

Prevalence of Food Myths and Beliefs among Pregnant Women of Haryana

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ABSTRACT

Pregnant women are the most vulnerable group of population. Pregnancy is a natural physiological state and during the course of evaluation adaptive mechanisms have developed to protect the fetus from harmful effects of adverse environmental conditions, including erratic supply of food conditions. Food myths are poorly justified nutritional concepts or even contradict existing scientific evidence, whereas individuals take them as the truth. Nutritional knowledge is an important tool in tackling misinformation and in the promotion of adequate food choices. The Present study was conducted to collect data about food myths and beliefs about pregnancy. One hundred twenty pregnant women were selected randomly from three hospitals, one is a private hospital (Bharat Nursing home) and two were government hospitals (Civil Hospital and PGI Rohtak). Questionnaire containing questions related to socio demographic information, food myths and beliefs was prepared and pretested. It was filled by an interview method. Study showed that food myths and beliefs were prevalent among Pregnant Women related to nutritive value, nature of foods and food myths and beliefs related to pregnancy which might have affected nutritional status. It can be concluded that nutrition education must be imparted to them to improve their nutritional status. Good nutrition during pregnancy will help to give birth to healthy babies, which is an asset for a developing nation.

INTRODUCTION

A woman's receptivity to health recommendations increase during pregnancy [1]. According to studies, women are more inclined to follow dietary advice from doctors, friends, or family members while they are expecting or nursing [2]. However, there are still misconceptions about different dietary habits during pregnancy in various cultures [3].

Myths are described as ideas propagated by the general public and thought to be true despite scientific evidence to the contrary [4,5,6,7,8]. Myths about diet can be harmful to health, especially for pregnant or nursing women. Knowledge, in contrast, relates to factual, scientific data on the impacts that are good for health [9]. Sadly, during pregnancy, misconceptions are occasionally believed more than facts [1].

In comparison to research done in Africa and the Middle East, the Western hemisphere has less information on food beliefs and knowledge [10,11]. Dietary habits throughout pregnancy affect postpartum weight increase and gestational weight gain. Furthermore, breastfeeding offers a host of advantages to both the mother and the infant, including immune support. On the precise nutritional value and immunological impact of breast milk on an infant, however, little is known [12]. There are misconceptions about whether a woman's milk production is sufficient to meet the needs of the new-borns, particularly in the first few days following delivery [11]. Both knowledge and beliefs are connected to nutritional practises throughout pregnancy and breastfeeding [13,14]. Depending on the age and level of education of expectant mothers and moms-to-be, the prevalence of these practises may differ between cultures [15,16]. Further research is still needed to dispel myths and outdated knowledge about nutrition in the first 1000 days postpartum [17,18]. As a result, it is obvious that dietary advice should be given while a woman is pregnant and breastfeeding, with a focus on dispelling common misconceptions. Studies have been done to examine expectant women' awareness and frequency of dietary misconceptions depending on age, years of education, income, marital status, and other socioeconomic factors. According to various socioeconomic factors, the study discovered that diverse nutritional beliefs and understanding existed [19]. Regarding food habits during pregnancy and lactation, there are numerous misconceptions and beliefs in India. For instance, some people think a pregnant lady should eat ghee (clarified butter) to ensure a healthy baby,

while others advise drinking coconut water to stave off discomfort and dehydration [18]. Furthermore, it's widely accepted that certain foods, such papaya and pineapple, might cause miscarriages and should be avoided by expectant mothers [19]. These myths and beliefs are rooted in Indian society and are frequently transmitted from one generation to the next. It's crucial to remember that a lot of these myths are unsupported by science and could be bad for the health of a pregnant woman. To dispel misunderstandings and encourage healthy eating habits, it is crucial to equip pregnant women and their families with accurate, evidence-based information.

Thus It's critical to recognise that the dietary practises of women are significantly influenced by myths and belief systems about nutrition during pregnancy. Myths about pregnancy diet are frequently perpetuated by cultural assumptions, customs, and false information. These beliefs may have an impact on pregnant women's food decisions and may have repercussions for both their health and the health of their unborn children. Investigating the prevalence of nutritional knowledge and myths among expectant moms in India is the goal of the current study. Based on a variety of socioeconomic criteria, including age, years of education, income, marital status, and other pertinent variables, the study compares the prevalence of myths and knowledge. The study aims to shed light on factors that affect nutritional practises during pregnancy and breastfeeding and inform the creation of effective dietary advice catered to the particular requirements of pregnant women by determining the prevalence of myths and knowledge in this population.

OBJECTIVES

The study was conducted with the objective to assess prevalence of food myths and beliefs among pregnant women of Rohtak City of Haryana.

MATERIALS AND METHODS

Locale of study: The present study was carried out on pregnant women from Rohtak city of Haryana.

Sampling Procedure: Three maternity hospitals from Rohtak city were selected purposely. These maternity hospitals were Bharat Nursing Home (Private Hospital), Civil Hospital and PGI Rohtak. Total 120 pregnant women in the second and third trimester were selected randomly.

Development and Pretesting of Questionable: A well structured questionnaire related to food myths and beliefs was prepared and pretested on ten respondents using an interview method.

Based on responses obtained from pretesting and difficulties faced, necessary were made in questionnaire to make it more functional.

Variables and Measurement: The list of commonly prevalent food myths and beliefs was prepared. Scores assigned for favorable, neutral and unfavorable responses were 1, 2 and 3 in positive statements and 3, 2 and 1 for negative statements.

Data Analysis: The data was analyzed using frequency and percent scores.

RESULT AND DISCUSSION

Food myths and beliefs related to nutritive value: Food myths and beliefs followed by pregnant women has been summarized and presented in Table 1 Practically there was no food which constitutes myth but food myths and beliefs which were widely prevalent have been discussed further .

Table 1 Food myths and beliefs related to nutritive value

Sr. No.	Statements related to food myths and beliefs	Favorable	Neutral	Unfavorable
1.	Apples are more nutritious than other foods	95 (75.16)	10 (8.33)	15 (12.30)
2.	Desi ghee is more nutritious than hydrogenated fats	103(85.80)	12(10.00)	05 (4.16)
3.	Egg from indigenous breeds of hen are more nutritious than crossbred hens	74 (61.66)	40(33.30)	06 (5.00)
4.	Almonds are more nutritious	74 (61.66)	26(21.60)	20 (16.60)
5.	Skimmed milk does not have any nutritive value	59 (49.16)	22(18.33)	39 (32.50)

Values in parentheses indicate percentage of pregnant women

Comments of pregnant women were obtained. Percentages of pregnant women who gave their opinion in favour, against or no opinion with regards to food myths are present in Table 1. Apple is more nutritious than other fruits as expressed by 75.16 percent, 12.3 percent and 8.33 percent of subjects, respectively . However, fruits such as guava, tomato and ziziphus available at low cost are more nutritious than apples. Higher percentage of respondents gave their views in favour of food taboos. In urban areas 85.8 percent of pregnant women believed that "Desi ghee is more

nutritious than hydrogenated fat" whereas 4.16 per cent expressed their views against this belief and 10 percent of respondents offered no comments. Majority (61.66 %) of pregnant women were in favour of the food myth "Egg from indigenous breeds of hen are more nutritious than crossbred hen" . Whereas 33.3 per cent had no comments and only 5 percent of pregnant women were against this opinion, but the color of egg shells has no relation to nutrition. Views about food myths "Almonds are more nutritious than peanuts" of respondents gave in favor, against and no comments were 61.66, 16.6 and 21.6 percent, respectively. Majority of pregnant women (49.16 %) thought that skimmed milk does not have any nutritive value and 32.5 per cent had their opinion against it. However, baring fat and vitamin A nutritive of skimmed milk is at par with whole milk.

Food myths related to pregnancy: Food myths related to pregnancy have been presented and summarized in Table 2.

Table 2. Food myths related to pregnancy

Sr. No.	Food myths	Followed	Not Followed	Reasons
1.	Food intake in pregnancy should be increased	98 (81.60)	22 (18.33)	Necessary for foetus nutrition
2.	Food considered as hot should not be consumed during pregnancy	93 (77.50)	27 (22.50)	Causes abortion and other complications of pregnancy
3.	Desi ghee and milk should be included in large amount in diet of pregnant women	100 (83.33)	20 (16.60)	Fats helps in easy delivery (parturition)
4.	Kangini should be included in diet	39 (32.50)	81 (67.50)	Traditional belief
5.	Omum seeds should be taken with water	66 (55.00)	54 (45.00)	Traditional belief
6.	Curd and buttermilk should be	55 (45.80)	65 (54.16)	Traditional belief

	avoided during pregnancy			
7.	Certain foods eaten during pregnancy mark sex of foetus i. Craving for spicy food mark female child ii craving for sweet food indicate male child	43 (35.83)	77 (64.16)	Traditional belief
8.	Pica habit (craving mud or clay)	54 (45.00)	66 (33.33)	Traditional belief
9.	Intake of papaya should be avoided by pregnant women	48 (40.00)	72 (60.00)	Hot foods causes abortion
10.	Lentil should not be given to pregnant women	56 (46.60)	64 (33.30)	Hot foods causes abortion
11.	Tomato build blood	43 (35.80)	77 (64.16)	Traditional belief
12.	Mango should not be consumed during pregnancy	76 (63.33)	44 (36.60)	Hot foods causes abortion

Majority (81.6 %) of pregnant women believed that food intake should not be reduced during pregnancy. It is necessary for fetal nutrition and only 18.33 per cent did it for the reason that it leads to delivering a large size of baby. Most pregnant women (77.50 %) had the opinion that hot foods (Table 2) cause abortion as not consumed during pregnancy. More than 83 percent of pregnant women expressed food belief that "Desi ghee and milk should be included in the diet of pregnant women " which helps in easy delivery (Parturition). Majority (67.5%) of pregnant women did not consume Kingini in their diets. It was considered a traditional belief. Actually there are only beliefs and no scientific basis behind these myths and beliefs, passed on by forefathers from one generation to another. While 32.5 per cent, had opinion in favor of food myth. Pregnant women consume omum seeds with water. Majority (54.16 %) of respondents did not follow the food myth "Curd and butter milk should be avoided during pregnancy" whereas 45.8 per cent of respondents had their views that curd and buttermilk are cold foods and should be avoided during pregnancy (Table 2) . Most pregnant women (64 %) did not follow the food

myth " Craving for certain foods mark sex of child " whereas only 35.83 per cent of respondents had views that craving for spicy foods mark female children and craving for sweet foods mark male children . It was considered as a traditional belief. Sixty percent of pregnant women had the opinion that papaya is called hot food and should be avoided during this period because it causes abortion. Similar views (46.6 %) were expressed in favour of the food myth "Lentil should not be given to pregnant women " . " Tomato builds blood "this food myth was not followed by 64.16 percent of pregnant women, whereas 35.8 percent followed this myth. Majority of (63.33 %) pregnant women had an opinion in favour of the myth "Mango should be avoided during pregnancy because mango is a hot food that causes abortion (Table 2), whereas 36.6 percent of pregnant women did not follow this food myth.

Food myths related to nature of food

Perusal of data presented in Table 3 related to the nature of food considered as hot, cold and neither hot nor cold.

Table No. 3. Food myths related to nature of food

Food groups	Hot	Cold	Neither hot nor cold
Cereals			
Wheat	9(07.50)	52(43.30)	59(49.10)
Pearl millet	100(83.30)	0	20(16.60)
Rice	0	97(80.80)	23(19.10)
Jowar	50(91.60)	47(39.10)	23(19.10)
Maize	109(90.86)	11(09.16)	0
Legumes			
Green gram	09(07.50)	98(81.60)	13(10.83)
Lentil	113(94.10)	0	07(05.83)
Bengal gram	42 (35.00)	41(34.16)	37(30.80)
Horse gram	108(90.00)	07(05.83)	05(04.16)
Black gram	103(85.80)	11(09.16)	06(05.00)
Cowpeas	72(60.00)	15(12.50)	33(27.50)
Moth beans	81(67.50)	30(25.00)	09(07.50)

Milk and its products			
Butter Milk	0	91(75.80)	29(24.10)
Milk	0	23(19.10)	97(80.80)
Curd	0	103(85.80)	17(15.00)
Desi ghee	71(59.16)	30(25.00)	19(15.80)
Butter	42(35.00)	41(34.16)	37(30.80)
Fruits			
Apple	11(09.16)	91(75.83)	18(15.00)
Banana	0	117(97.50)	03(02.50)
Mango	101(84.10)	0	19(15.83)
Orange	0	120(100.00)	0
Papaya	21(17.50)	90(75.00)	09(07.50)
Grapes	97(80.80)	0	23(19.60)
Tomato	83(69.16)	05(04.16)	32(26.60)
Ziziphus	53(44.76)	43(35.30)	24(20.00)
Plum	37(30.80)	47(39.10)	36(30.00)
Guava	07(05.83)	113(94.10)	0
Pear	23(19.60)	78(65.00)	19(15.61)
Peach	03(06.60)	71(59.100)	41(31.10)
Sapota	111(92.50)	0	09(07.50)
Vegetables			
Potato	99(82.50)	0	21(17.50)
Onion	0	59(99.10)	61(50.80)
Ladyfinger	90(75.00)	19(15.83)	11(09.16)
Spinach	05(04.16)	113(94.10)	02(01.60)
Cauliflower	97(80.80)	17(14.60)	06(05.00)
Cabbage	71(59.10)	46(38.30)	03(02.50)
Pumpkin	37(30.80)	70(58.30)	13(10.80)

Bitter gourd	120(100.00)	0	0
Calocasia	83(69.100)	29(24.13)	08(06.50)
Carrot	91(75.80)	29(24.13)	0
Radish	0	120(100.00)	0
Fresh peas and beans	53(44.10)	61(50.80)	06(05.00)
Bottle guard	0	120(100.00)	0
Turnip	41(34.26)	79(65.80)	0

Cereals considered as hot foods by pregnant women were jowar, maize and pearl millet. Rice was considered a cold food. Majority (49.1 %) of respondents considered wheat as neither hot nor cold followed by 43.3 percent of pregnant women who believed wheat as a cold food. There is no scientific basis because there is not much difference between the energy value of these cereals. Bengal gram, lentil, horse gram, black gram, moth bean and cowpeas are considered as hot. Green gram is only legume considered as cold pulses. However, the caloric value of green gram is similar to pulses considered to be hot. 70 percent of them considered as Milk and milk products cold were buttermilk and curd. Most of the pregnant women considered desi ghee and butter as a hot food, whereas milk is considered neither hot nor cold. Fruits considered as hot were mango, grapes, ripe tomato, ziziphus and sapota. Whereas, orange, papaya, banana, apple, plum, pear and peach were called cold fruits. Vegetables considered as hot were bitter gourd potato, lady finger, cauliflower, cabbage, colocasia and carrot. While onion, spinach, pumpkin, turnip, radish, fresh peas and beans were considered as cold vegetables.

CONCLUSION

It can be concluded that the nutritional status of pregnant women was poor. It was felt to improve their daily diet and impart nutrition education to get rid of food myths and beliefs followed by them. So That they can give birth to healthy babies, if the infants born are healthy and are an asset to the nation.

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