



A STUDY ON THE NUTRITIONAL PRACTICES OF PREGNANT AND LACTATING WOMEN: A GENDER PERSPECTIVE

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Abstract

Nutrition plays an important role in promoting the health of women in general, but it is highly crucial and significant in case of pregnant and lactating women because it decides the growth and development of the fetus as well as the newborn will be the source of future human capital of any nation. Poor maternal nutrition will adversely affect the women in pregnancy and that leads to some birth related problems. Because of food taboos, gender-based discrimination (breast feeding practices) and influence of patriarchy (son preference) causing lot of damage related to the nutritional requirements of women and girls throughout their life lead to nutritional anemia from one generation to another. Aims: To assess the nutritional (dietary) practices and beliefs of Pregnant and Lactating Women (P and LW) with special reference to prevalent gender barriers in the urban slums of Tirupati, Chittoor District of Andhra Pradesh. The present study was conducted during the period of November and December 2019 among the women residing in the urban slums of Tirupati. Data was collected by using of qualitative methods like In-depth Individual Interviews (IDIs) with PLW (10), Focus Group Discussion (FGDs) 4 (2 with pregnant and lactating women, 1 with Mother in-laws and 1 with husbands of PLW). Results: Better education or more years of schooling have better knowledge and understanding and having rational thinking about food taboos of PLW. Earning capacity of the PLW is deciding the dietary diversification, workload, sleep and rest than the PLW who are not working. Nutritional anemia was observed in PLW as well in the children (girls-duration of breast feeding was comparatively lower than of the male children) due to food restrictions/taboo during pregnancy and after child birth (gender discrimination, in taking care of the mother and child). It is concluding that gender stereo typed behaviors of elders, food taboos related gender discrimination, patriarchal ideology and thinking and gender-based violence are the major barriers for promoting the dietary diversification among PLW. This can be possible only through the implementation of effective behavior change communication interventions.

Keywords: Nutritional Practices, Pregnant and Lactating Women, Food Taboos, Gender Discrimination.

Introduction

Women are performing multiple roles in their life in the traditional country like India are as generators of income (productive role), key person in ensuring family's nutritional needs, procreation and upbringing of healthy children (reproductive role) all these are will help for the growth and advancement of the nation's Socio- economic development. In India we are giving lot of importance for the traditional beliefs/taboo (related to food), customs, eating habits and food practices all these are showing lot of influence on the health of the people. Those are very specific in case of pregnant and lactating women which are highly correlated and restricted with their local and familial conditions. These food taboos are causing gestational anemia and sometimes it shows an adverse effect on women after pregnancy, lactation and overall life time.

Women are more likely to suffer from nutritional deficiencies than men are, for reasons including women's reproductive biology, low social status/gender, poverty, and lack of education, low levels of awareness about healthy diet and its impact on the health of the mother and their children. Socio-cultural traditions and disparities in household work patterns can also increase women's chances of being malnourished and slowly this will be turned into anemia. Anemia is a major public health problem around the globe, it is invisible because of a late indicator of iron deficiency. And half of the anemia is caused due to iron deficiency. Anemia impairs the health and well-being of people in general, but it has an adverse effect on the women in the reproductive age was very high and increases the risks of maternal mortality, preterm labour, low birth-weight and neonatal /infant/child mortality also.

Nutritional health of women -Current Scenario

India is facing a major malnutrition crisis as it holds almost

- A third of world's burden for stunting, accounted for at least a quarter of maternal deaths (nearly 56,000 women each year reported globally,
- A third of women in the reproductive age in India are undernourished,
- There are 243 million adolescents (10 to 19 years) a large proportion of them are anemic, 56 per cent of girls and 30 per cent of boys.
- A 58.6 percent of the children are anemic in the age of 6 months to 5 yrs
- and 50.4 percent of the pregnant women who are in the reproductive age of 15-49 years are anemic



- A 53.2 percent of the Non-pregnant women age 15-49 years who are anemic, preterm labour, low birth-weight and neonatal /infant mortality. (Global Nutrition Report 2018 and National Family and Health Survey (NFHS-4).

Through the above statistics one can understand that if the girls are undernourished there might be a greater chance of being severely malnourished mothers are at a greater chance of giving birth to low-birth-weight babies and that perpetuates an intergenerational cycle of malnutrition or anemia.

Review of literature

Nutrition certainly interlinked with the perceived notions and beliefs but it is very particular with regard to the food items to be consumed by the pregnant and lactating women. Some of the studies have also revealed the existing food practices of the pregnant and lactating women are purely depending on the beliefs and traditional food habits, because of this pregnant and lactating women are denying of known nutritious food items which causing lot of damage for the health of these women at present as well as for their children in the future (Abu-Saad K, Fraser D; 2010, Bawadi HA, et al., (2010), Bang SW, Lee SS. (2010)).

The regular preferred consumption items will be tabooed and restricted /avoided during pregnancy as well as after delivery as per their customs and beliefs it was observed from the study conducted (Durga Rao P., et al., (2009, Lakshmi G. (2013)) among the tribal populations of north coastal Andhra Pradesh.

Maternal malnutrition may cause an increased risk of prematurity, low birth weight and developmental abnormalities. Acute anemia in pregnant women increases maternal morbidity and mortality. (Srilakshmi.B., (1997); Lakshmi G. (2013). Food taboos have been identified as one of the factors contributing to maternal undernourishment in pregnancy especially in rural areas (Olurinde A. Oni, Jamilu Tukur., (2012).

Contributors to poor health outcomes among women in South Asia include gender-based discrimination in breastfeeding, food allocation, immunization, access to health care services, and finances available to pay for treatment (Asfaw, Klasen, & Lamanna, 2007; Borooah, 2004; Gupta, 1987; Kurz & Johnson-Welch, 1997; Pande, 2003; Rajeshwari, 1996; Roy & Chaudhuri, 2008; Singh 2012, 2013; Song & Bian, 2014- sciencedirect.com).

India is the only nation where girls have greater risks of under-5 mortality than boys. Female disadvantage in breastfeeding and food allocation accounts for gender disparities in mortality. Girls' shorter breastfeeding duration accounted for an 11% increased probability of dying before age 5, accounting for about 50% of their survival disadvantage compared with other low-income countries (Fledderjohann J, et al. (2014).

Discrimination against girls and son preference has been enduring features of South Asian culture, embedded in and reinforcing patriarchy. Traditionally in India, a daughter's status within families has been low due to a combination of social, economic, and religious factors (Dyson and Moore 1983; Arnold, Choe, and Roy 1998).

Significance of the study

The food taboos during pregnancy and lactation period, gender discrimination and the patriarchy continues that will show a negative impact on the health of women as well as weakness the health of girl children and will lead to so many problems we have seen in the above sections of this paper. Hence the present study will help to find out various food restricts/taboo during pregnancy and lactation and how the women are affecting to malnutrition and they will know the impact of these food taboos are damaging the women during this period and they will adopt healthy food practices and healthy life style.

Reduce/remove the intensity of gender discrimination in breast fed practices and son preference help the PLW to make use of available health and supplementary nutrition programmes with in their community without any inhibition or superstitions like evil eye effect while eating at anganwadicentre where PLW are providing (supplementary cooked meal) by the government called Amruthahastam.

This will help the nation to promote gender equality in feeding of girls and to become healthy by enhancing the nutritional components of PLW without any patriarchal practices in order to reach sustainable development goals. The present study will provide an idea about the required strategies for the government to establish gender just society.



Objectives

With this back drop the present study was conducted with the following objectives. To study the knowledge, attitude and nutritional (dietary) practices of Pregnant and Lactating Women (PLW), factors influencing the dietary diversification with special reference to prevalent gender barriers in the urban slums of Tirupati.

Methodological design

The present study is based on the qualitative research and partially structured approach by using the qualitative methods like In-depth Individual Interviews (10), Focus Group Discussion (FGDs) 4 (2with pregnant and lactating women, 1 with Mother in-laws and 1with husbands of PLW). There are 30 slums in Tirupati Municipal Corporation these were situated in 23 wards with 16,532 households with a population of 74,859.

These slum women were federated in to Self Help Groups (SHGs) nearly 2701 and promoted as 95 Slum Level Federations (apex bodies). 15 slums were selected as sample for the present study covers 10 In-depth individual interviews 3 with Pregnant, 3 with lactating, 2 with in-laws who were also members in Self Help Groups (SHG) and its federations as Executive Committee members of slum level SHG federation as well as 2 IDIs were with husbands. Four FGDs were conducted in total and 42 members were participated (2 FGDs with Lactating women with 21 participants; one FGD with husbands –nine members and an FGD with Mother in laws with 10 participants). Detailed FGD guides /tools were prepared and used for Focus group discussions, after the requisite of ethical approval the study was conducted in the slums.

All the FGDs and IDIs were recorded electronically with voice recorder and the key points during the interview were noted down by the note taker. Each FGD took an average time of 35 minutes and IDIs were up to 40 to 50 minutes. The entire process of data collection was conducted during November and December months of 2019 by using of structured Interview guides both for IDIs and FGDS with open ended questions more of probing oriented nature of questions which covered food habits of pregnant and lactating, rest and sleep, daily activities of PLW, Access and utilization of available supplementary nutrition programmes within their community, Family support during pregnancy and in new born care,gender stereotyping of male and female child, Gender Based Violence (GBV) impacting Diet diversification, role of slum level federations in dietary practices of PLW and suggestions to improve nutritional needs of PLW...etc.

Findings of the Study

Mostly 60 percent of the participants and respondents are in the age group of 20-30 years and the least 8 percent of them are in the age group of 40-50 years. Coming to the religion all most all participants are Hindus except two of them are from Muslim religion; with regard to caste composition 76 percent of them are from Backward Caste and two of them are from minorities, as well as 6 percent of them are from Schedule Caste.

With regard to educational details of the participants only 34 percent of them were studied in between from class 6th to 10th and only 2 participants were educated up to post graduation level.

Only 8 percent of the respondents were attended nearly 9 sessions of health and nutrition related education so far. And highly 43 percent of them received health and nutrition nearly up to three sessions at Slum level federation meetings through Government health workers and Non-Governmental Organizations who are working at slum level.

Mostly 53 percent of the respondents (Women & SHG/SLF members) and respondent's wives, DILs are lactating at present and 18 percent of respondent's daughter in laws and wives and SHG members are pregnant.

The PLW were also revealed an interesting point with regard to the first reaction and the levels of happiness about the confirmation of pregnancy might be differs for the first and the second pregnancy, some of them were celebrated the occasion with distribution of sweets for the first time and the second time pregnancy were treated as very common/ normal and there was no more celebrations like earlier and sometimes it may depends on the sex of the existing child/children also as well as the financial condition of the family.

Most of the PLW are not specific about the sex of the child, but the FGDs of husbands, MILs and are very specific about a male child and they gave a reason in the following lines "if we have a male child in our family, he will perform our funeral activities (tala-korivi -which the heir applies to ignite the funeral pile) of the parents and the and grandparents and the most important one the boy will continue our family name". With this outlook one can understood that all the pregnancies are not receiving proper attention by their family members due to the ideology of gender and son preference (Dyson and Moore 1983; Arnold, Choe, and Roy 1998)



influence of patriarchy are being responsible to increase the gender discrimination in the society. So, that there is lot of need to change this kind of thinking/attitude of elderly and Mother in Laws (MILs) to promote a society with gender equality.

Pregnancy is physiologically and nutritionally a highly demanding period. Extra food is required to meet the requirements of the foetus as well as to perform the daily activities at home or at Work. PLWs expressed their view about why they work more even in the pregnancy **“the elders in the family and in the community suggested us to do our household works on our own will helps to get normal delivery or easy labour, so that we too follow and perform as what they said”**. PLW who are living in nuclear families are having high workload where as it was comparatively less in joint families but PLW have less chance of taking diet diversity due to customs and traditional practices should strictly follow having keen observation by the elders in the family (Abu-Saad K, Fraser D; 2010, BawadiHA,et.al.,(2010), Bang SW, Lee SS.(2010).

The sleep and rest of a pregnant and lactating woman influences on her diet necessity, if she works more hours, she needs more calories or if she takes rest also will reduce the intake necessity, and feeding to the baby depends on the age of the baby also diet intake should enhance. The daily activities of a pregnant and lactating woman will give us a picture about the diet requirement (quantity and quality of nutrients) this will help us to prepare a dietary plan for the PLW based on her workload as well as to maintain a good health during pregnancy and lactation period.

The PLWs who left their jobs felt that getting pregnancy and after giving birth to a child they are not in a position to meet their personal needs and they could not get the same jobs again. A woman who was working in a private company earning Rs15000 per month due to 2nd pregnancy she stopped her job because her health was not cooperating her do both chores, then she expressed that “when I was working I have choice in food items and I was purchasing all items for home whatever I like for me and my child, but it the scene was quite opposite my husband and in-laws are not purchasing even fruits for me and for my kid, this hurted me a lot and my health is not up to the mark like first pregnancy, my situation becomes very worse after leaving job, so that I felt strongly and conveying that employment is very important for women” Joblessness which reduces the decision making power of women at home, as well as it shows lot of effect on the dietary diversification of pregnant, lactating women and on their children. By observing the above situation, the researcher felt that the employment of PLW or any woman having direct impact on the dietary diversification of PLW and on the entire family’s dietary practices. This clearly shows that leaving job of a woman reduces the female purchasing capacity and decision making at home in all aspects. A family with limited resources will also control the health and nutrition of PLW as well on the entire family. The trends in the economic system which influences the price rise/inflation can have an adverse effect on the dietary practices (quantity and quality intake of food) of PLW as well as on the general population which prone to different diseases.

Most of the respondents and participants i.e. PLW and Mother In – Laws (MILs) and Husbands are having better knowledge about good dietary practices like consuming of green leafy vegetables, rice, ragi porridge/ragi ball, meat, egg and few fresh seasonal fruits like apple and orange, white grapes and pomegranates...etc, for PLW and but not have clarity about the quantity and quality of diet required and but pregnant women strictly restricted few food items like raw papaya, chicken and mutton during the early months of pregnancy which leads to abortion. Foods which are in black color (sesame seeds, black berry etc also avoided because if they ate the child will get Nallajeeva (after birth the baby turns in to black color) and having high chances for death also, hence, the elders in the family will resist these women to eat. The Pregnant woman also restricts to eat guava, coconut nut water which she catches cold through these conditions PLW are not having choice on dietary aspects of their own which pushes them in to severe anemia.

One of the pregnant women in her individual interview and few women in the FGD of PW revealed that “if we have lot of work, due to fasting during festivals and full moon day we will skip our meal, few PLW skipped egg and non-vegetarian foods in most of the week days in Tirupati because it is a religious /holy place, If the husband who is having alcoholic habit and wife battering, use of verbal and physical abuse of husband and in-laws some of the PLW were stopped intake of food, few PLW were not used micronutrient supplements (IFA,Maternal calcium & Vitamin A) regularly even though doctors suggesting them to take, because of smell and getting vomiting sensation during pregnancy and many of us were not used these tablets after delivery ,we felt that these micronutrients it is essential before delivery not as after ”.

The gender-based violence is taking place on the pregnant and lactating women was observed in the study area is purely because of financial problems/scarce resources, alcoholic behavior, physical and verbal abuse of husband and in-laws are some of the reasons for skipping meal by the women during their pregnancy and lactation period. This led to so many problems like abortions, low birth weight babies, insufficient /lack of mother’s milk for the baby, affecting anemia for both the mother and child in the later stages of their life. The above practices which may potentially harm the health included avoidance of food items during pregnancy and reduced water consumption, dry curry leaves powder for 4 weeks during the post-natal period, tubers increase flatulence and causes gas in the mother and baby and hence consumption was reduced. Most of these food practices were age old beliefs that are continuing



from one generation to another, most of the women were forced to adhere to them for the fear of being disrespectful and defiant. Negligence and lack of awareness about the use of IFA tablets making the women of pregnant, lactating and their children will be more vulnerable and having high chance to become as anemic and malnourished.

If the child may be a male one the levels of happiness will automatically be increased among the family members than of a girl's birth, because of the influence of son preference and patriarchy. One of respondent from Husband's FGD shared that "by having a male child my respect levels was enhanced at family level, from my in-laws and as well as in the community". He was celebrated the birthday of his son was in a grand way though he is living in poor socio-economic conditions. By observing this it is clear that gender identity and patriarchy which regulates the sexuality and fertility of the women in our society. This kind of thinking and biased attitude which directly causes female foeticide and sex selective abortions females are losing their fundamental survival/ right to life ultimately lead to decline in child sex ratio (0-6 years was observed with India's 2011 census reporting that it stands at 914 females against 1,000 males, dropping from 927 in 2001 - the lowest since India's independence.)

Almost all the participants from all FGDs and IDIs are well aware about the importance of first milk and they are practicing and fed the baby within an hour. If the mother is not having milk after delivery the elders will get milk from the other delivered women in that hospital. No one used pre lacteal foods. One of the LW revealed that she gave birth to a premature baby through caesarian delivery in the 8th month then the baby shifted to incubator and doctors advised her to use formula feeding.

Sex of the child will decide the dietary practices of lactating mothers. If the child is a male one the mother should not eat mango and banana, dhal, tubers, chicken and mutton up to 3 to 6 months, because the participants gave a reason that if the mother consume all these food items the male child could not get digest and he will get some stomach upset and hard stomach that may leads to diarrhea ...etc. this will affect the child's health and growth. But there were no such food restrictions to the mother if she has given birth to a female baby, because the girl child can digest anything this is a belief of the people in that locality. If it is a boy the dietary restrictions for the mother will be continued up to 5- 6 months and 3 months for a girl child. Here we can observe the gender disparity in taking care and protection of a male child. Bu we can see this as a favor of girl child the lactating mother will allow her to eat some nutritious diet because of by giving birth to a female child. On the either side of the coin girls are neglecting right from their birth onwards in protecting aspect of their health care due to patriarchy.

Due to less attention on women after delivery, poor natal and post-natal care and false perceptions related to the food practices of PLW will cause lot of damage particularly for the women who have second pregnancy or short duration pregnancy forboth the mother and the child will become as more anemic. And there are chances to miscarriage of pregnancy, maternal and infant mortality and stunting among children as well as lead to so many health problems. All the above-mentioned food related customary practices/misconceptions are due to lack of proper knowledge and understanding about the dietary needs of PLW. These community practices are highly influencing, becoming barriers and causing micro nutrients deficiency among PLW and children. Hence, it requires an immediate action to root out the food taboos and gender stereo typed practices in the community. Therefore, the study highlights the need to motivate PLW and other stakeholders to come out of the existing cultural food taboos and suggesting them to adopt best cooking practices to retain the important nutrients in order to promote the health and wellbeing of PLW in particular and population in general for better and healthy society. This scenario is clearly alarming us the need of gender sensitization programs to all the women especially for PLW and women in SHGs to encourage gender friendly environment.

In post-natal period up to two days the diet may be liquid or semi solid form with slight heat otherwise women will get burning in the stomach. For increasing milk secretion elders allowed women to eat rice, green leafy vegetables with less oil, soup of redgram/ toor dal in a limited quantity and these women should not sleep in a day time up to the baby reaches 6 months, if they slept, they will get some headache. Meat obtained from a lamb's head when consumed by the mother felt that it improves head control of the child. Hinge/asafetida was consumed by the delivered woman believed that it to be a cleansing agent that cleanses the abdomen post-partum.

And all participants are well aware about the type of services providing at AWC for PLW and children. The PLW are providing supplementary nutrition like food (Anna Amrutha Hastham -spot meal-boiled egg, rice, dhal, one green leafy vegetable curry and a glass of milk) and for children above 3 to 6yrs. A complementary feeding(Balamrutham) for children who are above 6 months of age, and pregnant women who are having less HB levels less than 9 will get additional package which contains ragi powder, jaggary, dry dates and peanut chickky (balasanjeevani) as well as micro nutrient supplements IFA, maternal calcium and Vitamin-A ..etc.

Very few PLW expressed that their family members may not allow them to go for spot meal after 8 month because the stomach will be very bigger and will get some Dhishti (wording of the evil eye/eye vision /looks of others may not good while eating



will get some giddiness and causes indigestion of food) a superstitious phenomenon is also a barrier for the dietary diversification of PLW and restricting them to make use of the existing services which are purely meant for their health and wellbeing.

The following suggestions were given by the participants who involved in IDIs and FGDs to promote the best diet diversification of PLW and women in their communities are

- At first educate all women along with their family members (husband, mother in laws, adolescent girls and boys, and other institutions which are directly or indirectly influencing the lives of women and girls in the community like elderly in the family and in the community, school teachers, religious leaders and SHG/SLF members...etc.)
- Develop a habit of eating all food items to the children right from the childhood without any food restrictions
- Should not follow all food practices and beliefs blindly decided by the elders in the community
- Promote the intake of millets (ragi laddu, dosa, porridge) in the regular diet of PLW as well women in general as a substitute of rice
- Adopt healthy habits (i.e intake of enough water, timely and nutritious food (but not priority to taste)
- Avoidance of unhealthy food practices like eating junk foods, drinking tea/coffee, skipping meal by showing a reason of pooja/fasting, festivals, personality, heavy workload, wrong beliefs/perception about certain foods...etc.

Some recommendations/Suggestions

- Need to sensitize the PLW more about to avoid short interval pregnancies (repeated pregnancies with short gap) where most of the women are facing deprivation (quality and quantity of nutritious diet and medical care) disparity (by family members in sharing of work load) and discrimination (sex of the first child is female).
- The study Identified there is a gap in the Knowledge (health and nutrition), Attitude (myths related to certain foods avoided during pregnancy and lactation period as well as irregular intake of micronutrient supplementation after delivery) and practice levels of PLWs/Husbands /SHG/SLF/MILs. The researcher suggesting to provide additional inputs are required for the PLW on a life cycle approach and for their family members and at community level in order to reduce the influence of major gender (patriarchal, deep rooted stereotyped behaviors) and other socio-economic and cultural barriers on the dietary diversification/requirements of PLW.
- The capacity building inputs should include the best cooking methods (retaining of micro nutrients/vitamins) as well as conduct demonstrations on the preparation of locally available low-cost diet needed for PLWs as well as for the general public to bring change in the best food practices people at large. Because most of the PLW and women in the reproductive age group are suffering with anemia and micro nutrient deficiency tells us that there is need to focus on this section also as part of intervention.
- Empowering women to take up livelihood projects or various Income Generation Activities (IGA) through their SHG/SLFs for promoting decision making related to best dietary practices during the crucial period of their life.
- There is lot of urgency to conduct gender sensitization programmes (to remove gender ideology, manifestation, patriarchy and its impact on women throughout their life) for all PLW, Husbands, in laws, SHG/SLF members and community at large to bring positive inclusive outlook/change in the mind set of people for creating gender friendly environment and favorable space for the girls and best dietary diversification of PLW.
- All the women need to be sensitized about the impact of Gender Based violence and its effect on the Dietary diversification of PLW at present and in the future at different levels i.e., at individual, family, community and society at large.

Conclusion

Son preference was clearly observed due to strong influence of patriarchy (controls the sexuality and fertility of women) this kind of attitude need to be removed in the minds of people through effective behavior change communication interventions for a society with gender equality. It is concluding that there is lot of need to educate all family members as well as teachers at school, adolescent girls and boys, SHG/SLF members about the need and importance of nutritious diet and dietary diversification of PLW (before and after pregnancy) and as well for all age groups. Because, education is the best tool that can be helped to break the pattern of gender discrimination and bring long-lasting change in the societal customs, traditional practices related to dietary aspects of PLW. It is concluding that gender stereo typed behaviors of elders, food taboos related gender discrimination, patriarchal ideology and thinking and gender-based violence are the major barriers for promoting the dietary diversification among PLW. This can be possible only through the implementation of effective behavior change communication interventions.



References

1. Abu-Saad K, Fraser D. Maternal nutrition and birth outcomes. *Epidemiol Rev.* 2010; 32(1):5-25.
2. Arnold Fred, Choe Minja Kim, Roy TK. Son preference, the family-building process and child mortality in India. *Population Studies.* 1998;52(3):301–315. [Google Scholar]
3. Bang SW, Lee SS. The factors affecting pregnancy outcomes in the second trimester pregnant women. *Nutr Res Pract.* 2009;3(2):134-40.
4. Bawadi HA, Al-Kuran O, Al-Bastoni LA, Tayyem RF, Jaradat A, Tuuri G, et al. Gestational nutrition improves outcomes of vaginal deliveries in Jordan: an epidemiologic screening. *Nutr Res.* 2010;30(2):110-7.
5. Durga Rao P, Sudhakar Babu M, Narasimha Rao VL. Persistent traditional practices among the tribals of North Coastal Andhra. *Stud Tribes Tribals.* 2006;4(1):53-6
6. Dyson Tim, Moore Mick. On kinship structure, female autonomy, and demographic behavior in India. *Population and Development Review.* 1983;9(1):35–60. [Google Scholar]
7. Fledderjohann J, Agrawal S, Vellakkal S, Basu S, Campbell O, Doyle P, et al. (2014) Do Girls Have a Nutritional Disadvantage Compared with Boys? Statistical Models of Breastfeeding and Food Consumption Inequalities among Indian Siblings. *PLoS ONE* 9(9): e107172. <https://doi.org/10.1371/journal.pone.0107172>
8. Lakshmi G. Beliefs and practices about food during pregnancy among Savara and Jataputribes. *Arch Pharm Bio Sci.* 2013;1(2):21-5.
9. Srilakshmi B. Maternal undernourishment. In: Srilakshmi B, eds. *Dietetics.* 2nd ed. Mumbai: New Age International (p) Ltd, Publishers; 1997.
10. Olurinde A. Oni, Jamilu Tukur. Identifying pregnant women who would adhere to food taboos in a rural community: a community-based study. *Afr J Reprod Health.* 2012;16(3):72.

Web sources

1. <https://www.sciencedirect.com/science/article/abs/pii/S0277953603003423#aep-abstract-id3>:accessed on 11-04-2020
2. <http://rchiips.org/NFHS/pdf/NFHS4/India.pdf> ; accessed on 24-11-2019.
3. <http://unicef.in/whatwedo/6/women-nutrition> ; accessed on 24-12-2019.

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