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Original Research Article

Food taboos during antenatal and postpartum period among the women of rural and urban areas of Tamilnadu

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Abstract

Background: Eating nutritionally balanced foods during pregnancy is very essential. In India, dietary habits of pregnant women are highly influenced by food fads, cultural taboos, customs and religious beliefs. Very minimum data is available on the dietary intake of pregnant and postpartum nutritional practices in India.

Objective: The aim of the study was to assess the existing beliefs and practices regarding food during pregnancy and lactation.

Design: Cross-sectional study/ Community based experimental study.

Place and duration of study: The present study was conducted at different parts of Tamilnadu. This study was conducted in five months time from September 2015 to January 2016.

Participants and methods: The sample included both currently pregnant women who have had a previous childbirth, and lactating women. Sample size was 650 females of age group 22-60 years. We asked about their traditional beliefs and their behaviour during antenatal and postpartum period. We used a framework approach to identify main taboos. Simple Convenience Sampling technique was used.

Results: 89% believed that there is an effect of food on pregnancy and lactation, 11% did not. Despite of high literacy rate (75%) there are certain strong, food beliefs regarding pregnancy and lactation which have been practiced by pregnant ladies and lactating mothers which were affecting their food intake.

Conclusions: All accessible resources for creating wakefulness among the women regarding the importance of diet during pregnancy and lactation should be used properly by using all means of communication.

Keywords: Women beliefs, nutrition, diet during pregnancy and lactation (post partum)

1. Introduction

Pregnancy is an active anabolic state characterized by a series of small adjustments whose purpose is to allow growth and development of the fetus while maintaining maternal homeostasis and preparing for breast feeding. The demand for both energy and nutrients is increased during pregnancy [1]. These adjustments relate to changes in maternal behaviour, affect the metabolism of all nutrients. They depend primarily on the nutritional status of the mother before conception and explain its ability to adapt to various nutritional situations.

Food taboos are common among around all societies of world, which are particularly perceptible during the pregnancy and lactation period. Common belief is the concept of ‘hot foods’ that produce heat in the body and ‘cold foods’ that have a cooling effect on the body. Pregnant women in India are bombarded with so many advices and suggestions that they in point of fact end up being puzzled about what to eat and what not to eat.

Different studies showed that there are restrictions on different foods during pregnancy and lactation in different population such as in Nigeria [2-11].

Since the fetus development and childbirth process is a natural phenomenon in continuity of human life, but the various groups of public with its culture in the whole world have multifarious perception, interpretation and behaviour response in implications to health.

We have taken up the study in view of the fact that very minimum data is available on the dietary intake of pregnant and postpartum nutritional practices in Tamilnadu among rural and urban women.
1.1 Objectives of the study

To examine the existing food practices during antenatal and postnatal period towards mother and child health among women from different parts of Tamilnadu

To study the beliefs, practices and superstitions towards food intake during antenatal and post partum period.

2. Materials and Methods

The study was conducted among women from different parts of Tamilnadu (rural, semi urban and urban areas of Chennai and rural areas of Salem). For the present study 650 eligible women in their reproductive age group between 22 to 60 years who have had a previous childbirth, and was lactating or expecting the first childbirth. The participants were randomly selected. The form asked for decision to participant if they would to participant in this research or not. The questionnaires were given to each participant with the instructions of how to complete it.

Questionnaire given to the participants included three parts- Part I Demographic Data consisted of 7 items constructed by researcher , Part II Taboos Activity Questionnaires consist of 24 items like Ripe Papaya, Raw papaya, Pine apple, Custard apple, Grapes(all varieties), Raw mango, Banana, Green leafy vegetables, Tomato, Amla (gooseberry), Curd, Meat, Fish, chicken, Saffron, Ash, Yam, butter ,hot beverages, egg ,betel leaves, jaggery, Millets and Grains, Part III included performing house hold work(sweeping, mopping) and using herbal treatment like using tulsi (*Ocimum tenuiflorum*) for common cold.

3. Results

Among the 650 participants of the survey, 35% women have completed graduation, 40% has completed Higher Secondary School, and 25% are illiterate. All of them either already mother or expecting the first child.

| 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 (all varieties) | 58                                 | 32                             | 10                         |
| Raw mango            | 23                                   | 65                             | 12                         |
| Banana               | 26                                   | 70                             | 4                          |
| Green leafy veg.     | 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                          |
| Ash                  | 53                                   | 34                             | 13                         |
| Yam                  | 37                                   | 57                             | 6                          |
| Butter               | 7                                    | 89                             | 4                          |
| Millets and Grains   | 10                                   | 88                             | 2                          |
| Hot beverages        | 28                                   | 67                             | 5                          |
| Egg                  | 27                                   | 73                             | Nil                        |
| Betel leaves         | 38                                   | 51                             | 11                         |
| Jaggery              | 9                                    | 89                             | 2                          |

87% of women conveyed that the pregnant and lactating female can do household work and 13% approved that household should not be done. More than 90% was uncomplaining towards the herbal treatment for pregnant and lactating mother and very little percentage denied it.
Concept of hot and cold food items among the women surveyed

89% of women thought-out raw papaya, ripe papaya, pine apple, fish, yam, egg and poultry meat as hot food and consumption of these food items during pregnancy causes abdominal pain and uterine contractions.

93% of women believed that Curd, butter, cheese, amla (gooseberry), grapes, custard apple green leafy vegetables is considered cold 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.

4. Discussion

This study assessed common food taboos and misconceptions during pregnancy. Study subjects were between the age of 22-60 years. More 25% of the interviewed women were illiterate. Almost half 323(49.8%) of study participants were constrained to avoid one or more food items during pregnancy and lactation.

Dependable with previous studies significance of balanced diet was established to be considerably related with age groups. Women younger than 30 years were more likely to eat balanced diet, consumption of pills like folic acid tablets, iron tablets, calcium tablets, TT injections, antenatal exercises, attend ANC and health education. The probable justification might be younger women may be more likely to recognize current health. Older women on the other hand, tend to think on native facts of customary practice and as a result giving less thought towards feeding balanced diet and ANC follow up.

The study done in South India, Pondicherry out of 339,216 (63.7%) told that some vegetables/fruits should be avoided during pregnancy. There was no significant difference regarding this misconception between literates and illiterates. Most of the illiterates (91.3%) told that papaya should not be eaten during pregnancy in comparison to 83.9% of literates. Most common reason for restriction of specified fruits/vegetables was abortion. [11]

In our study 64% avoided ripe papaya and 89% excluded raw papaya during pregnancy. Various surveys showed that, among the participants, 91.3% illiterate women and 83.9% literate women in Pondicherry [11] 82% women in Tamil Nadu [10] and 53.5% women in Surendranagar district of Gujarat [9] avoided papaya during pregnancy.

Papaya is also seen as abortificient in Indonesia [12], Malaysia [13] and Myanmar [14].

Ripe Papaya is commonly eaten by Indian population and it has revealed to have no effect on rat pregnancy. So, the 64% people avoiding ripe papaya during pregnancy is just because of unnecessary fear. The fear should be eliminated since study proves that isolated papaya proteinase I has no effect on pregnancy.

In our study 67% avoided pine apple during pregnancy. Unripe fruit juice and leave of pineapple plant have been known to have abortificient properties in Indian medicine for a long time[15]. Some foods are classified as ‘Hot’ which are believed to have negative effect on pregnancy and some foods are classified as ‘cold’ which are believed to have no negative effect on pregnancy[16].

Pineapple perceived as ‘hot’ in many regions of India such as in Karnataka community [17] and in Tamil Nadu [10]. According to a survey done on 339 adults of Pondicherry, India, it was seen that 9.8% illiterate women and 6.5% literate women avoided pineapple during pregnancy [11]. According to the statistics of an ayurvedic physician in Tamil Nadu, pineapple causes bleeding from uterus in 5-10% of women [10].

Table 2: Shows the Beliefs for the food avoided during pregnancy and lactation

| During Pregnancy | Beliefs                        |
|------------------|--------------------------------|
| Ripe papaya      | Causes loose stools, abdominal pain |
| Raw papaya       | Causes abortion                |
| Pine apple       | Causes cough                   |
| Grapes, Banana, Custard apple | Causes cold              |
| Grapes (black)   | Child born with dark complexion |
| Curd , butter milk | Causes cough and cold       |
| Twin banana      | Threat of twin foetus          |
| Maize, corn      | Abdominal pain                 |
| Yam              | Allergy to the child           |
| Hot beverages (especially coffee) | Child born with dark complexion |
| Chicken          | Causes loose stools, uterine contraction |

| During Post Partum Period | Beliefs                        |
|---------------------------|--------------------------------|
| Mango                     | Peel will not get digested, causes cough and cold in the child |
| Curd, Milk, 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  |

Kouser Banu et al / Food taboos during antenatal and postpartum period among the women of rural and urban areas of Tamilnadu 395
5. Conclusion

The study revealed that food taboos and misconceptions governing pregnancy exist in Tamilnadu state. Women in this study area were duty-bound to avoid specific food items due to cultural and traditional views. The illiterate women were, the more likely to observe more food taboos. This surveillance highlights the importance of educating women and providing nutrition education intended at changing pregnant and lactating women attitude towards balanced feeding habits.

Women living in semi urban and rural areas have more food taboos and misconceptions. This possibly will be enhanced by nutritional counselling program. Maternal and child health hospitals and peripheral health care canters have to play a foremost role in coordinating this effort of awareness creation. They should also set a counselling method regularly to identify women observing food taboos and provide suitable nutrition education.

The customary background influences woman behaviour during pregnancy. As a result, a lot of awareness needs to be spread in areas regarding the basic nutritional requirements of pregnant and postpartum women.

Limitations of the study

The cause and effect relationship was not established in the study.

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