifying and addressing these food taboos are of utmost importance. With this background the following study was conducted to assess food taboos during pregnancy and early lactation among pregnant women.

# Aims and Objectives-

To assess knowledge about food habits, food taboos and cultural food practices among pregnant women.

# **METHODOLOGY**

#### Study design-

Descriptive cross-sectional study.

# Study population-

Pregnant women attending antenatal clinic in a teaching hospital, Guntur.

Study Period- November 2022

### Study tool-

Self-designed, semi structured questionnaire.

The questionnaire consists of two parts,1<sup>st</sup> part containing socio demographic details and 2<sup>nd</sup> part containing questions regarding knowledge and practices about food taboos, food habits and cultural food practises among women during pregnancy.

# Sampling method-

All the pregnant women attending the antenatal OPD who fulfilled the inclusion and exclusion criteria were taken into the study by simple random method till the required sample of 100 was attained.

#### Inclusion criteria-

All antenatal mothers attending antenatal OPD in teaching hospital in Guntur, who gave consent.

#### **Exclusion Criteria-**

Antenatal mothers with high risk concerned.

#### Ethical clearance-

Ethical clearance was taken from institutional ethics committee.

# Study Method-

After obtaining consent, the participating women were explained about the study and were asked to fill form containing questionnaire in local language.

## Data analysis-

Data collected was entered in MS-Excel and were analysed for descriptive statics.

# **RESULTS**

# TABLE1: SOCIODEMOGRAPHIC PROFILE OF STUDY PARTICIPANTS (N=100)

Age wise distribution	Less than 20	13.0%	
	21 – 25 years	53.0%	
	26- 30 years	26.0%	
	Greater than 30 years	8.0%	
Place of living	Rural	62.0%	
	Urban	38.0%	
Religion	Hindu	93.0%	
	Muslim	4.0%	
	Christian	3.0%	
Type of family	Nuclear	78.0%	
	Extended	22.0%	
Occupation	House wife	62.0%	
	Laborer	31.0%	
	Job holder	7.0%	
Education	Illiterate	4.0%	
	Primary Education	2.0%	
	Secondary education	15.0%	
	High school/diploma	28.0%	
	Intermediate	36.0%	
	Graduate	15.0%	
Socio economic status	Upper middle	18.0%	
	Lower middle	36.0%	
	Upper lower	34.0%	
	Lower	12.0%	
QUESTIONS REGARDING KNOWLEDGE AND PRACTICE (N=100)			
Question	Yes	No	
Women who believe in	44.0%	56.0%	
use of saffron to improve the complexion			
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of the baby		
Women believing that cabbage, Bindi and pumpkin are hot foods	12.0%	88.0%
Women considering meat, fish and eggs as hot foods	20.0%	80.0%
Women who believe milk and curd to be cool foods	26.0%	74.0%
Women who believe that eating papaya and pineapple will cause harm to the pregnancy	29.0%	71.0%
Subjects believing that eating fused banana will give rise to twin pregnancy?	17.0%	83.0%
Subjects who believe that eating coconut will cause difficulty in delivery	10.0%	90.0%
Mothers who believe that eating more will cause difficulty in delivery	5.0%	95.0%
Subjects who believe that eating lemon would drive away evil spirit	12.0%	88.0%
Women who believe that turmeric will act as antibiotic	16.0%	84.0%
Mothers who believe that eating meat after delivery is good	75.0%	25.0%
Subjects who believe that eating spice, roots and tubers post-delivery will protect against bacteria	34.0%	66.0%
Mothers believing that eating papaya, garlic and spice will increase	36.0%	64.0%

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milk production		
Subjects who believe in avoiding jagery during conception	22.0%	78.0%
Subjects believing that during eclipse they should not step out	45.0%	55.0%
Mothers who eat meat	11.0%	89.0%
Women who believe to eat food after husband	19.0%	81.0%

# **Discussion**

The present study was conducted to assess the food habits, cultural food practises and food taboos during pregnancy and early lactation among women attending ANC clinic at Teaching hospital Guntur, Andhra Pradesh.

Among the study subjects most of them were young adults,53% were in the age range of 21-25 years, 34% of the subjects were greater than 25 years and 13% of subjects were 20 years and below. 62% of study subjects reported from rural background and 38% of them reported from urban background.

Based on religion, the participants in the study were majorly Hindus accounting for 93%, 4% of participants were Muslims and 3% of them were Christians.

In our study the results showed that only 4% were illiterate and 2% had primary education, whereas all the remaining subjects that is 94% had higher levels of education. Other studies by Banu kk et.al. among Indian women revealed that their education was mostly primary<sup>3</sup>.

With respect to type of family, 78% of the study subjects belong to a nuclear family and the rest 22% belonged to a joint family.

Regarding the profession 62% of women were house wife's, 31% were daily wage labourers and the rest 7% were regular job holders.

When it comes to social and economic status of the women only 12% report to be part of the lower social class.88% of the women either belong to upper lower class or middle class.

In our study it is seen that there exists belief in use of saffron to improve the complexion of the baby and our results reported that 44% of them do use saffron powder. There is no evidence to state that saffron consumption will improve the complexion of the baby, as stated in the study by Das IIa et.al. <sup>4</sup>

In our study we asked whether cabbage, Bindi and pumpkin are considered hot foods and the response noted was that 12% believed so. These results correlate with another study in west Bengal done by Chakrabarthi et.al. <sup>5</sup>

Nutritional practices in India are based the fact that hot foods are harmful and cold foods are beneficial during early periods of pregnancy. Hot foods that Indian women avoid are papaya, pineapple, jack fruit, banana, coconut, red chilli, meat and eggs. These foods are avoided as pregnancy is seen as a hot state and eating such foods are believed to cause miscarriages.

Our study population also believed that meat, fish and egg were hot foods, as 20% of subjects agreed and 80% did not. Also, in a study done by Chakrabarthi et.al found similar results, where pregnant women eating fish and meat would cause difficulty in delivery<sup>5</sup>.

It has been studied by Ali NS et.al. at Khan university Karachi that out of 400 respondents 12% of them had food restrictions based on this belief during pregnancy period and that 25% had food restrictions during lactation period<sup>6</sup>.

Such cultural food restrictions based on the nature of food is reportedly more common in south India as reported by a study conducted in Tamil Nādu by G.Eichinger et.al<sup>7</sup>.

The women in our study responded to the question that if they believe milk and curd were considered as cold foods and 26% agreed with that statement. Cold foods were culturally accepted and believed to support gestation. It has also reported in a study by Rajkumar Patil et.al. in Calicut that cold foods aid in good quality breast milk<sup>8</sup>.

In our study 29% believed that papaya and pineapple would cause miscarriages. This is supported by another study Conducted in Karnataka by Catherin N et.al. where the subjects avoided papaya due to the belief that it would cause harm to pregnancy<sup>9</sup>.

In our study only about 17% believed that eating of fused bananas would cause twin pregnancy. Eating of fused fruits in India is traditionally believed to cause twin pregnancy as reported by Ankita Parmar et.al. in study on taboos and misconceptions associated with pregnancy among rural women<sup>10</sup>.

Our study reported only 10% of subjects who believed that coconut consumption will cause difficult/ obstructed labour. Culturally coconut is also seen as a food taboo during pregnancy in study by Ankita Parmar et.al.<sup>10</sup>

Only 5% of our study subjects believe that eating more will cause difficulty in delivery. This has also been reported in study conducted in eastern cape south Africa by Chakona G et.al.<sup>11</sup>

12% of our study subjects report that lemon drive away evil spirits but this has not been reported elsewhere.

In the present study, found that 16% of the study subjects believed that turmeric has antibiotic effect and this has been documented in other study by Parveen Gul et.al.<sup>12</sup>

In our study population a significant portion 75% of them eat well post-delivery to support the baby with milk through lactation. Eating well also has been reported to improve the quality of milk produced as seen in study by Debpuur C et.al.<sup>13</sup>

In our study 36 % population had believed that after delivery eating of papaya would increase breast milk production. A study in Manado city health centre by Bai MKs et.al. showed an increase in breast milk production post papaya consumption<sup>14</sup>.

In our study 45% of participants believed that stepping out during eclipse would cause harm to baby. Stepping out during solar eclipse will cause harm to the person exposed but lunar eclipse does not do so. A study conducted in Karachi Pakistan by Burfat A et.al. explored this and it was found that the women believed the baby would be born with club foot. Medically this belief was found to be false<sup>15</sup>.

In our study it is reported that 89% of the ladies avoided eating meat due to cultural beliefs. Study among pregnant women in eastern cape south Africa by Chakona G et.al. revealed that the pregnant women avoided eating meat due to cultural beliefs of harm caused to the baby and difficulty in labour<sup>11</sup>.

In our study we find that 19% of the study subject follow the tradition of having the food only after their husband complete his meal. It may impact the health and nutrition of women especially during pregnancy. It has been reported by Chakrabarti S et.al. in studies that the diet of women during pregnancy has been restricted by cultural norms<sup>5</sup>.

# Limitations of the study

Our sample collection was taken from only one geographical area.

#### Conclusion

From our study we learnt about the cultural factors that influence the food habits of the women. We noted from our sample that most of the women were educated and did not blindly follow these cultural norms. Yet, there still exits 30% of the population that follow these cultures blindly. To conclude, these results could be used as driving forces to conduct educational programs on maternal nutrition during the pregnancy to benefit health of both mother and child.

#### Recommendation-

The government does conduct a lot of nutrition programs for the pregnant mothers. There is also a need for nutritional counselling regarding food taboos and cultural food practices to the pregnant women by the treating doctor or health care workers during antenatal visits.

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