

Unveiling Reproductive Health Challenges: A Qualitative Assessment to Explore Menstrual Hygiene, Breastfeeding, and Complementary Feeding Practices & Restrictions among Women in Himachal Pradesh

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Abstract Background: Women in Himachal Pradesh encounter various restrictions impacting their reproductive health practices, including menstrual hygiene, breastfeeding, and complementary feeding. This qualitative survey aimed to explore these practices, beliefs, and challenges to inform targeted interventions. **Methods:** A qualitative survey was conducted from March 2021 to August 2022 across 20 selected blocks in 11 districts of Himachal Pradesh. Focus group discussions (FGDs) included a diverse range of participants, such as women of reproductive age, lactating mothers, Anganwadi workers, ASHAs, and other stakeholders. Thematic analysis identified common themes and patterns related to menstrual hygiene, breastfeeding, and complementary feeding. **Results:** Thematic analysis revealed key findings in each area. Menstrual hygiene practices included the continued use of cloth instead of sanitary pads, improper disposal of menstrual products, and prevalent social and religious taboos and myths. Despite awareness of breastfeeding benefits, misconceptions about alternative feeding methods persisted. Complementary feeding practices were generally well understood, but certain communities held beliefs against non-vegetarian foods and relied on commercially prepared products. **Conclusion:** The study underscores the need to address cultural beliefs, provide accurate information, and promote evidence-based practices to enhance reproductive health in Himachal Pradesh. Targeted interventions, education programs, and community-based awareness campaigns are essential to dispel myths, promote positive practices, and empower women to make informed decisions.

Key Words menstrual hygiene, breastfeeding, complementary feeding, restrictions, beliefs, practices, qualitative survey, Himachal Pradesh

1. Introduction

Women in the reproductive age group in the state of Himachal Pradesh, where a diverse population resides, face various restrictions that impact their reproductive health practices. Understanding these restrictions is crucial for developing targeted strategies to promote appropriate menstrual hygiene, breastfeeding, and complementary feeding practices [1]–[5].

Menstrual hygiene plays a vital role in women's overall health, yet certain practices and restrictions still prevail in some communities. These include the use of cloth instead of sanitary pads, improper disposal of menstrual products, social and religious taboos associated with menstruation, and

myths related to menstrual practices [6], [7]. By exploring the perspectives of women, Anganwadi workers, ASHAs, and other stakeholders, this study sought to gain insights into the prevailing practices, beliefs, and challenges related to menstrual hygiene in Himachal Pradesh.

Breastfeeding is another critical aspect of reproductive health, impacting the growth, development, and overall well-being of infants. While breastfeeding has well-established benefits, misconceptions, taboos, and false beliefs regarding alternative feeding methods, such as formula milk or cow milk, still persist in certain communities [8], [9]. Understanding the prevailing attitudes and practices around breastfeeding can help inform interventions aimed at promoting

exclusive breastfeeding and dispelling myths.

Complementary feeding, the introduction of solid foods to infants alongside breastfeeding, is a crucial milestone in their nutritional journey. However, cultural beliefs and practices can influence the timing, types, and consistency of complementary foods [10], [11]. This study aimed to explore the prevailing beliefs, misconceptions, and practices related to complementary feeding in Himachal Pradesh, with a focus on consistency, non-vegetarian foods, and commercially prepared products.

This qualitative survey aimed to assess the prevailing restrictions in Himachal Pradesh, specifically focusing on menstrual hygiene, breastfeeding, and complementary feeding, with the goal of identifying key determinants and barriers that need to be addressed for the well-being of women in the region.

Overall, this research contributes to the existing literature by shedding light on the contextual factors influencing the reproductive health practices of women in Himachal Pradesh which will guide policymakers, healthcare providers, and community stakeholders in formulating evidence-based interventions to improve menstrual hygiene, breastfeeding practices, and complementary feeding, ultimately promoting the overall reproductive health and well-being of women in the state.

2. Materials and Methods

A. Study design

This research employed a qualitative survey design with a phenomenological approach to assess the various restrictions practiced by women in the reproductive age group in the state of Himachal Pradesh. The phenomenological approach was chosen to understand and describe the lived experiences of women regarding menstrual hygiene, breastfeeding, and complementary feeding practices within their cultural and social contexts.

B. Study team

The study was conducted by the Department of Community Medicine, Indira Gandhi Medical College, Shimla, in collaboration with the Department of Women & Child Development, Himachal Pradesh.

C. Study period

The survey was conducted from March 2021 to August 2022, allowing for a comprehensive assessment of the restrictions practiced by women in the reproductive age group.

D. Study area

The survey covered 20 selected blocks representing 11 districts in Himachal Pradesh. The chosen blocks aimed to ensure adequate representation of various communities and geographical regions within the state.

E. Study participants

The focused group discussions (FGDs) included a diverse group of participants from the target population. Each FGD consisted of 5-6 women in the reproductive age group, lactating females, women with children less than 5 years old, Anganwadi workers, Accredited Social Health Activists (ASHAs), members of Mahila Morcha, Self Help Groups, and Village Panchayats.

F. Study tool

Focus Group Discussions (FGDs)

- **Moderation:** The FGDs were moderated by trained researchers from the Department of Community Medicine, Indira Gandhi Medical College, Shimla.
- **Recording:** Each session was audio-recorded to ensure accurate capture of discussions.
- **Transcription:** The audio recordings were transcribed by a team of trained transcribers who were proficient in the local languages. The transcriptions were then reviewed by the moderators to ensure accuracy and completeness.
- **Procedure:** The FGDs were conducted using a semi-structured interview guide, which was developed to cover key topics related to menstrual hygiene, breastfeeding, and complementary feeding practices. The guide ensured consistency across discussions while allowing flexibility for participants to share their experiences freely. The discussions were conducted in local languages to promote effective communication and understanding.

G. Data collection

The qualitative survey involved conducting FGDs to gather information about the restrictions practiced by women. The FGDs served as a platform for open discussions and sharing of experiences among the participants.

- **Number of FGDs:** A total of 20 FGDs were conducted, with each FGD covering different communities within the 20 selected blocks.
- **Duration of Each FGD:** Each FGD lasted approximately 90-120 minutes to allow for in-depth discussion on each topic.
- **Sessions:** Each group underwent three separate sessions to cover the three main aspects of the study: menstrual hygiene, breastfeeding, and complementary feeding. This ensured that each aspect was thoroughly explored without overwhelming the participants in a single session.
- **Facilitation:** Trained researchers facilitated the FGDs using a semi-structured interview guide to ensure consistency across discussions.
- **Language:** The FGDs were conducted in local languages to promote effective communication and understanding, ensuring participants could express their views and experiences freely.
- **Moderation and Recording:** The discussions were moderated by trained researchers, and each session was

audio-recorded. The recordings were transcribed by a team of trained transcribers proficient in the local languages, with the transcriptions reviewed by the moderators for accuracy.

H. Data analysis

The responses obtained from the FGDs were transcribed and analyzed using thematic analysis. The responses provided by the participants were carefully reviewed, and common themes and patterns related to menstrual hygiene, breastfeeding, and complementary feeding were identified. These themes and patterns were organized and categorized to provide a comprehensive overview of the various restrictions and practices observed by women in the reproductive age group.

I. Ethical considerations

Ethical approval was obtained from the Institutional Ethical Committee of Indira Gandhi Medical College, Shimla, prior to conducting the survey. Informed consent was obtained from all participants, ensuring their voluntary participation and confidentiality. Participants were assured that their identities would remain anonymous, and the data collected would be used solely for research purposes. The study provided several benefits to the participants: it raised awareness and provided education on menstrual hygiene, breastfeeding, and complementary feeding practices, helping to dispel prevalent myths and misconceptions. It empowered women by enabling them to make informed decisions about their reproductive health. The FGDs also fostered a sense of community support, encouraging mutual aid and collective action for better health practices. Additionally, the insights gained from the FGDs were used to inform targeted interventions and policies aimed at improving reproductive health practices, which are expected to benefit the wider community by addressing specific needs and barriers identified during the discussions.

3. Results

Thematic analysis of the qualitative survey data revealed additional subthemes and corresponding verbatim quotes related to the restrictions practiced by women in the reproductive age group in Himachal Pradesh, focusing on menstrual hygiene, breastfeeding, and complementary feeding practices. These findings provide a more comprehensive understanding of the prevailing practices, beliefs, and challenges faced by women in the region.

A. Menstrual hygiene

In this survey, we found that most females had adequate knowledge regarding menstrual hygiene and its management. However, in a few areas, women still used cloths instead of sanitary pads, improperly disposed of their pads, and faced social and religious restrictions, especially concerning visiting temples and preparing food in the kitchen. In some pockets, myths and taboos regarding menstruation still prevailed in the community.

Theme: Menstrual Hygiene Practices

The theme of Menstrual Hygiene highlights the practices and challenges faced by women regarding menstrual hygiene management. The subthemes within this theme shed light on specific aspects such as the use of cloth, improper disposal, social and religious taboos, and myths and misconceptions. These findings emphasize the need for promoting the use of sanitary pads, educating women about proper disposal methods, addressing cultural beliefs, and dispelling harmful myths and misconceptions to ensure better menstrual hygiene and eliminate discriminatory practices.

Subtheme: Use of Cloth

In the majority of this hilly state, women utilize sanitary pads for managing menstruation. However, in specific areas, women continue to rely on cloth instead of sanitary pads. This practice underscores the importance of promoting the use of sanitary pads to enhance menstrual hygiene.

- Verbatim (26-year-old woman having one child): "Sanitary pads, aajkal sab pads hi use karte hain" (Nowadays, everyone uses sanitary pads).
- Verbatim: "Kapda use karte hain, dhote hain, dhoop mai sukate hain, press karte hain fir se reuse karte hain" (We use cloth, wash it, dry it in the sun, press it, and reuse it).

Subtheme: Improper Disposal of Menstrual Hygiene Products

Some women mentioned improper disposal of menstrual products, such as throwing pads in open areas. This finding emphasizes the importance of educating women about proper disposal methods to maintain cleanliness and prevent environmental pollution.

- Verbatim: "Some women mentioned improper disposal of menstrual products, such as throwing pads in open areas."
- Verbatim: "Pad use karte hain aur use jala dete hain" (We use pads and then burn them).
- Verbatim: "Hamne ek gadda khoda hai thoda dur usme daalte hain aur mitti se dak dete hain" (We have dug a pit a little far away, put them in it, and cover with soil).

Subtheme: Social and Religious Taboos

Participants reported social and religious restrictions associated with menstruation, including restrictions on visiting temples and preparing food in the kitchen. These taboos signify the need for addressing cultural beliefs and raising awareness to eliminate discriminatory practices.

- Verbatim: "Mandir to koi nahin jaata, 3-4 din tak baki iss area me koi perhej nahin" (No one goes to the temple for 3-4 days, but there are no other restrictions in this area).
- Verbatim: "Hanji alag room mein hi sote hai" (Yes, we sleep in a separate room).
- Verbatim: "Bas ye hi hai ki kitchen mein nahi jana, vrat nahi rakhna" (We just don't go to the kitchen or keep fasts).
- Verbatim: "Hamare mein to kitchen mein bhi nahi jaate. Sab kaam saas ko karna padta hai, achha hi hai, baithe

baithe milta hai sab” (In our place, we don’t even go to the kitchen. My mother-in-law has to do all the work, which is good, as we get everything while sitting).

Subtheme: Myths and Misconceptions

Myths and misconceptions related to menstruation were prevalent in some pockets of the community. These misconceptions need to be addressed through accurate information and education to dispel harmful beliefs and practices.

- Verbatim: "Maasik dharma ke time Khatta khana jaise nimbu, achaar, doodh, dahi, lassi, aadi nahi khate" (During menstruation, we don’t eat sour foods like lemons, pickles, milk, yogurt, buttermilk, etc.).
- Verbatim: "Log kehte hain ki maasik dharma ke samay baal nhi dhone chahiye, bindi vagarah nhi lagani chahiye" (People say that during menstruation, we should not wash hair or wear a bindi).

Subtheme: Adequate Menstrual Hygiene Practices

This subtheme highlights the practices and behaviors related to maintaining adequate menstrual hygiene, including the use of sanitary pads, proper disposal methods, seeking medical advice, and sharing experiences with close family members or friends. Promoting these practices can contribute to better menstrual hygiene management and the overall well-being of women.

- Verbatim: "Pad use karte hain aur use jala dete hain" (We use pads and then burn them).
- Verbatim: "Change to sab apne hisaab se karte hain, par mere ghar par bahu 3-4 ghante me change kar leti hai. Aajkal sabhi aware hain saaf safai ko lekar." (Everyone changes according to their needs, but in my house, my daughter-in-law changes every 3-4 hours. Nowadays, everyone is aware of cleanliness).
- Verbatim: "Hamne ek gadda khoda hai thoda dur usme daalte hain aur mitti se dak dete hain" (We have dug a pit a little far away, put them in it, and cover with soil).
- Verbatim: "Apni behan ya maa se share karte hoon" (I share with my sister or mother).
- Verbatim: "School mai books mai pada tha aur thoda apni friends se aur mummy ne bhi iske baare mai jankari di thi" (I read about it in school books, and also learned from my friends and mother).
- Verbatim: "Khoon jyada behne par, time pe period naa aane par, jaldi aa jaane ya der se aane par doctor ki salah lete hai" (When there is excessive bleeding, if periods are irregular, come early or late, we consult a doctor).

B. Breastfeeding

During the discussion in these FGDs, we found that the majority of the participants had sufficient understanding of the benefits and other aspects of breastfeeding. However, in some communities, misconceptions, taboos, and false beliefs regarding breastfeeding still persist, especially regarding formula milk or cow milk, expressed milk, and pre-lacteal feed.

Theme: Breastfeeding Practices and Beliefs

The theme of Breastfeeding focuses on the practices and beliefs related to breastfeeding among women. The sub-themes explore the awareness of breastfeeding benefits, alternative feeding methods, the duration of breastfeeding, and the issue of pre-lacteal feeds. These subthemes highlight the importance of promoting exclusive breastfeeding, dispelling myths about alternative feeding practices, emphasizing the recommended duration of breastfeeding, and discouraging the use of pre-lacteal feeds that can interfere with the establishment of breastfeeding.

Subtheme: Awareness of Benefits

Participants demonstrated sufficient knowledge about the benefits of breastfeeding, such as promoting infant growth, development, and overall well-being, acknowledging that breast milk is the ideal food for infants.

- Verbatim: "MAA ka dudh hi bache ko sahi khurak deta hai, Pet ke infection se bhi bachata hai, bacha jyada intelligent bhi hota hai" (Mother’s milk gives the right nutrition to the baby, protects from stomach infections, and makes the baby more intelligent).
- Verbatim: "Maa ke dudh ke to bahut laabh hain aur khaskar jo pehla gaada dudh hota hai vo to bahut hi labhkari hota hai, use bacche ki rog-pratirodhak khsmta badthi hai aur bacche ki growth bhi achi hoti hai" (There are many benefits of mother’s milk, especially the first thick milk, which increases the child’s immunity and growth).
- Verbatim: "Mansik star par Maa aur bache ke beech attachment ko badata hai" (It increases the attachment between the mother and child at the mental level).
- Verbatim: "Maa ke dudh ke to bahut fayde hai bcha swath hota hai, bche ki growth achhi hoti hai, bche ka dimaag theek bnta hai, bcha bimar km pdta hai" (There are many benefits of mother’s milk; the child remains healthy, grows well, has better mental development, and falls sick less often).
- Verbatim: "Haan g baccho ka shaaririk- mansik vikas bahut acha hota hai, bacche ki growth bahut achi hoti hai, kayi bimariyon se uski raksha hoti hai. Aur Maa ke liye bhi breast cancer, ovary cancer se bachaav hota hai aur sath hi next pregnancy ke liye bhi gap hota hai." (Yes, it greatly enhances the physical and mental development of children, protects them from many diseases, and also protects the mother from breast and ovarian cancer, and helps in spacing pregnancies).
- Verbatim: "Stanpaan krwane se bache aur maa ka lgav bdhta h aur kai prakar k cancer se maa ka bachav hota hai.maa ka dudh saaf hota h, ghr m billi k jutha krne ka darr nhi hota" (Breastfeeding increases the bond between the mother and child and protects the mother from various cancers. The mother’s milk is pure and there is no fear of it being contaminated by a cat at home).

Subtheme: Alternative Feeding Methods

Despite awareness of breastfeeding benefits, misconceptions and false beliefs regarding alternative feeding methods,

such as formula milk or cow milk, were present in some communities, highlighting the importance of promoting exclusive breastfeeding and dispelling myths.

- Verbatim: "Agar kisi lady ko dudh na aaye to cow milk ya formula milk dete hai, Nahi to sirf maa ka dudh dete hai." (If a lady does not have milk, they give cow milk or formula milk. Otherwise, only mother's milk is given).
- Verbatim: "Vaise to nahi dete, but agar maa ko kahi bahar jana pde to cow milk de dete hai." (Generally, it is not given, but if the mother has to go out, they give cow milk).
- Verbatim: "Kai baar jb bcha jyada rota hai to hm pani de dete hai" (Sometimes, when the baby cries a lot, we give water).
- Verbatim: "Agar MAA ka dudh kisi kaaran nahi nikalta to sunte hain ki powder feed ke liye bolte hain" (If the mother's milk does not come for some reason, they suggest powder feed).

Subtheme: Duration of Breastfeeding

Participants recognized the importance of breastfeeding for at least the first six months, with some mentioning the continuation of breastfeeding for up to two years, indicating the need for promoting the recommended duration of exclusive breastfeeding.

- Verbatim: "Janam ke turant baad hi 1-2 ghanto mein, aur kam se kam 2 saal tak to bacche ko dudh pilana chahiye" (Breastfeeding should start immediately after birth within 1-2 hours and continue for at least two years).
- Verbatim: "MAA ka dudh, Sirf Maa ka dudh, Bache ko 6 mahine tak sirf MAA ka dudh hi dena chahiye." (Only mother's milk, for the first six months, only mother's milk should be given to the baby).
- Verbatim: "6 mahine tak to sirf maa ka hi dudh pilana chahiye, paani to 6 mahine ke baad hi dena chahiye use pehle koi bhi opra khana ya paani nahi dena chahiye kyunki bacche ko bimari ka khtra bhi ho sakta hai isse" (For the first six months, only mother's milk should be given. Water should be given only after six months, as giving any other food or water before can cause illness to the baby).
- Verbatim: "Jaise hi maa theek mehsoos kre or jab tak bacha pina chahe, tb tk de." (As soon as the mother feels well and as long as the baby wants to drink, it should be given).
- Verbatim: "Jab tak dudh nikalta rahe tab tak ya Jab tak bacha pina chahe de dena chahiye" (As long as milk comes or as long as the baby wants to drink, it should be given).
- Verbatim: "Jyada se jyada samay tak, aur kam se kam 2 saal tak" (For the maximum time possible and at least up to two years).

Subtheme: Pre-Lacteal Feeds

Some participants mentioned the practice of giving pre-lacteal feeds to infants, such as honey or water, before initi-

ating breastfeeding, emphasizing the importance of discouraging such practices.

- Verbatim: "Han ji ghutti deni chahiye" (Yes, ghutti (a traditional herbal mixture) should be given).
- Verbatim: "Pehle shayad shehad dete the par abhi MAA ka dudh hi pilate hain, shehad dena ho to baad me bhi de sakte hain" (Earlier, honey was given, but now only mother's milk is given. If honey is to be given, it can be given later).

Subtheme: Factors Influencing Breastfeeding Practices

This subtheme focuses on the various factors that influence breastfeeding practices, including the belief in exclusive breastfeeding for the first six months, initiating breastfeeding immediately after delivery, and the importance of avoiding bottle feeding due to hygiene concerns. It highlights the participants' understanding of the significance of exclusive breastfeeding and the influence of cultural and healthcare factors on breastfeeding practices.

- Verbatim: "Maa ka dudh start karne se pahle pandit se puchte hai..kai baar bache ke liye maa ka dudh thik nhi hota..bache aur maa dono ke liye kharab hota hota hai..iss liye ek baar pandit se jarur puchna chahiye" (Before starting breastfeeding, they consult a priest as sometimes the mother's milk is not suitable for the baby, which can be harmful to both mother and child. Therefore, they always consult a priest).
- Verbatim: "Mujhe ni lagta kuch aur dena ki jarurat hai, pehle bache ke time mene mahine baad thoda paani dena shuru kiya tha, par iss baar nahin diya, sabne bola 6 mahine tak sirf or sirf MAA kaa dudh dena hai" (I don't think anything else needs to be given. For my first child, I started giving water after a month, but this time I didn't give it. Everyone said only mother's milk should be given for six months).
- Verbatim: "Bahut pehle is pratha ka prachlan tha ki bacche ko janm ke turant baad ghutti pila di jati thi prantu ab aisa kuch bhi nahi dete hain." (Long ago, it was a tradition to give ghutti to the baby immediately after birth, but now nothing like that is given).
- Verbatim: "Apna dudh nikalkar rakh jate hain freez mai aur 6 ghante ke ander bacche ko dedete hain" (They express their milk, store it in the fridge, and give it to the baby within six hours).
- Verbatim: "Nhi bottle se nhi peelana chahiye, katori chamach se pila skte h agr kbhij rurtat pdti hai." (No, the baby should not be fed with a bottle. If needed, the baby can be fed with a bowl and spoon).
- Verbatim: "Kyuki bottle ki safai ache se nhi kr paate hai jisse bacha bimar ho skta hai" (Because the bottle cannot be cleaned properly, which can make the baby sick).
- Verbatim: "Agr bache ko bottle se peelana hi pde dudh toh bottle ko har baar dudh peelane se pehle ache se ubalana chahiye." (If the baby must be fed with a bottle, the bottle should be boiled well every time before feeding).

C. Complementary Feeding

The majority of the participants in these FGDs had a sufficient understanding of the various aspects of complementary feeding when we talked about it, but in some communities, myths, taboos, and false beliefs still persist, particularly when it comes to consistency, non-vegetarian food, commercial preparation like cerelac, and junk or fast foods.

Theme: Introduction and Practices of Complementary Feeding

The theme of Complementary Feeding addresses the introduction and practices of complementary foods for infants. The subthemes discuss aspects such as the introduction of complementary foods, the consistency of foods, non-vegetarian food beliefs, commercially prepared products, and the consumption of junk or fast foods. These subthemes underscore the importance of timely and appropriate introduction of complementary foods, maintaining suitable consistency, addressing cultural beliefs about non-vegetarian foods, promoting locally available and nutritious options over commercial products, and educating parents about the adverse effects of unhealthy food choices.

Subtheme: Introduction of Complementary Foods

Participants had sufficient knowledge about introducing complementary foods around six months of age, mentioning suitable options such as mashed fruits, soups, dal (lentils), khichdi (a mixture of rice and lentils), and kheer (rice pudding).

- Verbatim: "Ye 6 mahine poore hone ke baad dia jata hai kyun ki jaise jaise baccha badta hai uski growth hoti hai aur use aur ahaar ki jarurat hot hai jo ki keval maa ke dudh se poori nahi ho sakti to ye dena chahiye" (This is given after six months because as the baby grows, its nutritional needs increase, which cannot be fulfilled by mother's milk alone).
- Verbatim: "6 mahine k baad bche ko thoda thoda khane ko de dena chahiye, jisme daal ka pani, soup dena chahiye." (After six months, the baby should be given small amounts of food, including lentil water and soup).
- Verbatim: "Ji ye 6 mahine poore hone ke baad dete hai... hlka khana khichdi daliya, uprla dudh, kheer wgerah." (Yes, this is given after six months... light food like khichdi, porridge, upper milk, and kheer).
- Verbatim: "6 mahine k baad bcho ko pahle masli daal dete hai taki bcho ki jaruratpuri ho ske" (After six months, the baby is first given mashed lentils to meet its needs).

Subtheme: Constituents and Consistency of Foods

Participants emphasized the need for appropriate constituents and consistency of complementary foods, gradually transitioning from semi-solid to solid foods as the child grows, ensuring moderately thick and easily digestible textures.

- Verbatim: "Ptl hona chahiye, hlka jo bcha pcha paye, na jyada gada na jyada pani, ptli khichdi jaisa" (It should be thin and light so the baby can digest it, not too thick or too watery, like thin khichdi).

- Verbatim: "Sir khana esa hona chahiye jo anaaj ki matra jyada ho aur thoda soup bhi ho taaki ghutne mein asani ho." (The food should have a higher grain content and some soup so that it is easy to swallow).
- Verbatim: "Daal ka pani, soup, fruit male huye, daal, khichdi, daliya, kheer, halwa, bche ko sb khilana chahiye" (Lentil water, soup, mashed fruits, lentils, khichdi, porridge, kheer, halwa, everything should be fed to the baby).
- Verbatim: "Isme mesh kela bhi de skte hai, suji ka halwa, khher, dalia, mesh roti aur daal, khichdi aur humare yhan meat, macchi ye sab nahi dete, haan hum bacche ke khane mai ghee, makkhan jaraur mila dete hain." (Mashed banana, suji halwa, kheer, porridge, mashed bread and lentils, khichdi, and in our place, we don't give meat or fish, but we do add ghee and butter to the baby's food).
- Verbatim: "Ye na to jyada sakhat ho jisse bacche ke gale mai adhe aur na jyada patla, sehad ke jaise hona chahiye." (It should not be too hard so that it sticks in the baby's throat, nor too thin, it should be like honey).
- Verbatim: "3-4 baar aur na jyada gaada aur naa jyada patla" (3-4 times a day and not too thick or too thin).
- Verbatim: "Mujhe lagta hai shuru me thoda patla de dena chahiye, 1-2 mahine me jab aadat pad jaye to gaada bhojan de dena chahiya" (I think it should be given thin at first, and after 1-2 months when the baby gets used to it, solid food should be given).
- Verbatim: "Sir khana esa hona chahiye jo anaaj ki matra jyada ho aur thoda soup bhi ho taaki ghutne mein asani ho" (The food should have a higher grain content and some soup so that it is easy to swallow).
- Verbatim: "Sir Semisolid hona chahiye kyonki bacha dudh bhi peeta hai aur uska pet chota bhi hota hai" (It should be semi-solid because the baby also drinks milk and has a small stomach).

Subtheme: Non-Vegetarian Foods

In some communities, beliefs and practices discouraged the inclusion of non-vegetarian foods in the child's diet, highlighting the importance of addressing cultural beliefs and providing accurate information about a balanced diet.

- Verbatim: "Hamare yaha nonveg dene se pahle pandit to puchte hai...agar kundli mein suit karta hai tabhi dete hai" (In our place, before giving non-veg, they consult a priest. If it suits the horoscope, then only it is given).
- Verbatim: "Non-veg agar 5 saal se pahle de de to dimag ka vikas ruk jata hai, bacha mandbudhi ho jata aur padhai mein kamjor bhi hota hai." (If non-veg is given before five years, mental development stops, the child becomes dull and weak in studies).

Subtheme: Commercially Prepared Products

Participants mentioned the use of commercially prepared products, such as cerelac, for complementary feeding, indicating the need to promote the use of locally available, fresh, and nutritious foods instead of relying solely on commercial

products.

- Verbatim: "Humare yaha cerelac bhi dete hai" (In our place, cerelac is also given).
- Verbatim: "Cerelac jaldi ban jata hai, suvidhajanak hain aur bache ko behtar poshan deta hai" (Cerelac is made quickly, is convenient, and provides better nutrition to the baby).

Subtheme: Junk or Fast Foods

Some participants mentioned that their children consumed junk or fast foods, emphasizing the importance of educating parents about the adverse effects of such foods on child health and promoting healthier dietary practices.

- Verbatim: "Meri ldkhi khati to hai but km khati hai kbhi 1 chamach kbhi 2 but bahar k chips wgerah kha leti hai" (My daughter eats, but she eats less, sometimes one spoon, sometimes two, but she eats chips and other outside food).
- Verbatim: "Mera bcha khana khata hai but sirf meetha khata hai na roti khata hai na sbji khata hai" (My child eats, but only sweets, not bread or vegetables).
- Verbatim: "Bche junk food khana jyada pasand karte hai jaise ki chips kurkure." (Children prefer eating junk food like chips and kurkure).

Overall, the thematic analysis revealed the persistence of certain restrictions, myths, and misconceptions related to menstrual hygiene, breastfeeding, and complementary feeding practices among women in the reproductive age group in Himachal Pradesh. These findings highlight the importance of targeted interventions, education, and awareness campaigns to address these barriers and promote positive practices. By addressing these challenges, policymakers, healthcare providers, and community stakeholders can contribute to improving the reproductive health and overall well-being of women in the state.

4. Discussion

The present study aimed to assess the prevailing restrictions practiced by women of reproductive age in Himachal Pradesh, focusing on menstrual hygiene, breastfeeding, and complementary feeding. The findings shed light on the various practices, beliefs, and challenges faced by women in these domains, providing valuable insights for developing targeted interventions and promoting positive practices. The discussion will compare these findings with existing literature and highlight the implications for policy, healthcare providers, and community stakeholders.

Menstrual hygiene practices emerged as a significant concern in certain areas of Himachal Pradesh. Despite the majority of women using sanitary pads, the continued use of cloth for managing menstruation was observed in specific pockets which is associated with increased risk of infection and inadequate menstrual hygiene management. This finding aligns with studies conducted in other regions of India, where the use of cloth remains prevalent due to cultural beliefs, limited access to sanitary pads, and affordability issues [12]–[16]. The improper disposal of menstrual hygiene products,

such as throwing pads in open areas, was also reported. This emphasizes the importance of educating women about proper disposal methods to maintain cleanliness and prevent environmental pollution. Furthermore, the study reveals the existence of social and religious taboos associated with menstruation, including restrictions on visiting temples and preparing food in the kitchen. These findings resonate with previous studies conducted in various parts of India, where cultural beliefs and practices surrounding menstruation are prevalent [17]–[20]. These findings underscore the need to address cultural beliefs and raise awareness to eliminate discriminatory practices. The persistence of other myths and taboos surrounding menstruation further highlights the need for targeted education and awareness campaigns to dispel harmful beliefs and practices.

Breastfeeding practices were generally positive, with participants demonstrating awareness of the benefits of breastfeeding and the importance of exclusive breastfeeding for the first six months including its role in promoting infant growth and development. However, misconceptions and false beliefs regarding alternative feeding methods, such as formula milk or cow milk, were still present in some communities. These findings resonate with studies conducted in other parts of India, highlighting the persistent influence of cultural norms and societal pressures on infant feeding practices [21]–[24]. To promote exclusive breastfeeding, interventions should focus on dispelling myths, providing accurate information about the benefits of breastfeeding, and supporting mothers in overcoming challenges such as perceived insufficient milk supply.

Complementary feeding practices showed a good level of understanding among the participants, with awareness of the appropriate age for introduction and the types of foods to be included. However, certain communities still held beliefs discouraging the inclusion of non-vegetarian foods in the child's diet. The study also revealed the use of commercially prepared products, such as cerelac, for complementary feeding. Similar findings have been reported in previous studies, highlighting the reliance on commercial products and the importance of promoting traditional, homemade foods for complementary feeding [5], [10], [25], [26]. Cultural beliefs and practices influenced these complementary feeding practices. These findings align with studies conducted in other regions of India, emphasizing the need to promote locally available and nutritious foods, maintain appropriate consistency, and address cultural beliefs regarding non-vegetarian foods [27], [28]. Interventions should focus on providing guidance to caregivers on appropriate complementary feeding practices, emphasizing the importance of homemade foods, and discouraging the reliance on commercially prepared products for promoting optimal infant nutrition.

Hence, the present study adds to the existing literature by providing insights into the specific restrictions and challenges faced by women in Himachal Pradesh. It is evident that cultural beliefs, social norms, and lack of awareness contribute to the persistence of these practices and barriers to

adopting healthier behaviors. Therefore, interventions should be tailored to address these contextual factors and promote evidence-based practices.

To address the challenges identified in this study, various interventions can be implemented. Educational programs targeting women, families, and communities can help dispel myths and misconceptions surrounding menstrual hygiene, breastfeeding, and complementary feeding. Health workers, including Anganwadi workers and ASHAs, play a crucial role in providing accurate information and counseling to women and families. Community-based awareness campaigns can help promote positive practices, encourage behavioral change and empowers women to make informed decisions regarding their reproductive health.

5. Limitations

It is important to note some limitations of this study. The findings are based on self-reported data and may be subject to social desirability bias. The study was conducted in specific blocks of Himachal Pradesh, and the findings may not be generalizable to the entire state or other regions. Future research could include a larger sample size and a more diverse population to obtain a more comprehensive understanding of the restrictions and practices in Himachal Pradesh.

6. Conclusion

This qualitative survey offers critical insights into the reproductive health practices of women in Himachal Pradesh, specifically focusing on menstrual hygiene, breastfeeding, and complementary feeding. The findings reveal that while there is a general awareness of healthy practices, significant barriers such as the use of cloth for menstruation, improper disposal methods, and social and religious taboos persist. Misconceptions about breastfeeding and the use of alternative feeding methods, along with myths surrounding complementary feeding, also continue to challenge optimal health behaviors. Addressing these issues requires comprehensive, targeted interventions, robust education programs, and community-driven awareness campaigns. By dispelling myths, promoting accurate information, and fostering supportive environments, policymakers, healthcare providers, and community stakeholders can significantly enhance the reproductive health and overall well-being of women in Himachal Pradesh, leading to more informed and empowered health choices.

Conflict of interest

The authors declare no conflict of interests. All authors read and approved final version of the paper.

Authors Contribution

All authors contributed equally in this paper.

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