

## Food Related Taboos and Misconception during Pregnancy and Breast feeding among women of Rural and Urban areas of Anantapur District

S. Nissar Begum<sup>1</sup>, Chinta Aruna Jyothi<sup>2\*</sup>, R. Swetha<sup>3</sup>

<sup>1</sup>Assistant Professor, Dept. of OBG, Govt. Medical College, Anantapur, AP, India

<sup>2</sup>Assistant Professor, Dept. of OBG, Govt. Medical College, Anantapur, AP, India

<sup>3</sup>Post graduate, Dept. of OBG, Govt. Medical College, Anantapur, AP, India

Received: 30-11-2021 / Revised: 21-12-2021 / Accepted: 02-01-2022

### Abstract

**Background:** In India, dietary habits of pregnant women are influenced by food fads, cultural taboos and religious beliefs. Hence knowledge about these misconceptions is necessary to educate the society regarding intake of healthy food during pregnancy and exclusive breast feeding practices. **Objective:** To evaluate the beliefs, practices and superstitions related to food during antenatal and post-partum period & breastfeeding and to assess factors influencing breastfeeding practice. **Materials & Methods:** A descriptive cross-sectional study was conducted among the women of reproductive age group at Anantapur district. A pre designed validated questionnaire was used to study the food related taboos in them during pregnancy and breast feeding practices. **Results:** A total of 600 women between the age of 20-35 years with mean age of 24.5 and  $\pm$  4.3 years participated in the study. Around 90% of study subjects classified some foods as hot and cold and avoided the as they would adversely affect them and the baby. Papaya, pine apple, curd, fused bananas, black grapes and poultry meat were commonly avoided food. Twenty percent of women did not feed colostrum because of taboos. **Conclusion:** The study revealed that food taboos and traditional beliefs relating to pregnancy exist in larger proportion of women and they still believe in old unscientific tales. This can be improved by empowering community based health workers to provide effective nutrition counseling to the mothers. There is a need for nutrition education and awareness generation among women. Increasing literacy status also reduces taboos/misconceptions.

**Keywords:** Food related taboos, misconceptions, hot foods and cold foods, Exclusive breast feeding.

This is an Open Access article that uses a funding model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>) and the Budapest Open Access Initiative (<http://www.budapestopenaccessinitiative.org/read>), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.

### Introduction

Pregnancy is a time of intensified nutritional vulnerability and nutritional status of women before and during pregnancy can have a substantial influence on fetal and maternal outcome[1]. The importance of maternal nutrition to fetal development and birth outcomes has been investigated[2-4]. Maternal nutritional deficiencies have been related to adverse maternal and birth outcomes including anemia, premature delivery, low birth weight, and other morbidities[5, 6]. Annually, 800,000 neonatal deaths though small for gestation age at birth, stunting, and wasting are linked to maternal undernutrition[7, 8]. Taboos are defined as a social or religious custom prohibiting or restricting a particular practice or forbidding association with a particular person, place, or thing. Taboos are often integrated with the culture, traditional in nature, and are carried out as convention or as per advice of the elderly. The practice of exclusive breastfeeding (EBF) is influenced by maternal knowledge and attitudes as well as socio-demographic and cultural factors. Promotion of proper breastfeeding practices for first 6 months of life is most cost effective & intervention for reducing childhood morbidity and mortality.

To promote exclusive breast feeding, knowledge of misconception and their clarification is of utmost importance and need of the day. Hence, the present study is conducted to assess the taboos related to eating habit during pregnancy and breast feeding among women in Anantapur District. It also aims to examine the existing food practices during antenatal and postnatal period towards mother and child health among women from different parts of Anantapur. Permission from hospital ethical committee was taken.

\*Correspondence

**Dr. Chinta Aruna Jyothi**

Assistant Professor, Dept. of OBG, Govt. Medical College, Anantapur, AP, India

### Materials and Methods

A cross sectional study was conducted among women from different parts of Anantapur for a period of 6 months.

### Inclusion Criteria

1. Women in their reproductive age group between 20 to 35 years
2. Women who had a previous childbirth and was lactating or expecting the first childbirth.

### Exclusion Criteria

Women who did not give informed consent.

A total of 600 women were randomly selected and enrolled in the study. A pre designed validated questionnaire in two local languages was prepared and given to the participants. Those who couldn't read and write were given a resource person to help them to fill the questionnaire. Instructions regarding filling the questionnaire were explained in local languages.

The questionnaire was broadly divided into 4 components. First part included socio-demographic data; second part was about taboos with regards to dietary habits, third part included questions regarding lifestyle and fourth part included questions pertaining to breast feeding practices. Questionnaires were collected anonymously after completion from the participants. Responses to the questionnaire were coded and entered into Excel Sheet and analyzed

### Statistical Analysis

Data was analyzed and tabulated; SPSS software version 21 was used.

### Results

Among the 600 participants of the survey, 40% women had completed graduation, 40% had completed higher secondary school and 20% were illiterate. The study subjects were between the age of 20-35 years with mean age of 24.5 and  $\pm$  4.3 years.

The common beliefs of participants regarding few food items have been illustrated in Table.1

**Table 1: Dietary beliefs among the participants**

| Food items             | Should not be consumed (Percentage % ) | Can be consumed (Percentage % ) | Do not know (Percentage %) |
|------------------------|----------------------------------------|---------------------------------|----------------------------|
| Ripe papaya            | 64                                     | 32                              | 4                          |
| Raw papaya             | 89                                     | 2                               | 2                          |
| Pine apple             | 67                                     | 22                              | 11                         |
| Custard apple          | 71                                     | 20                              | 9                          |
| Grapes                 | 58                                     | 32                              | 10                         |
| Raw mango              | 23                                     | 65                              | 12                         |
| Banana                 | 26                                     | 70                              | 4                          |
| Green leafy vegetables | 12                                     | 88                              | Nil                        |
| Tomato                 | 7                                      | 90                              | 3                          |
| Amla                   | 24                                     | 72                              | 4                          |
| Curd                   | 57                                     | 41                              | 2                          |
| Meat                   | 16                                     | 79                              | 5                          |
| Chicken                | 67                                     | 24                              | 9                          |
| Fish                   | 48                                     | 25                              | 27                         |
| Saffron                | 25                                     | 70                              | 5                          |
| Butter                 | 7                                      | 89                              | 4                          |
| Millets and Grains     | 10                                     | 88                              | 2                          |
| Hot beverages          | 28                                     | 67                              | 5                          |
| Egg                    | 27                                     | 73                              | Nil                        |
| Betel leaves           | 38                                     | 51                              | 11                         |

The reasons for their beliefs and misconceptions have been summed up in Table 2 and 3.

**Table 2: Reasons for avoidance of certain food items in Pregnancy**

| Food items avoided             | Misconceptions                           |
|--------------------------------|------------------------------------------|
| Ripe papaya                    | Causes loose stools, abdominal pain      |
| Raw papaya                     | Causes abortion                          |
| Pine apple                     | Causes cough                             |
| Banana ,Custard apple          | Causes cold                              |
| Black Grapes, Coffee and Jamun | Child born with dark complexion          |
| Curd , butter milk             | Causes cough and cold                    |
| Fused banana                   | Threat of twin foetus                    |
| Maize ,corn                    | Abdominal pain                           |
| Chicken                        | Causes loose stools ,uterine contraction |

**Table 3: Reasons for avoidance of certain food items during Post-Partum Period**

| Food items avoided                   | Misconceptions                                                 |
|--------------------------------------|----------------------------------------------------------------|
| Mango                                | Peel will not get digested, causes cough and cold in the child |
| Curd, coconut water and fresh juices | Causes cold for both mother and child                          |
| Egg, Wheat                           | Allergy to the child                                           |
| Chicken, peanuts                     | Causes dysentery in the child                                  |

Majority of the participants (90%) believed that both pregnant and lactating women can do household work and around 53% were favouring herbal remedies.

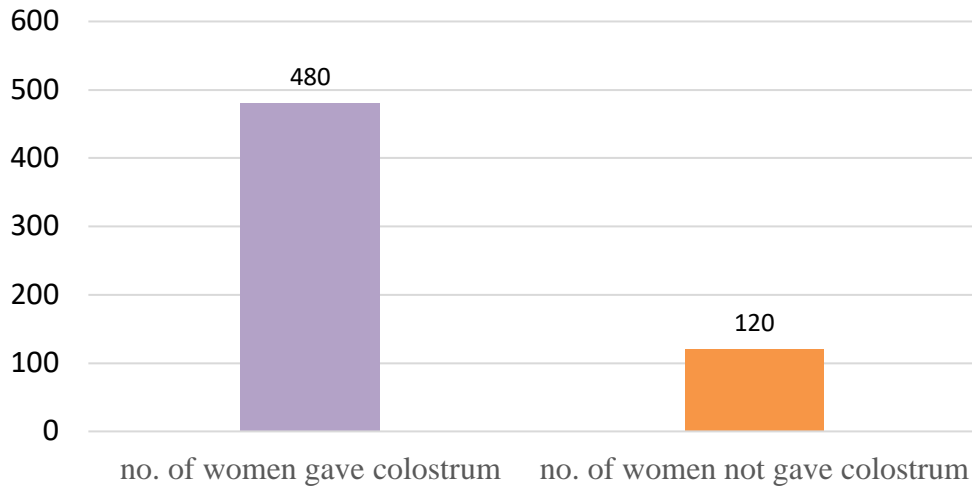
Eighty nine per cent of women thought that raw papaya, ripe papaya, pine apple, fish, egg and poultry meat as hot food and consumption of these food items during pregnancy causes abdominal pain and uterine contractions. Similarly 93% of women believed that curd, butter, amla (gooseberry), grapes, custard apple and green leafy vegetables are cold foods and consumption of these food items during pregnancy

causes cold and fever to the mother and during lactation causes cold and cough to the child .

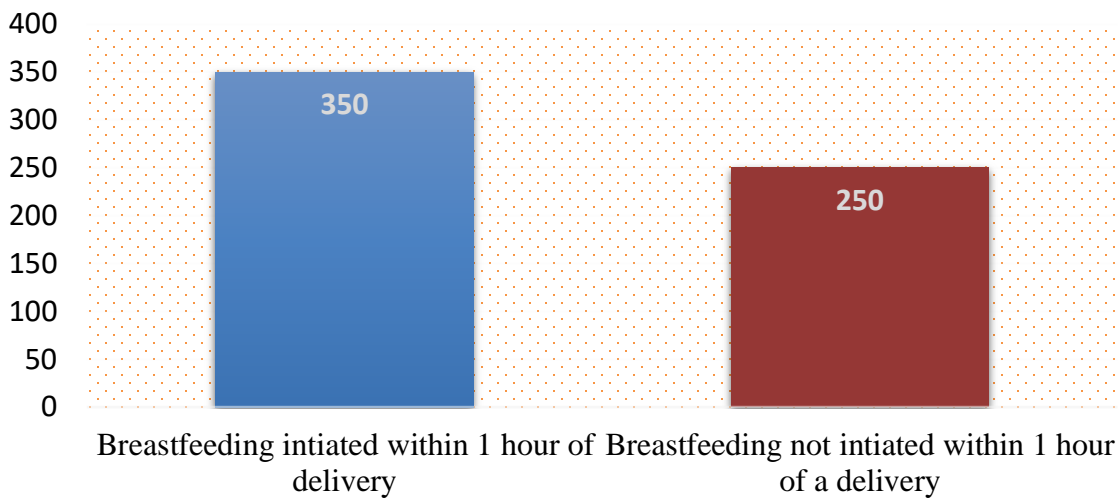
It was found out that unfortunately 120 (20%) women do not feed colostrum to the neonate because of the taboos. The data on feeding the colostrum is illustrated in the Chart 1.

Breast feeding was initiated within 1 hour of delivery in 350 participants. Exclusive breast feeding till 6 months was given in 425 participants. The breast feeding initiation practice is depicted in chart 2.

**Chart 1. Women who fed Colostrum to baby**



**Chart 2. Breastfeeding initiated within 1 hour of delivery**



**Discussion**

The present study was a questionnaire based study to evaluate the food taboos and misconceptions in women residing in Anantapur district. 600 participants were enrolled and it was found that majority of women had taboos regarding raw papaya, pine apple, fish, egg and poultry meat and fused bananas. They had strong misconception about hot and cold food items which may harm mother or baby.

A similar study was done by Biza and Nejimu among Pregnant Women of Shashemene District, Ethiopia, 2012 which enrolled 295 antenatal women[9]. Educationally, half of women 52.2% cannot read and write while (13.9%) had attended secondary as compared to 20% and 40% respectively in our study. It reflects educated participants are more in the present study but the taboos remain. Their study showed that Educational status and previous Antenatal Natal Care (ANC) attendance of the women had significant association with belief on balanced diet with an adjusted odds ratio of 5.0 (1.212-2.682) and 3.125 (1.178-8.291) respectively. This may be due to knowledge gained from formal education and experienced health education

during ANC care may improve the awareness of those mothers to feed balanced diet during pregnancy. The present study also had correlation of taboos was more in illiterate women.

Another cross-sectional study of 332 pregnant women in antenatal care (ANC) follow-up at selected private clinics in Mekelle city, Tigray, Ethiopia, recruited between April and May, 2017 was done by Tela FG et al[10]. According to this study around 12% of the pregnant women avoided at least one type of food during their current pregnancy for one or more reasons but in the present study almost half 323(49.8%) of study participants were constrained to avoid one or more food items during pregnancy and lactation. Study done by Tela FG et al put forth that mother avoided eating items such as yogurt, banana, legumes, honey, and "kollo" (roasted barley and wheat). The most common reasons given for the avoidances were that the foods were (mistakenly) believed to cause: abortion; abdominal cramps in the mother and newborn; prolonged labor; or coating of the fetus's body[10].

Thus, the present study highlighted the maternal nutrition education needs to be improved for better nutrition care and support for pregnant women. The antenatal period is the only time when midwives spend a significant time with the women in the reproductive age group and is an ideal time to provide nutrition education.

### Conclusion

The study revealed that food taboos and misconceptions governing pregnancy exist in Anantapur district. Women in this study area were constrained to avoid specific food items due to cultural and traditional views. This surveillance highlights the importance of educating women and providing nutrition education intended at changing pregnant and lactating women attitude towards balanced feeding habits. The lactating mothers' knowledge of and attitudes towards Exclusive Breast Feeding were generally favorable. However, their practice of Exclusive Breast Feeding was suboptimal. Mothers' misconceptions and misunderstanding of Exclusive Breast Feeding messages may play an important role in determining its practice. Maternal knowledge, maternal level of education and age of the child is also important in promoting the practice of Exclusive Breast Feeding.

The misconceptions related to food taboos during pregnancy should be discouraged insofar as they may restrict women's consumption of nutritious foods which could support maternal health and healthy fetal development. Health care providers should counsel pregnant women and their family about appropriate pregnancy nutrition during ANC visits.

### References

1. J. Labiner-Wolfe, S. B. Fein, and K. R. Shealy, "Prevalence of breast milk expression and associated factors," *Pediatrics*, vol. 122, no. Supplement 2, pp. S63–S68, 2008.
2. K. Abu-Saad and D. Fraser, "Maternal nutrition and birth outcomes," *Epidemiologic Reviews*, vol. 32, no. 1, pp. 5–25, 2010.
3. U. Ramakrishnan, F. Grant, T. Goldenberg, A. Zongrone, and R. Martorell, "Effect of women's nutrition before and during early pregnancy on maternal and infant outcomes: a systematic review," *Paediatric and Perinatal Epidemiology*, vol. 26, no. s1, pp. 285–301, 2012.
4. K. M. Merchant, "Women's Nutrition through the life cycle," in *Women in the Third World: An Encyclopedia of Contemporary Issues*, p. 165, Routledge, Abingdon, United Kingdom, 2014.
5. R. E. Stake, *Multiple Case Study Analysis*, Guilford Press, New York City, NY, USA, 2013.
6. S. Young, K. Murray, J. Mwesigwa et al., "Maternal nutritional status predicts adverse birth outcomes among HIV-infected rural Ugandan women receiving combination antiretroviral therapy," *PLoS One*, vol. 7, no. 8, Article ID e41934, 2012.
7. S. Ryan, Z. Wenjun, and A. Acosta, "Breastfeeding continues to increase into the new millennium," *Pediatrics*, vol. 110, no. 6, pp. 1103–1109, 2002.
8. R. E. Black, H. Alderman, Z. A. Bhutta et al., "Maternal and child nutrition: building momentum for impact," *The Lancet*, vol. 382, no. 9890, pp. 372–375, 2013.
9. Biza, Nejimu. (2015). Food Taboos and Misconceptions Among Pregnant Women of Shashemene District, Ethiopia, 2012. *Science Journal of Public Health*. 20153(3): 410. Doi:10.11648/j.sjph.20150303.27.
10. Tela FG, Gebremariam LW, Beyene SA. Food taboos and related misperceptions during pregnancy in Mekelle city, Tigray, Northern Ethiopia. *PLoS One*. 2020 Oct 13;15(10):e023945 doi: 10.1371/journal.pone.0239451. PMID: 33048926; PMCID: PMC7553351.

**Conflict of Interest: Nil Source of support: Nil**