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Food Taboos among Pregnant Nigerian Women

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Abstract

Background: Myths and taboos play an important role in the lives of women in the area as in other parts of the world. Some taboos can be dysfunctional or harmful. **Objectives:** To examine food taboos related to pregnancy and their perception by the women. **Methods:** There were 275 respondents through use of questionnaires applied at antenatal clinics. **Results:** Mean age was 29.08 years. 192(72%) of the respondent had tertiary levels of education and 32% to 75% were not in agreement with the food taboos and the possible negative effects attached. In the taboo associated with avoidance of caffeinated drink, there was a greater proportion in agreement 49% compared to 32%. **Conclusion:** Belief and adherence to food taboos is reducing in our environment as a result of increase in level of education, occupation and urbanization. No significant negative effect on past pregnancy outcomes was observed. Change should be approached in form of educating the women. This can be done during the health talks given by the nurses during antenatal visits and more importantly through increase in formal education especially to higher levels.

Keywords: Food Taboos, Pregnancy, Nigeria

Introduction

Food taboos are known in virtually all human societies, where they exist as unwritten social rules in one form or another.^{1, 2} In Nigeria, food taboos abound and play important roles among the major tribes like the Igbos, the Hausas and the Yorubas. Food taboos are used especially to modify behaviour. They function mainly by instilling fear of certain possible consequences which may occur if a particular food is eaten.

Generally there are myths for almost every activity in life, concerning for example, eating drinking, sleeping, sex and even pregnancy. There may even be medical related myths and sometimes even doctors are duped³. This study has concentrated on food taboos that affect pregnancy. Most of the myths and taboos have no scientific basis as they have been passed down from generation to generation and fear of terrible consequences, especially to the baby, has been the reinforcing agent^{4,5}. On a comparative basis, many food taboos seem to make no sense at all, because what may be declared unfit by one group may be perfectly acceptable to another. Various reasons have been adduced for food taboos. Of note is the avoidance of BournvitaTM (a cocoa beverage), this was mainly to avoid big babies which they felt would occur if the chocolate drink was taken as they feared that it could subsequently lead to difficult delivery or Caesarean section³. Some of the food taboos are therefore adhered to in order to decrease the nutritional value that reaches the baby with the intention of preventing the baby from growing “too” big⁴. Eating of snails was believed to lead to the baby drooling saliva while eating of plantain was believed to lead to post-delivery diseases causing progressive widening of the sutural line of the baby called ‘Oka-Ori’ in Yoruba language which is accompanied with excessive crying at night. Most of the taboos are aimed at protecting the babies and sometimes the mother^{4, 6}. Belief in these myths prevailed in various degrees in most of the women irrespective of age, religion and education.

Nigeria has a high maternal mortality rate of about 800- 1,000 per 100,000 deliveries. The major causes of maternal mortality include obstetric haemorrhage which is worsened by high level of anemia during pregnancies. Most of the non-physiologic anemia is nutritional and these food taboos that lead to avoidance of iron rich foods may possibly play a significant role⁵. An excessively restricted diet, which can be a result of over-zealous adherence to dietary proscriptions, can lead to nutritional deficiency. Food taboos are also dictated by the traditional beliefs or spiritual atmosphere of the area⁷⁻⁹ and these indirectly influence the outcome of pregnancies in our environment.

Therefore this study is aimed at examining the perception of pregnant women attending antenatal clinics on food taboos related to pregnancy and its effect on past pregnancy outcomes.

Methodology:

This is a cross- sectional survey carried out among pregnant women that attended antenatal clinics in three government hospitals in Ilorin, Nigeria. The study period was between June and December 2011.

Ilorin is the capital of Kwara State and it is located in the North Central geopolitical zone of Nigeria. It has savannah vegetation and the population is made of Yorubas predominantly; others are Hausas, Nupes, Fulanis and Igbos. It is an urban settlement with essential health and educational facilities at the primary, secondary and tertiary levels. It has a population of about 1.1 million¹⁰, a significant percentage is educated from school certificate level and above. Majority of the people are either Muslims or Christians with few traditional believers. The study population is an admixture of women from rural and urban settlements of the region.

Pregnant women who presented for ANC were recruited and the inclusion criteria were consent to participate, the ability to recall past pregnancy outcome irrespective of the outcome, and a confirmed index pregnancy. Being a non-Nigerian and earlier participation were the exclusion criteria, and this was done to avoid multiple responses. Study sites were Antenatal clinics of University of Ilorin Teaching Hospital, Ilorin, Civil Service Clinic and Children Specialist Hospital, Ilorin.

A total of 275 questionnaires were administered. The questionnaire was based on the data collection of influence of cultural beliefs, specifically pregnancy related food taboos, on health seeking behaviours and pregnancy outcome in an African setting.

It was made up of sections on bio data, past obstetric history and pregnancy outcome, past medical history and the common food taboos in the society. Most of these were self-administered while others were administered by the researchers and assistants who included nurses and medical doctors for respondents who were unable to read.

Ethical considerations: permission was taken from the study sites. The survey was conducted in accordance with the ethical requirements of the institutions. Patients gave informed consent after being counselled about the study. Among the recruited pregnant women, there was no refusal to participate during the study period.

The questionnaire was pre-tested among twenty pregnant women during a follow-up visit in a government hospital for correction and clarification of questions before being administered to the study group. These were not included in the study. Pregnancy outcome was measured in terms of mode of delivery and fetal weight. Fetal weights were classified into low birth weight (<2.5Kg), Normal birth weights (2.5Kg-3.9Kg) and fetal macrosomia ($\geq$ 4Kg). Data was analyzed using SPSS 17¹³.

Results

There were a total of 275 respondents with an age range of 18 -44 years and a mean age of 29.08 ± 4.299 years. This age distribution is shown in figure 1.

Table 1 shows the sociodemographic characteristics of the respondents. 224(82.7%) of the women were of the Yoruba tribe which is the predominant tribe in the area while the remaining 47(17.3%) were made up the Igbo, Hausa and Nupe tribes.

143(53.4%) were Muslims while 125(46.6%) were Christians.

Most of the women 192(72%) had tertiary levels of education, of these 135(50%) had university degrees, equivalent or higher qualifications while 57(21.3%) had post secondary levels but not up to degree levels.

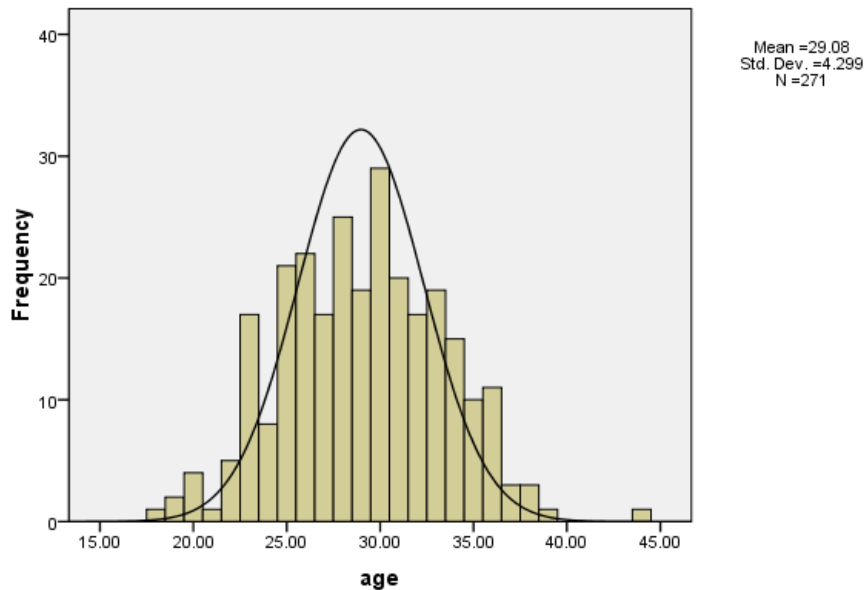


Figure 1: Distribution of age of pregnant women.

The occupational stratification of the respondents is also shown in this table. Table 2 shows the past pregnancy outcomes in terms of the birth weights of babies, the mode of delivery and the delivery outcome. Of the 275 respondents, only 150 past pregnancy outcomes were studied as there were 125 nulliparous women. 10 (8.8%) of the babies had birth weights less than 2.5 Kg, 97 (85.1%) had birth weights of between 2.5 to 4.00Kg while 7 (6.1%) had babies with weights greater than 4Kg.

Majority of the women had vaginal delivery 124 (82.7%) while only 26 (17.3%) had caesarean deliveries in their last pregnancies.

Table 3 shows the general proportion of responses to the food taboos. Table 4 shows the relationship between belief in food taboos and the socioeconomic statuses of the mothers and their spouses. Table 5 also shows past pregnancy outcomes in terms of foetal weight and modes of delivery with belief in food taboos.

Discussion

The study confirms the persisting presence of food taboos in the society, although beliefs in these taboos are quite low as can be observed from the proportion of respondents that disagree with the food taboos and the consequences attached. This contradicts the notion that food taboos are widely and deeply held and are difficult to erase¹¹. However, the belief that caffeinated drinks are injurious and must be avoided, has a greater proportion of agreement (49%) than disagreement (32%).

According to UNICEF, the incidence of low birth weight in Nigeria is 12% and Abidoye et al in Lagos reported 10.8%^{12, 13}. In this study, most women had previous deliveries that were of normal weight. There was no statistically significant difference in the past birth weights of the babies of respondents that agreed with the food taboos and those that did not. Probably, these women did not practice them but knew they existed and when practiced, had other nutritional substitutes for the 'sacrilegious' food items in pregnancy. This is further supported by the study by Chiwuzie and Okolocha which felt that there are other equally good sources of protein which may even be cheaper than the pregnant woman may opt for⁴.

In this study, there was a significant association between the ages of the respondents (young age) and the food beliefs that a pregnant woman must eat for two and that cold water must be avoided in pregnancy in order to allow free circulation of blood. This is probably because change in beliefs and attitudes are more difficult in older people generally. On the other hand younger women may be impressionable or frightened into adhering to the beliefs by the elders or their husbands. This is further supported by the review of taboos by Meyer-Rochow, who suggested that taboos may change throughout a person's lifetime with age in a predictable manner, as accepted and expected by society¹.

The respondents' educational levels were statistically significant in the food beliefs of avoiding snails in pregnancy in order not to cause the baby to drool saliva excessively after delivery, in the belief that the pregnant woman must eat for two and in avoidance of caffeinated drinks. The safety of caffeine ingestion during pregnancy is unresolved, some studies suggest that heavy caffeine use (≥ 300 mg per day) during pregnancy is associated with small reductions in infant birth weight that may be especially detrimental to premature or low birth weight infants. Some researchers also document an increased risk of spontaneous abortion associated with caffeine consumption. However, overwhelming evidence indicates that caffeine is not a human teratogen¹⁴⁻¹⁶. In view of the high proportion of respondents with tertiary levels of education, knowledge of these unresolved fears could possibly be an influencing factor in the decision that

caffeinated drinks should be avoided. Education has also probably helped to dispel the beliefs associated with snail eating, which is a good source of protein, and is readily available to women in the rain forest regions. With modern occupation comes increased exposure and more enlightenment. This may also explain the statistical significance in the avoidance of caffeinated drinks.

Among Kirwina Islanders bananas, pawpaws and other fruits are thought to be responsible for congenital anomalies like hydrocephalus and club-foot in pregnant women^{18, 19}. This is similar to the finding in this study in which it is believed that intake of twin bananas and plantain may lead to conjoint twins and infant disease in pregnancy. Similarly in the study by Lee et al, antenatal taboos are still commonly observed by contemporary Chinese women. Miscarriage, foetus malformation and foetal ill-health were the key cultural fears that drove contemporary Chinese women to observe the traditional taboos⁸. This finding was found to be statistically significant in relation to birth weight of these women. It is not unlikely that some food taboos/beliefs are shared by different tribes of varying ancestral origins. However, it may be that the avoidance of this fruit in pregnancy may have no consequences on birth weight outcome.

In the study by Chiwuzie and Okolocha they discovered that in the university town of Ile-Ife, in Southern Nigeria, many traditional healers discourage pregnant women from eating snails, snakes or okro soup, as these would 'harm the babies'; that a pregnant woman should not eat snails so the baby would not salivate excessively, become dull, or have a slow development of speech; and that puff adder meat (a delicacy in the locality) would cause the baby to be dull, sleep excessively and walk (take his/her first steps) very late⁴. This also is a similar finding to that in the study in which eating of snails was believed to lead to drooling of saliva and that snake meat was to be avoided by pregnant women. The beliefs are probably of the same origin, as the Yoruba tribe is predominant in the Ile-Ife town of Nigeria and Ilorin where this study was done. These taboos probably originated from the traditional healers and are still been preserved by these same healers as much as possible. This may be the reason wife's occupation, wife's education and husband's occupation are statistically significant in the belief in snails. The society is getting more western as urbanization increases and the influence of elders who are custodians of our traditions and beliefs is waning as they are left in the rural villages. This therefore, erodes strict cultural ideas that are medically detrimental.

Tribe and religion did not have any significant effect on the belief in food taboos. This is contrary to the study by Ojofeitimi which broke the reasons for food aversions by selected low income, illiterate women during pregnancy into four categories: health, tradition, economy and religion⁶. Perhaps the higher level of academic attainment of the respondents may account for this difference. In the

same study by Ojofeitimi it was observed that greater than two thirds of the women also strongly avoided Bournvita (a cocoa beverage), milk and cowpea seeds for fear of having big babies which they thought would lead to difficult labour and caesarean section⁶. It is similar to the findings in this study. With improvement in health standards and surgical skills and techniques, the aversion to caesarean section is probably reducing thereby leading to a corresponding reduction in the fear associated with these food taboos and hence the fewer proportion of respondents agreeing. The difference in levels of literacy between the respondents in each study could play a role in this case as well.

This shows that the food taboos really exist in our society as many were aware of them but they are obviously modified by socioeconomic factors and not necessarily by cultural determinants like religion and tribe. Increasing levels of education, urbanization and increasing exposure therefore appear to have contributed significantly to the reduction in the adherence to traditional beliefs and food taboos. It was recommended that classifications of food taboos should be undertaken in non-western cultures to assist the services provided by primary healthcare workers and foreign and indigenous non-governmental organisations that may be working in rural settings²⁰. Health-care practitioners should be aware that traditional antenatal taboos are still commonly observed among contemporary women. Given that some taboos can be dysfunctional (or even harmful if excessively subscribed to), health practitioners should regularly enquire about cultural practices as well as the entailed emotional responses. Although the cultural tradition connects the subjective maternal experience with their interpersonal lives, they serve as a powerful lens that health practitioners can make use of to understand the local moral world of modern motherhood.

Change should be approached by educating the women. This can be effectively done during the health talks given by the nurses and midwives during antenatal visits. Increase in formal education especially above secondary school certificate levels is also important while girl child education should be encouraged. Higher levels of education amongst the educated will go a long way in improving maternal and foetal outcomes in Nigeria.

Conclusion

Food taboos exist as a part of the culture of any society. Belief in the taboos and adherence to them are modified mainly by socioeconomic factors and not necessarily by cultural determinants. Increasing levels of education, urbanization and increasing exposure to western lifestyles therefore appear to have contributed significantly to the reduction in the adherence to traditional beliefs and food taboos.

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APPENDIX

Table 1: showing sociodemographic characteristics of Respondents

Ariables	N	%
<i>Tribe</i>		
Yoruba	224	84.2
Igbo	16	6.0
Hausa	7	2.6
Others	24	9.0
No response	9	
	275	100.0
<i>Level of Education</i>		
None	4	1.4
Primary	18	6.7
Secondary	53	19.9
Tertiary	192	72.0
No Response	8	
	275	100.0
<i>Religion</i>		
Islam	143	53.4
Christianity	125	46.6
No Response	7	100
	275	
<i>Occupation</i>		
Professionals and Managers	139	50.5
Skilled	39	14.2
Semi skilled	73	26.5
Unskilled	30	10.9
	275	100.0
<i>Parity</i>		
Nullipara	125	45.5
Para 1	65	23.6
Para 2	53	19.3
Para 3	26	9.5
≥Para 4	6	2.8
	275	100.0

Table 2: Past delivery outcomes of respondents

Mode of delivery	N	%
Vaginal	124	82.7%
Caesarean	26	17.3%
Total	150	100%
Birth weight classes		
Low Birth weight	10	8.8%
Normal Birth Wt	97	85.1%
Macrosomia	07	6.1%
Unsure	36	
Total	150	100%
Delivery Outcome		
Alive	132	88.0
Dead	18	12.0
Total	150	100%

Table 3: Responses to the food Taboos (%)

Food Taboos	Agree	Indifferent	Disagree
Must eat food for two in pregnancy.	36	11	53
Bournvita(cocoa drinks) must be avoided	36	08	58
Eating snails causes baby to drool saliva	21	15	64
Cold water will not allow blood to circulate	21	15	64
Eating crabs will make child hyperactive	11	30	59
Eating twin bananas will lead to Siamese twins	08	17	75
Snake meat is harmful and must be avoided in pregnancy	31	26	43
Eating salt not proper until 40days after delivery	14	15	71
Chili pepper will burn the eyes of the baby if eaten	10	17	73
Caffeinated drinks are injurious to baby and must be avoided in pregnancy.	49	19	32
Eating of plantain leads to infant disease	16	11	73

Table 4: Table of measure of association between Food Taboo and some Social economic factors

Food Taboos	Tribe	Religion	age	Wife's occupation	Wife's education	Husband's education	Husband's occupation
Must eat food for two	0.386	0.694	0.006*	0.664	0.017*	0.396	0.677
Bournvita(cocoa drinks) must be avoided	0.453	0.598	0.847	0.711	0.144	0.041*	0.104
Eating snails causes baby to drool saliva	0.237	0.812	0.114	0.046*	0.005*	0.012*	0.530
Cold water will not allow blood to circulate	0.982	0.953	0.018*	0.029*	0.074	0.008*	0.265
Eating crabs will make child hyperactive	0.884	0.946	0.738	0.404	0.076	0.702	0.775
Eating twin bananas will lead to Siamese twins	0.729	0.857	0.070	0.162	0.50	0.264	0.491
Snake meat must be avoided in pregnancy	0.951	0.159	0.389	0.762	0.493	0.674	0.431
Eating salt not proper until 40days after delivery	0.613	0.252	0.179	0.431	0.668	0.661	0.425
Chili pepper will burn the eyes of the baby if eaten	0.805	0.477	0.131	0.309	0.061	0.049*	0.315
Caffeinated drinks must be avoided	0.551	0.393	0.474	0.050*	0.050*	0.175	0.096
Eating of plantain leads to infant disease	0.801	0.09	0.948	0.275	0.663	0.060	0.67

* Significant at 5% level of significance $P \leq 0.05$

Table 5: Measure of association between Food Taboo and some delivery variables

	Delivery Mode	Delivery outcome	Birth weight
Must eat food for two	0.346	0.460	0.99
Bournvita(cocoa drinks) must be avoided	0.821	0.468	0.899
Eating snails causes baby to drool saliva	0.304	0.389	0.075
Cold water will not allow blood to circulate	0.274	0.987	0.974
Eating crabs will make child hyperactive	0.707	0.965	0.443
Eating twin bananas will lead to Siamese twins	0.153	0.360	0.050*
Snake meat must be avoided in pregnancy	0.145	0.206	0.038*
Eating salt not proper until 40days after delivery	0.313	0.973	0.043
Chili pepper will burn the eyes of the baby if eaten	0.965	0.670	0.847
Caffeinated drinks must be avoided	0.750	0.594	0.104
Eating of plantain leads to infant disease	0.075	0.503	0.008*

* Significant at 5% level of significance $P \leq 0.05$