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Beyond the Menstrual Shed: Exploring Caste/Ethnic and Religious Complexities of Menstrual Practices in Far-West Nepal

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ABSTRACT
Throughout Nepal, women and girls follow a range of menstrual practices, many of which leave them vulnerable to negative health outcomes. We applied a participatory visual research method called Collaborative Filmmaking to acquire a nuanced and sensory understanding of menstrual practices and motivations in Kanchanpur, Nepal. The study also provides insight regarding menstrual practice complexities across different castes/ethnicities and religions. Results show an array of menstrual practices related to cleansing, cooking, touching, worshipping, and sleeping. Participants' menstrual practices varied by caste/ethnic and religious background and were motivated by religious and spiritual beliefs, family tradition, negative consequences, and social pressure.

KEYWORDS
Nepal; menstruation; chhaupadi; caste/ethnicity; visual methods; collaborative methods; participatory research

Menstrual health, a growing global public health issue, refers to social, political, structural, educational, and environmental factors that affect experiences of menstruation and impact health. Though menstruation is a natural physiological process and its occurrence is generally a sign of good health, it can be a difficult experience for millions around the world (Geertz, Iyer, Kasen, Mazzola, & Peterson, 2016). Challenges associated with menstruation include the lack of access to affordable absorbent materials (Kuhlmann, Henry, & Wall, 2017), shortage of improved sanitation facilities to manage menstruation hygienically with privacy (Kuhlmann et al., 2017; Sommer & Sahin, 2013; Sommer, Schmitt, & Clatworthy, 2017), and missed educational opportunities during menstruation, though evidence regarding the extent to which this occurs and consequences of missing school is mixed (House, Mahon, & Cavill, 2012; Mason et al., 2013). Menstrual health challenges can also be social, cultural, or psychological in nature. Societies around the world attribute different meanings to menstruation, which are manifested in a variety of cultural practices. In many cultures menstruation is shrouded in silence, myths, taboos, and stigma that can lead to unsafe practices (Ali & Rizvi, 2010; Garg, Sharma, & Sahay, 2001; Hennegan & Montgomery, 2016; Human Rights Watch, 2017; Kuhlmann et al., 2017; Mason et al., 2013; Sommer, Ackatia-Armah, Connolly, & Smiles, 2015). As a result, menstruation is often associated with fear (Crawford, Menger, & Kaufman, 2014), loneliness (Lama & Kamaraj, 2015), stress (Crawford et al., 2014; Karki et al., 2017), inferiority (Action Works Nepal, 2012), disgust, shame (Dasgupta & Sarkar, 2008), and embarrassment (WaterAid, Water Supply and Sanitation Collaborative Council, & Unilever, 2013).

Menstruation in Nepal

Over 90% of women and girls in Nepal experience at least one restriction during menstruation, according to a study across nine districts of the country in all three geographical belts (Baumann, Lhaki, & Burke, 2019). The majority of women in Nepal do not engage in religious activities (89%), more than half do not touch the kitchen (60%), and many sleep separately (34%) during menstruation (Baumann et al., 2019). Furthermore, many avoid touching people and objects, such as their water source (24%), men and boys (27%), or plants or animals (27%) (Baumann et al., 2019).
Menstrual restrictions entrenched in the lives of Nepali women and girls of reproductive age are largely adopted to avoid transferring impurities that are associated with polluted menstrual blood to people and objects or places (Amatya, Ghimire, Callahan, Baral, & Poudel, 2018; Bennett, 2002; Cameron, 1998; Crawford et al., 2014). Therefore, women and girls are often separated from shared spaces and events in order to contain pollution (Bennett, 2002). In fact, the terms often used for menstruation in Nepali directly translate to "no touching" (na chhune) or "moving away" (para sarne) (Bennett, 2002). Such notions of pollution and uncleanliness are not unique to Nepal and have been witnessed throughout history in numerous different religious and cultural contexts. In her classic work on cultural concepts of dirt and pollution, Mary Douglas (1966, p. 2) described dirt as disorder: "Dirt offends against order. Eliminating it is not a negative movement, but a positive effort to organize the environment." In Nepal, when menstrual rituals and rites are followed, it is believed by many that the "dirty" or "polluted" can be managed and, in doing so, social order can be maintained. Creating such order protects people and communities from perceived danger or negative consequences, including natural disasters and disease (Bennett, 2002; Cameron, 1998).

Chhaupadi

One of the most extreme menstrual practices followed in Nepal is called chhaupadi, which banishes women and girls during menstruation and their post-natal period due to their perceived impurity (Kadariya & Aro, 2015; Ranabhat et al., 2015). Chhaupadi is a centuries-old, culturally and religiously-rooted practice in which Hindu women and girls are excluded from community and family life during menstruation (Amatya et al., 2018; Nepal Fertility Care Center [NFCC], 2015; Ranabhat et al., 2015; Weiss-Wolf, 2017). The word chhaupadi stems from the Raute dialect in far-west Nepal (Kadariya & Aro, 2015) and is comprised of two different root words. Chhau is defined as "untouchable, unclean or impure" and padi refers to "being or becoming" (Nepal Fertility Care Center, 2015). Thus, chhaupadi broadly refers to the "state of being untouchable/unclean" (Bist, 2014), a belief that originated in Hindu religious mythology (Cameron, 1998). Here we utilize the term chhaupadi to refer specifically to menstrual exile.

The prevalence of chhaupadi is as high as 71.2% in the mid-western mountains of Nepal among women between the ages of 15 and 49 (Central Bureau of Statistics & UNICEF, 2014). The practice is widespread in the mid- and far-west, where overall development and gender equality are the lowest in the country (Kadariya & Aro, 2015). In these regions, livelihood opportunities are limited, food security is low, and infrastructure is poor (Kadariya & Aro, 2015).

Those who follow the practice typically sleep in small huts or animal sheds (chhau goths) during menstruation and often for the first 11 days following childbirth (Kadariya & Aro, 2015; Karki et al., 2017; Kunwar, 2013; Lama & Kamaraj, 2015; Sharma, Teiklingen, Hundley, Angell, & Simkhada, 2016). The chhau goths tend to be

unhygienic, unsafe, and lack basic necessities such as water and sanitation facilities (Amatya et al., 2018; Nepal Fertility Care Center, 2015). The menstrual shed is typically one room constructed from wood, mud, straw, or stone (Cousins, 2019) with a small entryway and no windows (Nepal Fertility Care Center, 2015). It is common to light small fires to warm the sheds given the frigid temperatures in the harsh Himalayan climate, which puts those sleeping in the sheds at risk for asphyxiation due to the lack of ventilation. Most sheds do not have lockable doors to protect women from intruders, and the structures fail to protect women and girls from attacks by wild animals, such as poisonous snakes. From a public health perspective, practicing chhaupadi can leave women and girls in Nepal vulnerable to numerous negative health outcomes and even death (Kadariya & Aro, 2015; Karki et al., 2017; Ranabhat et al., 2015; United Nations Resident & Humanitarian Coordinator's Office [UNRCHC], 2011). However, it must also be noted that not all experiences of chhaupadi are negative. In a study by NFCC (2015), a group of girls in Bajura district reported that they liked staying in the chhau goths, as they had an opportunity to rest and enjoy the company of their friends.
In 2005, Nepal's Supreme Court banned chhaupadi, although efforts to enforce the law were limited until recently (Amatya et al., 2018; Gurung, 2019; Kadariya & Aro, 2015; Karki et al., 2017). In August 2017 (implementation started in August 2018), the Nepal Parliament passed Criminal Code 2074, which criminalized chhaupadi with a fine of 3,000 rupees (approximately $25 USD) and/or a 3-month jail sentence for anyone who forced a woman or girl to follow the practice (Amatya et al., 2018; Kathmandu Post, 2017; Preiss, 2017; Republica, 2017). The code also states that women should not be kept in a shed during the post-natal period, nor should they be subject to any other discriminatory behavior (Save the Children, 2018). This legislation is widely viewed as a positive step toward ensuring safety and well-being for Nepali women and girls, but strategies for enforcement are missing (Gurung, 2019).

Caste/Ethnicity and Religion in Nepal

The caste system in Nepal is a complex, hierarchical, social stratification system based on ritual impurity that widely impacts people's everyday lives of the people (Cameron, 1998; Grossman-Thompson, 2017). As described by Cameron (1998), who has worked extensively on caste in Nepal, "caste is best understood as having two different aspects – one oriented toward the systematic classifying and ranking of people and the other constituting everyday transactions and relations" (p. 11). One's caste is inherited at birth and determines status and social responsibilities.

In Nepal, there are 125 caste/ethnic groups, which are typically categorized into a few broad categories. At the top of the caste system are Brahman (historically priests) and Chhetri (historically warriors and rulers) groups (Kohrt et al., 2009). Falling in the middle are indigenous ethnic groups, who are generally Tibeto-Burman speaking and follow Buddhist and animist religions (Kohrt, 2009; World Bank & DFID, 2006). At the bottom of the caste system are Dalits (or 'untouchables') (Kohrt et al., 2009). In terms of population, Chhetri is the largest caste/ethnic group in Nepal and makes up 16.6% of the total population, followed by Brahman-Hill (12.2%), Magar (7.1%), Tharu (6.6%), Tamang (5.8%), Newar (5.0%), Kami (4.8%), Muslim (4.4%), Yadav (4.0%), and Rai (2.3%) (Central Bureau of Statistics Nepal, 2012).

Although caste categories appear to be neatly defined at first glance, the categories are controversial, fluid, and redefined through practice (Brunson, 2016). For example, significant complexities exist in the caste system, which are largely linked to the numerous ethnic minority groups (e.g., Magar, Tharu, Gurung, Rai, Sherpa) that fall at different

places in the hierarchy according to ritual impurity; these groups do not typically practice Hinduism, yet are still bound by the Hindu caste system that prevails in the largely Hindu nation (Grossman-Thompson, 2017).

Furthermore, the complex intersection of caste, class, and gender creates different structural limits that ultimately shape the health experiences of women in Nepal (Brunson, 2013). As such, examining this intersection of factors is critical in understanding health behaviors throughout the country (Brunson, 2013). Gender norms play out differently if one is high or low caste, and, when it comes to class, Brunson found that poor high-caste women do not follow the same rules as wealthy high-caste women (Brunson, 2013). Although we focus here on the exploration of menstrual practice complexities by caste/ethnic and religious groups, we recognize that isolating caste/ethnicity from other demographic variables (e.g., class, rurality, residence, education) is challenging. Further exploration of how caste intersects with other demographic variables and impacts menstrual practices is needed.

Nepal has a long history of rule by high-caste Hindus (Brahman and Chhetri) (Jaspal, 2011; Kohrt, 2009; UNFPA, UNICEF, & UNRCO, 2019). Generally, high-caste Brahman and Chhetri groups control politics, the education system, and businesses; the middle ranking Janajatis, Muslims, and the low-caste Dalits have been socially, economically, and politically marginalized (Kainee, 2017; Kohrt et al., 2009; World Bank, & DFID, 2006; UNFPA et al., 2019). Although discrimination based on caste has been illegal since 1963 (Cameron, 1998), inequalities in health and educational outcomes continue (Bennett, Dahal, & Govindasamy, 2008; Gellner, 2007; Levine, 1987; World Bank & DFID, 2005), and the National Planning Commission has called for more studies that explore disparities associated with caste/ethnicity (Bennett et al., 2008).
Only a few studies have explored how caste/ethnic differences directly relate to health outcomes (Bennett et al., 2008). In one study on caste/ethnicity and health in Nepal, the researchers noted that research exploring caste/ethnic differences is often circumvented to "avoid controversy about social categories" (Bennett et al., 2008, p. 1). Yet there appears to be a general consensus among the government, communities, and civil society that studying caste/ethnicity is required to develop comprehensive and inclusive policies and programs.

Nepal is also religiously diverse. The majority of the population follow Hinduism (81.3%), followed by Buddhism (9.0%), Islam (4.4%), Kirat (3.1%), and Christianity (1.4%) (Central Bureau of Statistics Nepal, 2012). Many Nepalis observe religious syncretism, or the blending of two or more religious belief systems; thus they engage in religious traditions from Hinduism, Buddhism, and traditional folk practices (U.S. Department of State, 2017).

Caste/Ethnicity and Religion in Menstrual Health Research

When it comes to menstrual practices specifically and the role of caste/ethnicity, the authors of a 2017 scoping review suggested that "Hindu ethnic groups such as Brahman, Chhetri, and Newar, have more restrictions than Janajatis (ethnic Nepalis)" (Karki et al., 2017, p. 7). In a quantitative study of 679 women and girls aged 13-51 years from the most populous castes/ethnic groups of Nepal, caste/ethnicity was shown to be a significant predictor of menstrual knowledge and practices, such that Janajati have the poorest menstrual knowledge and practices (Baumann et al., 2019). In addition to caste/ethnicity, residence was also significant in predicting menstrual practices (Baumann et al., 2019). These findings align with those of the Nepal Human

Development Index study, in which significant variations were found within caste/ethnic clusters, especially by location (e.g., hill vs. tarai1), which suggests that caste/ethnic inequalities may be further complicated by a geographic dimension, which requires further investigation (Government of Nepal & UNDP, 2014).

Fundamental Cause Theory

Fundamental Cause Theory (FCT) provided a guiding framework for our exploration of the relationship between caste/ethnicity and religion and menstrual practices. Link and Phelan (1995) argued for the need to direct attention to fundamental social causes, or more distal foundations of disease (e.g., socio-economic status, race, social support) in order to have the greatest impact on health policy reform. In much of the existing research on menstrual health in Nepal, proximal causes, such as individuals' menstrual knowledge or shortage of resources to manage menstruation (e.g., access to latrines, menstrual products) have been the focus of research and interventions. However, according to FCT, it is critical to move beyond proximal causes to consider fundamental causes because they involve people's access to resources (e.g., knowledge, money, power, prestige, social connectedness), which can be used to avoid risks or to promote health (Hatzenbuehler, Phelan, & Link, 2013; Link & Phelan, 1995; Schulz, Williams, Israel, & Lempert, 2002). In the present study, we explored caste/ethnicity and religious background as fundamental causes that influence people's beliefs and motivations for following menstrual practices.

Study Aims

This in-depth study was designed to build upon the current understanding of menstruation in Nepal by examining subtleties and complexities of a range of menstrual practices from a diverse group of adolescent girls. A nuanced understanding of how these restrictions and practices differ by caste/ethnic and religious background is largely missing from the literature. Although research to understand the specific practice of chhaupadi as it relates to menstruation is on the rise, less is known about the full range of menstrual practices and restrictions that affect the health and well-being of women and girls throughout the country. Furthermore, whereas it is well known that Hindus closely follow menstrual restrictions, including chhaupadi (Bist, 2014), no known studies have explored menstrual practices among Christians in Nepal; our study includes Christians' narratives. We embraced a community-engaged approach to gather emic perspectives using Collaborative Filmmaking, and had two specific aims:

1. Describe in detail nuances in menstrual practices among a caste/ethnically and religiously diverse group of adolescent girls in far-west Nepal, and
2. Explain motivations for following these menstrual practices.

A deeper understanding of the nature of menstrual practices and beliefs across caste/ethnic groups and religious divides will allow researchers, practitioners, and policymakers to better understand the root causes of menstrual health disparities and to learn from the experiences of individuals to design appropriate long-term solutions.

Method

Participants

Collaborative Filmmaking was implemented in the lowland district of Kanchanpur, far-west Nepal with seven girls aged 16-18 years, who were of various caste/ethnic and religious backgrounds. This district was selected due to diversity in caste/ethnicity and religion and the presence of the traditional practice of chhaupadi (Central Bureau of Statistics & UNICEF, 2015).

According to census data, the selected Village Development Committee (VDC)

(unnamed to protect the privacy of participants) population by caste/ethnicity is as follows: Chhetri (32%), Brahmin (19%), Tharu (19%) (classified as Janajati), Kami (7%) (classified as Dalit), and other (21%) (Central Bureau of Statistics Nepal, 2012). Participants were recruited with support from our community partner, NFCC, using purpose sampling in the village for maximum diversity. The research team ensured that all main caste/ethnic groups present in the village were represented. The participants came from four caste/ethnic groups (Dalit, Janajati, Chhetri, and Brahman) and two religious backgrounds (Hindu and Christian) (Table 1). The mean age of participants was 17.6 years. Participants were eligible for the study if they had reached menarche and experienced monthly menstrual cycles. Although a sample size of seven limits the generalizability of the study findings, the results of the films and associated interviews and discussions provide rich, detailed information about variation in the girls' experiences that could be achieved only via a small sample. Furthermore, the participatory and embodied research method allowed for subtleties in a range of menstrual practices to be captured and analyzed with participants' input.

Collaborative Filmmaking

Collaborative Filmmaking is a participatory, visual research method for collecting and analyzing data and disseminating findings using digital filmmaking (Baumann, 2019; Baumann, Lhaki, & Burke, 2020). It has been used to explore public health issues in a participatory and community-driven mode (Baumann, Merante, Folb, & Burke, 2019). Participants are collaborators throughout the research, and are trained to collect data through filmmaking, analyze their own films, and disseminate the findings through a community screening.

The six steps of Collaborative Filmmaking are as follows: (1) introduction, orientation, and training; (2) filmmaking/data collection; (3) film assembly and preparation for co-analysis sessions; (4) co-analysis sessions and group discussions; (5) public screening (optional depending on the interest of study participants), and (6) synthesis of findings for wider dissemination. A more detailed discussion regarding the implementation steps of Collaborative Filmmaking and associated ethical considerations for exploring other health topics is discussed elsewhere (Baumann, 2019; Baumann et al., 2020). A short film that describes the Collaborative Filmmaking research method can be found here: https://vimeo.com/239271038

Step 1. Participants were trained in basic filmmaking techniques, including vital ethical considerations (e.g., not filming others to ensure privacy is maintained, ability to withdraw from the study at any time, ability to remove any footage that makes participants feel uncomfortable), through interactive sessions, games, and exercises. The participants and the research team discussed the research topic in detail and brainstormed ideas for participants' films through storyboarding (note: a detailed explanation of the training session and associated steps is published elsewhere) (see Baumann 2019; Baumann et al., 2020). For this particular study, we explored the question: "What are the traditional menstrual practices in your family?"

Step 2. Participants were provided cameras to create films that address the research question. The participants engaged family members and friends to support them in

Table 1. Demographic Characteristics of Participants, Kanchanpur, Nepal, 2020

Participant	Age	Caste/Ethnicity	Religion	Education
1	18	Brahman	Hindu	11th grade
2	18	Dalit	Hindu	11th grade
3	18	Chhetri	Hindu	11th grade
4	18	Chhetri	Christian	11th grade
5	18	Dalit	Christian	11th grade
6	17	Janajati	Hindu	11th grade
7	16	Dalit	Hindu	10th grade

creating the films according to their own artistic vision and style (e.g., documentary, humor, drama, day-in-the-life); the researchers did not handle the cameras to avoid interfering with the participants' vision and storytelling. For this study, the participants were tasked with creating two films that highlighted their daily practices (1) during menstruation and (2) when not menstruating. We asked them to create two films in order to isolate everyday practices that the girls always follow vs. those that are distinct during menstruation.

Step 3. The research team assembled the footage created by the participants, subtitled the films, and created a list of clarifying questions based on what the filmmakers included in their films. Then the researchers conducted one-on-one co-analysis sessions with each participant. At the session, the research team watched the film with the participant on a laptop and discussed each segment of the film utilizing the SHOWED method,3 a Freirean root-cause questioning approach that is commonly used in other participatory methods, such as Photovoice (Wang & Redwood-Jones, 2001; Wang, Morrel-Samuels, Hutchison, Bell, & Pestronk, 2004). Finally, the researchers asked a series of clarifying questions about the films. The participants were then given the opportunity to remove any footage that they were not comfortable with and/or invited to reshoot segments of their film if desired.

Step 4. All of the participants attended a group discussion and film screening, which was held in a private room at a participant's home. At the session, each film was screened, followed by a discussion utilizing the SHOWED method. Each filmmaker was given the opportunity to clarify any discussion points raised by the other participants during the group discussion. The individual co-analysis sessions provided participants the opportunity to discuss the themes and issues of their films and artistic decisions in private, whereas the group discussion helped the researchers to gain a deeper understanding of the group's opinions and motivations and to discuss inconsistencies.

Step 5. The fifth step in Collaborative Filmmaking is an optional public screening. For this step, the research team met individually with each filmmaker to ask if she wanted to have her film included in a public screening. If the filmmakers agreed to screen their films publicly, they were given the freedom to design the event (e.g., where it should take place, who should be invited, the format of the event). The goals of the public screening were tri-fold: (1) to allow the filmmakers to design an event that celebrates their work in a format in which they felt comfortable, (2) to provide transparency in sharing the results of the study directly with the community and allow them to ask questions and share their opinions, and (3) to engage the broader community (or audience) in important discussions of, and raise awareness about, menstrual practices in the community.

Step 6. The final step of Collaborative Filmmaking is synthesizing the results through

qualitative thematic analysis. In the present study, three different types of data were collected and qualitatively coded to build a deeper understanding of the research topic: (1) collaborative films created by the participants, (2) transcriptions of co-analysis sessions and group discussions, and (3) the research team's field notes. Utilization of multiple forms of data is critical for development of a holistic understanding of Nepali girls' menstrual experiences, as we uncovered inconsistencies, as well as patterns, when we analyzed the different data types. For example, in one film, the participant filmed herself sleeping in a separate bed during menstruation; however, upon further discussion in the one-on-one co-analysis session, the participant expressed that it was important for her to show that she sleeps separately in her film to avoid disapproval from community members, even though her family does not always follow this practice.

This example demonstrates two critical points. The first is the importance of including multiple forms of data to untangle some of the complexities of participants' experiences. Second, it highlights one of the limitations of filmmaking, which, similar to other participatory and visual methods, may lead participants to create films that portray themselves in the best possible light. To lessen the impact of social desirability bias, the research team reminded participants throughout the study that they were not required to share their films outside of our study if they did not wish to do so, and the team worked to create a safe and collaborative working environment to increase participants' comfort. Finally, in anticipation that some participants might feel more comfortable discussing their films and research topic individually vs. as a group, we held both individual and group discussions as a part of the data collection process (Baumann et al., 2020).

Data were translated from Nepali to English by a team of three translators from NFCC. The principal investigator and two trained Master of Public Health student coders (who are also co-authors) watched all of the films, reviewed the translations, and developed a codebook to represent key themes from the data based on grounded theory (Glaser & Strauss, 1999). The codebook was revised at weekly team meetings, and each coder applied the codes to all the films and transcripts independently. Coders used a standardized Microsoft Excel template to assign codes and write memos. Discrepancies were identified and resolved by the principal investigator through discussions with the coders. Finally, codes were reviewed by NFCC to ensure that the contextual themes and language were culturally appropriate. Pseudonyms are used in the presentation of the results and in the films.

Procedure and Ethical Considerations

This study was conducted as a part of an academic-NGO partnership between the University of Pittsburgh's Graduate School of Public Health and NFCC. Parental written consent and youth assent were obtained for all participants before the commencement of research activities, and participants were given pseudonyms. Participants and their parents were informed that the study was exploring menstrual practices and beliefs in their community. An additional form was signed by participants and their parents at the end of the study (before the public screening) if they agreed to allow their footage to be screened publicly and associated images to be published in manuscripts, reports, exhibitions, and presentations. Participants were also trained on ethics and the importance of respecting the privacy of community members and fellow participants. They were advised to avoid filming people who were not enrolled in the study (Baumann et al., 2020).

Data collection was carried out in May and June 2017, when schools were in recess. Participants were compensated $70 USD, and the study team assisted participants in opening savings accounts to deposit their funds. The compensation amount and payment process were guided by NFCC based on their prior research experience in Nepal. Ethics approval was obtained from the University of Pittsburgh and the Nepal Health Research Council.

Results

Menstrual Practices in Far-West Nepal

The array of menstrual practices reported by the adolescent participants ranged from no specific menstrual practices (Christian Chhetri and Dalit), to few menstrual practices (Hindu Janajati), to many purity and exclusionary practices (Hindu Dalit, Brahmin, and Chhetri) (see Figure 1). The results are presented according to key menstrual practices, and both differences and similarities by caste/ethnicity and religion are discussed. Stills from participants' films are included to supplement the narrative. For an interactive, audio-visual experience of the data in full, visit: http://www.collaborativefilmmaking.com/2020/04/14/nepalyouth/

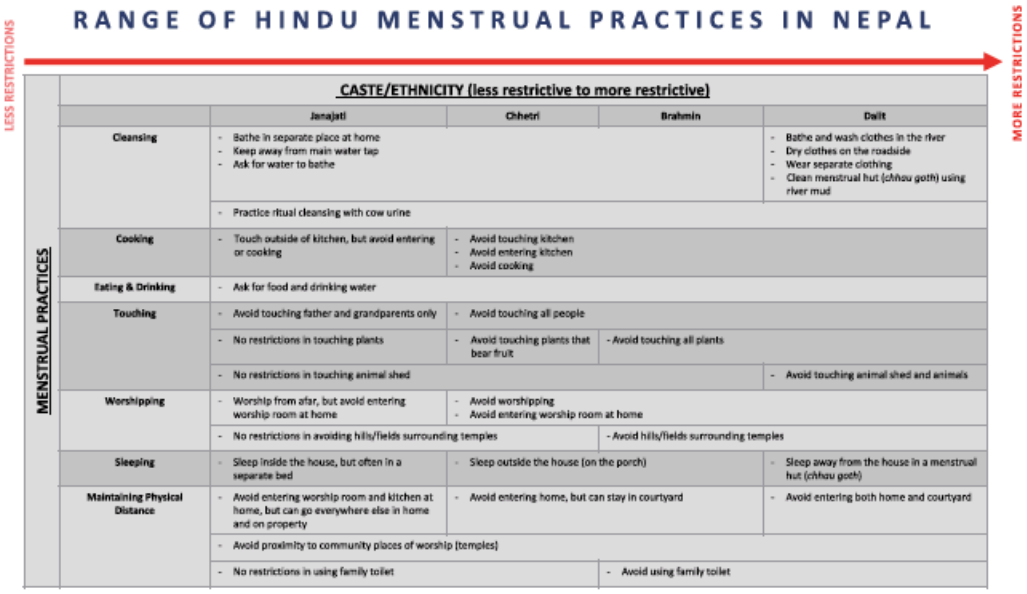

Figure 1. Range of Hindu Menstrual Practices, Kanchanpur, Nepal, 2020.

Bathing and cleansing

All of the Hindu participants reported altering their bathing practices during menstruation, but the degrees to which they did so varied by caste/ethnicity. For example, the Hindu Dalit girls followed the strictest bathing practices during their menstrual period. They were not allowed to enter their property for washing, and had to travel to the river to bathe (Figure 2): "[Menstruation] affects my life because when I menstruate, I go to the river to bathe, which is far away" (Maya, Hindu Dalit, age 18). The Hindu Dalit girls did have water taps installed on their properties outside their homes, which the girls reported using regularly when not menstruating; thus, class and affordability of a water source did not appear to be a key factor in why they adopted strict bathing and water gathering practices. The other three Hindu participants (Janajati, Chhetri, and

Brahman) were allowed to bathe on their property but were required to keep a distance from the main water tap, and thus had to request water from a family member or friend during their menstrual period. In contrast, the Christian girls (Dalit and Chhetri), regardless of caste/ethnic background, did not change their bathing practices and were able to use the water on their property while menstruating.

Figure 2. *Cleansing* (Hindu Dalit) - Muddy river where participant bathes and washes her clothing and bedding while on her period.
(Photos used with permission from the participants. Separate consent/permission forms were signed for all participants who agreed to have their images and films available publicly.)

Laundry was another cleansing-related practice that changed during menstruation for some participants. Following the most extreme practices, the Hindu Dalit girls washed their clothing and bedding in the river and hung their clothes to dry along the roadside during their menses, as they were not allowed to go near their homes during this time. When the Hindu Dalit girls were not menstruating, they washed and dried their laundry at home. The three other Hindu participants (Janajati, Chhetri, and Brahman) washed and dried their laundry at home during menstruation; however, they had to ask for water from others. The two Christian girls (Dalit and Chhetri) washed and dried their clothes at home as usual without restrictions.

For the Hindu Dalit girls who slept in a small shed (chhau goth) while menstruating, cleansing of the shed was also a key menstrual practice displayed and discussed in the films. The participants showed the process of cleansing the shed on the fourth day of their menstrual period using mud from the river mixed with bullock dung, which is believed to ward off snakes and insects and remove impurities (Figure 3). The two Christian girls also filmed actions of cleansing physical spaces, as they both showed themselves cleaning their homes during their menstrual period. However, they had different opinions about the work. For example, one girl said: "When we are menstruating, we do all the housework. I feel bad because we do not get any time to rest" (Asha, Christian Dalit, age 18); the other Christian girl expressed that she did not have a problem with conducting her regular household chores during her menstrual period.

Figure 3. *Cleansing* (Hindu Dalit) - Participant cleans the menstrual shed on the last day of her period for purification.

All of the Hindu girls (Brahman, Chhetri, Janajati and Dalit) practiced ritual cleansing by sprinkling and sipping cow urine to purify themselves on the last day of their menstrual period (Figure 4). "Our family members tell us that cows are a god and we should worship them. [Therefore] we will not be pure unless we drink their urine [after our menstrual period]" (Maya, Hindu Dalit, age 18). The participants also discussed the importance of sprinkling cow urine on people and objects if they accidentally touched them during their menstrual period: "If I touch my mom while menstruating, she will become sick and she may die. [But if] I take a bath, sprinkle the cow urine and drink [it], then she will be ok" (Sunita, Hindu Chhetri, age 18). If cow urine is unavailable, sprinkling water touched by an object made of gold, such as an earring or ring, is an alternative for ritual purification. One Christian girl confirmed that she has witnessed her friends practicing this tradition: "If Hindus touch the inside of the house [during their menstrual period], they have a tradition of sprinkling gold touched water and cow urine…they have also done this with us" (Mala, Christian Chhetri, age 18). Similarly, if a woman accidentally touches a water tap during her menstrual period, it is cleansed using cow urine. One Hindu girl shared the rationale for this practice: "While menstruating, someone accidentally touched that water tap and the water tap went dry. After putting cow urine [on it], water came again" (Sunita, Hindu Chhetri, age 18).

Figure 4. *Cleansing* (Hindu Dalit) – Participant sprinkles and sips cow urine to purify herself on the last day of her period.

Screenshot

Cooking

Though none of the Hindu girls were allowed to enter the kitchen or cook while menstruating, there were subtle differences in this practice between participants from different caste/ethnic backgrounds. In contrast, both Christian girls were allowed and even encouraged to cook during their menstrual period.

Among Hindus, the Dalit, Chhetri, and Brahman participants had the strictest cooking and kitchen use restrictions, as they were not allowed to go near the kitchen, enter the kitchen, or cook. On the other hand, the Hindu Janajati participant had slightly more freedom, as she could go near and touch the outside walls of the kitchen, but she was not allowed to enter. Some Hindu girls said it was nice to get a break from cooking: "For 5 days I don't cook. I think of it as a vacation" (Maya, Hindu Dalit, age 18). It should also be noted that for the Hindu girls in this study, the responsibility of cooking and bringing food to them during menstruation fell on other non-menstruating women. For example, they reported receiving food and drinking water from mothers, sisters, sisters-in-law, or female friends during their period. One Christian girl explained that, in her opinion, although it may seem like her Hindu friends are getting a break during their menstrual periods, they still have many responsibilities: "They only avoid the kitchen, but they [still] go to the forest and bring wood, and they work in the fields" (Mala, Christian Chhetri, age 18).

Both Christian girls cooked while menstruating, but they said that doing so can be challenging: "During menstruation I have physical pain, but I have to cook and sometimes I feel bad" (Mala, Christian Chhetri, age 18). Similarly, the other Christian girl said: "Sometimes I think my [Hindu] friends' rules are right [in that] at least they can rest during their period" (Asha, Christian Dalit, age 18).

Eating and drinking

All the Hindu girls had to receive food and drinking water from others during their menses, as they were not allowed to touch the water tap or enter the kitchen to make meals (Figure 5). The Christian participants were able to eat and drink as usual, regardless of menstrual status.

Figure 5. *Eating & Drinking* (Hindu Chhetri) - Participant asks for water from a friend while on her period.

As many girls were limited in their actions and movements during their menstrual period, they often had to ask for food and drinking water from others, such as friends and family members. One Hindu Dalit showed and described her experience waiting for water: "I cannot use this [water tap] while menstruating. Even if I feel thirsty, I cannot use [it] myself. I need to ask someone to get water for me. If there is no one around I need to wait, sometimes for 3–4 hours for someone to come give me water" (Maya, Hindu Dalit, age 18).

The films and associated discussions also revealed that Hindu Dalits followed the strictest traditions when it came to eating and drinking, and they used separate utensils when menstruating. One Dalit girl described her experience: "In our culture, water [is given] from afar, food from afar, comb from afar, everything we ask for they give us from afar [during our menstrual period]" (Kinjal, Hindu Dalit, age 16).

Touching

Most Hindu participants discussed restrictions regarding touching people, plants, animals, and related items during their menstrual period; the Brahman, Chhetri, and Dalit girls followed the strictest practices. The Christian girls had no touching restrictions during this time.

It was common to avoid touching family and friends, though the specific rules varied. All of the Hindu girls avoided touching family and friends to some degree. However, one Hindu Brahman girl explained that this rule is relaxed at school during menstruation as many students have to share the same bench: "While going to school and college we touch our friends. We sit on the same bench, so we have to touch them. We cannot make a separate bench and sit, so we [just] don't touch our mom and dad" (Srijana, Hindu Brahman, age 18). The Hindu Janajati girl had fewer restrictions when it came to touching others; she only had to avoid touching her father and grandparents. Unlike her Hindu Dalit, Chhetri, and Brahman friends, she discussed and showed herself touching friends and said: "When I am menstruating, I can engage with my friends and roam around with them" (Onsari, Hindu Janajati, age 17).

Menstrual restrictions related to touching plants are important practices woven throughout the films and discussions. Most of the Hindu girls (Brahmin, Chhetri, and Dalit) explained they were not allowed to touch plants during their menstrual period: "When I am menstruating, I do not touch plants. In our culture it is said that if we touch plants and trees that bear fruit, they will die. The fruit will become rotten, the leaves will fall, and the plants will become dehydrated" (Srijana, Hindu Brahman, age 18). Of all the Hindus, only the Janajati girl was allowed to touch plants during her menstrual period: "I touch this tree when I am menstruating. I touch this jackfruit. I touch all the things here. I touch all the trees" (Onsari, Hindu Janajati, age 17). She said she was relieved that her practices are more relaxed than others': "It is nice because I can touch the plants and I can get fresh air and can sit anywhere so I feel happy." Although her practices are less restrictive, she explained the pressure to practice certain menstrual restrictions: "When I am alone, I don't feel anything. But outside people say, 'they don't follow the practice, they touch the plants and all.' [So] in front of them we have to pretend like we are also practicing." Both of the Christian girls openly touched plants during their menstrual periods.

Worshipping

All Hindu girls had worship restrictions to some degree, whereas the Christian girls attended church as usual during their menstrual periods. Worship practices occurred at a variety of places including home prayer rooms, religious community spaces (i.e., temples and a church), and areas near places of worship.

Inside their homes, all Hindu girls had a prayer room, though their restrictions during menstruation subtly varied. Most of the Hindu girls (Brahman, Chhetri, and Dalit) were not allowed to enter their homes, hence they could not perform religious worship

activities: "Today I am menstruating so I cannot go inside and worship. I cannot go inside because there is the kitchen and prayer room. God does not allow us to worship when we are menstruating so I cannot go inside. In our culture if we go inside it will be a sin" (Sunita, Hindu Chhetri, age 18). In contrast, the Hindu Janajati girl was allowed to enter her home and worship while menstruating, although she was restricted in her movements and was not allowed to go near the worship room (puja kotha). As she stood at the edge of the prayer room, she explained that her practices are slightly different from the other Hindu participants: "I can worship from the heart, but I cannot go near the puja kotha. We don't need to follow as many restrictions as others. We can do meditation and worship god… I feel happy to worship" (Onsari, Hindu Janajati, age 17).

For all Hindu girls, avoiding community temples and shrines was vital. In addition, two Hindu girls (Brahman and Dalit) explained that, not only are temples to be avoided, but so are other holy places, such as the physical spaces surrounding temples: "(Standing 100 feet away from the temple and pointing across a field) There is a temple. I cannot go there. Also, I cannot walk in this field because in our culture we worship in that temple so we cannot go [in the field] when menstruating" (Srijana, Hindu Brahman, age 18) (Figure 6). One Hindu Dalit girl explained in her film: "There is a temple over there. We cannot touch this hill because the temple touches the hill" (Kinjal, Hindu Dalit, age 16).

Figure 6. *Worshipping* (Hindu Brahman) – Participant explains that she cannot enter this field while menstruating because there is a temple nearby.

By contrast, the two Christian girls were not only allowed to enter places of worship while menstruating, but they were expected by other Christians to do so. However, the participants explained that this can sometimes be challenging: "We do not have restrictions, so we go inside the church when we are menstruating. We feel awkward but we have to come. [Non-Christians] in the community ask us, 'Why are you roaming here and there while menstruating?' We feel afraid because people talk about us if we are menstruating and going to church. But what can we do? We have to come" (Asha, Christian Dalit, age 18). This finding illustrates that Christian girls may internalize the Hindu notion of pollution despite following Christian beliefs, or, as members of a religious minority, they may experience social pressure to conform to the majority's norms.

Sleeping

Sleeping practices during menstruation varied among the participants. All the Hindu participants altered their sleeping habits while menstruating in a range of ways, whereas the Christian participants did not change their sleeping habits.

The most extreme practices were followed by the two Hindu Dalit girls, who slept in a small shed (chhau goth) near a neighbor's home during their menses (Figure 3). One Hindu Dalit girl explained that sometimes many people crowd into the shed: "At times, 10-12 people sleep here when menstruating. When we are menstruating, we sit here, and all of us will go to the river to bathe. When we are not menstruating, we sleep in our houses" (Kinjal, Hindu Dalit, age 16). Though the other Hindu Dalit girl expressed a preference for sleeping closer to home or in a separate room inside her house, she explained that she does not suffer much: "There is a house near the shed [so] we don't feel afraid or in danger when we sleep here. We sleep peacefully" (Maya, Hindu Dalit, age 18).

The two high caste Brahman and Chhetri Hindu girls were allowed to sleep close to their houses, but not inside. In their films, they both showed how they slept on small benches on their porches (Figure 7): "I don't feel good sleeping outside. There are many insects that bite. I feel scared that something will fall on me. Our grandparents have also told us stories of a ghost that walks down the road at midnight. We feel so scared but what can we do? We have to sleep [here]" (Srijana, Hindu Brahman, age 18). In contrast to the experiences of the two Hindu Dalit girls who were allowed to sleep together in the shed, the Hindu Chhetri girl explained a different practice in her household. She sleeps on a bench outside the house during menstruation, and, if her sisters are menstruating at the same time, they sleep in the same place. However, if her mother is menstruating, she sleeps in a separate bed: "My mom says that if people on their period are in the same place, they will become even more impure. Therefore, she sleeps in a separate place and doesn't touch us [when we are all menstruating]" (Sunita, Hindu Chhetri, age 18).

Figure 7. *Sleeping* (Hindu Chhetri) – Participant explains that she sleeps on a bench on the porch of her house during her period.

The sleeping practices of the Hindu Janajati girl were less restrictive. In her film, she said that she sometimes sleeps in a separate bed located inside the entryway of her home during her menstrual period, but not always. In her co-analysis session, she discussed the community pressure to maintain these practices: "People here follow untouchability too much. If we say that we sleep in our usual bed when menstruating they will backstab us. They will say that we do not follow [untouchability rules] and they will not allow us to use their water tap" (Onsari, Hindu Janajati, age 17).

Maintaining physical distance

Maintaining physical distance between oneself and a place or object was commonly displayed in the films and discussed in the co-analysis sessions. Participants discussed keeping distance from kitchens, toilets, water taps, prayer rooms, homes, and temples. Whereas all Hindu participants maintained distance to various degrees, the Christian

participants did not follow such practices. For certain objects (e.g., water taps, toilets), only a minimum distance needed to be maintained, but for other places (e.g., temples, homes), a larger distance was required.

The most extreme example of maintaining physical distance was demonstrated in the films created by the two Hindu Dalit girls, who maintained a large distance between themselves and their homes during their menstrual period (Figure 8). They were not allowed to enter the courtyard of their homes, or use anything within the periphery of their homes, such as a toilet or water tap: "I should stay outside… if I go inside the gods' and goddesses' negative power will attack me, so I don't go inside" (Kinjal, Hindu Dalit, age 16). One girl also explained how difficult it is to maintain distance from her home and kitchen during festivals, which are central to community celebrations: "During Tihar4 everyone sits outside together and eats and enjoys the festival, but [while menstruating] we must sit separately at a different home, and I feel bad. Because of my period they separate me. While everyone else is eating together in the home, I am sitting separately and eating alone. [During this time] my eyes fill with tears" (Kinjal, Hindu Dalit, age 16). Following slightly less restrictive practices, the Hindu Chhetri and Brahman girls were allowed to stay in the courtyard and on the porch of their houses. They were not required to maintain physical distance from their homes, but they could not enter while menstruating.

Figure 8. *Maintaining Physical Distance* (Hindu Dalit) – Participant films her house from the boundary of her courtyard and explains that she is not allowed to enter the courtyard during her period.

The Hindu Janajati girl was free to enter her home except for the prayer room, whereas the Christian girls did not have any rules to follow regarding maintaining physical distance.

Another common practice was keeping distance from community places of worship. All Hindu girls (Brahmin, Chhetri, Janajati, and Dalit) maintained physical distance from temples during their menstrual period; the distance appeared to be at least 100 feet. When asked how far they have to stay from the temple, one explained: "We cannot go too close to the temple, it is good if more distance is kept" (Maya, Hindu Dalit, age 18). Two Hindu girls (Brahman, Dalit) discussed maintaining distance from toilets in their films. One expressed that using the same toilet as her elders was a problem because she is polluted during her menstrual period. She also explained the potential negative effects of following this restriction: "I cannot go inside the toilet when I am menstruating. This has affected me because if we do not use the toilet then the environment will be polluted. If the environment is polluted, then we may suffer from different types of diseases that can spread if [we are defecating] everywhere" (Srijana, Hindu Brahman, age 18). Another Hindu Dalit girl had different reasons for avoiding the family toilet during her period: "I cannot go near the toilet since the water tap is near the toilet. There is

also a fruit tree near the toilet so I cannot go near it. [In the past], my mother used this toilet on the fourth day of her period. After that the guava trees [near the toilet] died… so how can we use toilet? The guava trees died, and the water tap dried up" (Maya, Hindu Dalit, age 18). When asked about where she goes to the bathroom while menstruating, she explained that she can ask to use a neighbor's toilet if it is not near a water tap or fruit tree. Alternatively, she can go to the river. The other four girls (Hindu Dalit and Janajati; Christian Dalit and Chhetri) were allowed to use the toilet as usual while menstruating.

Motivations for Menstrual Practices in Far-West Nepal

The reasons for following the aforementioned menstrual practices included religious and spiritual beliefs, family tradition, fear of negative consequences, and social pressure. Many of these motivations also differed between caste/ethnic and religious groups represented in the sample.

Religious and spiritual beliefs

For all girls, religious and spiritual beliefs had a strong influence on menstrual practices. The Hindu girls often explained that they followed menstrual restrictions to avoid sinning or angering god: "[If we touch] the temple god will attack us…if there is a temple we can't go nearby" (Kinjal, Hindu Dalit, age 16). Even the Hindu Janajati girl, who had relatively lenient menstrual restrictions, mentioned religious beliefs as a reason for following her practices: "We should not go inside [the house because] god is there, and if we go inside and touch [things] it is a sin" (Onsari, Hindu Janajati, age 17).

Family tradition

Some girls cited family tradition as the reason for their menstrual practices: "It's from our grandparents, and mom and aunt. We have to follow what they say" (Srijana, Hindu Brahman, age 18 years). There appears to be a strong connection between current menstrual practices and family and ancestors' customs, and the girls were expected to maintain tradition: "In our culture they say we have to preserve our old culture" (Srijana, Hindu Brahman, age 18 years). Others did not feel they had a right to break these practices, which reflects the strong power of family tradition: "We don't know the main reason [for following the traditions] because they are practiced from earlier, [but our family says] 'Who are you to break these traditions? You are a small child of ours. We have lived half of our lives, and we haven't broken the practices'" (Maya, Hindu Dalit, age 18).

Fear of negative consequences

Fear of numerous negative consequences as a result of not following menstrual traditions was expressed by the participants. Some consequences were health-related, such as pain and sickness; girls discussed examples that ranged from health problems for their mothers, to headaches, shivering, leg pain, teeth pain, and/or stomach aches. One participant said: "I have seen people get sick. On the spot they will feel faint and experience a headache" (Sunita, Hindu Chhetri, age 18). Other negative consequences included the water tap drying up, plants and livestock dying, cows and bullock becoming sick, and cows producing less milk.

Social pressure

Girls discussed social pressure to follow menstrual practices and uphold traditions in the community: "People in our society have made it a tradition to follow these practices" (Asha, Hindu Dalit, age 18 years). The Hindu Janajati explained that her

immediate family is not necessarily strict when it comes to menstrual traditions, but she still follows many of the ritual purity rules in front of others; if she does not follow these traditions, she cannot access community resources such as the water tap. Social pressure is high, which pushes some families to follow chhaupadi and other restrictions.

Discussion

Complexities of Menstrual Practices among Hindus in Nepal

The results of the present study indicate a range of menstrual practices among the seven participants from one caste/ethnically and religiously diverse village. Hindus from all four caste/ethnic groups each followed subtly distinct menstrual practices, whereas the Christians from two different caste/ethnic backgrounds did not have any restrictions during their menstrual period. Among those participants who followed menstrual restrictions (Hindus), the Janajati girl had the most lenient menstrual practices, and the Brahman and Dalits followed the strictest menstrual practices.

Christian girls of both Dalit and Chhetri caste/ethnic backgrounds were not found to follow any specific menstrual practices and were permitted to engage in regular activities during their menstrual periods. However, menstruation was not without challenges. The Christian girls said that, on the one hand, they were pressured by their families and other Christians to perform household duties as usual during menstruation, yet, on the other hand, they felt social pressure from Hindu community members to adopt restrictions. This shows that Christian girls still face social pressure to follow purity practices (e.g., keeping distance from people and objects) and, in some cases, appear to internalize Hindu perceptions of pollution despite their adherence to Christianity. A limitation of our study is that it is unknown whether these participants were born into Christian households or had more recently converted. It is interesting that menstrual practices among the Christians in our study slightly differ from findings in neighboring India; although Christians in India do not follow as many menstrual restrictions as Hindus and Muslims, 42.5% still report avoiding religious functions during menstruation (Varghese et al., 2015), which was not the case in this study.

Among participants who adopted menstrual restrictions, Hindu Janajati were the most lenient. This finding aligns with those from other studies in Nepal, which suggests that Janajati practices are less restrictive than those of Brahmans and Chhetris, as Janajati are not required to adhere to strict social practices to validate their social status (PSI/Nepal, MIRA, & Maverick Collective, 2017; WaterAid, 2016). However, they still face challenges during menstruation. In a quantitative study that explored differences in menstrual knowledge (measured through a series of four questions about menstruation in which participants were given a point for each correct response), attitudes, and practices by caste/ethnic background across nine districts of Nepal, Janajatis had the poorest menstrual knowledge and practice outcomes (Baumann et al., 2019). This suggests that, although Janajatis follow fewer menstrual restrictions, accurate menstrual knowledge (e.g., definition and reason for menstruation, knowledge of menstruation before menarche) and hygienic practices (e.g., materials used to absorb blood, frequency of changing materials) are low among this group throughout the country, and targeted interventions that address the specific needs of Janajati women and girls are still needed.

The Chhetri and Brahman Hindu girls in the present study were found to follow more restrictions than the Janajati girl (e.g., sleeping outside the house though they did not sleep in a menstrual shed, not entering the home during their menstrual period). Finally, the Hindu Dalit practices were the most restrictive, as it was only the Dalit girls

who slept in a small shed far from their homes (i.e., practiced chhaupadi), avoided the periphery of their homes, and bathed and washed their clothes in the river. These findings generally align with previous studies, which show that Dalits follow strict menstrual practices in Nepal, and align with other studies on menstrual practices that show keeping distance from religious spaces, limiting mobility, and avoiding the kitchen to be common menstrual practices in Nepal (Baumann et al., 2019; Karki et al., 2017; Morrison et al., 2018; Ranabhat et al., 2015).

Regarding which caste/ethnic groups follow the most restrictive menstrual practices and articulation for why they follow them, two other studies support our findings that Dalits adopt the most restrictive menstrual practices. One mixed method study was conducted in Bajhang district and suggests that Dalit women are more vulnerable and face more trouble when it comes to menstruation (Joshi, 2015). A qualitative study that was conducted in Achham also suggests that practices are more rigid among lower-caste Dalits and among upper-caste Thakuris (Khadka, 2014). One reason for stricter menstrual practices among Dalits may stem from a phenomenon known as Sanskritization. The concept of Sanskritization was developed in India, but it describes a form of social change in the caste system that may also apply to Nepal, in which those in the lower part of the caste hierarchy (Dalits) seek upward mobility by emulating the practices and rituals of those at higher levels of the caste system (Srinivas, 1956).

Conversely, other evidence suggests that chhaupadi is practiced more strictly among high-caste Brahman and Chhetri castes (Upadhyay, 2017), which stems from the belief that higher caste groups "carry the onus to take upon more stringent forms of all purifying rituals including menstruation rituals to suppress the influence of various pollutants" (Sharma, 2014, p. 84). Although our results demonstrate that Hindu Brahmans and Chhetris practice numerous menstrual restrictions and ritual purification techniques, high-caste girls in the present study did not practice chhaupadi. Brunson's (2016) exploration of caste, gender, and class may help to explain such complexities; her findings suggest that experiences of low- and high-caste women may also be complicated by class. In our study, one of the high-class Dalit girls lived in a large, newly built concrete home with plenty of extra rooms, and she was economically well-off compared to the other participants; however, she was still not allowed to go near the house while menstruating, and she followed the most restrictive menstrual practices. Brunson's (2016) explanation provides insight: "…being wealthy does not free low-caste individuals of discrimination based on caste and might, in fact, lead to decreased autonomy and greater public scrutiny for low-caste women in particular" (p. 38). Thus, class may intersect with caste/ethnicity and complicate its relationship to menstrual practices. However, our sample was small, and the relationship between class and caste/ethnic roles needs to be further explored in future studies of menstruation with larger samples.

An examination of who follows menstrual practices in their most restrictive forms may also depend on context, education, rurality, homogeneity of the location, and other factors in addition to caste/ethnicity and religion. One study in Nepal showed that menstrual restrictions were more severe in locations where Hindu castes dominate (e.g., Mugu and Achham districts), whereas menstrual restrictions were more flexible in diversely populated communities or those heavily populated by indigenous ethnic groups (PSI/Nepal et al., 2017). This suggests that practices among caste/ethnic groups may also differ depending on the district and demographic composition of the community.

Moving Beyond the Menstrual Shed

According to the Joint General Recommendation/Comment by the Convention on the Elimination of Discrimination against Women (CEDAW) and the Committee on the Rights of the Child (CRC) (UN Committee on the Elimination of Discrimination against Women [CEDAW], 2014), harmful practices are persistent behaviors that discriminate on the basis of sex, gender, age, caste/ethnicity, language, religion, and more, which lead to violence and physical or emotional harm or suffering. The multiple exclusionary practices that many girls experience during menstruation can be considered harmful as they leave them vulnerable to violence, stress, injury, and poorer health, educational, and/or economic outcomes (CEDAW, 2014; United Nations Human Rights Office of the High Commissioner, 2013). Though attention to chhaupadi is growing, our findings illustrate that sleeping in a shed (chhau goth) is only one aspect of a wider range of harmful practices and restrictions that women and girls follow during their menstrual periods. The girls' films and discussions highlighted numerous other restrictive and discriminatory practices that keep women and girls out of communal spaces, worship areas, and away from water sources and friends and family members. Beyond the physical health vulnerabilities, there are psychosocial health concerns related to stigma, shame, and anxiety that are linked to widespread seclusion during their menstrual periods, which was also found in another ethnographic study of menstruation in Nepal (PSI/Nepal et al., 2017).

The research and menstrual health programming agenda must evolve in the context of the chhaupadi criminalization code that was passed by Parliament in August 2017 (Kathmandu Post, 2017). As the government strategizes ways to enforce the code, it is important that the practice of chhaupadi be explicitly defined. Activists have raised concerns that, without a clear definition of chhaupadi and without an understanding of which aspects of the practice have been criminalized, it will be challenging to curtail the practice in an equitable manner (Cousins, 2019). Based on the results of the present study, the definition of chhaupadi as menstrual seclusion associated with sleeping in a shed ignores other nuanced aspects of the practice. A holistic approach to menstrual health concerns must target deeply rooted ideologies that view women as polluted, which inevitably affect women's and girls' self-confidence and mental health. It must involve deeper engagement with fundamental root causes of menstrual practices associated with caste/ethnicity and religion. Menstrual health and hygiene interventions cannot be restricted to physical manifestations of certain practices, but must embrace a larger understanding of psychological burdens, shame, and embarrassment (PSI/Nepal et al., 2017).

Given that menstrual restrictions are subtle yet distinct between caste/ethnic and religious backgrounds, and as chhaupadi is only one aspect of a broader range of menstrual restrictions, the menstrual health research, policy, and intervention agendas in Nepal would likely be strengthened by embracing a wider and more encompassing view of the menstrual health needs. Interventions designed to improve menstrual health outcomes would similarly benefit from consideration of the range of restrictions, traditions, and beliefs that affect the rights, power, self-confidence, and self-esteem of women and girls. Community-driven solutions for harm reduction of chhaupadi-associated hazards should also be considered. A study conducted by NFCC and the United States Agency for International Development (USAID) in far-west Nepal showed that elimination of the shed alone is not enough to end the practice; a comprehensive approach that addresses all forms of menstrual discrimination in and outside the home is required (Nepal Fertility Care Center, 2015). Thus, efforts aimed at ending chhaupadi should adopt a phased, harm reduction

approach in which the focus is first to shift the shed closer to the house and away from the field, second to shift the practice from the shed to house, and then from the house to their own room (Nepal Fertility Care Center, 2015). It is also important to note that not all experiences of chhaupadi are equal, nor are they all dangerous. Some girls sleep in dilapidated sheds far from their homes, but others, like the participants in our study, sleep in a shed that is closer to home. The participants who practiced chhaupadi in the present study were not afraid to sleep in the shed, and reported that it was relatively well maintained, which is an example of a community-led harm-reduction approach that may be considered in other parts of Nepal.

Limitations

As the sample included seven participants, we cannot expect the findings to be generalizable to all girls living in far-west Nepal. In addition, some participants may have been hesitant to express themselves on camera, given that they knew that their visuals might be shared. The research team aimed to overcome this through comprehensive training, with ample opportunities for troubleshooting, feedback, and practice, as well as the opportunity to remove their footage from the study at any point in time. We also adopted a dynamic approach to informed consent, in which participants were not expected to make any decisions regarding sharing their films publicly until the end of the study. At that time, participants were invited to complete an additional consent process if they wished to do so, but sharing their films publicly was not a requirement for participation. Finally, we did not systematically collect class/SES information, which should be considered in future research. Additional studies are required to build upon this formative work to understand the prevalence of the practices and motivations found in the present study. Despite these limitations, the visual and collaborative method we applied was a unique and engaging opportunity for participants to express themselves in ways that go beyond words and provided rich, in-depth and nuanced details about a range of menstrual practices.

Conclusion

This in-depth study of menstrual practices and motivations provides a thorough narrative and visual analysis of the experiences of adolescent girls from different caste/ethnic and religious backgrounds in Kanchanpur, Nepal. Participants practice a range of menstrual traditions, and their menstrual practices are motivated by a number of social and religious factors. Given the complexities of menstrual practices in Nepal, which are religiously and culturally situated, policies, interventions, and studies must thoughtfully examine practices and propose solutions that consider the social values of communities, the caste system, and religious beliefs.

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