

Menstrual practices, fertility intentions and decision-making regarding family planning by women belonging to various indigenous groups of Wayanad- A qualitative study

Aswathy Sreedevi¹, Leyanna S. George¹, Steffi A. Varughese¹,
Shana S. Najeeb¹, Lakshmi Aravindan¹, Rithima Anvar¹, Sneha Georgy¹,
Vishnu B. Menon¹, Syama Sathish¹, Prema Nedungadi²

¹Department of Community Medicine, Amrita Institute of Medical Sciences, Amrita Vishwa Vidyapeetham, Cochin, Kerala, India, ²Director, AmritaCREATE, Amrita Vishwa Vidyapeetham, Cochin, Kerala, India

ABSTRACT

Background: Among the different social groups in India, the tribes are the most vulnerable and socioeconomically deprived. The tribal population is distinct from the general population in terms of their unique cultural, traditional, and reproductive health practices. Therefore, the aim of the study was to conduct an exploratory analysis of the menstrual practices, fertility intentions and decision-making regarding family planning among various indigenous tribal women of Kerala. **Methods:** A qualitative study was conducted among the tribal women of Wayanad district using the grounded theory approach. Using purposive sampling 16 in-depth interviews, 6 key informant interviews and 2 focus group discussion (FGD) s were conducted. Interview guides were developed for in-depth interviews, key-informant interviews, and focus group discussion through extensive formative research with literature reviews and taking expert opinions. The interviews were conducted among women of reproductive age and their spouses hailing from Paniya and Kurichiya tribal groups in Kalpetta and Mananthavady areas of Wayanad district. Key informant interviews were also conducted among doctors, pharmacists, and community health workers. **Results:** The key findings of this study were the identification of a web of cultural practices pertaining to menstruation among persons of tribal origin. Unique traditional practices such as “Valayamapura” and “Thirandukalyanam” were reported and most of the women were keen to carry it forward. Fertility desires among couples were found to be not significantly influenced by any gender bias. Decision-making regarding family size were found to be on a mutual agreement between the spouses. The tribal women were aware of modern spacing methods, but preferred natural methods of contraception for temporary use and tubectomy as the permanent method. Non-contraceptive use of oral contraceptive pills (OCP) was prevalent, and the majority took it occasionally for postponement of menstruation to attend various social events. **Conclusion:** Menstruation-related myths and practices are prevalent and require educational interventions. More focus needs to be given to male sterilization as the permanent method of contraception. The study underscores the need to address gender inequalities and attitudes among tribal populations and to increase efforts to promote higher education among the tribes for busting cultural myths and practices.

Keywords: Fertility intentions, menstrual practices, reproductive health, tribals

Address for correspondence: Dr. Leyanna S. George,

Associate Professor, Department of Community Medicine, Amrita Institute of Medical Sciences, Amrita Vishwa Vidyapeetham, Cochin, Kerala, India.

E-mail: leyanna.george@gmail.com

Received: 09-09-2022

Revised: 05-03-2023

Accepted: 27-03-2023

Published: 30-06-2023

Access this article online

Quick Response Code:



Website:
<http://journals.lww.com/JFMPC>

DOI:
10.4103/jfmpe.jfmpe_1799_22

Introduction

India has the largest share of the global population of indigenous people at 106.4 million constituting 8.24% of the

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

How to cite this article: Sreedevi A, George LS, Varughese SA, Najeeb SS, Aravindan L, Anvar R, *et al.* Menstrual practices, fertility intentions and decision-making regarding family planning by women belonging to various indigenous groups of Wayanad- A qualitative study. *J Family Med Prim Care* 2023;12:1214-21.

total population.^[1-3] The International Labor Organization characterized these communities as indigenous people in independent countries whose social, cultural, and economic conditions distinguish them from other sections of the national community and whose status is regulated wholly or partly by their own customs or traditions or by special laws or regulations in 1989.

Among the different social groups of the country, the tribes or indigenous people are the most socioeconomically deprived groups affected by poverty, illiteracy, poor living conditions, and poor health-seeking behavior.^[4]

Reproductive health is a complex mixture of genetic, biological, sociodemographic, cultural, economic, health care services, and awareness factors.^[5] According to national family household survey (NFHS)-4 the TFR among tribals has reduced to 2.5 though,^[6] the picture is not uniform across the country. Social class such as belonging to tribal groups has been associated with lower contraceptive use.^[6] Studies in Bengal and Andhra Pradesh have found low contraceptive use of 41.1% and 25%, respectively.^[5,7]

In Kerala, the tribal population accounts for about 1.45% of the State's total population and belongs to 35 different tribal communities. In studies in Wayanad, the predominantly tribal district, only 38.3% of the tribal women were aware of family planning methods and better knowledge regarding contraceptives were associated with socioeconomic status, education, and the accessibility to the primary health center.^[8,9] Other studies among women belonging to various tribes of Kerala have found a low contraceptive use^[10,11] and a high unmet need for family planning among these women in Kerala.^[10] Apart from the few quantitative studies across the country on contraceptive use, there are not many studies that focus on menstrual practices, fertility intentions, or women's role in decision-making. The expert committee recommends the right of every tribal man and woman to their reproductive choices including the particularly vulnerable tribal groups.^[12] In this context, it is especially important to understand fertility intentions, decision-making, and menstrual practices unique to this community.

Hence, this paper seeks to identify and understand the menstrual practices, fertility intentions, and decision-making capacity of women in family planning among the Paniya and Kurichiya—the two major tribes residing in Wayanad district in Kerala.

Methods

Materials and Methods

Study setting: This study was conducted in Kalpetta and Mananthavady community development blocks of Wayanad district in Kerala which is home to a majority of the indigenous groups of Wayanad.

Study design, sample size, and sampling technique: After obtaining institutional ethical committee clearance, a

qualitative study was conducted using the grounded theory approach. Using purposive sampling, a total of 16 in-depth interviews, 6 key informant interviews and 2 focus group discussion (FGD) s were conducted till saturation was obtained. The interviews were conducted among women of reproductive age and their spouses hailing from Paniya and Kurichiya tribal groups in Kalpetta and Mananthavady areas of Wayanad district. The FGDs were conducted among the tribal women belonging to the two clans separately. Key informant interviews were conducted among two doctors, pharmacists, and community health workers each.

Data collection and analysis: Interview guides were developed for in-depth interviews, key-informant interviews, and focus group discussion through extensive formative research with literature reviews and taking expert opinions. A list of predetermined open-ended questions were used in the interview guides. Probing questions were further asked to explore the topic in-depth. An informed verbal consent was obtained for participating in the interview and for audio recording the session. The interviews were then conducted in the regional language, Malayalam. The audio-recorded data was later transcribed verbatim and translated to English. The typed transcripts were reviewed for accuracy, completion, and familiarization, and were then manually coded to identify the emerging themes and subthemes. The coding was subsequently verified by at least two researchers. Conclusions were arrived at by data triangulation.

Results

In-depth interviews were conducted among 15 women of reproductive age group and with the spouse of one of the women. Focus group discussion (FGD) s were carried out among the two tribal groups, Paniya and Kurichiya separately. In order to acquire a holistic view about the provider's perspective, key informant interviews were done with two doctors, two pharmacists and a Junior Public Health Nurse (JPHN) and an Anganawadi worker (AW). Majority of the women in both the tribal groups belonged to the age group of 30–45 years and were married, except for an 18-year-old girl. Significant proportion of the women was involved in occupations like “Thozhilurappu”(MGNREGA) activities while the others were homemakers except for one of them who was a tribal promoter who was currently unemployed.

The vast majority received schooling up to 10th grade and stopped further studies. All the participants were living with their spouses except for two, whose husbands visited them once a month or so. The age of marriage of the women ranged from 18 to 23 years. The duration of marriage ranged from 10 to 22 years. Almost all the married women conceived within a year of marriage and had a minimum of two and maximum of three children. The average spacing between children was two–five years with the age of children ranging from two and a half years to 22 years of age. The themes identified are as follows and a summary of the findings are depicted in Table 1.

Table 1: Summary of findings based on themes

Themes	Evidence
Practices associated with attainment of menarche	<ul style="list-style-type: none"> - On attaining menarche, the girls are immediately moved from the home to a separate room called the “Orakkodu,” also called “Valayamapura.” - Women elder of the clan fix an auspicious date for “Thirandukalyanam,” which is considered to be of more importance than the girl’s “Kettukalyanam” (wedding). - This function ensures that the community is aware that a girl has come of age - Not allowed to go to school or meet men till the Kalyanam function is over - Dietary restrictions of oily food and coconut water
Menstrual absorbents and hygiene	<ul style="list-style-type: none"> - Sanitary pads are used only at the time of travel - First-time sanitary pads were used when it was provided as part of the flood relief kits - Lack of awareness and misconceptions prevent women from using sanitary pads
Valayamapura practices	<ul style="list-style-type: none"> - Women are considered impure during menstruation and hence not allowed to cook, touch utensils, or even see their husbands. They stay in a makeshift room/shed called “Orokkodu” - On completion of her periods, she takes a bath in the nearby river and then enters the house - During menstruation, she is considered to be possessed by demons and hence they keep an iron knife with themselves for protection. - In the current generation, there is scepticism about these practices, but they still seem to continue it since it is a deep-rooted tradition and they do not want to hurt the feelings of the elders.
Fertility intentions	<ul style="list-style-type: none"> - No gender preference was observed - Most preferred to have both genders in the family - Fertility decisions were made jointly by both husband and wife.
Use of contraception	<ul style="list-style-type: none"> - Awareness classes regarding the importance and different available methods of contraception were conducted by health workers from the health centers. - Most women did not resort to any contraceptive methods due to various reasons like lack of interest, potential side effects or husbands not favoring the use of the contraceptive methods - Most couples preferred permanent sterilization methods over temporary ones like condoms, IUDs, or OCPs. - Most of them preferred tubectomies. Among the temporary methods, natural methods of contraception such as sexual abstinence and calendar method were quite popular among these families than the barrier methods.

Menarche

All women attained menarche at around 12–15 years of age with majority at the age of 15 suggesting probable undernutrition among the girls. In the Kurichiya tribe, after attaining menarche, the girls are immediately moved from the home she is living to a separate room called the “Orakkodu,” also called “Valayamapura.” Soon after which women elders of the clan come and fix an auspicious date for “Thirandukalyanam,” which is considered to be of more importance than the girl’s “Kettukalyanam” (wedding) itself.

“With my sisters, it was even more strict. The first time they got their menses, they were not allowed to even step out to go to school till the kalyanam was over which would take place only after 2-3 months! Till the kalyanam got over, we are not allowed to meet any males. Not even our own father.” - 34-year-old woman

“Every member of our tribe including the leaders take part and celebrate it. We were not allowed to eat oily food and coconut water during this period.” - 32-year-old woman

This celebratory event for the girl child attaining menarche serves as an announcement to the neighborhood that the girl has come for age, quoting the AW working with the tribal community, *“it’s just an event to mark the menarche, people will come to know about it.”*

The girl will be made to dress up, wearing jewelry and covered in a silk garment and will be offered gifts. During the ceremony, the girl will be asked to walk seven times around a lighted lamp, similar to the wedding ceremony.

Menstrual absorbents and hygiene

During both in-depth interviews and FGDs most women said that, except in case of any occasions or travel during which they use sanitary pads, most of them prefer reusable clothes during their menstrual cycle. Most women used sanitary napkins for the first time in their lives when donations of these pads were made by people all over the world during the Kerala floods in 2018.

“During the floods, we received and used some sanitary napkins. Sometimes when we need to travel long distances also, we use napkins. Otherwise, we use only cloth.” - a 35-year-old woman

“Even when I go to college, I use cloth napkins, only if there is a difficulty, I use sanitary napkin” -18-year-old girl

Although health care workers claimed that women are being provided with sanitary napkins at their homes, barriers like misconceptions about sanitary pads, their lack of experience in using one, and their satisfaction with the already existing traditional practices prevented them from using sanitary napkins.

“I have heard that commercial sanitary napkins are not good for health but nowadays children use it for their ease”– 31-year-old woman

In these tribes, women consider themselves to be unhygienic during the time of menstruation. Beliefs of women being impure during their menstrual cycle and being possessed by negative energies are very strong and most women want these customs and practices to be followed by their upcoming generations as well.

“women are under the curse of the evil during menstruation”

“women are impure during their periods” – women of both tribes during FGD

“We are not allowed to touch any things such as utensils used in the kitchen or allowed to enter the home and cook during that period. Nor are we allowed to see our husbands. Following the bath, 3 days after the menstruation (‘moonnamkuli’) we can touch everyone” – 34-year-old woman, indicating the duration of restrictions have reduced now.

Valayamapura

The tribal clans that were interviewed had a small temple within their houses. Women were strictly not allowed inside the houses during menstruation as they considered them to be unhygienic or impure to be walking around in the house during these times. Valayamapura or Orakkodu is a separate room outside the home of these women with a separate toilet facility where they stay for the span of their cycles.

“We have to stay in a separate house called ‘Orakkodu’ during menstruation outside our home.” – 34-year-old woman

“...atleast 3 to 4 days, till bleeding stops. And at the end of 4 days, we will go to nearby river and take bath.” – 33-year-old woman

There is also a belief among the tribals, that during this time, women are likely to get possessed by demons because of which they kept articles like knife/iron instruments with themselves when they went into the “Valayamapura” to protect themselves from evil spirits. Not all such Valayamapurans necessarily have toilet facilities for women. In such facilities with no separate toilets, the women are expected to use the already existing toilet way before everyone wakes up in the morning, clean it, and leave for the rest of the members of the family to use. She isn’t allowed to use the toilets during the day and has to wait till evening to use it again after everyone else is done using it for the day.

Although there were few women who felt scared to stay alone in a separate room during their monthly cycles, most women were well accustomed to these practices, preferred it, and believed that it is the right thing to follow the age-old customs. They believe that it is for “our own good” and that these customs must remain and be followed for generations to come. All the clothes, garments, and utensils they need and use during the days of menstruation must be maintained in the Valayamapura itself and should not be allowed inside the house after use. After the bleeding stops, the woman is required to bath in the river along with all her belongings including her clothes, the mat she lied on, etc. All the garments and materials washed are dried under the sun thereafter.

“...when my children were little, I used to feel bad. We are not allowed to touch our own little babies on the days we are having menses. We have to lay the babies on the doorstep of the Orakkodu after we feed them. the baby will then be cleaned and taken back into the house. We believe in a god and our god likes it this way. I am only hoping it continues the same way for the generations to come.” – 34-year-old woman

Some women wanted to keep these traditions alive and pass them on to the next generation because these seven days were the

only time that they could take rest from all the hectic household chores and other routines.

“The days I have periods I am fully free. It’s the time we can taste husband’s food. These are days of happiness and relief.” - 39-year-old woman.

“This is the time they are getting to rest for a few days. They will be working even till one day before delivery.” - a doctor working in Kalpetta

Physical contact of other family members is not allowed with menstruating women.

“In my ancestral family home, we have a separate building with few rooms for staying during menstruation. In nuclear families, we have one room for the purpose only.” -33-year-old woman

However, the younger generation finds it inconvenient and unnecessary to stay within a confined room during their cycles but because they are afraid of being questioned by elders of the family, they follow these practices. Over the years, as the size of the families became smaller, they found it difficult to function properly without the homemaker around. Therefore, the number of days a woman has to stay in a separate room has currently reduced to the days the woman bleeds or no days at all and the concept of separate rooms outside the house has changed to a separate room within the house.

“My daughter is not at all interested. She is unhappy with our traditions. The children these days are difficult, they want to do the opposite of what we want them to do...however she has to stay, it is mandatory.” -38-year-old woman

Though slow, a generational transition was definitely observed because of better education and awareness. However, there were some families which did not follow these traditions within their homes, but at the same time were uncomfortable admitting the same to their relatives and others outside their homes due to fear of judgment, quoting

“I don’t stay away during my menstruation. Right now, I came to stay in my mother’s house. Only when I am here, I stay in a separate room during menstruation.” – 40-year-old woman

The health workers of the area were also cognizant about these practices and remarked about the changes that have occurred over the years.

“They stay separate for 3-4 days as a tradition. Years back, it used to take 7-8 days to even enter the bedroom. This has been relaxed a bit. Nobody bars them from going to school now too.” - Anganawadi worker

The husband of one of the women opined that, quote

“During periods my wife stays away in a separate room for 7 days during which I am fully willing to cook. For 3 days they can’t touch anybody. On the 4th day of periods, we will wash and sprinkle cow dung for purifying

the room. After that some ladies will make food, some people will eat what they cook, some won't. In my case, my wife cooks on the 4th or 5th day for my children, but I don't eat, I cook my own food at this time."

On enquiring about such practices and why they were so common in this region, the health care worker (HCW) s stated that although the younger generation girls are sceptical about the tradition, they keep practicing it out of fear of their elders.

"There are few families who have extreme belief in this. Some people don't but they won't tell this to others. Once others know, then they fear that they may get isolated. Few families are very scared, both men and women; If they "touch", will anything happen to them or not" – AWW

Fertility intentions

The average size of the families has reduced drastically over the years.

"Now it's mostly around 2-3 children. Earlier, it used to be 5, 6, 7 etc."- JPHN

In families with three children, the decision for the third child was because of wanting children from both genders in the family and not due to the favoring of any specific gender.

"Since we had two sons, my husband wanted one more child, a daughter. However, I said I need only two children and so it is." – a woman during FGD

"When we go for field visits, we ask them if it will be a boy or a girl and they reply that they are okay with any gender and will care for them." – AWW

"(laughs) My eldest child was a girl, so everyone wanted the second one to be a boy. It turned out to be a girl again. Again, I delivered for the third time and when again a girl baby was born, decided to do sterilization."- 31-year-old woman

Most often, after the second or third delivery, permanent sterilization is being considered now and decisions taken regarding the sterilization process were taken by both partners and with mutual consent from both the husband and wife which is commendable.

"... he (husband) was the one who suggested to me after the second delivery be it a girl or boy, isn't it better we stop future pregnancies" – a woman during FGD

"It (decision regarding family planning) is taken by both of them these days. Now even the males are concerned. They accompany their pregnant wives and all for visits....even if they want to permanently stop, both of them will be willing." – JPHN

"Most of the time, it's the wife who meets me. The spouse usually sits outside. They will come inside, only if I call them. Nowadays, recently-married couples come together." – a doctor

Be it during in depth interview (IDI)/FGDs, almost all women were of the opinion that men were supportive of their opinions regarding childbearing and that women have a prominent role in deciding for themselves whether they want a child or not.

Use of contraception

The women had knowledge about the importance and different available methods of contraception as routine awareness classes were conducted by health workers from the health centers. However, most women apparently did not resort to any contraceptive methods due to various reasons like lack of interest, potential side effects, or husbands not favoring the use of the contraceptive methods when both partners discuss the same within the family.

"no (all shake their heads) we haven't, we haven't used. To tell the truth they have given us condoms and contraceptives, but we haven't used it" – a woman during FGD

In the health care giver perspective, these women are routinely supplied with contraceptives like condoms and oral contraceptive pills (OCP)'s (MALA-N) to their homes by the health care workers (HI/JPHN). But when asked about this to the women, very few said they were using these temporary methods and there was only one of them who had a chronic use of OCP's.

As far as OCP pills were concerned, most women took these pills very few times during their lifetime. Most of the use was for the postponement of cycles to attend religious functions or other functions or festivals.

"No, my husband says no need to use all this. Only if you can go, you attend the function. But we women feel it will be nice if everyone goes together for marriage or to temples."- A-34-year-old woman

"My sister-in-law was down with a fever and there was no one to cook at home, hence I had to take the pill to delay my periods. I take it only when there is an unavoidable circumstance or a function. I took it two or three times this year"- 40-year-old woman

Most couples prefer permanent sterilization methods over temporary ones like condoms, intrauterine device (IUD) s, or OCPs. Most of the permanent sterilization were tubectomies. Among the temporary methods, natural methods of contraception such as sexual abstinence and calendar method were apparently quite popular among these families than the barrier methods. This, might be because these practices existed amongst families since generations and they were comfortable following the same culture,

"Usually after their third or fourth delivery they go to the hospital for doing permanent sterilization" – AWW

Lack of proper education may also be a contributing factor to less awareness of these women about the temporary methods of contraception.

“Yes, that (about contraceptive methods) I have heard through my sister, mother only. You see after 10th standard is when such classes on contraception are taken, so I don't know much about these measures (Implying she does not know since she has not gone to school after 10th grade)” - a 34-year-old woman

As far as permanent methods were concerned, awareness and advice were directly given to both partners by the doctor, making it more acceptable in families. The awareness of temporary contraceptive measures among the menfolk was not explored and may also contribute to the lower use of temporary contraceptives.

Though IDIs were conducted among women belonging to Kurichiya tribe, FGDs were conducted in both tribes separately. For the FGDs, eight women of Paniya clan and seven women of Kurichy tribe had participated.

Discussion

The key findings of the study were the identification of unique cultural practices pertaining to menstruation among the tribals such as “Valayamapura” and “Thirandukalyanam,” which most of the women are willing to carry forward as it has been bequeathed to them to propitiate the Gods. These customs stem from deep-rooted beliefs that menstruation is ‘impure.’ The tribal women were aware of modern spacing methods, but preferred natural methods of contraception for temporary use and tubectomy as the permanent method. Fertility desires of married people were not influenced by gender bias and decision-making regarding family size was found to be on a mutual agreement between the spouses with a desire for two–three children. Non-contraceptive use of OCP was prevalent, and the majority took it occasionally for postponement of menstruation to attend various social events.

Menstrual practices

The sociocultural taboos related to menstruation were found to be widely prevalent among the populace. Ceremonies like the “Thirandukalyanam” to mark the menarche of girls were recognized as a celebrated ritual among them, a function customary in a few other areas too.^[13] The ladies are not allowed to consume certain foods and refrain from using products like coconut oil at this time. These findings are similar to those from tribals in Andhra Pradesh and Assam.^[14,15] This may probably be due to several prevailing myths that particular food items result in heavy menstrual bleeding or increase abdominal pain.

There are various folk beliefs surrounding menstruation as the tribals regard menstruating women impure and hence, any objects touched by them at this time are considered to be contaminated.^[16] Hence, they are strictly prohibited from attending weddings, going to other houses and holy places, a finding similar to a study in Jammu.^[17] The present study findings indicate that the tribal women resorted to the occasional use of OCPs to postpone menstrual cycles due to the prevailing menstrual taboos preventing them in taking part in social and

religious events. The “Valayamapura”—a separate “menstrual” room or hut, is where menstruating women stay in seclusion and was found to be a distinctive custom among them. The women are restricted from performing their routine daily activities and excluded from community activities, a finding similar to a study on tribals in Nepal by Amatya *et al.*^[18] Though some younger women voiced discomfort in carrying out these rituals, the older women were happy to abide by the age-old traditions. This may be due to the lack of clarity on the biological process of menstruation, about good hygienic practices. This may be the reason for passing on the cultural observances of the elders.^[16] However, the study observed a few key transformations that have occurred in the past few years such as relocating from a separate hut outside the house during menstruation to a separate room within the home, as well as a shorter duration of stay. The participants were found to prefer the traditional cloth napkins over regular sanitary napkins. This may be due to the fact that they are used to cloth napkins which are more readily available and cheaper than commercial sanitary pads.^[19]

Fertility intentions and decision making

Regarding decision-making on determining family size, it was found that women decide jointly with their husbands on the number of children a family would have. The average spacing between children was two–four years and most women preferred a family size of two children. These findings were found to be in concordance with the NFHS Survey 4 of Kerala (2015–2016).

Contraceptive use

A pronounced gap exists between the knowledge of contraception and its use among tribal women as opposed to non-tribal women.^[20] Despite the regular free distribution of contraceptives from health centers, the women didn't use them regularly and mostly resorted to permanent sterilization after completion of a desired family size of two–three children. For temporary methods, natural contraception was a favorite. It was observed in the quantitative study that preceded this that contraceptive use was 26.4% but the fertility rate was not commensurately high, which may be due to the use of natural contraceptives.^[21] This finding is akin to a study conducted by MR Pradhan *et al.*,^[11] where female sterilization dominated the use of other contraceptive methods like pills and condoms in India. The inconvenience caused while using some of these methods is usually cited as a reason in similar studies.^[22] Poor contraceptive use prevalence is also found to be inversely proportional to the respondent's education and media exposure.^[23] Most women took OCPs to postpone their menstrual cycle to attend social gatherings and events. This is due to the stern traditions prohibiting menstruating women from entering religious shrines and attending functions.^[24] Majority of the participants were working in the Kudumbashree, MGNREGA scheme. The women were found to be active participants in the platform as is also seen in other districts throughout the state, as per a study by Raj *P et al.*^[25] Early cessation of education coupled with younger age of marriage, therefore, puts the tribal women in a disadvantaged

position as opposed to their counterparts regarding knowledge and understanding about reproductive health.

The strength of our study is that, it is a one-of-a-kind study which captures the ground realities faced by reproductive age women of the two major tribal clans in the difficult-to-access hilly terrains of Wayanad. Even though efforts were made to obtain a holistic view of the state of affairs of the Paniya and Kurichiya tribal groups, the limitations of our study include the absence of interviews with elderly women, which could probably have given more insight into the transition of practices between generations and comparison of the observed customs between the current and olden times.

Sensitization of health care workers, community health workers, and school teachers regarding reproductive health and menstrual hygiene would be desirable so that they can further disseminate this knowledge in the tribal community and mobilize social support against menstruation-related myths. The study brings out the fact that all contraceptive uses is oriented toward woman and female sterilization. Creating more awareness about the various temporary methods of contraception will help to create a positive attitude among them. The study underscores the need to increase efforts to build on the gender-equitable approach of the indigenous persons to family planning, increase access and awareness of contraceptive practices.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Indigenous Peoples, Poverty, and Development. In: Hall GH, Patrinos H, editors. Cambridge University Press; 2012.
2. Census of India: F - Series: Fertility Tables. Available from: <https://censusindia.gov.in/census.website/data/tables>. [Last accessed on 2021 Jul 11].
3. Census of India : Provisional Population Totals India: Paper1: Census 2011. Available from: <https://censusindia.gov.in/census.website/data/population-finder>. [Last accessed on 2021 Jul 11].
4. Mukherjee A, Banerjee N, Naskar S, Roy S, Das DK, Mandal S. Contraceptive behavior and unmet need among the tribal married women aged 15-49 years: A cross-sectional study in a community development block of Paschim Bardhaman District, West Bengal. *Indian J Public Health* 2021;65:159-65.
5. Indigenous Peoples at the United Nations | United Nations for Indigenous Peoples, 2015. Available from: <https://www.un.org/development/desa/indigenouspeoples/about-us.html>. [Last accessed on 2021 Jul 11].
6. Sanneving L, Trygg N, Saxena D, Mavalankar D, Thomsen S. Inequity in India: The case of maternal and reproductive health. *Glob Health Action* 2013;6:19145.
7. Lakshmi G, Sambasiva Rao R, Giridhar L. Perceptions towards family planning - A study on tribal women from Andhra Pradesh. *Indian J Maternal Child Health* 2011;13:1-8.
8. Perception- reality gap in the utilization of maternal and child health care services among tribal in Wayanad District, Kerala. Available from: https://www.academia.edu/38493439/PERCEPTION_REALITY_GAP_IN_THE_UTILIZATION_OF_MATERNAL_AND_CHILD_HEALTH_CARE_SERVICES_AMONG_TRIBALS_IN_WAYANAD_DISTRICT_KERALA. [Last accessed on 2022 Feb 14].
9. Walvekar PR, Wantamutte A, Mallapur M. Knowledge index of contraceptives among married women residing in rural area-A cross sectional study. *Indian J Public Health Res Dev* 2014;5:27.
10. Need for contraception among Tribal women in Kerala, Southern State of India. Semantic Scholar. Available from: <https://www.semanticscholar.org/paper/NEED-FOR-CONTRACEPTION-AMONG-TRIBAL-WOMEN-IN-KERALASajitha/f31ef268ae229d8b6653c9902cfea7df068f3610>. [Last accessed on 2021 Jul 11].
11. Pradhan MR, Dwivedi LK. Changes in contraceptive use and method mix in India: 1992-92 to 2015-16. *Sex Reprod Healthc* 2019;19:56-63.
12. Report of the expert committee on tribal health, tribal health in India-bridging the gap and a roadmap for the future. MoHFW and ministry of tribal affairs, government of India 2018.
13. Thirandukalyanam is seen as a 'progressive' celebration of periods, But is it really? Youth Ki Awaaz. 2020. Available from: <https://www.youthkiawaaz.com/2020/06/thirandukalyanam-celebration-of-rite-of-passage-of-kerala/>. [Last accessed on 2021 Nov 09].
14. Udayar SE, K K, Devi PV. Menstrual hygiene practices among adolescent girls residing in tribal and social welfare hostel in Andhra Pradesh: A Community based study. *Natl J Comm Med* 2016;7:681-5.
15. Goswami RG, Thakur MB. Folk beliefs of food avoidance and prescription among menstruating and pregnant Karbi women of Kamrup district, Assam. *J Ethn Foods* 2019;6:19.
16. Garg S, Anand T. Menstruation related myths in India: Strategies for combating it. *J Family Med Prim Care* 2015;4:184-6.
17. Dhingra R, Kumar A, Kour M. Knowledge and practices related to menstruation among tribal (Gujjar) adolescent girls. *Stud Ethno-Med* 2009;3:43-8.
18. Amatya P, Ghimire S, Callahan KE, Baral BK, Poudel KC. Practice and lived experience of menstrual exiles (Chhaupadi) among adolescent girls in far-western Nepal. *PLoS One* 2018;13:e0208260.
19. Shah SP, Nair R, Shah PP, Modi DK, Desai SA, Desai L. Improving quality of life with new menstrual hygiene practices among adolescent tribal girls in rural Gujarat, India. *Reprod Health Matters* 2013;21:205-13.
20. Alukal AT, George L, Raveendran RC. Awareness and practice of contraceptive methods among women in Kerala, India. *Int J Reprod Contracept Obstet Gynecol* 2018;7:1501-4.
21. Sreedevi A, Vijayakumar K, Najeed SS, Menon V, Mathew MM, Aravindan L, *et al.* Pattern of contraceptive use, determinants and fertility intentions among tribal women in Kerala, India: A cross sectional study. *BMJ Open* 2022;12:e055325. doi: 10.1136/bmjopen-2021-055325.
22. Nisha C, PJ Kerline, Sunil A, CM Jinu, Saju CR. Knowledge, attitude and practices regarding family planning methods in a rural area in Thrissur district Kerala, India. *Eur J Biomed*

Pharm Sci 2018;5:224-7.

23. Singh A, Singh KK, Verma P. Knowledge, attitude and practice GAP in family planning usage: An analysis of selected cities of Uttar Pradesh. *Contracept Reprod Med* 2016;1:20.
24. Meshram PD, Ratta AK, Kumar V. Perceptions and practices related to menstruation amongst tribal adolescent girls in rural field practice area of tertiary health care institute in Mumbai. *Int J Community Med Public Health* 2020;7:1313-7.
25. Raj P, Tessy M. Uplifting rural women through Kudumbasree-MGNREGS partnership in Kerala State. 2019. Available from: <https://www.semanticscholar.org/paper/UPLIFTING-RURAL-WOMEN-THROUGH-KUDUMBASHREE%E2%80%93MGNREGS-RajTessy/1123702ae8ac5471daad78b695cc8dbc41e536a1>. [Last accessed on 2022 Feb 28].