



Socio-cultural and religious factors influencing menstrual hygiene management among schoolgirls in Tanzania. A literature survey

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Abstract

Background: Menstruation is a natural phenomenon for adolescent girls and women as part of their reproductive life. It is associated with social and cultural values among schoolgirls and women. This study aimed to identify and discuss several socio-cultural and religious elements that influence menstruation among Tanzanian schoolgirls.

Methods: The study is a literature survey based on relevant papers published in Tanzania. It was conducted utilising a seven-step methodology, in which relevant themes from several prospective bibliographic databases, such as Google Scholar, PubMed, and institutional repositories, were methodically identified, collated, and analysed using descriptive methods.

Results: The survey found sociocultural and traditional factors influencing menstrual hygiene management among Tanzanian schoolgirls. These elements include religious beliefs, impurity, witchcraft, local superstitions, menstruation's association with fear, shame, and secrecy, male involvement, awareness, knowledge, and abilities, and relationships with family, teachers, and peers.

Conclusion: The government and other stakeholders should work together to address the socio-cultural and religious concerns that affect menstrual hygiene management among schoolgirls in the country.

Keywords: Menstrual hygiene management; Menstruation; Religious factors; Socio cultural factors; Tanzania

Background

Menstruation is a natural phenomenon for adolescent girls and women as part of their reproductive life (Panda et al., 2024). It is estimated that menstruation is experienced by about one-quarter of the global population, or about 1.8 billion women and girls of

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reproductive age between 15 and 49 years (Jain, 2013). Girls start menstruating between 11-14 years. Poor hygiene during menstruation has been associated with serious ill health, ranging from reproductive tract infections to urinary tract infections (Bobhate & Shrivastava, 2011).

Menstrual Hygiene Management (MHM) involves clearly understanding the basic facts of the menstrual cycle and how to handle it comfortably. Globally, 2.3 billion girls and women do not manage their menstruation properly due to a lack of MHM facilities, high costs, and ignorance (Mulugeta Demmu et al., 2023). This leads to the use of unhygienic menstrual material (such as old clothes) that cause infections, a threat to their well-being and growth. The study conducted in sub-Saharan African countries revealed that, on average, 49% of the school girls missed four school days monthly due to menstruation (Tamiru et al., 2015). About 200 million women and girls from developing countries struggle to access clean water for personal hygiene and private places (Crofts & Fisher, 2012). Schools have inadequate handwashing facilities, dirty toilets that are not private, and a lack of places to dispose of menstrual materials. Menstruating girls' school life becomes uncomfortable and difficult.

Similarly to other developing countries, MHM is among the challenges that schoolgirls in Tanzania face. Sociocultural and religious factors generate hurdles for teenagers and impede the reception of crucial, sufficient information concerning proper MHM. Tanzania has a huge variety of socio-cultural issues that impede MHM practices. Besides, MHM practices among schoolgirls can affect multiple areas across the sustainable development goals (SDGs) agenda, including health, education, gender equality, and women's empowerment (Mohammed Gena, 2020). Poor MHM in schools lead to absenteeism, dropping out, diminished dignity, and a variety of sexual and reproductive health concerns, all of which can have serious and long-term health and socioeconomic consequences for adolescent girls not only in Tanzania but in other countries (Canon, 2021; Van Eijk et al., 2016).

For instance, in schools, adolescent girls' ability to manage their menstruation is hampered by a variety of factors, including low knowledge level of menstruation, insufficient access to safe and private toilets, a lack of clean water and soap for personal hygiene, and limited access to affordable and sanitary materials and disposal options (Patel et al., 2022; Sharma et al., 2022). Moreover, sociocultural myths, norms and religious beliefs impose restrictions on girls during menstruation. All these factors make it difficult for all girls to manage their menstruation in a safe and sanitary manner.

Hence, it is crucial to identify the social-cultural and religious issues in order to intervene correspondingly. However, no comprehensive study or review provides information on how socio-cultural and religious factors affect school life and the general well-being of schoolgirls in Tanzania. Therefore, this survey highlights and discusses socio-cultural and religious issues that influence MHM among schoolgirls in Tanzania.

MHM Situation in Tanzania

Proper MHM is crucial for Tanzanian schoolgirls and women. However, the Tanzanian government increasingly recognises menstrual health and hygiene but has not fully mainstreamed them (Lila et al., 2022). Most girls in rural primary and secondary schools who have reached puberty do not have sufficient materials and facilities during their monthly menstrual cycle (Magayane & Meremo, 2021) and face other sociocultural and religious challenges. However, the government and stakeholders have given MHM issues the attention it deserves.

In the past 10 years, the government and local and international organizations have launched MHM initiatives, as presented in Table 1. All these initiatives aim to improve MHM among women and girls in Tanzania.

Table 1: MHM initiatives in Tanzania

Initiative	Core function	References
Girls in Control	It is a multi-country project that aims to increase school attendance for adolescent schoolgirls through improved MHM in schools and a value-chain business model that facilitates access to safe, affordable, and sustainable sanitary materials.	(SNV, 2024)
Empowering girls through WASH	Through the Foreign, Commonwealth, and Development Office-funded project, Save the Children recognized the urgent need to address MHM challenges girls face. The project focused on constructing latrines, providing disposable sanitary pads, and building handwashing stations to combat absenteeism and promote safety during menstruation.	(Save the Children Tanzania website, 2023)
Maji Safi Group's Menstrual Hygiene Program	Is recognized as a founding member of the nationwide menstrual hygiene management coalition in Tanzania. The coalition is committed to improving the supply chain of menstrual products, educating girls and women on feminine hygiene, and breaking the silence of the barriers women face during menstruation.	(Maji Safi Group website, 2023)
Improving menstruation hygiene management and sanitation conditions in Tanzanian schools	The project's main objectives include girl-friendly sanitation infrastructures, public acceptance of menstruation, and improved school capabilities for good practices.	(Alstom Foundation website, 2023)
'Sauti ya Binti' (Daughter's Voice)	An initiative to promote better healthcare and education for girls in Tanzania (awareness of the changes they go through as they grow).	(The Tanzanian Citizen newspaper website, 2018)

The nation's decision to promote menstrual hygiene as a public health concern is a significant milestone (Gabrielsson, 2018). In 2018, the members of the parliament of Tanzania gave a value-added tax (VAT) exemption for sanitary pads. A year later, it reinstated the VAT exemption as it was ineffective in cutting costs and boosting girls' and women's access to sanitary pads. The Ministry of Health, other sectoral ministries such as the Ministry of Environment and Local Government and MHM stakeholders such as NGOs and international organizations have partnerships to improve MHM by providing human and financial resources. Despite these efforts, there is still poor MHM among schoolgirls in Tanzania. Tanzania scores low in knowledge, attitude and practice on MHM, with some differences between rural and urban areas (Okello et al., 2022).

While MHM issues are generally expressed in the national guidelines for water, sanitation, and hygiene in health care facilities (URT, 2017), and the Water, Sanitation, and Hygiene (WASH) guidelines were issued in 2016, no specific guidelines provide clear and specific recommendations or instructions on how to perform a task, decide, or achieve MHM issues in Tanzania. More evidence is needed to adequately incorporate MHM issues in future policy documents for planning purposes and MHM resource allocation.

Methods

A literature survey was conducted to appraise MHM among Tanzanian schoolgirls. The utilization of literature surveys has increased consideration in recent years. (Bryman, 2012). This survey includes pertinent research used as secondary data, as well as evaluation and assessment information published in various databases, to examine the socio-cultural and religious aspects impacting MHM among Tanzanian schoolgirls. It reproduces prior and current research findings to provide a general overview of the pertinent topic. (Owusu & Vaaland, 2016).

This study was conducted through the Seven-Step paradigm, replicating the exploration, interpretation, and communication phases commonly used in a complete literature review (Onwuegbuzie & Frels, 2016). First, researchers investigated global perceptions about MHM among schoolgirls in Tanzania and highlighted its associated influential factors. The key terms such as 'menstrual hygiene', 'MHM', 'schoolgirls', 'traditional beliefs, taboos and rituals concerns', 'fear', 'shame', 'secrecy', and 'awareness, knowledge and skills' were selected to explain deeply the MHM among schoolgirls. Second, researchers prepared an initial list of relevant studies, identified through Google Scholar, Web of Science, institutional repositories, and grey literature documents, and then completed the list through snowball sampling (Waters, 2015).

Each keyword search produced a high number of hits. Each hit was narrowed down to relevant research in journal papers, book chapters, reports, media and speech articles, or working papers containing the keywords in the main text and connected to socio-cultural and religious aspects impacting MHM among Tanzanian schoolgirls. All hits in each list were checked, and the resulting list was analysed for prospective selections. The second screening reduced the list to 105 studies from 234. The selection procedure found that certain research was unsuitable owing to a lack of precise information about the

sociocultural and religious factors that influence MHM. As shown in Table 2, 76 studies were chosen from 105.

Table 2: Potential studies relevant to socio-cultural and traditional factors influencing schoolgirls in Tanzania

No.	Variable	Number of relevant studies	Per cent
1.	Traditional beliefs, taboos and rituals	11	14.9
2.	Religious beliefs	05	6.8
3.	Impurity, witchcraft and local superstitions	15	20.3
4.	Restrictions associated with menstruation	16	21.6
5.	Menstruation is associated with fear, shame and secrecy	13	17.6
6.	Male involvement	04	5.4
7.	Awareness, knowledge and skills	07	9.5
8.	Relationships with family, teachers and peers	02	2.7
9.	School/gender-related policies	01	1.4
Total		74	100

The selected studies identified potential themes consistent with the study's premise. Extensive reading, analysis, and synthesis were performed to verify the data's reliability and validity and determine the relationship between the emerging themes from relevant research and the study's objectives. The researchers developed and carefully collated theme summaries using descriptive methods to prevent plagiarism (Williams, 2018). The final step was to communicate the final results through thorough discussion. The model for this study is indicated in Figure 1.

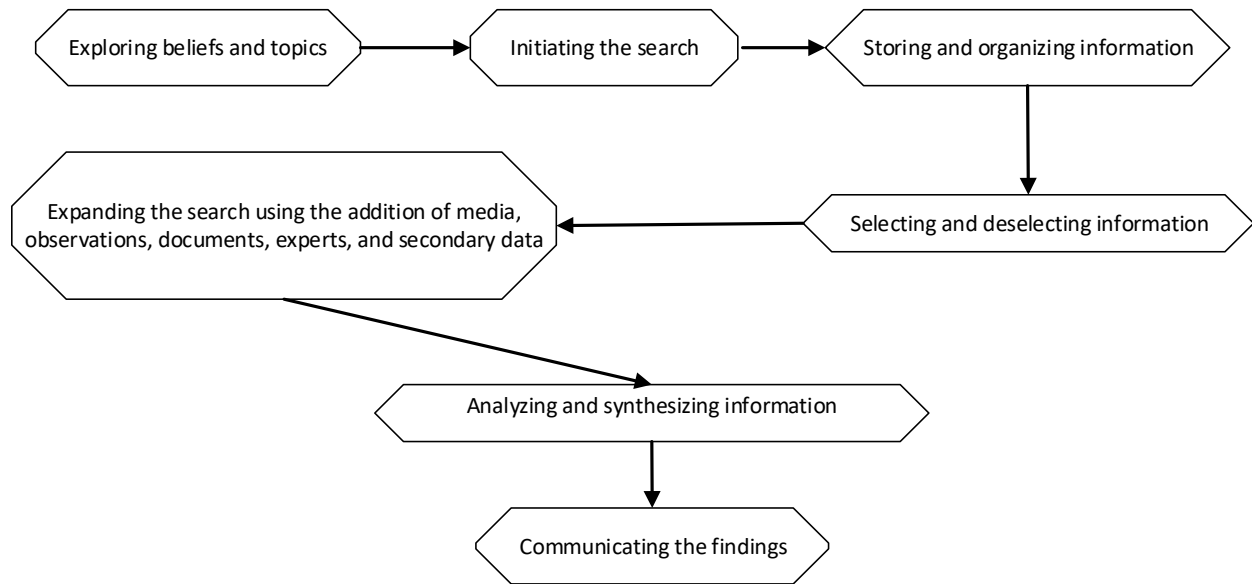


Figure 1: The Seven-Step Model used in the study for an extensive literature survey, as adopted and modified from Williams (2018)

Results

The study of sociocultural and religious factors influencing MHM among schoolgirls is complex and requires a deep understanding and identification from people with different experts in public health, sociology, and religion. After examining the selected papers in this survey, we identified eight main factors that influence individual and community behavioural change regarding environmental health (Table 1). These factors differ among individuals, communities, nations, and generations.

Table 1: Main themes socio-cultural and religious factors influencing MHM among schoolgirls in Tanzania that were identified after a literature review

No.	Theme	Implications to MHM among the schoolgirls	References
1	Traditional beliefs, taboos and rituals	Menstrual blood is believed to be a private matter that is often associated with impurity in Tanzania Tribes believe that they can shorten the days of menses for girls who get their periods for more than 5 days in Rorya district in Mara region Menstruating girls are not supposed to hit a dog as it believed that the dog will stop being brave behaviour on environmental sanitation and solid waste management in the societies in Muleba district, Kagera region Traditional rituals that are done when a girl experiences her first period some areas such Namtumbo district in Ruvuma region and Mufindi district in Iringa region	Stoilova et al., (2022) (Grevstad., 2022) (Grevstad., 2022)

2	Religious beliefs	<p>The community perceive that Islam is stricter with practices related to menstruation than Christianity in most parts of Tanzania.</p> <p>When menstruating, girls may be expected to stay away from their peer group, avoid male community members, and not visit certain locations, such as churches</p> <p>Girls or women are not allowed to preach because they are considered dirty, unholy and weak when they are in menstruation, in Mkoma Ward in Mara region.</p>	<p>(Njee et al., 2021)</p> <p>(Tamiru et al., 2013)</p> <p>(Grevstad., 2022).</p>
3	Impurity, witchcraft and local superstitions	<p>Menstrual materials are handled with care because of witchcrafts beliefs that if someone takes your menstrual blood you won't have children, you will over-bleed or lose your womb, in Mufindi district in Iringa region.</p> <p>Reusable menstrual material are not hanged outside as the girl can be bewitched. Many girls and women hang reusable menstrual materials indoors and not under direct sunlight that facilitates proper drying to avoid infections of wearing damp ones, in Mpwapwa district in Dodoma region</p> <p>Also, some are scared to be married, especially Wafipa in Rukwa region, Wasafwa in Mbeya region and Waluo in Mara region. Their mothers also keep the secret because they will be bewitched to death if they refuse to marry off their daughters.</p> <p>There is a belief that If a used menstrual material is not disposed of well and it is picked by bad people, the girl can be bewitched hence she won't get kids, or might make her go crazy or she can be killed in Rorya district in Mara region.</p>	<p>Sommer et al., 2015; Tamiru et al., 2013</p> <p>Kim & Choi, 2020; Torondel et al., 2018</p> <p>Stoilova et al., 2022</p> <p>Njee et al., 2021</p>
4	Restrictions associated with menstruation	<p>Menstruating girls are not supposed to eat mangoes lime and green vegetables, in Rorya district in Mara region.</p> <p>The Kine and Luo (tribes in Mara region), menstruating girls are not supposed to harvest vegetables it is believed that the leaves will dry up or rot (eg; tomatoes, pumpkin leaves, spinach, "sukuma wiki" and the local green vegetable "mgagani"); and they are not supposed to weed and harvest groundnuts. They are also not supposed to slaughter a chicken when they are in their menses.</p> <p>Girls are not supposed to walk into a groundnuts farm as the plants will dry up, if she has to walk into the farm</p>	<p>Kumar & Maity, 2022</p> <p>Njee et al., 2021</p> <p>NIXON, 2007</p>

		<p>she has to throw sand on the plants first, in Mpwapwa district in Dodoma region</p> <p>Girls are not supposed to eat sugarcane or drink tea as they are both sweet and it is believed that the sugar will cause heavy bleeding in Lushoto district in Tanga region.</p>	Sugita, 2022
		<p>School girls from the Wamang'ati community in Arusha region are not allowed to attend school when menstruating, they stay home under observation; and they sleep on a hide during menstruation.</p> <p>Parents and teachers encourage schoolgirls in Temeke district in the Dar es Salaam region and Namtumbo district in the Ruvuma region not to attend school during their menses.</p> <p>Likewise, menstruating schoolgirls in Msalala district in Shinyanga region, Igunga district in Tabora region, Rorya district in Mara region and Mpwapwa district in Dodoma region are not allowed to cook as they are considered to be dirty.</p> <p>In Rorya district in the Mara region, menstruating girls are not supposed to fetch water or walk across a fishing net.</p>	NIXON, 2007 Njee et al., 2021 House et al., 2012 House et al., 2012
5	Menstruation is associated with fear, shame and secrecy	<p>Teasing, especially of primary school girls, is common in urban areas of Mbeya region and in Mufindi, Iringa region. One acute manifestation of boys' negative attitudes is period teasing—harassment linked directly to girls' menstruation.</p> <p>Boys engage in period teasing because they perceive periods as embarrassing, especially visible markers of periods (odor or stains).</p> <p>In addition, male peers are the most commonly feared perpetrators of period teasing among this sample of girls.</p>	Benshaul-Tolonen et al., 2020 Benshaul-Tolonen et al., 2020; Chinyama et al., 2019; Girod et al., 2017 Benshaul-Tolonen et al., 2020
6	Male involvement	<p>In most of the rural areas in Tanzania, especially in the districts of Mpwapwa, Pemba, Karatu, Rorya and Kibondo, males are socio culturally prohibited to deal with menstrual issues, as it is considered a dirty thing, hence shameful to involve them; and it is also</p>	Njee et al., 2021

		considered as a women issue, hence discussing it is like talking about the nakedness of a woman. Also, culturally, in West Tanzania especially in the districts of Kibondo, Msalala and Butiama, men are not supposed to know that their daughters are menstruating.	Njee et al., 2021
7	Awareness, knowledge and skills	Most of the schoolgirls with and without disabilities appear to have a fair awareness of menstruation. The lack of awareness and education as well as sociocultural conditioning around menstruation were cited as major contributors to male disengagement from menstruation generally.	Bishoge et al., 2022; Njee et al., 2021 Njee et al., 2021
8	Relationships with family, teachers and peers	While most of the males (parents, family members, teachers and peers) play a significant role in educating girls about menstruation, their influence is limited by entrenched misconceptions and a lack of systematic guidance.	Njee et al., 2024
9	MHM related policies	There is no standalone MHH policy in Tanzania. Menstruation is a subtopic of adolescent reproductive health guidelines and school curricula on similar topics and a subcomponent of SWASH guidelines.	Njee et al., 2021

Discussion

Traditional beliefs, taboos and rituals

Traditional belief is the passing down of cultural information from one generation to another. Taboo is a social or religious custom restricting a particular practice, person, place or thing (Chakrabarti & Chakrabarti, 2019). A ritual is a religious ceremony of actions performed in a certain order. Traditional beliefs, taboos, and rituals impact and reinforce the behaviour of girls and women during menstruation in different parts of the world. The sociocultural beliefs and perceptions of menstruation are due to multiple factors evolving from cultural beliefs of girls' and women's fertility and impurity. During menstruation, girls and women are considered impure, untouchable and undesirable, especially in developing countries (Garg & Anand, 2015; Joshy et al., 2019; Mukherjee et al., 2020; Rothchild & Piya, 2020; Syed Abdullah, 2022).

In some areas, especially developing countries, menstrual taboos and norms direct girls and women to avoid cooking or eating certain foods and, in some cases, avoid bathing and isolate themselves during menstruation (Australian Department of Foreign Affairs and Trade, 2016). For instance, culturally, menstruation is still considered to be dirty and impure in India, leading to the isolation of girls and women who are in their menstrual period (Garg & Anand, 2015). Moreover, in India, during menstruation, some women aren't allowed to enter

the kitchen and temples, sleep in the daytime, bathe, wear flowers, have sex, touch other males or females, talk loudly, and touch pickles (Bhartiya, 2013).

In Tanzania, there are a lot of cultural beliefs or myths that influence girls during menstruation. For instance, according to Stoilova et al., (2022), menstrual myths and taboos exist, and in most communities, menstrual blood is believed to be a private matter that is often associated with impurity in Tanzania. Some communities believe girls and women can spread misfortune during menstruation (Stoilova et al., 2022). Numerous myths and social norms impose restrictions on girls and women to participate in community issues, hence causing difficulties and impeding their freedom. For instance, in many parts of Tanzania, girls and women are told that they should not touch tomatoes, mushrooms and sweet potatoes (they will rot or die), touch eggs (they will rot), touch neonates (they will get rashes), harvesting a fruit and eating it (will cause severe stomachache) or harvest pumpkin leaves (they will dry out).

Social norms or informal rules and practices about managing menstruation and interacting with menstruators exist. Most cultures have ways to deal with beneficial or harmful myths about girls and women. For instance, the Simbiti tribe in Rorya district, Mara region, believes that they can shorten the days of menses for girls who get their periods for more than 5 days. This is done by the girl lying on the floor of a house made of sticks, and she counts a few sticks laid horizontally; her menses will be shortened according to the number of sticks she has counted (For example, if she counts 3 of them her menses will be shortened to 3 days) (Grevstad., 2022).

Moreover, menstruating girls in the Muleba district, Kagera region, are not supposed to hit a dog as it is believed that the dog will stop being brave (Grevstad., 2022); and in Rorya, Mara region, it is believed that if a used pad is disposed of carelessly, a dog eats it, and the individual won't have a child. The positive side of the fear of not having a child is that it facilitates proper disposal of menstrual materials among some girls (Njee et al., 2021).

In some cultures, menarche signifies readiness for sexual activity and marriage, with particular implications for sexual and reproductive health as well as educational attainment (Ibitoye et al., 2017; Sommer et al., 2017). In some parts of Tanzania, such as Namtumbo and Mufindi districts, traditional rituals are done when a girl experiences her first period. During the rituals "kuchezwa", girls are taught how to manage menstruation hygienically, how to appear as a grown woman and are prepared for marriage wifely duties; and some are married off after the rituals when they are teenagers (Njee et al., 2021). "Kuchezwa" is a traditional ritual that is done once a girl reaches menarche. Likewise, in some tribes in Tanzania, once a girl starts her menses, she is considered old enough to get married. The ritual, at times, also leads to teenage pregnancies, abortion, and transmission of sexually transmitted diseases. This ritual also leads to some girls keeping it a secret, leading to difficulties in getting MHH materials and not getting medical help for girls with painful menses. Those who are married off end up being housewives, fueling more male dominance, and this prevents girls' personal development academically and economically.

Furthermore, males are not supposed to have sexual intercourse with menstruating girls and women as it is believed they will get hydrocele in Mufindi district, Iringa region,

(Grevstad., 2022). This promotes hygiene and prevents infections in men and women, but unfortunately, the community is deprived of the correct cause of hydrocele.

Subsequently, menstrual taboos facilitate gender inequality by depriving girls and women of sufficient healthcare, education and work.

Religious beliefs

Many religions have practices that impact the relations, activities, and participation of menstruators in daily activities (Ganguly & Satpati, 2023). Religious and local leaders are influential in communities, impacting MHM within the community. Abstinence from sex, exclusion and isolation from religious activities are the usual restrictions of most religions.

In Tanzania, there is a difference in how Christian and Muslim girls or women conduct and handle themselves during menstruation. In most parts of Tanzania, the community perceive that Islam is stricter with practices related to menstruation than Christianity (Njee et al., 2021). When menstruating, girls may be expected to stay away from their peer group, avoid male community members, and not visit certain locations, such as churches (Tamiru et al., 2013).

During her menses, an Islamic girl or a woman is considered ritually impure. She is supposed to stop certain forms of worship. For example, the five daily prayers, fasting during Ramadan (she fasts for an equivalent number of days later) or sitting in a mosque. She is also not allowed to touch the Holy Qur'an – "juzuu" or "msahafu" (recitation is allowed if she does not physically touch the Holy Qur'an and recites it from memory or, a recent adaption, reads it from an electronic device). The restrictions are rooted in the notion that menstrual products such as blood are 'dirty' - "najisi" or "haram" (House et al., 2012).

Conversely, Christianity is perceived to be easier going with practices related to menstruation. Some restrictions still exist for denominations, such as some of the Roman Catholic and Sabbaths in the Mbeya Region; women are not allowed to preach or to become priests because of menstruation (they are considered dirty, unholy and weak). In the Mara region, menstruating girls are not supposed to go to church (the Sabbath church is in the Mkoma ward). Ladies are advised not to receive Holy Communion, to preach and to sing as church choir members when they are in their menses, and they are supposed to stay outside the church because they're dirty (Grevstad., 2022).

While religions have core doctrines, perspectives, values, and teachings, this study intends to how religions in Tanzania influence menstruation and not undermine or support any religion.

Impurity, witchcraft and local superstitions

Impurity is the state of not being pure. Witchcraft is a practice of evil magic. Superstition is an irrational belief in supernatural influences of good or bad luck. Socio-cultural norms and religious taboos are associated with impurity, witchcraft and superstitions. Studies have revealed that erroneous knowledge of the menstrual cycle, hygiene, and self-care practices is less widespread than superstitions, illogical beliefs, and misunderstandings (Adika, 2013).

Menstruating girls and women (Sharma et al., 2022) and menstrual blood are considered impure and should be washed off in some developing countries especially in South Asia and Africa (Caruso et al., 2017; Chebii, 2018; Seyed Hosseini, 2020; Wall et al., 2018). The same case happens in Tanzania. For instance, menstrual materials are handled with care because of witchcraft beliefs that if someone takes the menstrual blood, the woman/girl is likely to over bleed or loses womb or cannot have children (Sommer et al., 2015; Tamiru et al., 2013). Hence, girls and women bury their menstrual materials to avoid being bewitched.

Likewise, reusable menstrual materials are not hung outside as the girl can be bewitched in Mpwapwa district, Dodoma region. Many girls and women hang reusable menstrual materials indoors and not under direct sunlight, which facilitates improper drying to avoid infections from wearing damp ones (Kim & Choi, 2020; Torondel et al., 2018). The positive side of the fear of being bewitched is that it facilitates the proper disposal of menstrual materials among some girls and women.

Menstruation is a secret among individuals as girls fear witchcraft (being bewitched after someone finds out that they are bleeding, the menstrual blood; once taken by a witch, the individual may not get a child in Rorya district, Mara region (Umeora & Egwuatu, 2008). In Rorya, there is a belief that if a used menstrual material is not disposed of well and bad people pick it, the girl can be bewitched; hence, she will not get kids, or it might make her go crazy, or she can die (Njee et al., 2021).

Menstruation is a topic that falls underneath the broader category of sexuality issues; thus, in order to change knowledge, attitudes and beliefs regarding menstruation, comprehensive sex education is essential (Joshi et al., 2015). Primary school girls try to keep their MHM issues secret. They are scared to be sexually harassed, bullied, segregated by their peers in plays and other common activities because they are considered as grownups.

Restrictions associated with menstruation

Poor knowledge of menstruation leads to misconceptions that perpetuate stigma and cultural restrictions, as well as poor hygiene (Mahon & Fernandes, 2010). Restrictions may include diminished mobility, seclusion, dietary restrictions, or being prevented from fully participating in community life (State & Monitoring, 2012). Cultural perceptions and restrictive practices associated with menstruation can serve to isolate and stigmatize girls and women. (Winkler & Roaf, 2015). Where this is the case, stigma and silence around menstruation can contribute to gender inequality that discriminates against women and girls throughout the lifecycle (Geertz et al., 2016). Such restrictive practices can also influence MHM and the extent to which menstruation can be managed effectively and with dignity (House et al., 2012).

The following are restrictions on girls during their menses in many parts of Tanzania. menstruating girls are not supposed to eat mangoes, lime and green vegetables in Rorya district, Mara region (Kumar & Maity, 2022). There is a belief that green vegetables can make them bleed daily or after every 2 weeks and end up bleeding thrice within the same month. Families that practice dietary restrictions may have effects on girls' nutrition. Menstruating

girls are also not supposed to eat hot food as it is believed that it will cause heavy bleeding, and they are not supposed to take certain pills such as panadol as it is believed that this might stop the menses. The negative side of this belief is that girls with unbearable pain will not take painkillers to ease their pain so that they can study and carry out their daily routines.

Moreover, in the Kine and Luo (tribes in the Mara region), menstruating girls are not supposed to harvest vegetables such as tomatoes, pumpkin leaves, spinach, 'sukuma wiki' and the local green vegetable 'Pagani', as it is believed that the leaves will dry up or rot. They are also not supposed to weed and harvest groundnuts. They are also not supposed to slaughter chickens when they are in their menses (Njee et al., 2021). Likewise girls are not supposed to walk into a groundnut farm as the plants will dry up; if she has to walk into the farm, she has to throw sand on the plants first in Mpwapwa district, Dodoma region (NIXON, 2007). Moreover, girls are not supposed to eat sugarcane or drink tea as they are both sweet, and it is believed that the sugar will cause heavy bleeding in Lushoto district, Tanga region (Sugita, 2022).

School girls from the Wamang'ati community in the Arusha region are not allowed to attend school when menstruating; they stay home under observation, and they sleep on a hide during menstruation (NIXON, 2007). Likewise, parents and teachers encourage schoolgirls in Namtumbo district in the Ruvuma region not to attend school during their menses (Njee et al., 2021). Moreover, schoolgirls who are in menstruation in most rural areas of Tanzania do not participate in sports' activities to avoid heavy bleeding and abdominal pains and to prevent menstrual materials from falling off or staining their clothes. This is due to the lack of durable and effective menstrual materials in rural areas.

As the cooking or preparing food is essential at household level, most of schoolgirls are not allowed to cook or prepare food while they are in menstruation as they are considered dirty in some rural areas such as Msalala district in the Shinyanga region, Igunga district in the Tabora region, Rorya district in Mara region, Marangu district of the Kilimanjaro region and Mpwapwa district in the Dodoma region (House et al., 2012).

Bad enough, menstruating girls are not supposed to sit on a well as it will dry up in the Kibondo district, Kigoma region and menstruating girls are not supposed to fetch water and walk across a fishing net in Rorya district, Mara region (House et al., 2012). All of these events stigmatize girls when they are in menstruation.

Menstruation is associated with fear, shame and secrecy.

MHM is a common challenge, especially for poor rural girls and women, due to their standards of living. Public menstrual hygiene accidents are embarrassing and shameful to adolescent girls. A growing body of evidence suggests that girls commonly report feelings of embarrassment and shame related to menstruation. Often, these emotions are borne from both internalized and externally imposed constraints (Benshaul-Tolonen et al., 2020; Mason et al., 2013; Rheinländer et al., 2019). Another cause for school absenteeism, as reported by Rajbhandari et al., (2018), is fear of leakage and staining during menstruation. Similarly, Benshaul-Tolonen et al. (2020) reported that menstruation was a source of shame, pain, and fear of leakage and odour, as well as teasing from boys in Northern Tanzania.

In Tanzania, boys have phrases they use to tease girls when they see menstrual stains. Phrases like ‘*slaughtering chicken*’, ‘*without a knife*’, ‘*breaking a pot*’, ‘*shedding water*’, ‘*going to wete*’, and ‘*receiving a salary*’ are used by boys across the country. Some girls are roughed when they are in menstruation. For instance, an adolescent girl is laughed at in school if her skirt accidentally gets stained with menstrual blood (they also tell her that she has slaughtered a chicken – in Swahili, ‘amechinja kuku’ in Rorya district, Mara region. Such incidents may lead to harassment by boys, teasing, and making fun of girls. Hence, girls miss school during their menses or drop out of school. Teasing, especially of primary school girls, is common in Mbeya and Mufindi, Iringa urban areas. One acute manifestation of boys’ negative attitudes is period teasing-harassment linked directly to girls’ menstruation (Benshaul-Tolonen et al., 2020).

Some girls avoid sitting around people due to the fear that others can smell menstrual blood. In most parts of Tanzania, menstruating girls do not want to sit around and mix with other people as they think they are smelling. In addition, male peers are the most commonly feared perpetrators of period teasing among this sample of girls (Benshaul-Tolonen et al., 2020). Boys engage in period teasing because they perceive periods as embarrassing, especially visible markers of periods (odour or stains) (Benshaul-Tolonen et al., 2020; Chinyama et al., 2019; Girod et al., 2017).

Male involvement

While Preliminary boys and men, families, and communities are essential to combat stigmas and taboos to girls who are in menstruation (Benshaul-Tolonen et al., 2020; Mahon & Fernandes, 2010; Mason et al., 2013), in most of the rural areas in Tanzania, especially in the districts of Mpwapa, Pemba, Karatu, Rorya and Kibondo, males are socio-culturally prohibited from dealing with menstrual issues. It is considered a dirty thing, hence shameful to involve them. It is also considered a women's issue; hence, discussing it is like talking about the nakedness of a woman (Njee et al., 2021).

Most men in the Karatu district, Arusha region, never involve themselves in taking care of the girl’s menstrual issues and cannot even attend meetings discussing menstrual health among women and girls. Girls cannot sit near or even talk about menstrual issues with their male parents. Since in rural areas, men are usually the breadwinners and the ones with a final say concerning family resources; girls face difficulties in getting money to purchase MHH materials (Njee et al., 2021).

Likewise, it becomes difficult for some girls to discuss menstrual issues with their male parents. Girls find it difficult to share their menstruation challenges because of the belief that it is not a men’s issue and it is a shame. Financial constraints give a loophole for ‘sugar daddies’ to cater for MHH materials needs, among other needs and wants, leading to teenage pregnancies, abortions and transmission of sexually transmitted diseases. Also, culturally men are not supposed to know that their daughters are menstruating in West Tanzania, especially in the districts of Kibondo, Msalala and Butiama districts (Njee et al., 2021).

Awareness, knowledge and skills

Globally, girls often lack accurate knowledge regarding menstruation and menstrual health and hygiene (Unicef, 2022). Parents, teachers, and health practitioners may also be misinformed, preventing girls from getting the necessary knowledge and skills for healthy well-being. Most of the school girls with and without disabilities appear to have a fair awareness of menstruation (Bishoge et al., 2022).

There is an expectation that higher levels of education are associated with greater awareness regarding MHM, which will result in better hygiene practices during menstruation. (Afiaz & Biswas, 2021). The lack of awareness and knowledge of menstruation is one of the challenges facing the male disengagement from menstruation in Tanzania (Method et al., 2024).

While there are some initiatives for improvement of MHM, Tanzania scores low in knowledge, attitude and practice on MHM, with some differences between rural and urban areas (Njee et al., 2024). Girls in rural areas of Tanzania face more challenges in managing menstruation than those in urban areas.

Relationships with family, teachers and peers

Schoolgirls get guidance and supplies from family, teachers, and peers. Female family members (mothers, aunts, sisters, and grandmothers) usually guide and help schoolgirls get supplies. They also inform schoolgirls about signs of puberty and how to handle menstruation and provide them with materials to use during menstruation. Teachers impart knowledge of menstruation and provide menstrual materials to schoolgirls. Schools and teachers are important in how girls navigate menstruation during adolescence (Phillips-Howard et al., 2016).

Their peers at school and home also provide guidance. It is easy for schoolgirls to talk to fellow girls of their age group. A few fathers help with supplies and guidance during menstruation. Fathers are usually the financial providers to families; hence, they give money to their daughters to purchase sanitary pads. While most of the male parents, brothers or guardians support their schoolgirls by providing financial assistance to purchase, there is still insufficient support to schoolgirls when they are in menstruation from families and at school, which impedes hygiene and health.

Generally, females (parents, family members, teachers and peers) are socio-culturally responsible for educating and supporting girls during menstruation. While most of the males (parents, family members, teachers and peers) play a significant role in educating girls about menstruation, their influence is limited by entrenched misconceptions and a lack of systematic guidance (Njee et al., 2024).

MHM related policies

There is no standalone MHM policy in Tanzania. Menstruation is a subtopic of adolescent reproductive health guidelines and school curricula on similar topics and a subcomponent of SWASH guidelines. There is a need for an MHM policy in Tanzania whereby menstruation will be mentioned to normalize it and thereafter influence social norms. The policy will catalyze discussions of MHM issues, facilitating menstrual health. Gender-sensitive MHM



interventions are crucial for menstrual health. Interventions such as training teachers on MHM and providing necessary menstruation information should be part of the MHM policy. Female-friendly water and sanitation facilities in schools and trained teachers supporting students are two examples of gender-responsive measures that could be implemented within the education sector. (Sommer et al., 2017). The MHM policy will facilitate overcoming the taboo around menstruation and fast-track prioritization of implicit MHM in schools.

Conclusion and Recommendations

MHM among schoolgirls is influenced by sociocultural and religious factors, which affect school attendance, complete school involvement, and class attention. Consequently, the schoolgirls' education is jeopardised. Sociocultural interventions should be implemented in society through education to increase awareness and attitudes towards MHM. Knowledge will aid in the debunking of falsehoods. Influential people of society should be urged to promote MHM in order to help girls overcome superstitions. Social and cultural issues must be given the attention they deserve and handled convincingly in MHM interventions so that schoolgirls can achieve academically and reach their full potential.

Competing Interests

On behalf of all authors, the corresponding author stated that there was no conflict of interest.

Availability of Data

Data sharing not applicable to this article as no datasets were generated or analyzed during the current study.

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