Barriers to accessing menstrual healthcare for adolescent girls in Nepal: A mixed-methods study of patient, community, and provider perspectives

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Abstract

Despite the high prevalence and substantial negative impact of dysmenorrhea, heavy menstrual bleeding, and other menstrual symptoms, girls rarely seek help or receive healthcare. This study explores the barriers adolescent girls in Nepal face in accessing healthcare for menstrual symptoms.

Data were collected through focus-group-discussions and in-depth-interviews with adolescent girls, healthcare workers, teachers, and traditional healers in two districts of Nepal. They were analysed thematically using Levesque's access to healthcare framework.

Key barriers identified include stigma and social norms, lack of knowledge, symptom minimization, and concerns about future fertility. Girls rarely seek help for dysmenorrhea even if the pain is "unbearable"; this is exacerbated by beliefs that medication may affect future fertility. Both pain and heavy bleeding are minimised, dismissed and normalised. Healthcare workers, while theoretically willing to help, frequently shared these beliefs and were limited by inadequate training, lack of diagnostic tools, and not being allowed to use contraceptives as treatment options. Poor menstrual literacy and comprehensive sexuality education limited the ability of girls, parents, teachers, and healthcare workers themselves to recognise normal menstruation versus symptoms that warranted further investigation.

Addressing these barriers requires a holistic approach integrating menstrual, sexual, and reproductive healthcare, with a focus on improving both health literacy and the healthcare system.

Background

The need for treatment of menstrual disorders and symptoms is substantial, with one study of low- and middle-income countries (LMICs) estimating that prevalence of heavy menstrual bleeding ranges from 38% to 77% (Sinharoy et al., 2023) and prevalence of dysmenorrhea may exceed 70% (Armour et al., 2019). Menstrual pain and disorders, such as dysmenorrhea and heavy menstrual bleeding, can significantly impact the daily lives of adolescent girls, affecting their education, mental health, and social participation (Hennegan et al., 2019). In Nepal menstrual pain is a common cause of school absenteeism (Amery et al., 2023). Despite this, many girls do not seek medical care for these issues, often viewing such symptoms as normal or unavoidable. This normalization is compounded by stigma, lack of knowledge, and limited healthcare options, particularly in LMICs like Nepal.

Against this background menstruation has historically received little attention in global health programs and sexual and reproductive health research (Wilson et al., 2021). Although the Guttmacher-Lancet Commission recognized menstruation as part of reproductive health (Starrs et al., 2018), it failed to encompass crucial elements of menstrual health, neglecting menstruation's significant (and inextricable) impact on fertility and sexual activity amongst other things (Higgins & Smith, 2016). Menstruation also remains on the periphery of family planning discourses, with the two fields mainly siloed, even though modern contraceptives are often a recommended first line of treatment for most menstrual disorders. Indeed, in a low resource setting, contraception may be one of the only treatment options available (Wilson et al., 2021).

Menstruation in Nepal is surrounded by stigma and restrictions, the most severe of which is *chhaupadi* (seclusion during menstruation), which has been criminalized since 2018 (Joshi, 2022). While the Government of Nepal has long recognized the issue of *chhaupadi* both policy and research generally fail to fully acknowledge the full range of menstrual taboos and their impacts (Amery et al., 2023). Over 80% of 15-19 year old girls practice some form of menstrual restriction, but less than 10% practice *chhaupadi* (NDHS 2022). Menstrual policy in Nepal has also focussed on provision of products, with a sanitary pad distribution scheme providing girls in state school with disposable pads; this policy aims to keep girls in school by reducing menstrual absenteeism, but our previous research showed that pain is by far the most common cause of girls missing school during their periods (Amery et al., 2023).

While a few studies in Nepal have looked at adolescent girls' access to sexual and reproductive health (SRH) services, none have looked at access to healthcare in relation to menstrual health specifically. Adolescent girls in Nepal experience high rates of early marriage and pressure to conceive quickly, along with significant gender-based violence (Lafontan et al., 2024). They have many SRH challenges, but menstruation is generally the first and one that they must contend with frequently – according to the latest DHS around 90% of 15-19 year old girls have menstruated in the last 6 weeks. Previous research has noted that access to SRH services more broadly is impeded by a "gendered ideology and moral framework" concerning sexual behaviour (Pandey et al., 2019) along with widespread social stigma (Mattebo et al., 2019). This is despite the longstanding introduction of adolescent friendly health services (Pandey et al., 2019), which were meant to improve SRH service access. Studies have also described how a lack of education and information impeded help seeking (Shrestha & Wærdahl, 2020; Mattebo et al., 2019; Regmi et al., 2010). All of this is compounded by poor quality comprehensive sexuality education meaning that adolescents often lack the health literacy needed to seek help (Lafontan et al., 2024).

This paper aims to explore the barriers adolescent girls in Nepal face in accessing healthcare for menstrual disorders. It also aims to understand how menstrual health interacts with other

components of SRH in terms of access to healthcare. We argue that stigma and isolation, lack of knowledge, social norms around symptom minimisation and normalisation, and fears regarding future fertility most significantly hinder adolescents' ability to seek and receive care for menstrual disorders. Added to these are institutional healthcare barriers around lack of training, access to diagnostic procedures, and lack of medications. Finally, we argue that this supports the burgeoning evidence that if menstrual healthcare is properly integrated with SRH services then this will facilitate engagement and access throughout the lifecourse (Hoppes et al., 2023).

Theoretical Framework

We utilise the conceptual framework by Levesque et al. (2013) who define access to healthcare as "the opportunity to identify healthcare needs, to seek healthcare services, to reach, to obtain or use health care services, and to actually have the need for services fulfilled". This framework is composed of five dimensions of accessibility that include both individual level factors and process level factors relating to healthcare systems and services (see Figure 1). We chose the Levesque framework as it accounts for both the individual and health systems perspective on access, while allowing for flexibility (Cu et al., 2021).

Data and Methods

The data used in this paper was collected as part of the MeJARa project, which is a novel mixed-methods study about menstrual justice in Nepal and Guatemala. It is a collaboration between the University of Bath (UK), CREHPA (Nepal) and 32 Volcanes (Guatemala), funded by UKRI. The overarching aim of this project is to improve women's and girls' menstrual experiences and reduce negative impacts of menstruation and related practices, through co-designing and rigorously testing an intervention.

Overview of Collected Data

In total we conducted **29 focus group discussions** and **58 in-depth interviews**. These consisted of:

Focus group discussions

- 13 with adolescent girls (7 in Kaski, 6 in Surkhet)
- 8 with adult men (4 with men aged 21-40 years old, 4 with men aged 41-64 years old, equally split between districts)
- 8 with adult women (4 with women aged 21-40 years old, 4 with women aged 41-64 years old, equally split between districts)

In-depth interviews

- 16 interviews with school teachers (8 in Kaski, 8 in Surkhet)
- 16 interviews with healthcare workers (8 in Kaski, 8 in Surkhet)
- 10 interviews with faith healers/religious leaders (5 in Kaski, 5 in Surkhet)
- 16 interviews with community leaders (8 in Kaski, 8 in Surkhet)

Qualitative data was collected using focus group discussions and in-depth interviews. Guides were developed following an earlier pilot study in Dailekh district (Amery et al., 2023). Guides were pre-tested and ethical approval obtained from the NHRC (Nepal Health Research Council) and University of Bath. Data collection took place in December 2023-January 2024. Data was collected in two districts located in two different provinces: Surkhet district in Karnali province, and Kaski district in Gandaki province. All interviews were audio recorded and transcribed verbatim in the original language. These transcriptions were then translated into English for analysis.

Data were analysed thematically using a combination of inductive and deductive approaches. Initial familiarisation with the data informed the development of a coding framework that included both emergent themes and predefined domains based on Levesque et al.'s (2013) access to healthcare framework. The five dimensions of accessibility (approachability, acceptability, availability and accommodation, affordability, and appropriateness) and the five corresponding abilities (to perceive, seek, reach, pay, and engage) were used to structure the coding and interpretation. The adapted framework is illustrated in Figure 1.

Coding was conducted in NVivo 14. To ensure rigour and consistency, transcripts were double-coded, and discrepancies were resolved through discussion. Regular team meetings were held to refine themes, discuss interpretation, and ensure analytic coherence. The framework facilitated analysis of barriers and facilitators across multiple levels, from individual knowledge and beliefs to health system constraints and provider practices.

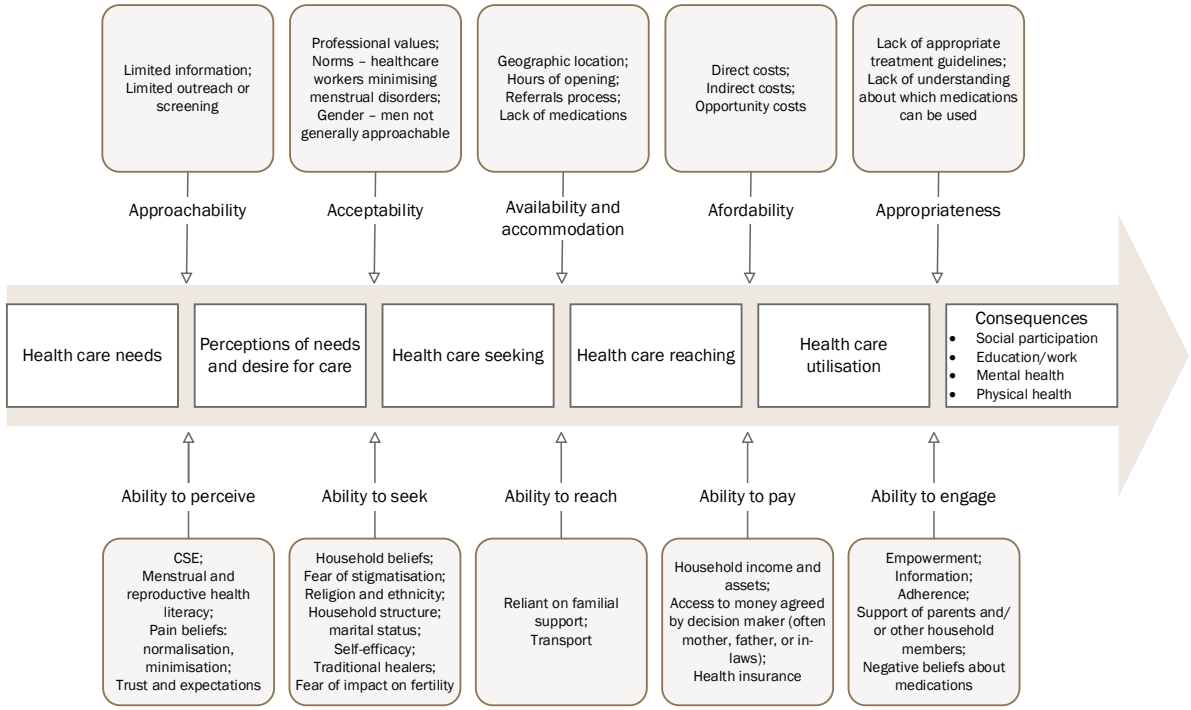

Figure 1: Conceptual framework for the access of adolescent girls to healthcare for menstrual pain and disorders in Nepal . Adapted from Levesque's conceptual framework of access to health care. Creative Commons Attribution License: CC BY 2.0

Results

Thematic analysis of interviews and focus group discussions revealed a complex range of barriers and facilitators shaping access to healthcare for menstrual symptoms and disorders. While important structural limitations exist within the health system, some of the most significant barriers actually stem from socio-cultural norms, stigma, and a lack of knowledge about the menstrual cycle, and misinformation about pain killers and other potential treatments. Findings are presented below using the five dimensions of Levesque's framework described above.

i. Recognising Menstrual Symptoms as Health Issues (Approachability & Ability to Perceive)

We find that while there are important structural factors relating to the health system, some of the most pervasive barriers to access exist around the ability to perceive and the ability to seek. The normalisation and minimisation of menstrual symptoms, especially pain is so pervasive that it is rare for adolescent girls to even perceive that they might need healthcare. Adolescent girls, adult caregivers, and healthcare workers all agreed that menstrual pain is just a normal part of life. This internalised normalisation results in girls rarely considering their symptoms to be serious enough to warrant professional healthcare.

> *"Women don't seek help for menstrual pain, possibly because [they] consider it a normal occurrence." (Healthcare worker)*

"They say, "everyone goes through it, you will be fine in a day or two". They say it's just a minor issue" (Adolescent girl)

Education within families is often limited, focusing more on restrictions than on understanding bodily processes or identifying symptoms that require attention.

Most of our mothers are illiterate so it would be better to some extent if they are educated regarding these things. (Adolescent girl)

Schools are supposed to provide comprehensive sexuality education (CSE), but girls report that teachers are under-trained and uncomfortable with the subject, thus often reinforcing wider stigma. Furthermore, teachers reinforced the normalisation of menstrual symptoms and did not know when girls should consult a medical professional. Teachers generally knew that they did not have sufficient knowledge and suggested that the topic should be broadened and taught by a specialist such as a school nurse or healthcare worker. Male teachers, in particular, did not want to teach the topic.

"And teachers themselves feel uneasy. They might even stop discussing the topic." (Adolescent girl)

This information is not available in the curriculum and doesn't contain any information on how to reduce menstrual pain." (Teacher)

Some healthcare workers observed that girls would only open up about menstrual problems if prompted. This suggests that better outreach and proactive screening could improve approachability of services and help girls perceive their symptoms as legitimate.

"They don't talk openly but they start sharing their problems once I begin the conversation. They tell they are having menstrual pain and have talked about having heavy bleeding … They don't openly talk by themselves. They only tell us when we ask them." (Healthcare worker, Surkhet)

ii. Norms, Stigma, and Gate Keepers (Acceptability & Ability to Seek)

Even when girls perceive a problem, they are still constrained by social norms that render menstrual pain an inappropriate or shameful reason to seek care. Seeking help for pain was seen as less acceptable than for heavy bleeding.

"They rather hide their pain than come here. They won't see us for their pain." (Healthcare worker, Surkhet)

Married women were perceived to have more freedom to seek care than adolescent girls.

"They usually open up easily regarding [heavy] menstrual bleeding. Although adolescent girls cannot speak so openly, the women easily open up." (Healthcare worker, Kaski)

Girls rarely seek help. According to both healthcare workers and adolescent girls, they would not consider seeking healthcare unless the pain was so severe as to be intolerable e.g. causing them to pass out.

"They tell us to only take medicine when the menstrual pain becomes unbearable. They tell us to cope with the pain as much as we can. They also say that consuming medicine too much could affect our fertility." (Adolescent girl)

Even if girls perceive that they need healthcare, the attitudes of those surrounding them tend to minimise and normalise any struggles. Seeking help was often seen as disruptive and unnecessary by family members and teachers – challenging the received wisdom that pain is "normal". Girls report that people get frustrated with them if they mention their menstrual symptoms and so they generally choose not to talk about them except with each other:

"They always say "Your stomach always keeps hurting". They react annoyed and frustrated from it." (Adolescent girl)

There is a clear culture of silence and lack of knowledge surrounding menstruation and girls don't know what is and isn't normal, which again results in them frequently failing to realise that their symptoms warrant help. Even the healthcare workers did not agree about whether menstrual disorders could be considered a health problem. Some thought that pain during menstruation was normal and could never be considered a health issue. Heavy menstrual bleeding was generally more likely to be considered a health issue albeit one which could be solved with improved menstrual products.

Widespread misinformation about the role of medicine and painkillers led to fear of healthcare seeking and suspicion of medicines. It also led to anxiety for girls who did not know what to believe as they were also concerned that their menstrual symptoms (especially pain) might indicate infertility or another health problem despite the widespread normalisation. Many of the misbeliefs about medication centred on fertility, with girls concerned that medication might cause infertility or that it might cause their future babies to be born disabled. These misbeliefs were also shared by many other people in the community – mothers, teachers, and even healthcare workers. Given the centrality of reproduction to women and girls position in society it is not surprising that this conflicting information about fertility were a cause of widespread anxiety.

"We avoid consuming medicines as much as we can because it is said that they reduce our capacity to give births in the future." (Adolescent girl)

An unusual factor influencing the ability to seek in this context was the role of traditional healers, who were sometimes approached before healthcare workers. They can act as a gateway to formal healthcare but this is dependent on the traditional healer, with some being extremely dismissive of formal medicine, while others were keen to explain their role in referring women and girls on, and a third group choosing not to engage in the issue at all.

"I do as far as my knowledge goes. I refer them to hospitals if that does not work. We cannot turn them away when they seek us. Many traditional healers exorcise them like something possessed them or ask for chicken or goat sacrifices" (Traditional Healer, Surkhet)

There was also disagreement about the extent to which menstrual symptoms might be the result of karma/past sins, with some traditional healers saying that "it is the outcome of past sins" and that they "recite prayers and perform rituals to heal them". Healers who professed a belief in menstrual symptoms being a result of karma also talked about past successes treating women:

"Many women have recovered after I gave them chicken's blood and cow's ghee to eat." (Traditional Healer, Kaski)

Some traditional healers told us about referring people onto the hospital if they could not help, and in some cases they told us that they would not help with such problems at all and would send

women straight to get help from "the hospital". It is not clear the extent to which they were telling us what they thought we wanted to hear. It is also important to consider that more progressive traditional healers were more likely to be prepared to be interviewed. In some cases

> *"They want me to heal them with my prayers and rituals… My Guru can scan the entire body including our brain, nerves, kidneys, and liver, and tell me the problems women are experiencing. After identifying the problem, I tell women to visit a clinic to do an X-ray. I also tell them that I am not a doctor and cannot give medicine" (Traditional Healer, Kaski)*

> *"I do as far as my knowledge goes. I refer them to hospitals if that does not work. We cannot turn them away when they seek us. Many traditional healers exorcise them like something possessed them or ask for chicken or goat sacrifices" (Traditional Healer, Surkhet)*

iii. Navigating Barriers to Services (Availability & Ability to Reach)

Health system limitations constrain even those who want to seek care. Healthcare workers described challenges related to availability and accommodation, including limited facility opening hours, lack of adolescent-specific services, and absence of clear referral pathways. Stockouts of medication and lack of access to diagnostic tools were also common. Girls in remote areas may face long travel distances, a lack of privacy in facilities, and no support to travel. In many cases, family attitudes further limit girls' ability to reach care.

Girls' ability to physically reach care was contingent on family support, mobility, and logistical constraints. Girls reported being unable to travel alone, particularly during menstruation, or lacking permission to visit health facilities. Without familial support girls struggled to access healthcare. Indeed, girls frequently reported having to complete more physical chores during their periods as they frequently weren't allowed in the kitchen, and that this exacerbated pain and heavy bleeding.

> *"If there is no support from the family, it can prevent participation." (Teacher)*

Many healthcare workers said that they were keen to help, but said that girls often hide their pain; they also said that families were often unsupportive and in some cases actively prevented women and girls seeking healthcare for menstrual issues, especially pain. Even the healthcare workers were often dismissive of menstrual pain saying that girls were "attention seeking" or that menstrual pain is "normal" so if they have discounted other problems (e.g. appendicitis) then counselling is provided but not medication. Healthcare workers were keen to provide self-help options for girls experiencing pain; these included hot water bottles, drinking hot water, nutritious food, and getting enough rest. In some cases medication, further investigations, or referrals to more specialist services might be carried out if these self-help methods were not sufficient to control the pain; however, this was not common. Even when referrals were provided, they were not always taken up due to cost, difficulty of travel, family attitudes, and home responsibilities.

iv. Direct and Indirect Costs and Financial Gatekeepers (Affordability & Ability to Pay)

The cost of utilising services was mentioned by healthcare workers. Adolescent girls did not often discuss this barrier, though they did discuss their lack of resources in relation to other menstrual choices (such as purchasing menstrual products).

Healthcare workers in Surkhet frequently talked about how people did not utilise referrals due to financial constraints, as the cost of transportation and being away from home could be high,

especially for those in more remote areas where the hospital is far. They mentioned that this was an issue for those with a "lower socioeconomic status", but they also mentioned that it was a particular problem for those where family members had migrated to India. Some healthcare workers even mentioned that they had used money from their own pockets to cover costs or negotiated delayed payment for patients.

> *It appears to be a financial issue; individuals may lack sufficient funds to travel…Sometimes, they need to cover expenses for food and lodging during their stay. Nothing comes without a cost, and they must carry money with them. (Healthcare worker, Surkhet)*

The opportunity cost of women and girls missing their chores and responsibilities at home was also mentioned, though less frequently than financial constraints (possibly because those who had gained referrals had already overcome some barriers related to family attitudes). Nonetheless, family members were sometimes not prepared to let them forego their responsibilities in order to travel and get further tests or see a gynaecologist.

v. Misinformation, Provider Knowledge, and Treatment Options (Appropriateness & Ability to Engage)

Treatment options are limited, even when the drugs are available. Contraceptives are a recommended first line treatment for dysmenorrhea, especially the combined oral contraceptive pill (Hoppes et al., 2023). Contraceptives are also widely available in Nepal, but healthcare workers were generally unaware that these were a potential treatment option, despite saying that they would explain the menstrual impacts of contraceptives for family planning purposes. Even when healthcare workers wanted to provide contraceptives to treat menstrual problems, they said that they were not allowed to provide these to unmarried girls. In some cases healthcare workers had incorrect beliefs about contraceptives, reflecting the negative beliefs about medication of the girls and wider community.

> *"It might affect fertility later. That's one reason. So, we don't believe it's necessary to make these methods accessible." (Healthcare worker, Kaski)*

Again, fear of medications and the ramifications of using them were found to be widespread. These views also reflected broader gaps in training and treatment guidelines, particularly around the potential use of oral contraceptives for dysmenorrhea. While some providers were motivated to help, they lacked the tools, protocols, and institutional support to provide comprehensive care. These limitations compromised both the appropriateness of care and girls' ability to engage meaningfully with the system.

Girls reported that they had been told using medication could affect their future health, their future fertility, and even the health of any future children. Girls found it tricky to navigate the competing claims that medication might cause harm, but the pain itself might also be causing harm. When even healthcare professionals lack the knowledge and training to correct such misinformation it is unsurprising that few girls receive appropriate healthcare for their menstrual symptoms.

Discussion and Conclusion

This study provides insights into the multiple barriers experienced by adolescent girls in trying to access healthcare services for menstrual health and how this is inextricably linked with wider SRH. Key themes that arose include lack of knowledge among not only adolescent girls, but also

healthcare workers, teachers, and parents; stigma and isolation surrounding menstruation and reproductive health; the influence of religion; and widespread minimisation and normalisation of menstrual disorders. From a systems perspective, many healthcare workers held the same misbeliefs about menstrual disorders as the wider community and did not think them worthy of healthcare intervention beyond advice about basic self-help; that said some healthcare workers were extremely keen to help and were frustrated by their lack of training and access to diagnostic tests or drugs.

Mapping the elements that we found within our analysis onto Levesque's framework (Figure 1) we find that to access are concentrated around the ability to perceive and ability to seek from the perspective of the adolescent girls. This is the result of the strong social norms that minimise, normalise, and dismiss menstrual and SRH concerns of girls (and women more broadly). Our findings align with previous studies looking at access to SRH services for adolescent girls in Nepal, which found that stigma and social norms were some of the most important barriers to care (Pandey et al., 2019; Mattebo et al,. 2019; Shrestha et al., 2020). Previous studies have often not considered menstrual health as part of SRH though and the stigma surrounding menstruation is distinct from that surrounding sexual activity amongst adolescents in Nepal. Where sexual activity is prohibited and taboo for adolescents, menstruation is seen simultaneously as extremely impure and so normal that even severe symptoms do not warrant healthcare. Menstruation is inextricably associated with reproduction and fertility. Rumours abounded that menstrual pain might indicate future infertility, or conversely it might indicate the reproductive system "warming up". There were also common beliefs that pharmacological treatments of menstrual pain might cause future infertility, while many believed that menstrual disorders would be solved by getting pregnant. This web of misbeliefs illustrates the need to properly integrate menstrual, sexual and reproductive healthcare together.

From a healthcare systems perspective approachability and acceptability were particularly key, though appropriateness was also an issue. Appropriateness was rarely mentioned by adolescent girls as so few had even sought healthcare, whereas healthcare workers were more likely to discuss this aspect or reveal it indirectly through their lack of knowledge and training; this was in contrast to a review of previous studies implementing the Levesque framework where it was concluded that availability, affordability, and especially appropriateness were focussed on over other dimensions (Cu et al., 2021).

Our findings also highlight the role of traditional healers as both a barrier and potential gateway to formal healthcare. In the absence of clear, trusted, and adolescent-friendly pathways, girls' families often turn first to traditional healers who are more accessible, familiar, and spiritually aligned with their beliefs. Traditional healers occupy a critical position in the health system ecology, particularly in rural or underserved areas. Within Levesque's framework, their presence intersects with both the approachability of services and users' ability to reach them — not necessarily in geographic terms (though this was sometimes the case), but in terms of social proximity and perceived legitimacy. While some traditional healers referred girls to clinics, others reinforced harmful beliefs about karma, spiritual causation, or the ineffectiveness of modern medical intervention. Inconsistent referral practices, coupled with the widespread belief that menstrual disorders are non-medical or even morally rooted, further delayed or diverted care. Moreover, as more progressive healers were more willing to be interviewed, our data may underrepresent the extent to which traditional practices inhibit access to effective treatment. These findings point to the importance of engaging with pluralistic providers in health system planning and adolescent SRH outreach — not only to improve referral pathways, but also to reshape understanding about what constitutes a legitimate health concern.

In conclusion, this study highlights the critical need for a more integrated approach to addressing menstrual, sexual, and reproductive healthcare for adolescent girls in Nepal. Stigma, social norms, and widespread misconceptions about menstrual disorders significantly hinder girls' ability to perceive the need for care and seek appropriate services. These barriers are compounded by a lack of knowledge and resources within the healthcare system itself, limiting the quality of care available. Addressing these challenges requires not only better training for healthcare workers but also comprehensive education for adolescents, parents, teachers and communities to dismantle stigma and harmful beliefs around menstruation and reproduction.

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