

Research Article

Traditional Childbearing Beliefs and Practices among Mothers at a District Hospital in Goa

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A B S T R A C T

Background: Traditional health practices are observed by mothers in every region of the world with varying frequency. They often get influenced by their peers and elders and follow some potentially harmful practices during their childbearing period.

Aim: To identify and describe various traditional beliefs and practices observed during pregnancy among mothers at South Goa District Hospital.

Methods: This is a descriptive, cross-sectional study. It was conducted over a period of 3 months (March-May 2019) among postnatal mothers by interviewing study participants about various cultural beliefs and practices observed during pregnancy. Data were entered into an Excel spreadsheet and analysed using SPSS version 22.

Results: Nearly two-thirds of the study participants (68.75%) avoided going outdoors and laid in bed during an eclipse while 42.5% avoided sleeping on the abdomen or slept in the left lateral position to avoid birth defects in babies. To predict the sex of the baby, 12.5% of the mothers believed that if a pregnant lady craves sweet food, it's a girl and if she craves sour/ salty food, it's a boy while 11.5% believed that if a pregnant woman is carrying low, it's a boy. With respect to food taboos, 53.75% of the mothers believed in avoiding 'hot' foods and eating 'cold' foods during pregnancy.

Conclusion: The study highlights the popular traditional childbearing practices observed among mothers as a means of creating awareness among health professionals in order to discourage possible harmful practices and promote beneficial practices for a safe and healthy pregnancy.

Keywords: Tradition, Cultural Practices, Pregnancy, Infant, Maternal Health

Introduction

Pregnancy is a normal biological phenomenon significantly influenced by religious and traditional practices and beliefs

in the Indian context. These traditions reflect community beliefs regarding what is helpful for the pregnant woman and her unborn baby.¹ Pregnant women exhibit their faith

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in these beliefs and practices to ensure the protection of pregnancy and safe delivery. However, cultural beliefs, improper religious practices, and several Indian norms may directly or indirectly affect the health status of pregnant women in varying severity. The antenatal period in itself poses health challenges to women and a different outlook towards life as it leads to drastic alterations such as physiological and physical changes, emotional stress, mood swings, lack of self-care and missed periods.

Maternal health is one of the predominant keystones for the progress of any nation. It helps in the development of its citizens, reduction of poverty, and in building social capital. Reduction in maternal mortality is one of the principal indicators of the Sustainable Development Goals.² A healthy and uncomplicated pregnancy can be achieved by ensuring frequent antenatal check-ups and safe institutional deliveries. Reduction in maternal and child mortality ratio can be achieved by ensuring the fulfilment of these criteria.

Cultural beliefs predominant in Indian societies can largely affect the utilisation of maternal health care services. Moreover, misinterpretation, insensitivity and lack of impressionability towards cultural perceptions of the society dictating pregnancy among health care providers may lead to a break in the channel of communication with the pregnant woman and her family.³ A pregnant woman's fear of redundant medical interventions can also lead to possible problems or risks going undiagnosed for a long time during pregnancy, which will further delay the woman from seeking institutional care. These demand-side barriers favour the rampage of familiar practitioners in the community providing informal health care.⁴

Considering the fact that there is limited data in Goa on traditional beliefs and cultural practices observed during the antenatal period, the present study was undertaken among postnatal mothers admitted at South Goa District Hospital to shed light on this topic to implement effective strategies for ensuring safe motherhood among pregnant women and to promote cultural competence among health professionals towards antenatal care.

Materials and Methods

This observational descriptive study was conducted over a period of 3 months (March-May 2019) among mothers within 72 hours of postnatal period admitted in the respective wards of the South Goa District Hospital, Margao. During the study period, data were collected thrice weekly from 80 study participants who were interviewed face to face using a pre-designed, pre-tested, semi-structured questionnaire after explaining the rationale of the study to them and obtaining written informed consent.

The questionnaire used for obtaining data from the study participants comprised of questions concerning socio-

demographic data of the study participants like age, sex, religion, occupation, education, etc, cultural beliefs and practices observed during pregnancy, and forbidden practices and food taboos during pregnancy.

Before beginning the study, the required ethical approval was obtained from the Institutional Ethics Committee (IEC) of Goa Medical College.

Data were entered into a Microsoft Excel spreadsheet and analysed using SPSS version 22. Descriptive statistics were used to present the data.

Results

The socio-demographic data of the study participants showed that majority of the mothers were aged between 19 and 25 years. Majority of the mothers were Goans (61.25%). Of the total, 22.5% of the mothers interviewed had completed lower primary school education. A considerable proportion of the study participants were not employed (93.75%). As per modified B. G. Prasad Classification, Update - 2019, 41.25% of the mothers belonged to Class III socioeconomic status. The additional details regarding socio-demographic profile of the study participants have been mentioned in a previously published study.⁵

Table 1 describes some of the traditional beliefs observed by mothers to avoid birth defects in babies during pregnancy. Nearly two-thirds of the study participants (68.75%) avoided going outdoors and laid in bed during an eclipse while 42.5% avoided sleeping on the abdomen and slept in the left lateral position. Other such practices observed were limiting physical activity (32.5%), avoiding flights (22.5%), and avoiding lift/ escalator (15%).

Table 1. Traditional Beliefs among Mothers to Avoid Birth Defects in Babies during Pregnancy

(N = 80)

Beliefs	Number (%)
Avoid going outdoors and lay in bed during an eclipse	55 (68.75)
Avoid sleeping on stomach/ sleeping in left lateral position	34 (42.5)
Limit physical activity	26 (32.5)
Avoid flights/ travelling	18 (22.5)
Avoid lift/ escalator	12 (15.0)

As far as the prediction of the sex of baby during pregnancy is concerned, 12.5% of the mothers believed that if a pregnant lady craves sweet food, it's a girl, and it's a boy if she craves sour/ salty food while 11.25% believed that if a pregnant woman is carrying low, it's a boy. Furthermore, the size of womb during the third trimester of pregnancy was believed to predict a baby's sex by 5% of the mothers.

3.75% of the mothers believed that the facial appearance of a pregnant lady can predict the baby's sex (Table 2).

Table 2. Traditional Beliefs among Mothers to Predict the Sex of Baby during Pregnancy

(N = 80)

Beliefs	Number (%)
If a pregnant woman craves sweet food, it's a girl, and if she craves sour/ salty food, it's a boy	10 (12.5)
If a pregnant woman is carrying low, it's a boy	9 (11.25)
Size of the womb	4 (5.0)
If a pregnant woman has a glowing face, it's a girl	3 (3.75)
Position of the umbilicus	2 (2.5)
Excessive morning sickness indicates it's a girl	2 (2.5)
If you have acne while pregnant, it's a girl	1 (1.25)
If you see a parrot in your dreams, it's a boy	1 (1.25)

Among the 80 study participants, it was observed that some practices were forbidden during pregnancy to ensure the well-being of mother and baby. Almost half of the mothers, i.e., 47.5% were advised to avoid attending funerals while 40% were prohibited from worshipping God or performing rituals at religious ceremonies. Other practices found to be noteworthy were to avoid talking to widows or women with infertility issues (35%), to avoid cooking food during festivals (20%), and to avoid wearing new clothes (7.5%) (Table 3).

Table 3. Forbidden Practices among Mothers during Pregnancy

(N = 80)

Practices	Number (%)
Attending funerals	38 (47.5)
Worshipping God/ performing rituals	32 (40.0)
Avoid seeing/ talking to widows/ infertile women	28 (35.0)
Cooking food during festivals	16 (20.0)
Wearing new clothes	6 (7.5)

While some practices were forbidden during pregnancy, certain other additional traditional beliefs and practices were assessed among the study participants. It was noted that 48.75% of the mothers had observed a baby shower at the 5th or 7th month of pregnancy to celebrate the anticipated arrival of their first child. A significant proportion of mothers (63.75%) were advised to stay at their maiden home during

the third trimester of pregnancy. When the mothers were asked about sexual intercourse during pregnancy, majority of the mothers (52.5%) couldn't comment on the safety of sexual activity while being pregnant. In addition, 53.75% of the mothers believed in avoiding 'hot' foods and eating 'cold' foods during pregnancy (Table 4).

Table 4. Selected Traditional Practices observed among Mothers during Pregnancy

(N = 80)

Practices	Number (%)
Observing baby shower at 5th/ 7th month of pregnancy before the arrival of first child	39 (48.75)
Staying at maiden home during late pregnancy	51 (63.75)
Sexual intercourse during pregnancy	
Yes	12 (15.0)
No	26 (32.5)
Don't know	42 (52.5)
Avoiding hot foods and eating cold foods during pregnancy	
Yes	43 (53.75)
No	15 (18.75)
Don't know	22 (27.5)

Table 5. Food Items Consumed by Mothers during Pregnancy with Reasons

(N = 80)

Food Items	Reason for Consumption
Fruits (apple, banana), green leafy vegetables, milk, egg, curds, cooked dal	To improve the well-being of mother and baby
Almonds, pistachios, dry grapes	To increase IQ of the baby
Rawa, ragi, fenugreek bhaji, jowar roti	To increase milk production
Saffron powder (in milk or water)	For fairer complexion of the baby
Protein supplements	For increased energy to support pregnancy

With respect to food taboos, food such as some fruits (apple, banana), green leafy vegetables, milk, egg, curds, and cooked dal were preferred to improve maternal and foetal health. Dry fruits such as almonds, pistachios, and dry grapes were consumed to increase the Intelligence Quotient (IQ) of the baby. Interestingly, foods such as rawa, ragi, fenugreek bhaji and jowar roti were advised by elders for efficient lactation (Table 5). However, certain foods

were believed to cause harm to the mother or the growing foetus. Selected fruits such as papaya, pineapple, jackfruit, watermelon, mango, and pumpkin were believed to act as abortifacients while grapes and oranges were believed to cause common cold in mothers. Interestingly, fused bananas were not eaten to avoid twin pregnancy (Table 6).

Table 6. Food Items Avoided by Mothers during Pregnancy with Reasons

(N = 80)

Food Items	Reason for Avoidance
Fruits (papaya, pineapple, jackfruit, watermelon, mango, pumpkin)	Act as abortifacients
Fruits (grapes, orange)	Can cause cough and cold
Fused fruits (banana)	Can cause twin pregnancy
Shellfish	Induce pre-labour contractions
Potatoes, pulses, oil, ghee	Cause an abdominal bloating sensation
Brinjal	Causes indigestion
Spices	Can cause damage to baby's eyes
Meat (chicken, mutton), chocolates	Increase production of heat in the body

Discussion

The present study highlights a number of traditional beliefs and practices particularly aiming to ensure the safety of mother and baby during the antenatal period. These customs have no scientific evidence and are usually prejudices that have become part of social culture. Previously published literature suggests that women observed these customs to respect traditions, or because of family pressure or pressure from elders, even when they did not consider them to be important or believe in practising them. This was because they had their apprehensions about the possible negative consequences (to the growing foetus and the mother) in case they chose not to adhere to these customs.⁶

Although maternal practices are being modified to ensure their suitability to the present context of modern women's lives, yet our review shows that many conventional practices are still being followed in various Asian cultures.⁷ It has also been observed that most of such beliefs do not pose any harm or have any adverse impact on women or their babies. As a matter of fact, many among them actually help the women physically and psychologically, such as birth position and confinement practices. Hence it is important for healthcare providers to comprehend these prevalent practices while promoting and providing care to enhance utilisation and boost service-user's satisfaction.

In the present study, it was observed that the study participants took certain precautions to prevent birth defects in the growing foetus, miscarriage, or stillbirth during pregnancy. A large majority of the study participants were advised to avoid going outdoors and lay still in bed during an eclipse (68.75%). Nayak et al. (2020), in a similar study, observed that 40.7% of pregnant women believe in not eating food or cutting anything during an eclipse.⁸ As per astrological opinions, pregnant women should be extra cautious at the time of an eclipse. The expecting mother should not step out of their homes as it can lead to premature labour or structural abnormalities. Some cultures suggest that they should not eat, drink or even sleep during this time.⁹ Other practices include avoiding lying on one's abdomen or sleeping in left lateral position (42.50%), limiting physical work (32.5%), and avoiding flights (22.5%) which were consistent with findings from a study done by Iyengar et al.¹⁰ wherein activities such as farm work involving lifting heavy objects (i.e. rice bag or water buckets), driving, lying on one's abdomen, and even bathing during the first month after childbirth were avoided to prevent miscarriage or stillbirth.

Studies have shown that the gender of the child can be predicted by the physical appearance of pregnant woman, the foods she craves, and her behaviour at times. In our study, 12.5% of the study participants indicated that if the pregnant lady craves sweet food, it's a girl, and if she craves sour/ salty food, it's a boy, while 11.25% believed that if the pregnant woman is carrying low, it's a boy. In addition, 5% noted that an enlarged belly signified a boy while a small belly would be carrying a girl. The glowing face of a woman during pregnancy predicted the child to be a girl in 3.75% of the mothers. An everted umbilicus predicted a boy while an inverted umbilicus predicted a girl in 2.5% of the mothers. These findings were congruent with a study done by Karahan et al. in Istanbul, Turkey.¹¹ Okka et al.¹² in their study also noted that the baby's sex could be predicted from the shape of mother's abdominal region (32.4%) and from the changes on mother's face (27.1%). Literature published in the past tends to highlight the beliefs surrounding prediction of the gender of a baby and the views thought to be related to the gender roles attributed to men and women in the society. The assumed traditional gender roles in our society expect women to be passive and calm, while men are supposed to be strong, resilient, assertive, and independent. A significant proportion of women are disadvantaged in the patriarchal societies of India. Male-child preference is deeply rooted, especially in Hinduism, to continue the family line and perform funeral rites.¹³

Various taboos have been found to be linked to certain astrological beliefs of people regarding the dangers that pregnant women and their foetuses may have to face. In

the present study, a significant proportion of the study participants were forbidden from attending funerals (47.5%) which was similar to the findings of a study done by Nayak et al.⁸ wherein 51% strongly agreed with the belief of avoiding funerals during pregnancy to prevent miscarriage or stillbirth and to ward off the wrath of evil spirits on the unborn baby. In addition, 40% were not allowed to worship God or perform any rituals, particularly among Hindus. Another 35% weren't allowed to interact with widows or infertile women which correlated with the findings of a survey by students of DCH Nsg¹⁴ while 20% weren't allowed to cook food for offering to God during festivals. While there is no scientific evidence to suggest the ill-effects of these practices, it is believed that pregnant women are considered impure, hence, they should refrain from touching food or water sources and avoid pious and pure places such as temples and kitchens as seen by Legare et al. in Bihar.¹⁵

In our study, it was observed that 48.75% of the study respondents reported observing a baby shower during pregnancy before the arrival of the first child. In a study conducted by Choudhary et al. in North India, a similar ceremony called 'Godh Bharai' was observed by 53% of the study population.¹⁶ Another study done in West Bengal observed the celebration of a similar ceremony called 'Saddah'. In Goa, this ceremony is popularly called 'fulam malop' (adorn the coiffure with flowers) and is observed by Hindus to celebrate the arrival of the first child.¹⁷ It is held either in the 5th, 7th, or 9th month of pregnancy before the expectant mother is sent to her maiden home for confinement. The expecting mother is decked up in flower jewellery and costumed in a traditional saree to symbolise the Hindu Goddess Lakshmi or Saraswati and is showered with gifts by her family and well-wishers.¹⁸ The ladies put tikka (vermilion) on the mother's forehead and whisper advice about motherhood into her ears; everyone then prays for her and the baby's wellbeing. A similar custom is observed among Muslims wherein parents visit their expecting daughter's home in the 7th month of pregnancy with lots of sweets, food, and new clothes for their daughter and son in law.¹⁹

In our study, 63.75% of the mothers were advised to stay at their maiden house during the third trimester of pregnancy. Choudhary et al.¹⁶ also observed a comparable proportion of 18% of mothers planning to stay with their own mother after delivery. In Goa, it is known that mothers are advised to go to their maiden home called 'kular' in Konkani during the third trimester of pregnancy and postpartum for confinement.¹⁷

In the present study, when the mothers were asked about their views on sexual intercourse while being pregnant, 52.5% of the respondents couldn't comment on the safety of sexual activity during pregnancy, irrespective of their

choices. Only 15% believed that sex is safe while 32.5% did not consider it safe. It was found that they generally avoided coitus from their 3-8 months of pregnancy to at least 3 months postpartum. Morris et al.²⁰ noted among their participants in southeast Madagascar that it is believed that the partner of a pregnant woman should not have sex with casual partners during her pregnancy because it might have an adverse effect on the unborn baby. Beinempaka et al. found that sexual activity is not permitted for one month after delivery among pregnant women.²¹

The general concept around food taboos during pregnancy is that acidic, high protein, and salty foods are believed to be 'hot', and fruits, vegetables, and sweet foods are believed to be 'cold'. There is no definite correlation between the 'hot' and 'cold' concept of food and its temperature. Pregnancy is considered to be a 'hot' state and cold foods are preferred, but in certain places, especially in India, it is also opined that hot food helps with the onset of delivery and hence is advised towards the end of pregnancy.¹ Pregnancy, itself, is believed to be an over-heated state, and the physiological changes that occur during pregnancy may cause a hot/ cold imbalance in the body. Hence, cold foods are believed to keep this balance in check to counteract the "overheated" state of pregnancy.²² These views were supported by 53.75% of the respondents in our study as also in various studies conducted in India and abroad. Begum et al.²³ in a similar study among tribal women of Maharashtra revealed that pregnant women of Korgu tribe denied eating "hot" foods such as papaya, banana, shevaga, til, and masur dal. Gedamu et al. in their study observed that the prevalence of nutritional taboos was 19.5%.²⁴

Selective fruits (apple, banana) and green leafy vegetables, milk, egg, curds, and cooked dal were the most commonly mentioned beneficial food items to improve the well-being of mothers during pregnancy. These results were consistent with the qualitative findings of Catherin et al. wherein fruits like apple, lemon, meat like chicken, mutton, egg, and groundnut powder were believed to improve maternal and child health, however, the intake of egg and fish were thought to cause ear discharge and hair loss in babies.²⁵ Intake of dry fruits such as almonds and pistachios was thought to improve IQ of babies as seen in 0.2% of mothers in a study by Karahan et al.¹¹ Foods consumed for increased lactation were semolina porridge (rawa), ragi (satva/ tizaan), fenugreek (methi) bhaji, and jowar roti (zonle bhakri).

In our study, the study participants were advised to avoid fruits such as papaya, pineapple, jackfruit, watermelon, mango, and pumpkin as they were believed to act as abortifacients. These views correlated with the findings of Nayak et al.⁸ wherein intake of pineapple was strictly avoided by 41.5% of pregnant mothers. It is believed that foods such as ripe papaya and pineapple are considered to

be purgative in action or could cause abdominal pain and uterine contractions ultimately leading to miscarriage.^{26,27} Some thought-provoking beliefs such as fruits like grapes or orange cause common cold or foods such as potatoes, oil or ghee cause abdominal bloating and discomfort, could hint at excess intake of these foods. However, other beliefs stated for some food items such as spices causing damage to baby's eyes or fused bananas causing twin pregnancy can be correlated with that of the study by Catherin et al.²⁵ and had no scientific explanation. The traditional beliefs surrounding diet during pregnancy emphasise the importance of educating women, especially regarding nutrition, in order to change their attitude towards balanced feeding habits to prevent lack of adequate nourishment among pregnant and lactating women which may, in turn, affect the growth of the baby.

Conclusion

The present study highlights the various cultural beliefs and practices observed during pregnancy in Goa. It is desired that health professionals should be aware of these cultural practices followed by the community to provide culturally competent health care that is acceptable to society. It is recommended that harmless, acceptable or even potentially beneficial practices observed during the antenatal period may be supported and considered a part of our rich culture, whereas harmful beliefs and practices should be avoided along with debunking ritualistic myths which threaten the physical and mental well-being of a pregnant woman by providing nutrition and health education during antenatal visits to avoid potential adverse health effects among these mothers.

Limitations

Our study can be viewed as a pilot project for the assessment of traditional practices observed during pregnancy among postnatal mothers. It is recommended to conduct a large-scale epidemiological study preferably with a mixed-method model to procure further information. The limitation of this study was that the respondents might be subjected to recall bias. It is desirable to draw comparisons among cultural beliefs across religions or regions (rural or urban).

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