

Food taboos among pregnant women in Hadiya Zone, Ethiopia

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Abstract: A cross-sectional study assessing the prevalence of food taboos during pregnancy, types of foods prohibited and the associations of some of the socioeconomic parameters to food taboos, was carried out in Hadiya Zone, Southern Ethiopia. Two hundred ninety five healthy pregnant women who attended an antenatal clinic for routine check-up between February and May 1995, were included in the study. A questionnaire consisting of socioeconomic information, food taboo practice, types of foods avoided and reasons for avoidance was administered by trained nurses. The results indicate that a little over a quarter of them (27%) avoided at least one type of food due to food taboos. Milk and cheese were regarded as taboo foods by nearly half of the women (44.4%) followed by linseed and fatty meat (16% 11.1% respectively). The reasons for avoiding foods include fear of difficult delivery (51%), discoloration of the fetus (20%) and fear of abortion (9.7%). Among the few socioeconomic variables studied, education and income were found to influence food taboos ($P<0.05$). The findings underscore the importance of education and income in improving maternal nutrition, through changing food habits and increasing purchasing power of the mothers. [*Ethiop. J. Health Dev.* 1998;12(1):45-49]

Introduction

Pregnant women avoid specific foods due to several reasons. Some pregnant women avoid foods as a result of a strong dislike (aversion) developed following pregnancy. Other women avoid on medical grounds. In developing countries, however, a substantial number of pregnant women avoid specific foods due to cultural beliefs or impositions. The practice of avoidance of foods due to cultural food beliefs is referred to as food taboos.

Cultural food restriction during pregnancy is a common practice, particularly in developing countries. High prevalence of food taboo practice was reported in several areas of the world. In one of the communities in Nigeria, for example, it was found that

about 66% of women avoided milk (1) while in another village, Ebomoyi (2) observed that practically all pregnant women avoided meat (98%). In the Sudan, a study by Boucher revealed that fatty foods and sweets are abstained from by a sizeable proportion of pregnant women (3). Similarly, a study by Foyta in Mauritania indicated that eggs and goat's meat are the major taboo foods during pregnancy in the area (4) while in Botswana, meat, salty foods and bread are found to be prohibited by many pregnant women (5).

Few studies undertaken in Ethiopia also indicate that food restrictions during pregnancy are also a common practices throughout the country.

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A document prepared by the Food and Nutrition Unit in the Ministry of Planning and Economic Development indicated that milk, eggs and goat's meat are the major food items prohibited during pregnancy in most parts of the country (6). Another study by Beddada showed that milk and green vegetables are prohibited during pregnancy in many areas (7).

Major reasons forwarded by the women as to why they avoid some foods include fear of difficult delivery as a result of big babies following the consumption of foods presumed to increase the size of the fetus (1,3,8,9). Other reasons include, fear of abortions and discolouration of the fetal body (8).

Much work has not been done on the impact of food taboos on maternal nutrition. A few studies undertaken in this direction, however, show that food taboos play a negative role in maternal nutrition. For example, in Nigeria Ojofeitimi and Tanimowo (10) attributed the failure of 75% of the women to attain the recommended weight gain to the strong food taboos practised in the area. In another study, also in Nigeria, Ojofeitimi and co-workers (1) observed that pregnant women who were not practising taboos had significantly higher weight gain and heavier babies ($p < 0.02$) than the women practising food taboos.

In summary, the available literature regarding food taboos indicates that little work has been done on the prevalence and significance of food taboos to maternal nutrition in Ethiopia. The fact that food taboos are closely linked to dietary intakes of pregnant women underscores the need and the importance of undertaking investigations regarding food taboos.

Methods

The study site, Hadiya Zone, was selected on the basis of the opinions of nutritionists regarding the occurrence and magnitude of qualitative changes in foods consumed during pregnancy and the logistic facilities necessary to carry out the study. In this site, one MCH (Mother and Child Health) clinic was randomly selected. The study employed a cross-sectional study design with a retrospective recall procedures. All healthy pregnant women (required sample size of 295) who came for routine antenatal check-ups in the selected clinic between February and May 1995 were included in the study. A questionnaire addressing food taboo practice, demography and socioeconomic information was administered by trained nurses. The questionnaire was pretested on 30 pregnant women prior to actual data collection and necessary modifications were made based on the pretest. The data were entered in SPSS/DE and analyzed using SPSS/PC software. Age in years was categorized into three categories, less than 24, 24 to 30 and older than 30. This categorization was intended to see difference in taboo practice among the young, middle aged and the old women.

Gravidae, number of times a woman became pregnant, was categorized into two categories, less or equal to two in one and greater than two in the other. The intention was to see the difference in taboo practice between women with few pregnancies verses women with several pregnancies. Income was categorized in- to two categories. Low, below 250 Ethiopian birr and relatively high (middle income), 250 Ethiopian birr and above.

Results

Table 1 shows demographic characteristics of the study women. Most of the women (70.2%) were from Hadiya ethnic group, while Kambata, Gurage and Amhara ethnic groups constituted the rest (29.8%). Almost equal numbers of women participated from rural and

Table 1: Demographic characteristics of the study women (N=295)

Characteristics	Proportion (%)
Education (Levels of Education)	
No Education	23.7
1 - 8 grades	46.1
>8	30.2
Residence	
Rural	50.8
Urban	49.2
Income (Ethiopian Birr)	
<250	65.4
>250	34.6
Ethnicity	
Hadiya	70.2
Amhara	10.2
Gurage	9.8
Others	9.8
Religion	
Protestant	88.1
Muslim	6.1
Other	5.8

Occupation	
Housewife	92.2
Civil Servant	5.8
Occupation	2.0

urban communities (50.8% and 49.2%, respectively). In terms of occupation, nearly all the women (92%) were housewives, 5.8% were civil servants, while only 2% were self employed. In terms of religion, the majority (87%) were Protestant Christians of various denominations while other religions such as Moslems, Orthodox, and Catholic constituted the rest. About two thirds were from the lower income group, while the rest were from the middle income class. In terms of education about a quarter (23.7%) had not attended schools, and nearly a half (46.1%) had attended up to various classes in elementary school, while about a third (30%) had gone to classes beyond elementary school.

The reproductive profile of the study women is shown in Table 2. Mean age and mean gravidae were 25.2 years and 3.6, respectively. The low mean age and low mean gravidae indicate that the respondents were mostly young women. In fact, women who were older than 30 were only about 13%. There were no respondents from first trimester: 29.5% were in their second trimesters, while the majority, (70.5%), were in their third trimesters.

Table 2: **Reproductive profile of the study women (N=295)**

Characteristics	Percentage	Mean±SD	Min	Max
Age (years)				
<24	45.8			
24 - 30	41.2			
>30	13.0			
		25.2±4.	17	42
Gravidae (number)				
1 and 2	44.1			
≥3	55.9			
		3.6±2.6	1	12
Gestational age (month)				
First trimester	--			
Second trimester	29.5			
Third trimester	0.5			
		7.2±1.5	4	9

These proportions indicate that women come for antenatal check-ups mostly during the third trimester, when they approach delivery. The mean gestational age of 7.2 months confirms this pattern.

Table 3 shows that slightly over a quarter of the women (27.5%) abstained from eating at least one food, while 18.6% reported that they abstained from eating more than one food due to food taboos. Food restrictions to most foods were found to be more prevalent during the last trimester, except for linseed which was said to be prohibited throughout pregnancy. Table 3 also shows that among a few reasons forwarded, fear of big size fetus resulting in difficult labour was mentioned by half of the women while a smaller proportion reported discoloration of the fetal body (20%).

Table 3: **Prevalence of food taboos among Hadiya women and the reasons given for avoidance**

Avoidance (n=295)	Percentage
Not avoiding any food	72.5
Avoiding at least one food	27.5
Avoiding more than one food	18.6
Reasons (n=81)	
Fear of difficult delivery	51.0
Discolouration of the fetus	20.0
Fear of abortion	9.7

Common foods consumed in the area and the proportion of women reporting the usual consumption of these foods is shown in Table 4. “Teff injera” and “Shiro wot” are the most commonly consumed foods, followed by wheat bread and kocho (70%, 67%, 48% and 35%,

respectively).

Food types avoided and the proportion of women avoiding them is also shown in Table 4. The most common taboo foods were milk and cheese, which were avoided by nearly half of the women in both cases (44.4%). Linseed, fatty meat and banana were also avoided by a small proportion of the women (16%, 11.1% and 8.6%, respectively). In general livestock foods were avoided by over 90% of the women with food taboos.

The relationship of food taboos with selected variables is shown in Table 5. Although categories of residence, age and gravidae did not show any difference, there was significant difference in prevalence of food taboos between the low and high education levels and lower and middle income groups ($P < 0.05$). Four times more women who did not attend secondary schools observed food taboos compared to women who attended secondary school. Similarly, three times more women from low income group observed food taboos compared to women from the middle income group.

Table 4: **Types of foods usually consumed and prohibited in the area as reported by the respondents**

Food type	Usually consumed (%)n=295	Total (%)n=81
Specific foods		
"Teff Injera"	70	1.2
Wheat bread	48	1.2
Linseed	11	16.0
Cheese	--	44.4
Milk	--	44.4
"Enset bread"	35	- -
Potato	--	1.2
Meat sauce	--	2.5
Fatty meat	--	11.1
Kale	17	- -
Coffee	--	- -
Banana	--	8.6
Orange	--	1.2
Shiro wot	67	- -

Discussion

Prevalence of food taboos observed in this study appears to be relatively low compared to prevalence rates reported elsewhere in Africa and Ethiopia (1,2,6). It is speculated that the relatively low prevalence of food taboos observed in this study is due to the relatively better educational levels of the study participants. Over 76% of the studied women had gone to school, which is several times higher than female literacy rates in other parts (for example; Oromiya 15%, Amhara 12%) of the country (11). Nearly thirty percent prevalence of food taboos, on the other hand, underlines the need to further strengthen the efforts to eliminate food taboos in the area.

The observations about livestock foods being the major taboo foods concurs with the findings by other investigators. In Nigeria for example, it was observed that practically all women avoided livestock products such as meat, milk and cheese (1,2). This is one of the serious disadvantages of observing food taboos, since the major sources of protein which are essential nutrients needed for the rapidly growing fetus are avoided.

Table 5: **Distribution of women practising food taboos by categories of selected variables**

Variable	n	Food Taboo
Residence		
Rural	145	50.6
Urban	150	49.4
CHI Square		0.0
Age (years)		
<2	135	51.9
≥ 2	165	49.4
CHI Square		1.9
Education (grade)		
0	70	19.8
1 - 8	136	60.4
>8	89	19.8

CHI Square		4.8*
Income (Eth . Birr)		
<250	193	75.3
≥250	102	24.7
CHI Square	145	50.6

* P<0.05

The most common reason for the food taboos was fear of difficult delivery as the result of increased size of the fetus due to consumption of nutritious foods. This was also reported in other studies (1,3,9).

Not much has been studied about the cultural, socioeconomic and demographic determinants of food taboos. However, it is only logical to expect that lack of education in general and lack of nutrition education in particular are the most important factors contributing to observance of food taboos. This fact is confirmed in this study. The less educated women are, the more they observe food taboos. The finding about the influence of income on food taboo practice appears to be the effect of correlation of income to education. The less educated women are, the more likely it is that they are poor and at the same time observe more food taboos. This observation underscores the importance of educating women and providing nutrition education aimed at changing mothers' attitudes towards appropriate feeding practices. The impact of such endeavours has been evaluated in Nigeria, where women who were educated and changed their wrong food attitudes showed significantly better nutritional status compared to women who continued to observe food taboos (1).

The recommendation of this study is that concerted and strengthened actions towards eliminating food taboos in the area should be initiated. MCH clinics must play a leading role in coordinating this efforts. MCH clinics should also put in place mechanisms that can routinely identify women observing food taboos, assess the reasons and provide appropriate nutrition education services at least for women who come to their clinics. Other governmental and non-governmental organizations and various public associations, such as Farmers Associations and Women's Associations should also be actively involved in endeavours aimed at eliminating these harmful beliefs.

As this study was limited in several aspects (time, finance and other logistics) more indepth investigations could not done. Therefore, the authors strongly recommend more investigations, in particular, prospective studies covering the whole gestational period.

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