

Across Sectional Study on Social and Cultural Food Taboos Related Barriers in Prevention of Anemia in Pregnant Women of Amravati District, Maharashtra India

Usha Deshmukh*

Department of Computer Science, University of Mumbai, Maharashtra, India

ABSTRACT

Introduction: Anemia is a major health challenge in developing countries during pregnancy, including India. Nutritional requirements increases during pregnancy and restrictions on consumption of foods rich in the required nutrients may have negative consequences for a mother as well as for her growing fetus. Therefore, our objective for performing this study was to evaluate the social and cultural barriers in the prevention of Anemia and to evaluate the perceptions and practices of anemic women.

Methods: A cross-sectional questionnaire based study, including 100 pregnant women, was conducted in a Vatsalya Hospital, Amravati. In depth interviews were conducted with these 100 patients.

Results: Total 100 antenatal women were taken for the study. In which the socio-demographic profile of the participants, distribution of participants as per obstetric history and admissions along with their education, description of past medical history, and their knowledge and attitudes along with the actual practices were studied.

Conclusion: As a conclusion, adherence to social and cultural related food beliefs is evident in pregnant women found in Amravati city. There is a need for nutritional education and awareness creation about the nutritional consequences of following food taboos and iron supplements. As a short term intervention, this kind of education should be developed and disseminated during ANC follow ups, and should target not only pregnant women but also their husbands and families. In the longer run, the literacy level of mothers should be improved across the life cycle to avoid such misconceptions.

Keywords: Anemia; Food taboos; Antinatal care; Nutritional care

INTRODUCTION

Anemia is a major health challenge in developing countries during pregnancy, including India. During pregnancy, a woman will receive antenatal checkups to check her condition and prevent complications. Anemia is a risk factor that contributes 50% of maternal deaths and harm to fetus. World Health Organization (WHO) defines a pregnant woman is classified into anemic if her hemoglobin (Hb) level is less than 11 gr/dl [1]. Nutritional requirements increases during pregnancy and restrictions on consumption of foods rich in the required nutrients may have negative consequences for a mother as well as for her growing fetus. Anemic women are more prone to many complications i.e, 2-4 times more, such as the increased risk of cardiac diseases, decreased work productivity, preterm delivery, postpartum hemorrhage, and infections. Evidences show that 40% of pregnant women were anemic in the year 2016 due to food taboos. New born of anemic mothers suffer from low birth weight and low immunity. Iron deficiency is the most common cause of anemia in pregnancy, but

it never occurs alone it is usually accompanied by a deficiency of other nutrients [2].

Most communities, urban or rural, have several taboos regarding foods to avoid during the period of pregnancy, and most have local explanations for variety of food taboos that why certain foods should be avoided [3]. Such taboos may have health benefits, but they also have a large cost to pay on mothers and fetuses. Food taboos are an important public health goal, especially where food resources are limited. Along with this, some information regarding food taboos is limited in various regions [3]. Therefore, our present study is associated with the food taboos, related misconceptions, and associated factors among pregnant women which develop anemia in Amravati district.

High magnitude of anemia is associated with the severe health consequences that highlight the need to identify the barriers for anemia prevention in pregnancy [4,5]. The purpose of this study was to evaluate the Social and Cultural food taboos related barriers to prevent anemia and to evaluate the practices and perceptions of

Correspondence to: Usha Deshmukh, Department of Computer Science, University of Mumbai, Maharashtra, India, Tel: +91-8668324946; E-mail: drketkikale@gmail.com

Received: 02-Mar-2022, Manuscript No. jnfs-21-12446; **Editor assigned:** 04-Mar-2022, PreQC No. jnfs-21-12446 (PQ); **Reviewed:** 18-Mar-2022, QC No. jnfs-21-12446; **Revised:** 23-Mar-2022, Manuscript No. jnfs-21-12446 (R); **Published:** 30-Mar-2022, DOI: 10.35248/2155-9600.22.12.1000p37

Citation: Deshmukh U (2022) Across Sectional Study on Social and Cultural Food Taboos Related Barriers in Prevention of Anemia in Pregnant Women of Amravati District, Maharashtra India. J Nutr Food Sci. 12: p37.

Copyright: © 2022 Deshmukh U. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

anemic women towards their condition.

MATERIAL AND METHODS

A hospital based cross sectional study was performed from May 2021 to July 2021, who visited Vatsalya Hospital, Amravati. The study was questionnaire based and interview system was followed. The questionnaire was designed to observe various food taboos associated with pregnancy, the food that were avoided, the perceived reason for avoidance, diversity of respondents, diets during pregnancy, socio-demographic characteristics and Hb levels [6].

After reporting frequency statistics mean and standard deviation of continuous variables, bivariate and multivariable logistic regression analyses were conducted to identify the socio-demographic factors and diet variations associated with food taboo practices.

The questionnaire had five sections. The first section consists of questions regarding participant's demographic characteristics such as age and socioeconomic status [7]. The second section has questions related the past, obstetric and trimester history of the participant. The third section included questions like knowledge of participants regarding anemia and supplements. The fourth section has questions related the attitude of participants for antenatal care and the prevention of anemia. The fifth section included various questions to reveal the actual practices of the participants. At the end of the interview, queries from the pregnant women were addressed, and counseling regarding a balanced diet and compliance with iron supplements and the perceptions of antenatal care and prevention of anemia was discussed. Every fourth participant was chosen for an in depth interview where questions were asked about various food taboos. Most of the results were observed and described in percentages.

RESULTS AND DISCUSSION

Total 100 antenatal women were taken for the study. Table 1 shows the sociodemographic profile of the participants.

Table 1: Sociodemographic profile of the participants.

Characteristics	Number (%) n=100
Age in years	-
<25	36%
25-30	54%
30-45	10%
Socio economic Status	-
Upper Middleclass	46%
Lower Middleclass	20%
Lower socioeconomic status	34%

Our findings revealed that cultural food taboos which are practised by women by avoiding certain foods that are essential for a healthy pregnancy. Many taboos in India may vary according to the regions. Common and nutritious foods including mangoes, papayas, meat and eggs as being traditionally restricted. Our study showed that food taboos still exist along with the use of modern health care services [8]. Majority of participants in the current study are still practicing food taboos and following traditional recommendations during pregnancy which leads to the deficiency of iron. Our observations state that Multigravida patients are more prone for anemia than primigravida patients.

It is obvious that observance of food taboos and adhering to related misconceptions about dietary prohibitions can negatively

affect the nutrition and health status of pregnant women as well as the health, development, and life-long wellbeing of their growing babies [9]. In this study, some pregnant mothers were prohibited from consuming food items such as Papaya, Meat, Green coconut water, Small fishes, Milk, Various vegetables especially green and leafy vegetables, Watermelon, Asli or flax seeds, Curd and Banana.

Bananas were also considered as a taboo food by some of the study participants, who believed that banana can become coated to the body of the fetus, leading to the development of big babies (fetal microsomal), causing difficult labor and may cause abortion, Avoiding eating bananas during pregnancy may be problematic because bananas are not only cheap and energy dense, but are also rich in potassium, which can improve the health of the heart of the mother as well as her growing fetus [10,11]. Bananas also contain many other micronutrients such as vitamin B6 and minerals, as well as fiber, along with this they also have antioxidant properties. Pregnant women also restricted from eating animal source foods such as milk and curd, which are rich in high quality proteins, under pressure of influencers who stated that it may lead to poor pregnancy and increase the risk of giving birth to a low birth weight baby. Moreover, low consumption of animal source foods during pregnancy may lack various essential nutrients, leading to protein, energy, and micronutrient deficiencies, particularly these protein rich foods are also good sources of calcium, iron, vitamin and B-complex.

Taboos were also observed against variety of veggies under the influence of mother in law or elder in the families, They stated that consumption of brinjals and cabbage may leads to cause cooling effect on mother as well as fetus, cucumber and watermelon can cause infantile colic and diarrhoea, Red chillies may cause excessive acidity, Beans and guava is considered as a cold vegetables and caused cooling effects on mother.

The study also pointed out major restrictions on the use of honey and it was believed by some inlaws that it can cause abortion but scientific evidence indicates that honey poses no known health risks to pregnant women or fetuses, and contains high amounts of carbohydrates, proteins, minerals, and multiple antioxidants.

Some people also restrict meat and eggs which provide great nutritional requirements but many of them believe that it can cause food poisoning. Among all influencers mother in laws contributes more restrictions (57%) while husband are playing more helpful support. Along with this there are many other influencers (43%) like friends, neighbours, office colleagues, elders in the family who restricts variety of food taboos.

Our research has been conducted to examine whether and how social and cultural practices results in barriers for intake of healthy diet especially rich in iron results in the development of anemia and other deficiencies. Many traditional practices and beliefs influence the pregnant women along with this, food habits of people are variously influenced by their culture. Religions can also play a significant role in the category of influencers. Majority of women interviewed in the current study were practicing variety of food taboos, in some cases the women and families prefer to visit a traditional healer rather than to visit the nurse midwives for antenatal checkups. The reasons of choosing traditional healer because they do not have to pay more to them. All women believe that women should eat more during pregnancy in order to have healthy babies; they were mostly supported by their husband and less likely by the community. The nutrition practices and taboos

of the women showed a statistically significant association with their age, community. The present study reports that maximum number of patients is in the range of 25-30 which is 54% of the total participants, while upper middle class contributes more socioeconomic status which is 46% of all participates.

This study showed a significant association between observance of food taboos by pregnant women and their level of education, this might be due to the knowledge that they gained from formal education and from reading which may simultaneously boost their healthy eating practice. A review of evidence on traditional beliefs and practices from Pregnancy food taboos and related misperceptions suggests that nutritional education should not only provide to mothers but also to their husbands and families.

CONCLUSION

As a conclusion, adherence to social and cultural related food beliefs is evident in pregnant women found in Amravati city. Educational status were found to be negatively associated with observing food taboos during pregnancy, which results in the deficiency of iron and leads to anemia. Thus, there is a need for nutritional education and awareness creation about the nutritional consequences of following food taboos and iron supplements. Physical and mental health anxiety related food taboos also contributes major role in the development of anemia. As a short term intervention, this kind of education should be developed and disseminated during ANC follow ups, and should target not only pregnant women but also their husbands and families. In the longer run, the literacy level of mothers should be improved across the life cycle to avoid such misconceptions.

COMPETING INTERESTS

The authors declare that they have no competing interests.

ACKNOWLEDGEMENT

None.

REFERENCES

1. Widyawati W, Jans S, Utomo S, van Dillen J, Janssen AL. A qualitative study on barriers in the prevention of anaemia during pregnancy in public health centres: Perceptions of Indonesian nurse-midwives. *BMC Pregnan Childbirth*. 2015;15:47.
2. Lipoeto NI, Nindrea RD. Nutritional contributors to maternal anemia in Indonesia: Chronic energy deficiency and micronutrients. 2020;29.
3. Tela FG, Gebremariam LW, Beyene SA. Food taboos and related misperceptions during pregnancy in Mekelle city, Tigray, Northern Ethiopia. Spradley FT, editor. *PLoS ONE*. 2020;15.
4. Darmawati D, Siregar TN, Kamil H, Tahlil T. barriers to health workers in iron deficiency anemia prevention among indonesian pregnant women. *Anemia*. 2020;24:1-6. [Crossref]
5. Mishra A, Marwah S, Divedi P, Dewan R, Ahluwalia H. a cross-sectional study of barriers in prevention of anemia in pregnancy. *Cureus*. 2021;20.
6. Hakizimana D, Nisingizwe MP, Logan J, Wong R. Identifying risk factors of anemia among women of reproductive age in Rwanda: A cross-sectional study using secondary data from the Rwanda demographic and health survey 2014/2015. *BMC Public Health*. 2019;19:1662. [Crossref]
7. Yasuoka J, Nanishi K, Kikuchi K, Suzuki S, Ly P, Thavrin B, et al. Barriers for pregnant women living in rural, agricultural villages to accessing antenatal care in Cambodia: A community-based cross-sectional study combined with a geographic information system. *PLoS ONE*. 2018;13:e0194103.
8. Ramulondi M, De-Wet H, Ntuli NR. Traditional food taboos and practices during pregnancy, postpartum recovery, and infant care of Zulu women in northern KwaZulu-Natal. *J Ethnobiol Ethnomed*. 2021;17:15.
9. Nahrisah P, Plianbangchang S, Somrongthong R, Kumar R, Wahed T, Anwar F. Micronutrient Intake and Perceived Barriers Among Anaemic Pregnant Women in Aceh, Indonesia. *J Ayub Med Coll Abbottabad*. 2019;31:491-495.
10. Deriba BS. Nutritional-related predictors of preterm birth in North Shewa Hospitals, Central Ethiopia: A case-control study. *PHMT*. 2021;12:315-324.
11. Lokossou YUA, Tambe AB, Azandjèmè C, Mbhenyane X. Socio-cultural beliefs influence feeding practices of mothers and their children in Grand Popo. *Health Popul Nutr*. 2021;40:33.