

**Menstrual Practices, Beliefs, and Traditions of Menstruating People in Nepal: A Scoping
Review of the Qualitative Evidence**

by

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Bachelor of Arts, University of Pittsburgh, 2022

Submitted to the Graduate Faculty of the
Department of Behavioral and Community Health Sciences
School of Public Health in partial fulfillment
of the requirements for the degree of
Master of Public Health

University of Pittsburgh

2023

UNIVERSITY OF PITTSBURGH

SCHOOL OF PUBLIC HEALTH

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April 24, 2023

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Abstract

Menstrual health and hygiene (MHH) and the adherence to negative restrictive menstrual practices are major issues in Nepal with pressing public health relevance. Factors that influence menstrual beliefs and practices in the country include family members, menstrual education, religion, menstrual stigma, gender discrimination, caste/ethnicity, illiteracy, geography, and poverty. There is ample evidence to suggest many Nepali peoples' traditional menstrual health practices and beliefs have negative mental and physical health effects. The objective of this essay is to review the current state of qualitative evidence regarding menstrual practices, beliefs, and traditions of menstruating people in Nepal. Utilizing this information, this scoping review will also examine past menstrual health management (MHM) interventions in Nepal and suggest modifications for future interventions and research. Qualitative studies from Nepal that examined factors contributing to menstrual practices, beliefs, and traditions were identified through searches across four databases: Medline, APA PsycInfo, Global Health, and EMBASE. Four qualitative studies published between 2014 and 2022 were included in this literature review. All four studies reported participants partaking in a plethora of restrictive practices during menstruation, including menstruators being restricted from entering kitchens and temples, sharing a bed, and using the same water source as others in the community. Research on menstrual practices, beliefs, and traditions in Nepal, especially based in rural regions where stricter practices and beliefs are more prevalent, is extremely lacking. Future research and interventions should utilize a holistic

community-based approach that accounts for all the aforementioned factors that influence menstrual beliefs and practices.

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Preface

I would like to extend my thanks and gratitude to my academic advisor and Essay reader, Dr. Cynthia Salter, for putting in the time to support the development of this essay. I would also like to thank the Health Sciences librarian, Helena VonVille, for guiding the academic search for this review and assisting me to focus my research. Both Cynthia and Helena were essential in the creation and completion of this essay. Additionally, I was greatly influenced by the research done by former University of Pittsburgh Public Health graduate, Sara Baumann, whom I would like to thank for performing such important and innovative work on menstrual health management and tradition in Nepal.

Lastly, I would like to thank the University of Pittsburgh's School of Public Health for providing me with the knowledge and support necessary for successfully completing my master's degree. I am extremely grateful for the time I have spent at Pitt, the knowledge I have acquired, and the people I have met along the way.

I would additionally like to acknowledge my own positionality and biases that limit this literature review. Because I have never been to Nepal and have not conducted my own original research on this subject, I was limited by my own public health knowledge and what research was available to me through the search engines provided by the University of Pittsburgh. By following the predetermined procedures of this literature review and addressing my positionality, I was able to minimize the impact these biases may have had on my work.

1.0 Background

1.1 Introduction

Menstruation, also referred to as having a period, is a natural bodily process in which the inner lining of a person's uterus sheds as blood through the vagina. This happens approximately once every 28 days and is referred to colloquially as a "period." Some women have longer or shorter menstrual cycles, which can recur between every 21-40 days. Regular menstruation, or menstruation that occurs approximately once a month, is associated with fertility. However, many factors, such as stress, exercise, weight, and medication can influence when, for how long, and to what extent a woman's period occurs (Mayo Clinic Staff, 2023). Therefore, it is considered to be "regular" to miss or skip a monthly period once in a while in a woman's life. If consecutive periods are "skipped," this could be an indicator of pregnancy, polycystic ovarian syndrome (PCOS), or other conditions affecting hormone production (Mayo Clinic Staff, 2023).

While menstruation is a natural biological event, many societies stigmatize the process of menstruation as embarrassing, unclean, or gross. This stigmatization often leads menstruating people to associate feelings of shame, embarrassment, and secretiveness with having their period. In many societies, stigma and feelings of embarrassment prevent adequate education and discourse about menstruation and foster a sense of secretiveness about it. For example, advertisements for period products have historically referred to menstruation as something that should be kept secret. Tampons are often marketed with the promise that nobody will know you are on your period. This societal pressure for secretiveness can contribute to inadequate menstrual hygiene, which is recognized to have adverse mental and physical health effects (Sharma et. al., 2022). Due to the

push of this idea that periods should be kept secret from the outside world, many women associate shame with menstruation and are not properly educated on what menstruation is and how to manage it hygienically (Making, 2021).

The emergence of recognition and discussion of the negative health effects of inadequate menstrual hygiene towards the end of the 20th century led to a defining of menstrual health and a subsequent focus on healthy menstruation among global health organizations. These organizations include the Center for Disease Control (CDC), the World Health Organization (WHO), the United Nations International Children's Emergency Fund (UNICEF), and the World Bank. Menstrual health has since been recognized as a basic human right by the Center for Disease Control (CDC), and menstrual health management (MHM) interventions have been on the rise. For example, many countries where Water, Sanitation, and Hygiene (WASH) initiatives have been implemented, such as Haiti, have been incorporating MHM interventions as part of these initiatives in response to community recommendations (World Bank Group, 2018). These MHM interventions include but are not limited to educational campaigns on menstruation targeting young girls in schools and donating pads and tampons to communities (World Bank Group, 2018).

While MHM and Menstrual Health and Hygiene (MHH) have been emerging topics of discussion and exploration in international health forums within the past few years, they are relatively new areas of health focus, consequently, research on the best methods for program intervention is lacking. In many countries, menstruation itself has heavy ties to tradition, religion, and gender roles, which has made it difficult for menstrual health advocates or health organizations to efficiently create and implement MHM programs that target all the factors that influence menstrual health. The ties to religion, gender roles, and tradition are often accompanied by deeply rooted belief systems that MHM programs are not equipped to address. For example, in many

Asian cultures that follow Hinduism menstruating people practice specific cleansing rituals during menstruation that are believed to prevent negative responses from their gods (Baumann, 2019). MHM intervention teams often do not fully understand these deeply rooted religious or cultural systems before implementation of their programs, which is a major limitation in many evaluations of these programs (UNICEF, 2019). Factors that influence menstrual health include, but are not limited to, access to menstrual products, religion, culture, familial influence, sanitation facilities, education, and socioeconomic status.

In many lower-middle-income countries (LMIC's), such as Nepal, geographical and accessibility factors create additional barriers to implementing MHM programs. This is why integrative research that explores sociocultural aspects of MHM is needed to create effective interventions in countries – especially LMIC's, like Nepal, where menstruators are experiencing negative menstrual health effects at a higher rate than in higher income countries. This essay will analyze the qualitative research on menstrual attitudes, beliefs, and traditions in Nepal and describe the importance of this type of research to create effective and culturally appropriate MHM interventions.

For the purpose of this paper, the terms “menstruators,” “girls,” and “women” will be used interchangeably to describe people who menstruate. However, it is important to note that a person does not have to identify as a woman to menstruate and that not all who identify as women menstruate. While “menstruators” is the more inclusive term, many articles, papers, and research additionally use the words “women” and “girls.”

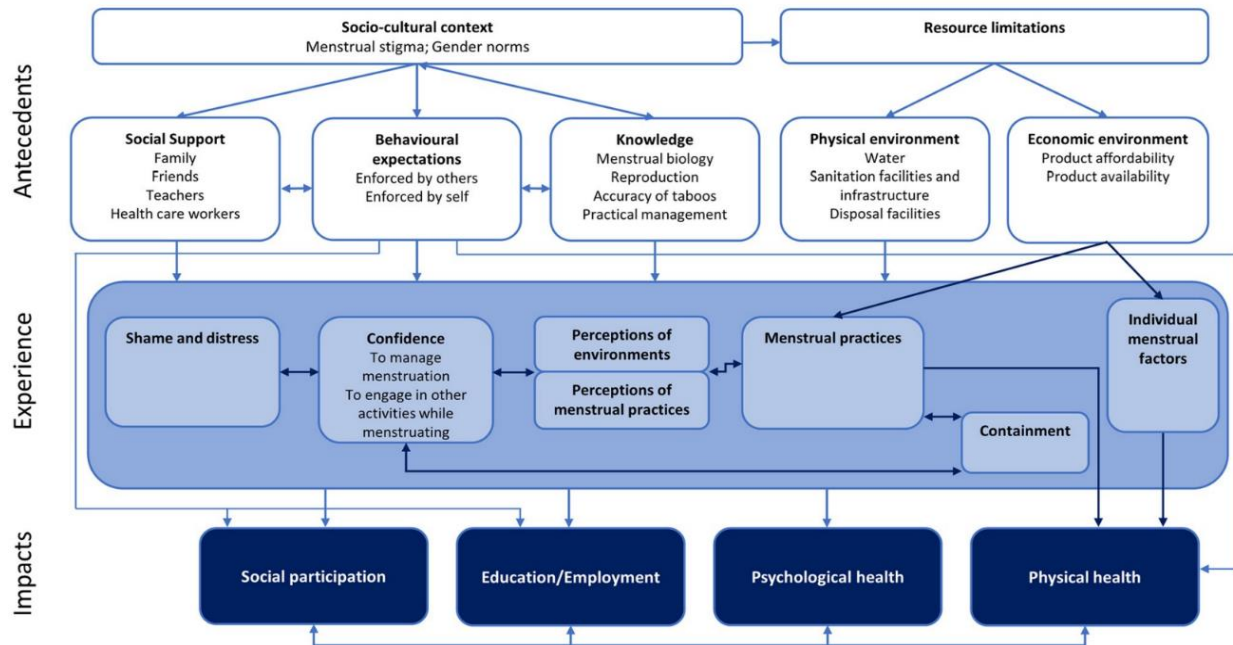
1.2 Menstruation and Environmental Risks

Onset of menstruation typically begins between the ages of 10-16. Menstruation may last for two to seven days, and generally happens once every month until a person reaches the age of about 50 (Lacroix et. al., 2023). The first occurrence of menstruation, which is referred to as menarche, is often seen as a girl's initiation into womanhood. While the term initiation has historically been tethered to traditional cultural ceremonies and/or rituals, it is used here in a broader way to describe how menarche is widely seen as a girl's transformation into a woman in her society. While different cultures and societies may approach menarche differently, most regard it as a time of transformation or change for female members of their society. (Mauling-Gumbaketi et. al., 2021).

Many factors influence how someone experiences menstruation. Income, geographic location, culture, societal norms, and religion all play a part in the beliefs, traditions, and practices that women hold about their menstrual cycle and engage in while menstruating, as well as how their communities and society expects them to behave or how other family and community members may treat them during menstruation. For example, in many Asian countries, Hindu tradition states that women should isolate themselves from other members of the community when they are menstruating (Baumann et. al., 2020). A 2019 systematic review of research about women and girl's experiences of menstruation in LMIC's outlined the interaction of factors influencing menstruators' experiences of menstruation. Factors outlined in this review varied by sociocultural context and the available resources of the communities. Stemming from community context came experiences of shame, confidence, and menstrual practices as well as the potential impact of these practices on a menstruator's social participation, education, employment, and both physical and mental health (Figure 1, Hennegan, 2019). The figure below, developed by researcher Hennegan

and colleagues, aids to outline and emphasize the many factors that play into menstrual health and how these factors may shape a woman’s experiences of menarche, describing the socio-cultural context as well as the resource access that influences experiences of menstruation.

Figure 1: Hennegan et. al



Logistical and physical factors such as adequate access to sanitation facilities, menstrual products, and information/education – which are inextricably linked to many of the previously stated cultural and societal factors – also influence how a woman experiences menstruation. These vary from community to community.

One important aspect of menstrual hygiene management is the type of menstrual products women and girls use for blood flow. Many studies done on menstrual practices in LMIC’s show evidence of reusable sanitary cloths being the most common menstrual blood collection methods for menstruating women (Morrison et. al., 2018). In Nepal, the United Nations Children’s Fund’s

(UNICEF) research of menstrual hygiene habits discovered that between 74.3%-83% of girls in the districts they studied used menstrual cloths more than any other form of menstrual product (Morrison et. al., 2018). However, many studies do not typically include menstrual cloths under the umbrella of “menstrual products” due to a commercialized push for the mass production of disposable sanitary pads and tampons in Westernized cultures. Commercial menstrual products often explicitly refer to disposable sanitary pads, tampons, and reusable menstrual cups. Therefore, cloths are often seen and referred to by researchers as “makeshift period products” and lumped in categories with paper towels, napkins, and toilet paper when discussing adequate menstrual hygiene habits. However, little research has explored menstruators views about cloth menstrual products, and in some higher-income settings commercially available reusable cloth products are gaining acceptability as ecologically sound alternatives to disposable products (GladRags, n.d.).

According to Hennegan et. al, “Lack of funds to purchase menstrual items or pain relief, and lack of affordable cloth or commercial menstrual products, was a frequent study finding” in the 2019 systematic review of research on menstrual health in LMIC’s (2019). In communities where commercial period products are not available, researchers report that menstruators may resort to makeshift materials or the reuse/overuse of old products (Das, 2015). “Products like rags, paper towels, and reused pads put menstruators at a heightened risk for urogenital infections, such as urinary tract infections and bacterial vaginosis” (Das, 2015). As seen by this finding, although “rags” or “cloths” are viewed as the norm in many LMIC’s like Nepal, their capability of being improperly used and causing infection is conflated with paper towels and reused disposable cotton pads, restricting further research exploration into these products and their role in menstrual hygiene. In addition to the use of “makeshift products,” lack of proper sanitation facilities, such as running water, toilets, means to dispose of menstrual products, and/or a lack of privacy for women

to change/dispose of menstrual products, can impede women and girls from practicing adequate menstrual hygiene and thus increase the risk of contracting reproductive and urinary tract infections (Sumpter, 2013). Left untreated, infections can spread and cause further complications regarding fertility and kidney function (World Bank Group, 2022).

Because menstruation is a heavily stigmatized topic, education and discourse surrounding menstruation are often incomplete, inconsistent, and/or inaccurate. Stigma and shame contribute to perpetuating systems of restrictive menstrual practices in many LMICs which can negatively impact the health of the menstruator and often leave young girls unprepared to experience menarche. While menarche happens whether a girl considers herself prepared or not, the experience of going through menarche without fully understanding what menarche entails, when it will occur, and what that will mean for a young girl within her society or culture can lead to feelings of fear, guilt, shame, or anxiety when it does occur.

For example, in a study completed in Uganda, which highlights the role stigma plays on menstrual knowledge, a woman recalled the fear of her first period as follows:

“I was so scared actually I thought it was a disease that had attacked me. I thought I was going to lose my life at any moment because it was really scary to start bleeding from down there. I thought I was going to die” (Miuro 2018)

Even though menstruation is a normal bodily process that most women go through in their lives, it can be jarring for someone who does not know they are going to experience it. Many people conflate blood with death and dying, which explains why a girl who is unprepared for menarche could be afraid when her first period begins.

Feelings of fear, guilt, shame, and unpreparedness surrounding menstruation have been common findings in many other qualitative and quantitative studies assessing menstrual attitudes in various countries. For example, in a systematic review of menstrual health and hygiene in Nepal

done by Sharma et. al., five studies reviewed reported mental health concerns associated with menstruation that encompassed feelings of “confusion, stress, shame, pain, fear of leakage and teasing” among the participants (2022).

These feelings of confusion, stress, and fear, paired with inadequate resources for proper menstrual health management, can additionally cause women to miss school or work while on their periods. In a study completed with adolescent girls in rural Gambia, “Of the 561 girls surveyed, 27% reported missing at least one school day per month due to menses.” (Shah et.al. 2022). Even in high-income countries, menstruation is associated with missing school, and in studies done in the United States, one in five girls across the country were found to miss all or part of their school day due to their period (University, n.d.). Many studies in both high-income and low-income countries that show evidence of women and girls consistently missing school or work because of their periods, have linked the same contributing sociocultural factors described above in this paper. Therefore, inadequate education, discourse, and resources associated with menstruation, although it is a normal biological process that has been occurring in women since the beginning of time, continue to limit educational opportunities for girls and women, which in turn perpetuate a patriarchal society that prevents an equitable environment between men and women.

A recent push by international organizations addressing menstrual health management and hygiene emphasizes the idea that every menstruator deserves access to resources and facilities that ensure good menstrual health – without having to miss work, school, or face stigmatization embarrassment or fear. In a 2022 official statement on menstrual health and rights, the World Health Organization (WHO) called for recognition of menstruation as a health issue with “physical, psychological, and social dimensions” (WHO, 2022). Additionally, the WHO reiterated

that menstrual health is heavily influenced by the environment in which those who menstruate live (WHO, 2022). Kuhlmann et. al. writes that women residing in rural areas of LMIC's tend to practice poorer menstrual hygiene behaviors and MHM interventions are less effective in these areas (2017). Similar findings are reflected in Nepal and will be discussed further in this paper.

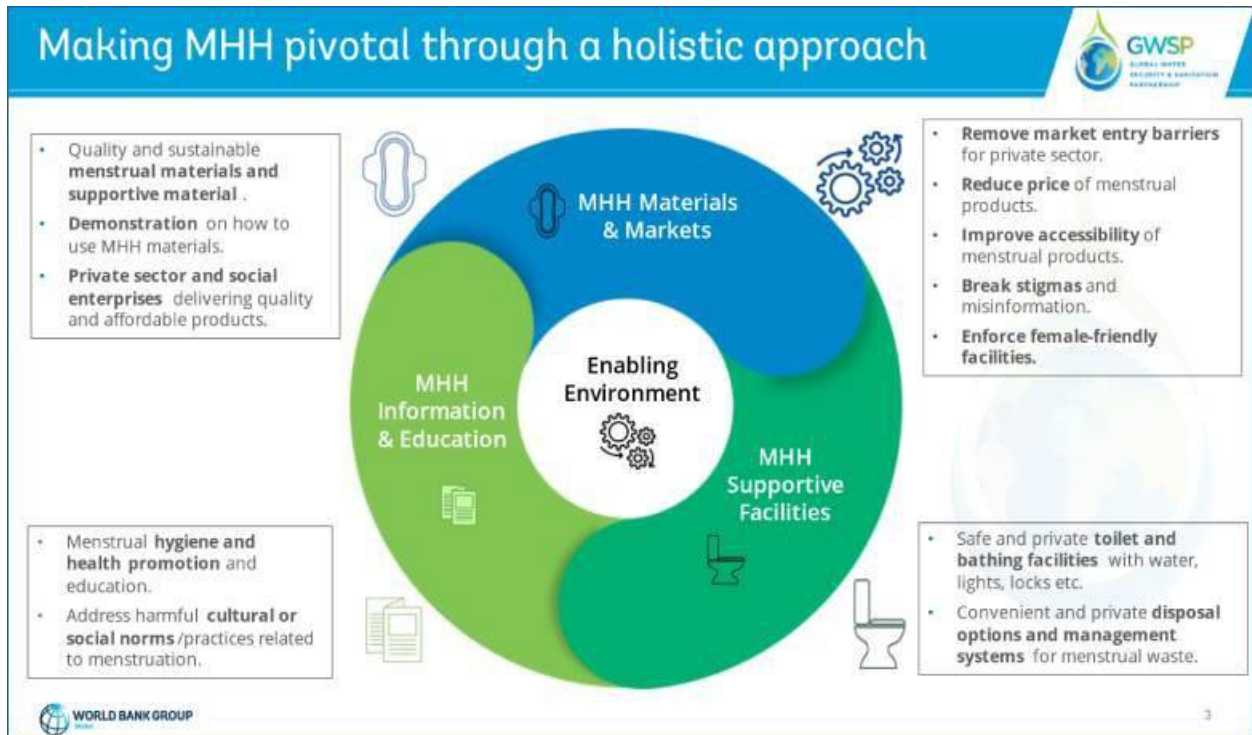
1.3 Terms, Frameworks, and Push for Advocacy

Information and resources for MHM have been emerging in the last decade. In 2012, the WHO and UNICEF Joint Monitoring Programme (JMP) for drinking water, sanitation, and hygiene developed the definition for menstrual health management. The definition, which has since been used and accepted widely, reads, “women and adolescent girls using a clean menstrual management material to absorb or collect blood that can be changed in privacy as often as necessary for the duration of the menstruation period, using soap and water for washing the body as required, and having access to facilities to dispose of used menstrual management materials. They understand the basic facts linked to the menstrual cycle and how to manage it with dignity and without discomfort or fear.” (WHO/UNICEF, 2012) Within the same year, WaterAid, an international nonprofit organization focused on water, sanitation, and hygiene, published a “toolkit” to guide MHM programs and interventions, which complimented the components of the multifaceted definition developed by the JMP (House, 2012). Organizations such as WaterAid, the WHO, and UNICEF often work with governments to guide interventions and public health outreach. These organizations had been established as credible groups who are trusted on an international level. Therefore, due to the organizations’ credibility and previous work with governments, both publications helped to influence governments and other organizations to

recognize menstrual health as an important issue influenced by and relating to a plethora of other factors, including social stigmatization (Bobel, 2019).

Working from this, the United Nations Educational Scientific and Cultural Organization (UNESCO) defined Menstrual Health and Hygiene (MHH) as a term that, “encompasses both MHH and the broader systemic factors that link menstruation with health, well-being, gender equality, education, equity, empowerment, and rights” and add, “These systematic factors have been summarised by UNESCO as accurate and timely knowledge, available, safe, and affordable materials, informed and comfortable professionals, referral and access to health services, sanitation and washing facilities, positive social norms, safe and hygienic disposal and advocacy and policy” (UNICEF, 2019). The term MHH is included in the 2019 UNICEF

Figure 2: World Bank Group Holistic Approach



Guidance to Menstrual Health & Hygiene report which focuses on designing and supporting menstrual health programs (UNICEF, 2019). MHH focused programs widely call for a holistic approach to addressing related issues. A holistic approach is defined as one that looks at the whole of an issue and its factors when attempting to provide support (NSW, n.d.). In terms of menstrual health intervention, a holistic approach is one that looks at education/dissemination of information, sanitation facilities, period products, and the role that stigma may play within a society (World Bank Group, 2021; Figure 2).

Figure 2 and the WaterAid toolkit provide useful guiding models for intervention plans addressing MHH and MHM; however, organizations have been struggling to adapt these materials to local communities and initiate interventions. Because holistic approaches outlined by the World Bank and UNICEF are heavily reliant on the resources a community has access to, societal norms, and conducive policy, it can be difficult for country-specific implementations to successfully tackle each individual aspect of the MHH holistic approach model seen in Figure 2. For example, many holistic MHH interventions are integrated within WASH interventions that focus heavily on sanitation facilities and access to clean water. While sanitation facilities are an important aspect of the MHH holistic approach model outlined in Figure 2, many interventions do not adequately pair sanitation goals and outcomes with those that tackle MHH materials and markets. This leads to an incomplete MHH intervention, despite intentions for a “holistic” approach, which has been seen in many of the country specific WASH intervention evaluations (UNICEF, 2019).

Consequently, menstrual health is included in the United Nations 2030 agenda (United Nations, 2021). Because the UN agenda is created to promote international equity, having menstrual health on their 2030 agenda indicates that there is still work that needs to be done to ensure the menstrual health and hygiene of women and girls over the world. While ample evidence

exists of tools, definitions, and frameworks on the issue, current community-based interventions need to be piloted and evaluated to establish meaningful change. Research is lacking on MHH/MHM in LMIC's and how policy and program implementation may have changed behavior and health outcomes (Hennegan et. al., 2019). This essay will be focusing on the country of Nepal, an LMIC that has received attention for inadequate MHM resources and heavy menstrual stigmatization. Recent attention to the country can be majorly attributed to the practice of Chhapaudi, the traditional and culturally accepted use of menstrual huts to isolate menstruators from their communities, which has been linked to harms and health risks. Research focusing on Chhapaudi in Nepal has uncovered other restrictive menstrual practices in the country that are heavily rooted in Hinduism, which is the most widely practiced religion. Chhapaudi has received global attention and is the focus of many intervention projects and research in Nepal that have been implemented within the last decade (Karki, 2017).

1.4 Nepal: Caste, Religion, and Geographical Considerations

Nepal is a small landlocked country in Asia (The World Bank, n.d.). Geographical and religious considerations are very important to understand when reviewing menstrual health and traditions in Nepal. The small nation's landlocked geography and its religious history have heavily influenced traditions and practices related to menstruation and menstrual health. For example, "As a result of its years of geographic and self-imposed isolation, Nepal is one of the least developed nations of the world" (Encyclopedia. n.d.). This not only influences the resources and quality of sanitation for menstruating peoples, but also contributes to educational gaps and menstrual stigma. The Cambridge English Dictionary defines underdeveloped nation as "a country that is less

developed economically than most others, with little industry and little money spent on education, health care, etc.” (Cambridge, n.d.). Spending less money on education and health care would directly affect factors previously outlined as determining how a person experiences menstruation. To recap, inadequate education on menstruation leads to stigmatization and feelings of fear, shame, and guilt among menstruators. Additionally, it is likely, if underdeveloped nations are “less developed economically than most others,” they are also not spending money on the creation and upkeep of sanitation facilities necessary for adequate menstrual health and hygiene.

The most practiced religion in Nepal is Hinduism (81.3% of 2011 population), which also influences many traditional views towards menstruation within the country, such as the previously mentioned practice of Chhaupadi. Other religions practiced in the country include Buddhism (9%), Islam (4.4%), Kirat (3.1%), Christianity (1.4%), Prakriti (0.5%), Bon, Jainism, Bahai, and Sikhism (Central, 2012). Nepalese practices rooted in historically accepted gendered discrimination and religion have been associated with negative menstrual health and attitudes (Sharma, 2022). Many traditional practices surrounding menstruation in this country include aspects of Hindu prayer and the idea of “cleanliness.” For example, most Nepalese women are not allowed to enter religious temples when they are menstruating because menstrual blood is seen as “impure” (Baumann et. al., 2020). Other restrictive and/or isolating menstrual practices are common in Nepal, which will be described further in the results of this paper’s literature review.

Figure 3: Map of Nepal



Nepal has seven provinces, which are further divided into seventy-seven districts, as pictured above (WorldAtlas, 2021; Figure 3). A rigid caste system is used to categorize Nepali citizens by social class. The caste system is a tradition brought by Indian migrants, and it is not practiced by indigenous Nepalese people, who make up 36% of the population (Caste, n.d.; International, 2021). Caste systems are ways in which societies classify the people within them into groups (Caste, n.d.). These groups are typically marked by economic standing within the society and are often directly linked to certain occupations. While caste systems still exist and are adhered to in some societies, they were mostly used historically in Asian countries to control local communities (Caste, n.d.). Separating societies by economic class controlled what occupations people had, where they lived, and how much power they had within their communities. In this way, higher castes were given more power and had/have more control over those in lower castes

(Caste, n.d.). Today, strict caste categorization and discrimination are viewed negatively, and many Asian countries' governments, including Nepal's government, have outlawed said discrimination within their constitutions (Tamakar, 2005).

While caste discrimination is something many Asian governments are working to dismantle, many people in Nepal still choose to adhere to identifying with a particular caste. “The 2011 census (in Nepal) listed the population as belonging to 126 caste and ethnic groups, including 63 Indigenous Peoples; 59 castes, including 15 Dalit castes; and three religious groups, including Muslim groups” (International, 2021). Dalit refer to people residing in the lowest caste groups and have historically been nicknamed “untouchables” due to their low social standing. Many research studies, including those on MHM, account for caste identification in participant surveys to assess the role of caste in how people in Nepal live and function. Many research studies on menstrual practices and beliefs in Asian countries mention that women are viewed as “impure” while menstruating (Sharma et. al., 2022). Impurity is a construct that is also seen between castes in the Nepalese caste system. How women are treated while menstruating is how Dalit castes, aka “impure” or “untouchable” castes, have historically been treated by higher castes (Caste, n.d.). Both traditions are influenced heavily by Hinduism and are often not followed as strictly by Nepalese citizens who do not practice the religion. Despite Article 11(4) of the Nepali Constitution guaranteeing the right against untouchability, the concept and practice of untouchability remains rampant in the country (Tamakar, 2005), which is why caste affiliation is an important factor to assess in menstrual health research in Nepal.

Caste discrimination and the upholding of more traditional values is more common in the far-Western region of Nepal, which is more rural and faces extreme/diverse climactic conditions (Tamakar, 2005; UNFCO, n.d.). Consequently, MHM interventions have not been as successful

in these regions, and existing research calls for more qualitative work to be done in these areas to analyze the best ways to approach interventions (UNICEF, 2019). According to the United Nations Field Coordination Office (UNFCO) in Nepal,

“The region (Far-West Nepal) has complex socio-economic structures and there is both widespread gender and caste based discrimination. Traditional systems associated with religion, culture and customs also have a great impact on overall development.” (n.d.)

These same traditional systems uphold restrictive menstrual practices, which makes them important to understand before creating an MHM intervention plan. The Far-West region of Nepal is also known to have insufficient school facilities and education which has led to high levels of illiteracy (UNFCO, n.d.). Because proper education about menstruation plays such a large role in how girls and women experience their periods and care for themselves while on their periods, it is evident that the calls for more research and outreach for MHM programs in the Far-West region of Nepal have merit.

1.5 Menstrual Health and Hygiene in Nepal

Menstrual hygiene and health have been issues of increasing focus in Nepal and other South Asian countries within the past two decades. Evidence shows a majority of girls (89%) experience some form of restrictions or exclusion in Nepal during menstruation (Karki, 2017). These restrictions include, but are not limited to, being denied entry into religious buildings while menstruating, not being able to wash your dishes or body from the same water source as others, and not being able to share a bed with another person (Mukherjee, 2020).

Previous MHM interventions in Nepal have focused specifically on education and outreach in schools with young girls. For example, “Undertaking both practical interventions and research, the Water, Sanitation and Hygiene (WASH) in Schools (WinS) programme is implemented in partnership with the Department of Water Supply and Sewerage (DWSS), the Department of Education, the Nepal Red Cross Society and the Federation of Drinking Water and Sanitation Users Nepal (FEDWASUN)” (UNICEF, 2019). This program implemented either “soft” or “hardware” interventions in over 2,500 Nepalese schools in rural districts. The “soft” interventions relied on educational tactics to increase knowledge and fight stigma, while the “hardware” interventions focused on providing schools with toilets and washing facilities for menstruators to privately dispose of their menstrual products. While these interventions were soundly planned and staffed, local cultural norms and taboos often prevented the “soft” interventions from making a difference. Additionally, the “hardware” interventions were successful upon installment, but facilities quickly went into disrepair (UNICEF, 2019). After evaluation of this program, UNICEF called for more research to be done analyzing and seeking to dismantle the cultural taboo and stigmatization surrounding menstruation in Nepal. More specifically, research regarding restrictive menstrual practices and why they are followed, especially qualitative research looking at this topic, has been called for after the evaluations of many MHM programs in Nepal.

1.6 Chhaupadi History and Policy

An extreme form of menstrual seclusion, called Chhaupadi, is practiced in more rural areas in Nepal. Chhaupadi is a tradition in which girls and women who are menstruating must leave home to sleep in a hut, secluded from other members of their community. The hut is typically a

small room, often where animals are kept by the community (Amatya, 2018). In more modern practices, Chhaupadi huts are kept close to a family's residence, while traditionally they are outside of the community and shared by all menstruators of that community (Kadariya and Aro, 2015). The practice is known to be carried out despite adverse weather conditions or the age of the menstruator. Similar to lore surrounding other restrictive practices, those who practice Chhaupadi often believe that bad things will happen to them, their villages, or their families if they do not adhere to their traditions. While the Nepal government banned Chhaupadi in 2005, the practice is still common in many rural communities. The practice has been linked to negative health outcomes including inadequate hygiene, snake bites, animal attacks, hypothermia, and emotional stress (Kadariya and Aro, 2015). Additionally, Chhaupadi and related restrictive practices have been associated with increased instances of pain in lower abdomen, subfertility, urinary problems and abdominal lumps (Thapa, 2019).

Due to the negative health outcomes associated with the practice of Chhaupadi and the ineffectiveness of the 2005 ban, Chhaupadi was criminalized in Nepal in 2017 by Nepal's parliament. The punishment for forcing someone to obey this tradition after its outlaw is a three-month jail sentence and/or a 25-30 Euro fine (Welle, 2017). However, Chhaupadi would have to be reported in order for someone to be charged, which is unlikely to happen within a society that normalizes or accepts it as a common practice. While negative attitudes and health effects are tied to these practices, many women still feel obligated to follow through with them in order to appease family and community members (Rothchild, 2020). This is why it is extremely important to understand the stories and opinions of Nepalese women surrounding menstruation and how they view their traditions to efficiently create programs that prioritize women's health.

1.7 Rationale for Review

Research on menstrual health practices in Nepal, especially using qualitative methods, is severely lacking. The research that is available describes restrictive and exclusionary menstrual practices rooted in stigma, religious beliefs, and gender roles prevalent in Nepali districts. Despite bans and laws created to prevent the most extreme of these menstrual practices, they continue to occur (Baumann, 2022). Programs promoting legal changes about menstrual practices and their implementation have not adequately considered the cultural and societal history of menstrual practices in Nepal and must seek to break down the stigma through educational outreach before real change can be accomplished. Additionally, current programs often do not adequately reach the more rural areas of Nepal where restrictive practices are more prevalent.

Qualitative research is pertinent in understanding public opinion, motivation, cultural norms, and what has and has not worked to make change in the past. Additionally, qualitative data is needed to understand structural influences and how a society functions, which gives researchers further insight into what communities want and need to live healthy lives. Even when researchers are exploring the same health topics within their research, the research approach – whether qualitative, quantitative, or a mixed methods approach – greatly determines what data can be collected, how it can then be analyzed and interpreted and, ultimately, how research data can be utilized to improve intervention development. Qualitative methods, such as focus groups, interviews, and media-based research exploring individual and community narratives, help people to better understand the human experience in ways that quantitative research and numbers cannot (Cleland, 2017). Qualitative methods explore the ways that reality is socially constructed and the complexity of human experience.

When researchers are studying behavior, beliefs, and/or traditions that they are not personally used to or do not agree with, they inherently approach that research holding onto their own individual and societal bias. For example, within research on menstrual beliefs, traditions, and practices in Nepal, many researchers from Westernized countries likely do not agree with the restrictions menstruators face. They may believe these practices are inhumane and based on traditional patriarchal values. Whether they are “right” or not is not the issue at hand. It is more important to understand how people in Nepal experience and interact with these traditions before assumptions are made from the own background of the researcher. Additionally, this belief of social constructivism and emphasis on qualitative predispositions promote interventions that incorporate understanding and input of the community being served (Mann & MacLeod, 2015).

1.8 Objectives

The objective of this paper is to review the qualitative research literature on menstrual practices and attitudes in Nepal and to describe the research results through a multifaceted lens that considers taboo, gender roles, social norms, and stigma surrounding the topic. Multifaceted refers to an approach that looks at and targets two or more factors that influence a health behavior. Reviewing qualitative literature through a multifaceted lens that assesses multiple factors will help to expand discourse on menstrual health and stigma in Nepal and promote future qualitative, narrative-based research that considers the many factors that influence MHM and MHH in LMIC’s. Additionally, this essay strives to identify and describe the gaps in qualitative research surrounding menstrual attitudes, beliefs, and traditions in Nepal and why it is pertinent to learn

from and utilize firsthand stories of Nepalese women to promote change. Upon addressing these gaps, the essay will suggest modifications for future interventions and research.

2.0 Methods

2.1 Eligibility Criteria

A literature review was undertaken to focus on qualitative research on menstrual beliefs, traditions, and attitudes based in Nepal from 2005-2023. The decision to focus on qualitative research was based on the belief that qualitative data is crucial to informing and creating more appropriate community-based outreach within the field of public health and MHM interventions. Mixed methods studies were excluded so as to focus on qualitative studies. Additionally, there were limited mixed methods studies following the inclusion criteria I have outlined – and of those that would have been included, many had already been reviewed and evaluated in other literature reviews. This essay focuses on research published from 2005 onward because the Chhaupadi ban in Nepal was implemented in 2005 and this essay seeks to focus on behaviors since the ban was implemented. While the stories and experiences of menstruating women in Nepal were of top priority, all qualitative studies were included even if they gathered the opinions of non-female members of the community in order to allow for a more comprehensive understanding of societal factors that drive menstrual practices and opinions. Lastly, studies that were not original work or written in English excluded from this review. The inclusionary and exclusionary criteria are as follows:

Inclusion Criteria

- (1) Published qualitative research related to menstrual practices, traditions, taboo, and/or beliefs in Nepal
- (2) Studies regarding menstruating women (roughly ages 12-50)

- (3) Qualitative research

Exclusion Criteria

- (1) Articles on research studies not based in Nepal
- (2) Articles on research studies that did not solely use qualitative methods (aka mixed methods studies)
- (3) Articles related to menstrual health that did not discuss taboo, beliefs, stigma, and/or attitudes
- (4) Articles on research studies that did not regard menstruating women
- (5) Articles that were not original research (reviews, conference proceedings, etc.)
- (6) Articles not in English

2.2 Information Sources

A literature search was conducted on January 30th, 2023, by this author and health sciences librarian Helena VonVille using four databases: Medline, APA PsycInfo, Global Health, and EMBASE.

2.3 Search Strategy

Due to limited literature on this topic, broad key terms were used: “menstruation,” “menstrual cycle,” “menarche,” “chhaupadi,” “Nepal,” “qualitative,” “focus groups,” “interviews,” “survey,” “attitudes,” “practices,” “beliefs,” etc. Key terms were combined through

the Boolean operators ('AND' and 'OR). An example of the search strategy is as follows: (((((menstruation) OR menstrual cycle) OR Chauppadi)) AND Nepal). The search was then adapted to search other databases. Duplicates were removed after the initial search using the AED method (Otten, 2019). The inclusion and exclusion criteria were defined before the literature search and were followed strictly. Appendix 1 shows all search strategies and data related to each search.

EndNote (Clarivate) was used to store all citations found in the search process and to check for duplicates not found during the search process. Search strategies and results were tracked using an Excel workbook designed specifically for one-person reviews (VonVille, 2023).

2.4 Selection Process

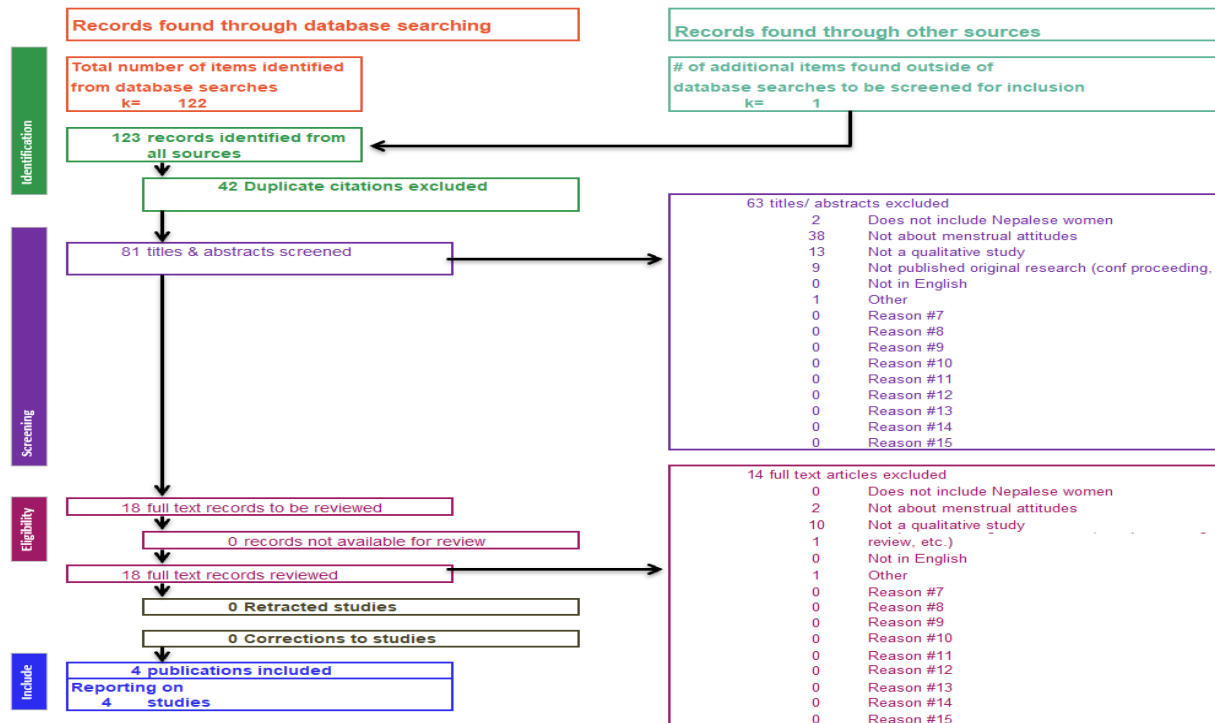
The Excel workbook was used for study selection after searches had been completed and all unique citations were added to the appropriate worksheet. The author assessed each title and abstract to determine if it should be excluded (with a single reason provided) or go to full text review. The full text of non-excluded articles was retrieved, and an exclude/include decision was recorded in the Excel workbook.

3.0 Results

3.1 Selection of Sources of Evidence

The Excel workbook was utilized to exclude research articles based on the previously outlined eligibility criteria. As portrayed in Figure 4, of the 122 publications found in the initial search, four were deemed eligible for the completion of this review. Reasons for exclusion of abstract/titles and fully reviewed texts are outlined within the flowchart.

Figure 4: PRISMA-ScR Flowchart for Menstrual Practices, Beliefs, and Traditions



3.2 Characteristics of Sources of Evidence

Descriptions of the studies included in this review are presented in Table 1. These characteristics include study purpose, design, setting, sample characteristics, and main results found. Four studies that met inclusion criteria were identified. The studies were published between 2014-2020. These studies were each conducted in or included different districts of Nepal. Each study was completed using only qualitative methods. No mixed methods studies were included. Four mixed methods studies were excluded upon abstract review. Of the 10 full text articles reviewed for inclusion that were excluded due to the reason “not a qualitative study”, only one was a relevant mixed-methods study. Two studies utilized focus groups, two utilized surveys, and one utilized collaborative filmmaking. All four studies focused on beliefs, traditions, knowledge, and practices surrounding menstruation in Nepal. The ages of the participants varied within each study. Most (n=3) studies included strictly female participants, while one study asked for feedback from men within the study community as well as women. Chhaupadi was mentioned in every included study. Other restrictive practices common to Nepal, such as separation from the community, also were discussed in all four studies. Three out of the four studies discussed or accounted for caste/ethnicity. All studies accounted for age of the participants as a factor that may influence their opinions, beliefs, and/or behaviors surrounding menstruation. Bias of the research team was not assessed for within the eligibility criteria, which is a limitation of this review. Only two out of the four studies discussed research team positionality and what they did to combat bias stemming from a Westernized research team. Within those two studies, positionality was discussed very briefly, which is also a limitation of the research itself.

Table 1: Evidence Table of Study Characteristics

Study	Journal	Purpose	Study Design	Setting	Sample	Results
Bauman et. al. 2020	Women's Reproductive Health	To introduce collaborative filmmaking as an effective qualitative research medium and get a firsthand glimpse into the menstrual practices of adolescent girls in a rural Nepali village – to raise awareness and spread dialogue on a community and national level – exploring the role caste, ethnicity, and religion have on menstrual practices and attitudes	Qualitative Collaborative Filmmaking case study	Kanchanpur District	7 menstruating females between the ages of 16-18 from 4 different caste/ethnicities and 2 different religions	Isolation and restrictive cultural practices were shown through firsthand video experience of the adolescent girls during menstruation – the project helped the girls to become more comfortable talking about menstruation and sharing their experiences as women with their communities- menstrual practices were found to differ between religions and caste/ethnic groups within this community

Thapa et. al. 2019	SAGE Open Medicine	To explore traditional menstrual practices in rural Nepal and understand public opinion and factors surrounding these practices	Qualitative case study	Accham district	4 women, 3 men, and 2 female community health volunteers from the district	Seclusion and separation practices are common among menstruators in rural Nepal – contextual factors such as poverty, stigma, influence of family and healers, illiteracy, and cultural beliefs surrounding menstruation fuel and shape these menstrual practices and change surrounding them is slow
Crawford et. al. 2014	Culture, Health, & Sexuality	To understand menstrual stigma in the context of religiously based menstrual restrictions imposed on women in Nepal	Qualitative Study Utilizing Focus Groups and Interviews	Kathmandu metropolitan area	Focus group 1: female students from Tribhuvan University (n=4) Focus group 2: volunteers among staff from an NGO devoted to the empowerment of women (n=4) Individual interviews: convenience	Women reported stigmatization of menstruation which was connected to fear of menarche and feelings of distress surrounding it

					sample of 11 adult women All Nepali female residents of the area over 18 and fluent in English	
Rothchild & Piya, 2020	The Palgrave handbook of Critical Menstruation Studies	To illuminate social structures and previously overlooked dynamics within gender as they play out around menstruation among women in Nepal	Qualitative study utilizing Focus Groups (stratified by age)	Various Nepali districts	70 women separated into age categories (up to 25, 25-30, 31-40, 40-50, and 50+)	Through women's life stories, it was found that discriminatory beliefs, social norms, and practices around menstruation form a "web of control" around adolescent girls and women in Nepal that limits their independence and is associated with negative attitudes and feelings

3.3 Results of Individual Sources of Evidence

The research included in this review reported that many people in Nepal who support traditional views believe that menstrual blood is “unclean” or “impure” (Thapa, 2021). Each study included within this review mentioned this belief and how it was associated with restrictive practices that women are subjected to while they are menstruating. While some of these practices are tied to religion, others are also rooted in cultural lore that is believed to bring about bad luck if not adhered to. Each reviewed study mentioned some sort of guilt-based influence on women following restrictive practices while menstruating. Common restrictive practices followed by menstruating people in Nepal while menstruating, reflected in each study, include not sharing a bed, not touching others’ dishes or water sources, not entering prayer rooms or temples, and/or not attending school. Common similarities in the qualitative data gathered by the four studies are grouped into the following categories: feelings of fear, shame, or guilt, bathing/cleansing rituals, kitchen restrictions, separation from community, negative opinions/questioning/modifications of practices, and consequences of not following restrictions.

3.3.1 Feelings of Fear, Shame, or Guilt

The stigma surrounding menstruation in Nepal was evident and discussed in all four of the aforementioned studies, despite the studies being set in different areas of the country. Study setting spanned from the far-West region of Nepal to the Kathmandu metropolitan area. Many study participants cited associating feelings of shame, guilt, and embarrassment with menstruation due to a lack of discourse or adequate education on the subject. Examples of testimonies gathered regarding to these feelings are included below:

“Sumangala Khadka (40, Sindhupalchowk) who had her period at 14, shared, ‘I had thought that it was a leech but the blood was a lot more . . . After seeing the blood and checking my body properly for leeches and not finding them, I was then sure that I had my period.’” (Rothchild, 2020).

“Gita Silwal (44, Kathmandu) shared, ‘I didn’t know what menstruation was. My relatives used to tease . . . that I will experience something new when I reach the age of 13 or 14. I used to feel scared and think how does it feel to have these kinds of experiences? I had it at 12 years . . . I cried a lot . . . because I could not understand what is happening in my body . . . we feel shame.’” (Rothchild, 2020).

“Virtually all respondents reported they knew little about menstruation prior to menarche. Sex education was either absent, minimal or offered well after they had experienced menarche” (Crawford, 2014).

“Some women mentioned specific fears that their bodies had been damaged, injured or broken: ‘I was really, really worried, and my mom, she finally said, ‘Oh, what happened, you’re going to the bathroom all the time, what happened to you? Has your thing broken up?’ I was much more worried then because my ‘thing’, vagina, might have broken up and I was really, really worried. My mom was joking, but I was serious.’ (Maya, age 34)” (Crawford, 2014).

While the Thapa and Baumann study data did not include specific testimonies about participants being scared or unprepared for menarche, both studies discussed how education influences MHM. A lack of education on menarche and proper menstrual hygiene was linked to negative MHM and negative feelings towards menstruation in general.

3.3.2 Bathing/Cleansing Rituals

All four studies reported restrictive practices regarding the use and sharing of water while menstruating. It was reported that women who were menstruating were not allowed to wash themselves, their clothes, or their dishes in the same water supply as other members of their communities. For example, a participant in the Baumann et. al. study reported, ““(Menstruation) affects my life a bit because when I menstruate, I go to the river to take bath, which is far away’ (Maya, Hindu Dalit, 18 years).” (Baumann et. al., 2020). Rothchild reported, “a menstruating woman should be careful to not let even a drop of water fall from her mouth while drinking, as

that drop could pollute the ground” (Rothchild, 2020). While some women reported following restrictive practices with water sources less strictly than others, practices regarding water were extremely common. Baumann et. al. additionally reported, “All the Hindu girls had to receive food and drinking water from others, as they were not allowed to touch the water tap to get water or enter the kitchen to make meals.” (Baumann et. al., 2020).

Cleansing rituals were another practice described in the qualitative research. The importance of using cow urine as a cleansing agent for women while they were menstruating was mentioned in two of the four studies. Cows are sacred animals in the Hindu faith, which is why their urine has been used by women during menstruation to rid them of their impurities (Rothchild, 2020). Testimonies regarding using cow urine to cleanse oneself during menstruation are listed below:

“All of the Hindu girls practiced ritual cleansing by sprinkling and sipping cow urine to make themselves pure after their menstrual cycle was finished (Figure 21). “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 menstruation)” (Maya, Hindu Dalit, 18 years).” (Baumann et. al. 2020).

Nirmala Pariyar (23, Kathmandu) shared in that Dalit community, “We stay at another’s house for seven days. After the seventh day, mother would come to take me back home with new clothes to change. Before that, I should wash myself, then I would be purified (sprinkled) with gold water (water dipped with gold) and cow urine.” (Rothchild, 2020).

These practices reiterate the belief that menstruating women are “impure” or “unclean” and address the belief that menstruators must be purified for the sake of themselves and their communities.

3.3.3 Kitchen Restrictions

Often going hand in hand with the restrictions regarding water, some form of restrictions in the kitchen during menstruation was mentioned in all four studies. The Baumann et. al. study reported that the kitchen is regarded as a sacred place in Hinduism, which would help to explain why menstruating women, who are perceived as impure, are often not allowed to enter (2020). The difference between Nepali women who practiced Hinduism and those who practiced Christianity was highlighted by Baumann et. al. For example, they wrote, “None of the Hindu girls were allowed to enter the kitchen or cook while menstruating, whereas both Christian girls were allowed and encouraged to cook” (Baumann et. al., 2020). None of the three other studies included participants who practiced Christianity.

Additionally, differences between specific castes/ethnicities that showed variations in strictness regarding practices during menstruation were highlighted in the study. According to the study, the Dalit and Brahman girls experienced the strictest cooking and kitchen-use restrictions among the Hindu practicing participants (Baumann et. al., 2020).

Because sacred places were commonly off limits to menstruating girls and women in all studies, access to temples and religious rooms was also commonly restricted. Crawford reported a participant saying, “‘We were not allowed to reach out or go to sacred places, gods and goddesses. We were kept away from those areas, stating that those are very pure areas, spiritual places where we should not be touching or taking part.’ (Sushila, age early-40s).” (Crawford, 2014). All four studies mentioned restriction from entering prayer rooms or temples while menstruating.

Separation from Community

Whether it was through the participation of Chhaupaudi or simply not being able to enter the kitchen, all studies reported some form of separation or isolation of menstruating people from

others in the community. Separation during sleeping was mentioned in all studies, while it was reported that some girls practiced it more strictly than others. For example, in the Rothchild study, they reported that a participant shared, “During periods we either slept in the shed with cattle or in the veranda outside the house” (Rothchild, 2020). However, Crawford reported a participant saying, “[My husband] doesn’t mind... Before we, like, we had a system of not sleeping together for four days, we sleep separately but he doesn’t mind... there’s no harm in sleeping together.” (Crawford, 2014). These examples represent the variety of strictness in sleeping practices and how adherence may be changing over time.

3.3.4 Questioning Practices/ Modifications/ Negative Opinions

All four studies reported women questioning or modernizing menstrual practices in some way, showing that they often believed the stricter traditions to be harmful and perhaps in some way unnecessary. For example, Rothchild writes, “In the sharing of their life stories, women, both young and old, raised important questions about menstrual restrictions, and often connected these ideas with the ability to challenge existing patterns of discrimination and exclusion.” (Rothchild, 2020). Examples of testimonies from the studies where women questioned practices are as follows:

“Rekha went on to explain, ‘I used to feel, why I should not touch here and there? . . . And why I am kept in this room? . . . Even during religious ceremonies, I didn’t go to places . . . I didn’t go myself into the kitchen . . . Now my mom has become a little more liberal . . . entering kitchen and other places . . . All I know is I should be clean . . . my mom also became aware by going to nearby health places and also she heard from others too.’” (Rothchild, 2020).

““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, 17 years).” (Baumann et. al., 2020).

“One woman (Participant no. 1) who did not follow the tradition, explained that spending a night in the shed would be a bad experience for women. She put it this way: Chhaupadi is bad! If people don’t practice Chhaupadi, women can sleep

on their own bed, can clean up and bathe nicely. Now, if a woman should practice Chhaupadi, she will be given a small piece of mat, she needs to sleep on it, and will be scoffed by mosquitoes; snakes may bite her; may be some strangers will just grab her during the night. People should be aware of what might happen to them in those conditions.” (Thapa et. al., 2019).

Many women who questioned traditional or stricter menstrual practices reflected more modern views or adaptations to these practices. Some women reported not adhering to the practices whatsoever. Testimonies related to the adaptation or refusal of traditional menstrual practices in Nepal are as follows:

“There are many Gods, I cannot please all of them. Now if a God is angry for not practicing the practices, then He can curse me. But I won’t stop cooking my own food, taking care of my cattle and staying in my own house. I haven’t ever practiced it so far and will not practice it ever” (Thapa et. al., 2020)

“When asked what could be done to improve her menstrual experience she said, “It is a modern world. People have made chhaupadi. It would be good if people would (also) eliminate it. But our gods and goddesses will not allow it. Though we cannot (eliminate it), we can make a small house near our home to sleep in during menstruation. If we are nearer, we will not be afraid” (Maya, Hindu Dalit, 18 years).” (Baumann et. al., 2020).

Crawford cited the avoidance of the stricter practices as a way for women to manage behavioral stigma. They reported, “The most prevalent behavioral stigma management strategy was to juggle traditional expectations and modern responsibilities by finding ways to avoid the most onerous restrictions.” (Crawford, 2014). While other studies included discussion about the adaptation of traditional practices, they did not directly relate this to managing stigma.

3.3.5 Consequences of Not Following Restrictions

All four studies reported some form of negative consequences that Nepali women believed would occur if they did not adhere to the practices and restrictions common during menstruation. Fear of what would happen if they did not follow menstrual restrictions was cited as a major

motivator in participating in these practices (Baumann et. al., 2020). Specific examples of these beliefs are reflected in the following testimonies:

“One Hindu Chhetri girl explained how she avoided touching her mother: “I cannot touch my mother. If I do, she will become sick” (Sunita, Hindu Chhetri, 18 years).” (Baumann et. al., 2020).

“A woman (Participant no. 5) put it this way: If people in my home are not well, maybe it is because of some other problems, but I fear that it is because of God or because of not following the tradition. In my house, we have a separate room to sleep during my periods. I do not go to the kitchen and do not touch the water jar.” (Thapa et. al., 2019).

“She put (Participant no. 2) it this way: Menstrual blood is bad and should be cleaned. If I don’t follow the tradition, I will have bad dreams in night, and there will be problems in the family. If I don’t do it, my heart will not be happy. It will be difficult to stay close to other people; I would not feel comfortable.” (Thapa et. al., 2020).

“Among the participants, four women and two men believed that if women in the family would not follow the traditions, some problems would happen in the family.” (Thapa et. al., 2020)

Other studies reported consequences specifically related to the men in their communities.

Rothchild reported that women were put into seclusion during menstruation to protect their male family members (2020). Rothchild writes,

“As Ramita Dahal (33, Dolakha) explained, “(I) told my mother . . . Then, my mother scolded me for looking at my brother’s face and (she) said, ‘Do you want to eat (kill) your one and only brother looking at his face while having period? . . . In our Chhetri caste, a girl should not look the face of her brother while having her first period so I was taken to another place to hide.’” (2020).

Crawford reported similar information, describing that many women felt the need to follow these practices to appease elders within the community (2014). For example, Crawford writes, “One way of coping with stigmatization was to label it as traditional cultural practice. A number of women stated they accept and participate in all the rituals and customs of menstruation, feeling responsible for maintaining them out of respect for tradition and their elders” (2014). This idea of community and familial pressure to adhere to traditional practices was emphasized in all reviewed articles.

One study discussed and assessed the role of traditional healers in deterring the negative consequences of not following menstrual restrictions. Traditional healers are members within Nepali communities who often incorporate Hindu beliefs into primary health care practices. Due to their credible connection with the Hindu faith, they are generally trusted within the communities they serve and highly revered. Thapa et. al. reported, “Five women who practiced menstrual restrictions believed that the traditional healers can talk to the God and could identify whether the god was angry on the women in the family because of not following the menstrual practices.” (Thapa et. al., 2020). No other studies discussed the role of traditional healers in influencing menstrual practices, which is an area for potential future research.

3.3.6 Interventions

Many studies discussed the role of MHM interventions in Nepal. One study specifically talked about interventions to reduce the prevalence of Chhaupadi practices in rural communities where adhering to stricter menstrual practices is more prevalent. Thapa et. al. reported the use of female health volunteers, implemented by the Nepali healthcare system in the 1980’s, to assist in the eradication of Chhaupadi practices (2020). The female health volunteers reported, “menstrual sheds in a few villages had been destroyed and those villages had been declared Chhaupadi free” (Thapa et. al., 2020). However, others included in this study reported that women participated in the Chhaupadi elimination program for the sake of incentives and did not actually stop practicing seclusion while sleeping.

No other studies mentioned Chhaupadi elimination programs within their communities and two participants in the Thapa et. al. study reported never having participated in any type of said program. Additionally, Baumann reported that public knowledge on criminalization, especially in

rural communities, is scarce (Baumann et. al., 2020). Therefore, the criminalization was found to be equally as inefficient as the 2005 ban in its ability to change societal behaviors.

4.0 Discussion

4.1 Summary of Evidence

This scoping review examined qualitative studies of menstrual beliefs, practices, and traditions in Nepal. While they utilized different qualitative research methods, the four included studies found similar rich contextual data patterns regarding menstrual practices and beliefs. The qualitative studies included in this review emphasized the continuation of restrictive menstrual practices in different geographical areas of Nepal. Two of the studies (Baumann and Thapa) were conducted in communities within the far-West region of the country, which is known for upholding more traditional views and lacking a proper educational system. Not surprisingly, both studies reported community members practicing the most extreme form of menstrual restriction – Chhaupadi. Even the Crawford study, conducted in the greater Kathmandu metropolitan area, reported that restrictive menstrual practices were still prevalent. However, participants in this study reported more modern adaptations of practices and beliefs, as reflected in the results section. This may be due to greater education and less adherence to traditional values in more urban areas of the country. The variety in these results due to geographical location support the findings that MHM interventions must address local variation in culture and customs and that program interventions may be more urgently needed in the far-West region of Nepal, where menstruators face more potential for health-threatening restrictions. MHM interventions that seek to change deeply rooted religious practices regarding menstruation may face resistance from community members, particularly in more restrictive rural areas versus metropolitan ones. Therefore, results from the qualitative studies in the far-West rural areas provide critical contextual information for

researchers and public health workers to understand why women continue to uphold these restrictive practices.

All four studies reflected religiously rooted exclusionary practices such as menstruators being restricted from entering kitchens and temples, sharing a bed, and using the same water source as others in the community. Most menstruators in the studies reported a heavy familial and community influence on adhering to the menstrual practices. Participants mentioned that they believed bad things would happen to them or their families if they did not adhere to these practices. This influence could account for why participants within the studies recalled performing at least one or more restrictive practices, and contributes to insight into the lingering effects of cultural taboos. While modified practices seemed to be more prevalent among younger women and women living in more urban areas of Nepal, they were also present in reports from the far-West region. Because the studies reviewed all were completed within the last decade, modifications of the practices could allude to a modern emergence of menstruators wanting to eventually move away from the stricter traditional practices. Modified practices and beliefs included letting women sleep in their houses during their periods, allowing them to enter the kitchen while menstruating, and not believing that not participating in the practices would have negative effects on your family/community.

Feelings of fear, shame, and guilt surrounding menstruation and hygiene was reported by all studies in Nepal. Adequate education is necessary in working to dismantle stigmatization and increase menstrual knowledge, which would, in turn, promote healthier practices. While enhancing menstrual health education has been an objective for most MHM interventions in the past, understanding how educational systems in Nepalese communities' work is pertinent to creating an intervention that effectively disseminates information. Because these educational materials will

likely push ideas that go against traditional Nepalese beliefs and practices, it would be beneficial for researchers to survey community members on how they react to the information within the materials.

4.2 Utilizing Results for Future MHM/MHH Interventions

The rich qualitative data reported and analyzed within the four studies included in this review reveals important aspects of Nepalese communities and how/why they uphold traditional practices were obtained. This information can inform development and implementation of MHM interventions through an emphasis on researchers practicing cultural humility and competency. For example, knowing that familial and community pressures heavily influence the continuation of these practices is something organizations can target in future MHM interventions. The holistic MHH approach created by the GWSP outlines creating and promoting educational materials that reject harmful stigma (World Bank Group, 2022). While this is important, it would be hard to effectively target communities in far-West Nepal with this part of MHH intervention when illiteracy rates are high, and the educational system is severely lacking. A more community-targeted approach could include classes to disseminate this information by word of mouth. Classes could differ based on age of community members and work to ease older members of the community into the ideas in a slower manner.

Also, many previous MHH/MHM interventions seek to only educate young girls on menstruation (UNICEF, 2019). While this is extremely important, interventions need to target more than just young girls in school. Due to the finding of heavy community and family influence, it is important to educate everyone, young or old, male or female, in order to break down stigma

and cultural lore surrounding menstruation in Nepal. Tackling an issue so heavily rooted in tradition and religion is complex, but education has shown evidence of being the best way to combat stigmatization and increase discourse on a subject.

Of the studies reviewed, one reported opinions from female community health volunteers who had directly worked within the communities (Thapa et. al., 2019). Female community health volunteers serve as part of the Nepali community health workforce (Williams, 2020). About 52,000 female community health volunteers serve in the country of Nepal, as of 2020 (Williams, 2020). While research suggests that these workers have played and continue to play an integral role in reducing negative health outcomes in the country, MHM interventions have yet to utilize them as partners. However, female community health volunteers were incentivized in assisting the Nepal government in eradicating Chhaupadi practices in Nepalese villages. The volunteers helped to tear down Chhaupadi sheds within villages and promoted menstruators sleeping in their houses during their periods. Despite the interventions, many of the volunteers and women in the communities continued to practice Chhaupadi and reported being heavily swayed by the incentives (Thapa et.al., 2019). While the full extent of these interventions was not covered in the research, it reflects that female community health volunteers are integrated within their communities and are trusted by the Nepalese government to influence health behaviors. Future research on female community health volunteers, their roles within the communities they serve, and their participation in MHM interventions could be greatly beneficial in the creation of evidence-based community centered interventions.

Similarly, the Thapa et. al. study mentioned the influence of traditional healers in Nepali communities (2019). The results reflected that many participants reported traditional healers being able to “talk to their gods” in search of forgiveness if they did not adhere to certain restrictive

practices while menstruating (Thapa et. al., 2019). While this may be more common in areas within the far-West region of the country, it could be beneficial for future MHM research to analyze traditional healers' influence further and try to get them to assist in interventions.

Evidence that younger menstruators in Nepal believe that modifications of certain practices, such as Chhaupadi, are acceptable is a promising finding that future MHM interventions can utilize. Eradication of restrictive menstrual practices is a hefty goal. Pushing communities towards modifications of these practices and beliefs that were reflected in the study results could act as a steppingstone for the eradication of harmful menstrual practices. Highlighting modifications that continue to incorporate religious beliefs and do not disrespect Hinduism could be important objectives for public health organizations. Research on how modified practices and beliefs are responded to among more rural communities could greatly help the development of future MHM interventions in Nepal. Additionally, because these traditions are so tied to Hinduism, it would be beneficial for research and intervention teams to be well versed in the religion and be willing to learn from community members.

Of the extremely limited qualitative studies on menstrual practices, traditions, and beliefs in Nepal that exist, many are relatively recent and have not been utilized to promote menstrual health programs. Of the outreach programs addressing menstrual health in Nepal that exist/have existed, many have been limited to focusing on urban areas in the country where restrictive menstrual practices are less likely to be adhered to. Thapa et. al. writes,

“A recent quantitative study has reported that certain ethnic groups, especially in the rural areas, have largely fallen behind in terms of menstrual health outcomes, and these blanket menstrual hygiene management programs may not be sufficient for improving menstrual knowledge and practices among the population groups who live in the rural areas.” (2019).

Ultimately, community-based holistic approaches that target the many sociocultural factors previously examined within this essay are needed in these rural areas in order to promote change.

Many menstrual health management (MHM) programs in Nepal have historically focused on sanitary products and education without addressing traditional practices and societal impact, which has influenced this finding of certain ethnic groups in rural areas falling behind in terms of menstrual health outcomes.

Lastly, discussing the limitation of research team positionality, especially when coming into a country where a research team is not originally from, is extremely important for public health research and intervention. The bias that a research team brings to the research they are completing is heavily reliant on any preconceived ideas they have before beginning their work. These ideas heavily stem from culture, background, and education. Because only two out of the four studies in this review discussed research positionality and bias from the research team's own cultural background, it is possible this was not something they thought about or addressed. Without addressing these biases, researchers and public health officials pose a major risk of forcing their opinions and beliefs upon the group they are studying. This also puts them at risk of assuming the wants and needs of a community, which is another reason why qualitative community-based research is so important.

4.3 Limitations

Qualitative studies on menstrual beliefs, traditions, and practices in Nepal are lacking. Additionally, studies based in the far-West region of Nepal where these restrictive practices and traditional beliefs are more prevalent are needed in order to curate the most efficient MHM interventions. Because the exclusionary criteria yielded only four eligible studies, this scoping review is based on limited data. Additionally, not all studies reported caste/ethnicity of their

participants, which limits how the Nepal caste system influences menstrual practices and beliefs. More research is needed in order to better understand the motivations behind traditional menstrual practices in Nepal. Evaluations of MHM interventions in LMICs, especially those in countries with heavy traditional and religious influence, are also needed in order to assess how to best serve communities within these countries.

5.0 Conclusion

Despite the emergence of MHM advocacy and intervention within the past two decades, menstrual practices, beliefs, and traditions in Nepal still continue to uphold harmful restrictive practices and inadequate menstrual education. While qualitative evidence promotes multifaceted intervention that targets sociocultural aspects of menstruation in Nepal, it is severely lacking. Factors that influence menstrual practices and beliefs in Nepal include family members, menstrual education, religion, menstrual stigma, gender discrimination, caste/ethnicity, illiteracy, geography, and poverty. Additional research is needed in order to create meaningful MHM interventions in Nepal that effectively improve menstrual health and hygiene practices, dismantle harmful traditional beliefs, and ensure the menstrual health of all who menstruate in the country. Community-based research conducted in the far-West region of Nepal that accounts for caste, education, community/family influence, and the roles of traditional healers and female community health volunteers is more specifically needed to create MHM interventions that are specific to more rural populations. Qualitative research on this topic is necessary for public health workers to better understand the motivations, wants, and needs of Nepalese people and to promote their future involvement in MHM interventions. Qualitative research in Nepal could help researchers gain insight into why sanitation focused MHM programs, such as those implemented by WASH, are proving to be ineffective in changing the menstrual hygiene practices of young Nepali women (UNICEF, 2019). Additionally, qualitative research that values and incorporates the participation of community members can assist researchers in developing MHM and MHH programs to effectively address unhealthy structural beliefs and behaviors surrounding menstruation.

Appendix A Search Strategies

Appendix Table 1: Summary of Literature Databases

Table	Vendor/ Interface	Database	Date Searched	Database update	Searcher(s)
2	Ovid	Medline	January 30, 2023	1946 to January 27, 2023	Helena M. Vonville; Mura L. Gildea
3	Ovid	APA PsycInfo	January 30, 2023	1806 to January Week 4 2023	Helena M. Vonville; Mura L. Gildea
4	Ovid	Global Health	January 30, 2023	1973 to 2023 Week 04	Helena M. Vonville; Mura L. Gildea
5	Elsevier	EMBASE	January 30, 2023	January 30, 2023	Helena M. Vonville; Mura L. Gildea

Appendix Table 2: Medline Search Strategy

Provider/Interface	Ovid
Database	Medline®
Date searched	January 30, 2023
Database update	1946 to January 27, 2023
Search developer(s)	Helena M. VonVille; Maura L. Gildea
Limit to English	Yes
Date Range	2005-2023
Publication Types	No limit by publication type
Search filter source	No search filter used

1	menstrual cycle/ or menstruation/
2	((chhau adj1 (hut or huts)) or chaupadi or chhaupadi or menstruat*).ti,ab,kf.
3	1 or 2
4	focus groups/ or interviews as topic/ or narration/ or qualitative research/ or ((face-to-face or guided or in-depth or indepth or informal semi-structured or semistructured or structured or unstructured) adj3 (discussion* or interview* or questionnaire*).ti,ab,kw. or (ethnograph* or "field work" or fieldwork or focus group* or key informant* or qualitative).ti,ab,kf.
5	"surveys and questionnaires"/ or health care surveys/ or self report/
6	(survey* or questionnaire*).ti,ab,kf.
7	4 or 5 or 6
8	3 and 7
9	Attitude/ or attitude to health/ or health knowledge, attitudes, practice/
10	Cultural Characteristics/ or Culture/ or Folklore/ or religion/ or social isolation/ or social stigma/ or Superstitions/ or taboo/
11	(attitude* or belief* or cultural or culture or ethic* or folklore or hindu* or isolat* or perspective* or religio* or restriction* or ritual* or seclude* or seclus* or superstit* or taboo* or tradition*).ti,ab,kf.
12	9 or 10 or 11
13	8 and 12
14	13 and (nepal/ or nepal*.ti,ab,kf.)
15	limit 14 to english language
16	limit 15 to yr="2005 - 2023"

Appendix Table 3: APa Psycinfo Search Strategy

Provider/Interface	Ovid
Database	APA PsycInfo
Date searched	January 30, 2023
Database update	1806 to January Week 4 2023
Search developer(s)	Helena M. VonVille; Maura L. Gildea
Limit to English	Yes
Date Range	No limit by date
Publication Types	No limit by publication type
Search filter source	No search filter used

1	menstruation/ or menstrual cycle/ or menarche/
2	((chhau adj1 (hut or huts)) or chaupadi or chhaupadi or menstruat*).ti,ab,id.
3	1 or 2
4	(focus group or interview or qualitative study).md.
5	interviews/ or focus group interview/ or semi-structured interview/
6	(((((face adj2 face) or guided or ("in" adj1 depth) or indepth or (semi adj1 structured) or semistructured or structured or unstructured) adj3 (discussion* or interview* or questionnaire*)) or (ethnograph* or (field adj1 work) or fieldwork or (focus adj1 group*) or (key adj1 informant*) or qualitative)).ti,ab,id.
7	data collection/ or self-report/ or surveys/
8	((self adj1 report*) or survey* or questionnaire*).ti,ab,id.
9	4 or 5 or 6 or 7 or 8
10	3 and 9
11	nepal.lo. or nepal*.ti,ab,id.
12	10 and 11
13	(attitude* or belief* or cultural or culture or ethic* or folklore or hindu* or isolat* or perspective* or religio* or restriction* or ritual* or seclude* or seclus* or superstit* or taboo* or tradition*).ti,ab,id.
14	3 and 11 and 13
15	12 or 14

Appendix Table 4: Global Health Search Strategy

Provider/Interface	Ovid
Database	Global Health
Date searched	January 30, 2023
Database update	1973 to 2023 Week 04
Search developer(s)	Helena M. VonVille; Maura L. Gildea
Limit to English	Yes
Date Range	2005-2023
Publication Types	No limit by publication type
Search filter source	No search filter used

1	menstruation/ or menstrual cycle/
2	((chhau adj1 (hut or huts)) or chaupadi or chhaupadi or menstruat*).ti,ab,id.
3	1 or 2
4	nepal.gl. or nepal*.ti,ab,id.
5	3 and 4
6	social stigma/
7	beliefs/ or health beliefs/ or religious beliefs/
8	(attitude* or belief* or cultural or culture or ethic* or folklore or hindu* or isolat* or perspective* or religio* or restriction* or ritual* or seclude* or seclus* or stigma* or superstit* or taboo* or tradition*).ti,ab,id.
9	6 or 7 or 8
10	5 and 9
11	limit 10 to yr="2005 - 2023"

Appendix Table 5: Embase Search Strategy

Provider/Interface	Elsevier
Database	Embase®
Date searched	January 30, 2023
Database update	January 30, 2023
Search developer(s)	Helena M. VonVille; Maura L. Gildea
Limit to English	Yes
Date Range	2005-2023
Publication Types	No limit by publication type
Search filter source	No search filter used

#1	('menstrual cycle'/de OR 'menstruation'/de)
#2	(chhau NEAR/1 (hut OR huts)) OR chaupadi:ti,ab,kw OR chhaupadi:ti,ab,kw OR menstruation:ti,ab,kw OR menstrual:ti,ab,kw
#3	#1 OR #2
#4	'nepal'/de OR nepal:ti,ab,kw OR nepalese:ti,ab,kw
#5	#3 AND #4
#6	('stigma'/de OR 'cultural factor'/de OR 'cultural anthropology'/de OR 'folklore'/de OR 'religion'/de OR 'social isolation'/de OR 'superstition'/de OR 'taboo'/de OR 'social stigma'/de OR 'attitude'/de OR 'attitude to health'/de OR 'health behavior'/de)
#7	(attitude*:ti,ab,kw OR belief*:ti,ab,kw OR cultural:ti,ab,kw OR culture:ti,ab,kw OR ethic*:ti,ab,kw OR folklore:ti,ab,kw OR hindu*:ti,ab,kw OR isolat*:ti,ab,kw OR perspective*:ti,ab,kw OR religio*:ti,ab,kw OR restriction*:ti,ab,kw OR ritual*:ti,ab,kw OR seclude*:ti,ab,kw OR seclus*:ti,ab,kw OR stigma*:ti,ab,kw OR superstit*:ti,ab,kw OR taboo*:ti,ab,kw OR tradition*:ti,ab,kw)
#8	#6 OR #7
#9	#5 AND #
#10	#9 AND [english]/lim AND [2005-2023]/py

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