

Behavior modifying myths practices and effect on health seeking behavior among pregnant Yoruba women, south western Nigeria – a cross-sectional study.

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ABSTRACT

INTRODUCTION: Cultural practices and beliefs influence and underpin the behavior of women during pregnancy and childbirth; this behavioral change could influence the health-seeking behavior as well as the outcome of pregnancy.

OBJECTIVES: The objective of this study was to determine the behavior modifying myths among pregnant Yoruba women and their sources.

METHODS: This descriptive cross-sectional study was carried out among 250 pregnant Yoruba women attending the antenatal clinics of Bowen University Teaching Hospital, Ogbomoso and Ladoke Akintola University of Technology Teaching Hospital, Ogbomoso. A structured, interviewer-administered questionnaire was undertaken. Consent was sought verbally.

RESULTS: The age of the respondents ranged from 15-45 years with a mean age of 27 years (± 3.5). Most of the women were married $n=239$ (95.6%) and primarily Christian $n=184$ (73.6%). 127 (50.8%) of the women had a tertiary education while only 13 (5.2%) had no formal education. 41 (16.3%) of the respondents being primigravida. Six myths were identified with food taboos being the most common. These were being practiced by 61.2% of the respondents. The reasons given for modifying their behavior varied from warding off ghosts to the delivery of a well-formed child. The most frequent source of information were their relatives (42.4%).

CONCLUSION: The practice of the myths was neither influenced by educational status nor religion. The majority of these practices do not have a deleterious effect and did not influence health-seeking behavior or outcome of pregnancy based on the reasons adduced for the practice.

Keywords (MeSH): Behavior; Myth; Pregnancy; Nigeria

INTRODUCTION

Despite modernization and technological advancement, the people of Africa still hold deep-rooted cultural norms and practices; there is little or no data to support beneficial effects on the pregnancy of these practices [1]. As in other countries, Nigerian cultural practices are deeply rooted and affect choices in all aspects of life in both positive and negative ways [1].

Health seeking behavior and ideas about medical conditions are secondary to the beliefs of the individual; and pregnancy, one of the most fundamental milestones in family life around the globe, is not exempt from the influence of these beliefs [2]. While childbirth is a biological event, pregnancy and birthing experiences are mostly social constructs, shaped by cultural perceptions and practices of which myths are an example [3].

Traditional cultural practices reflect values and beliefs held by members of a community for periods often spanning generations. Every social grouping world-wide has specific traditional cultural practices and beliefs, some of which are beneficial to all members, while others are harmful to a specific group [4]. These cultural practices and beliefs influence and underpin the behavior of women during pregnancy and childbirth, leading women to believe that they must follow and practise them to preserve their pregnant state and give birth to healthy infants. Unfortunately, changes in beliefs are quite slow to result in behavioral change [5].

The Yoruba people of Nigeria, are well known for their cultural beliefs which guide them morally, intellectually and spiritually in life.

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There are many myths surrounding pregnancy, with most coming from traditional and cultural beliefs [6]. The 30 million Yoruba people who live in Southwestern Nigeria are one of the three major tribes in Nigeria. Subgroups of the Yorubas include the Oyos, Egbas, Ijesas, Ekitis, Ijebus, Ondos, Ifes, Egbados, Ketus, Yagbas, Aworis and the Igbominas. These subgroups have been described as belonging to a distinct cultural category because of binding factors such as language, a common origin, and similar political structures [7, 8].

The combined maternal mortality ratio in developing countries is 239 per 100,000 live births. That of Nigeria stands at 576 per 100,000 live births with a woman's lifetime risk of maternal death in Nigeria being 1 in 54 [9]. Ineffective health care delivery system combined with strong influences of culture and religion on health make it a daunting task to better our health services especially concerning maternal health [2].

The socioeconomic burden of behavior modifying myths among pregnant women cannot be underestimated. Practices that are harmful could be life-threatening to the mother and/or child, resulting in losses to the family, community and the nation as a whole. Absence from work reduced productivity among affected families and deteriorated reproductive indices are all sequelae of these harmful practices [10].

Aims: This study aims to determine the common behavior modifying myths among pregnant women in Ogbomoso and their sources and to evaluate the burden of these practices and assess their impact on maternal health-seeking behavior and outcome of pregnancy.

METHODS

Study design: A descriptive cross-sectional study

Source/location of the population: Yoruba women attending the antenatal clinics of Bowen University Teaching Hospital and Ladoké Akintola University of Technology Teaching Hospital in Ogbomoso, Nigeria. Both are tertiary health institutions and serve as locations for both basic and advanced medical training and for the provision of extensive health care services to the populace.

Participants/Subjects:

Inclusion criteria: All Yoruba women attending the antenatal clinics at both health institutions were included in the study

Exclusion criteria: Refusal to participate was respected

Recruitment/enrolment of participants: The patients were recruited via the antenatal clinic, over a period of eight weeks.

Variables and outcomes:

The primary outcome was: behavioral change in pregnancy associated with practice of pregnancy related myth.

Secondary outcomes were: influence on pregnancy outcome, effect on health seeking behaviour in pregnancy

Sample size (power calculation): The sample size was determined using Kish Leslie formula to give a power of 80% with a significance of 0.05 based on a prevalence of 54.2% found by Owonikoko et al [11].

How were outcomes measured: Data collection was conducted through a pretested, structured, interviewer-administered questionnaire written in English with Yoruba translation. The questionnaires were administered through one-on-one interviews.

Data collection: Trained research assistants administered the questionnaire. The questionnaire consisted of 36 multi-item questions divided into three sections. Section A consisted of questions related to sociodemographic and obstetric data; section B consisted of questions related to practices based on behavior modifying myth related to pregnancy, the reason for the modification and source of information about the myth while section C consisted of questions related to how the myth affected the use of health care services.

Statistical analysis: Frequency tables were made using Statistical Package for the Social Sciences (SPSS) version 20 (IBM, Armonk, NY).

ETHICS/STUDY OVERSIGHT:

Risk to subjects: No significant risks were identified

Funding & Sponsors: No funding has been sought for this project.

Potential conflict of interest: There is no conflict of interest

Consent process: The study was explained to the women as a group at the beginning of the antenatal clinic, and they were assured of confidentiality. Their consent was sought verbally with an option to opt out of the study, and the women who declined were not discriminated against.

Institutional review board (IRB): Ethical approval was obtained from the ethical committee of Bowen University Teaching Hospital in Ogbomoso.

RESULTS

The age of the respondents ranged from 15-45 years with a mean age of 27 years (± 3.5). The majority (30.4%) of the women were within the age range of 26-30 years. Most of the women were married 95.6% (n=239); 50.8% (n=127) of the women had tertiary education while only 5.2% (n=13) had no formal education. 73.6% (n=184) of the women were Christians. 83.7% (209) of the women were multiparous (Table 1).

Table 1: Characteristics of patients

Characteristic	Patient population N=250
Mean age (years)	27±3.5
<20	15 (6.0%)
21-25	67 (26.8%)
26-30	76 (30.4%)
31-35	59 (23.6%)
36-40	27 (10.8%)
>40	06 (2.4%)
Marital Status	
Married	239 (95.6%)
Single	9 (3.6%)
Divorced	2 (0.8%)
Parity	
Nulliparous	41 (16.4%)
Multiparous	209 (83.6%)
Social class	
I	147(58.8%)
II	70(28.0%)
III	33(13.2%)
Religion	
Christianity	184 (73.6%)
Islam	60 (24%)
Traditional	6 (2.4)
Occupation	
Professional	114 (45.6%)
Artisan	84(33.6%)
Housewife	28(11.2%)
Student	24(9.6%)
Educational status	
Tertiary	127 (50.8%)
Secondary	100 (40.0%)
Primary	10(4.0%)
No formal education	13(5.2%)

Table 2 shows the behavior modifying myth and the proportion of the respondents that practice it. Six myths were identified with food taboos being the most common; 61.2% of the respondents are practicing it.

Table 3 highlights the reasons given for modifying their behavior based on the myth while Table 4 shows the source of information about the myth.

Table 2: Behavior modifying myths practiced and their frequency

Behavior modifying myth practiced	Patient population (n=250)
Use of safety pin around the belly ¹	145 (58.0%)
Avoidance of sexual intercourse throughout pregnancy ²	73 (29.2%)
Avoidance of going out when the sun is high ³	135 (54.0%)
Avoidance of going out at night ⁴	133 (53.2%)
Avoidance of people walking across their outstretched legs ⁵	116 (46.4%)
Avoidance of consumption of rodents, snakes and snails ⁶	153 (61.2%)

Table 3: Reasons for modifying behavior based on myth

Behavior modifying myth*	1	2	3	4	5	6
Wards off evil spirits	145	-	-	-	-	-
Exposes to evil spirits/ghosts	-	-	95	75	-	-
Child replaced by evil spirits/ ghosts	-	-	20	37	-	-
Signifies bad omen	-	-	-	-	-	-
Avoid miscarriage	-	57	-	-	-	-
Delivery of malformed baby	-	-	20	21	-	-
Child will resemble the person	-	-	-	-	116	-
Prolonged labor	-	-	-	-	-	40
Baby crawls on the chest	-	-	-	-	-	13
Delay in baby walking	-	-	-	-	-	35
Excessive maternal salivation	-	04	-	-	-	06
Excessive salivation in the child	-	12	-	-	-	45
Results in childhood theft	-	-	-	-	-	14
Total	145	73	135	133	116	153

*See Table 2

Table 4: Source of information about the myth

Source	Frequency (%)
Relatives only	106 (42.4)
Friends only	32 (12.8)
Relatives and friends	20 (8.0)
Religious homes	16 (6.4)
Hospital staff	15 (6.0)
Mass media	20 (8.0)
Social media	15 (6.0)
Internet	2 (0.8)

DISCUSSION

Our study in Ogbomoso demonstrates that more than two-thirds of the respondents believed in myths that modified their behavior during pregnancy. The most common source of information were the respondent's relatives. This agrees with the findings of other authors [5, 10, 11, 12,13]. The participant's behavior was neither influenced by educational status nor religion; even though the majority of the respondents (90.8%) had at least secondary school education with the majority (73.6%) being Christians. This was similar to the findings of Owonikoko et al [11] but was different from the findings of other authors [12, 13].

Avoidance of consumption of rodents, snakes, and snails: 61.2% of the respondents practiced this food taboo. They attributed this behavior to the belief that it could result to prolonged labor, excessive maternal or child salivation, delay in the child achieving developmental milestones (especially walking), childhood theft and the tendency that the baby will crawl with the chest rather than the limbs. The practice of food taboos is prevalent in most cultural groups in Nigeria [11, 14], the reasons adduced to this practice are similar among these cultural groups [14]. Adherence to this practice is, however, higher in this study than the findings of other authors [11, 14]. Ekwochi et al. explained the low incidence in their study by inferring that most of the women secretly took these foods because they were coerced into the practice by relatives [14]. However, this was not the case among the respondents in this study. They agreed to carry out this practice because they believed the myth and were eager to avoid the sequelae of not adhering to the practice. Although there are other readily available sources of proteins, this practice denies the women of cheap and familiar sources of protein and vitamins in their locality that could help reduce the high prevalence of nutritional deficiencies in rural areas of the country [14, 18, 19]. This practice is therefore discouraged among the people.

Use of a safety pin around the belly: This was the second most common behavior modification among the respondents. 58% of the respondents attached a safety pin to a clothing covering their abdomen. This was similar to the findings of Owonikoko et

al., who found 54.2% of women followed this behavior. All the respondents reported that they attached the safety pin to ward off evil spirits from both themselves and their unborn babies. 76.4% of women in the study carried out by Owonikoko et al. reported the same reason for the use of safety pins. Attachment of safety pin on its own might seem harmless. However, there have been rare reports of pin injury to the patients which led to wound abscess [15].

Avoidance of going out of doors when the sun is high: This behavior modification was seen in 54% of the respondents. This was similar to the findings of other authors [11]. Most of the respondents attributed their refusal to go out when the sun was high to avoidance of exposure to evil spirits/ghosts (70.4%) while the remainder credited it to the fact that a high sun could result in delivery of a malformed baby or replacement of their baby by evil spirits/ghosts. Despite the reason for this behavior, it could be termed beneficial because it helps avoid heat exhaustion/stroke, damage to the eyes, sunburn and skin cancer [16].

Avoidance of going out at night: 53.2% of the respondents observed this. Similar to those that avoided going out when the sun is high, they attributed their behavior to avoidance of exposure to evil spirits/ghosts and avoidance of replacement of their baby by evil spirits/ghosts. Similarly, this behavior is beneficial because it reduces exposure to violence especially assaults and accidents [17].

Avoidance of people walking across their outstretched legs: This behavior modifying myth was seen in 46.4% of the respondents. These respondents all attributed this behavior to the belief that the baby will resemble whoever walks across their outstretched legs in pregnancy. Respondents believe this may result in paternity dispute upon delivery of the baby. This behavior is neither harmful nor beneficial.

Avoidance of sexual intercourse throughout pregnancy: This practice was found in 29.2% of the respondents. The primary reason attributed to this behavior was avoidance of miscarriage. Nevertheless, the study reveals that most of the respondents engaged in sexual intercourse during pregnancy; other studies have shown that the majority of women feel that sexual intercourse should continue during pregnancy, excluding the third trimester when the desire and resultant satisfaction reduces [20]. Apart from the satisfaction derived from sexual intercourse, women believe it helps to maintain marital harmony by keeping the husband at home [20, 21]. Nevertheless, in instances of placenta praevia, threatened abortion and cervical incompetence sexual intercourse should be discouraged.

Impact on health-seeking behavior and outcome of pregnancy: None of the behavior modifying myths found among the respondents had an effect on their health-seeking behavior since the reasons given for the practices were in no way related to uptake of healthcare. All behavior, except food taboos, have a low probability to impact the outcome of pregnancy negatively. It is good to note that, if the women practicing the food taboos took other sources of protein and vitamins, even

the effect of the food avoided on the outcome of pregnancy would be negligible.

CONCLUSION

This study concludes that myths modify the behavior of women in pregnancy. Even though the majority of these practices do not have deleterious effects, some do; however, they have no negative impact on health-seeking behavior or outcome of pregnancy. Health care providers should educate the women on their practices in pregnancy, helping them to choose the behaviors beneficial to both the mother and child.

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