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Exploration of Menstrual Hygiene Management Behavior and Influencing Factors Among Female Inmates

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ABSTRACT

Background: Poor Menstrual Hygiene Management (MHM) can adversely affect women's reproductive health, particularly for incarcerated individuals. Addressing the MHM needs of women in prison is crucial to ensure adequate hygiene access, safeguarding their health and well-being despite confinement.

Purpose: This study aimed to explore the behaviors and factors influencing MHM practices among female inmates in correctional settings.

Method: Employing a qualitative phenomenological approach, the research was conducted from June to August 2024. Ten informants were purposively selected from the Women's Prison in Padang. Data were gathered through in-depth interviews, observations, and document reviews, then analyzed using Interpretative Phenomenological Analysis (IPA).

Result: The study's findings revealed two main themes. The first theme was the poor MHM practices among inmates, and the second theme identified the factors influencing their MHM practices, which comprised three categories: limited availability of facilities, lack of MHM-related information, and support from family and friends.

Conclusion: The study concluded that the limited availability of facilities was the primary barrier to maintaining menstrual hygiene in correctional facility.

INTRODUCTION

Menstrual Hygiene Management (MHM) is a critical aspect of women's reproductive health, encompassing the use of absorbent materials to manage menstrual blood, changing them privately, bathing with clean water and soap, and having safe, accessible facilities to dispose of or reuse these products. Adequate MHM practices include using clean absorbents, replacing them at appropriate intervals, washing with soap and water, and disposing of waste hygienically while maintaining privacy (1). Although women should prioritize menstrual hygiene, many still face challenges in managing it particularly incarcerated individuals. Addressing female inmates' MHM needs is essential to ensure proper hygiene access, safeguarding their health and well-being even in prison.

Poor MHM practices can lead to severe consequences, such as increased risks of reproductive tract infections (RTIs) and urinary tract infections (UTIs). These infections including bacterial vaginosis and vulvovaginal candidiasis may cause distressing symptoms like irritation, foul odor, and itching,

significantly impacting women's self-confidence (2, 3). The highest RTI rates are reported in Asia and Africa, with prevalence reaching 45% (4). In Indonesia, vulvovaginal candidiasis affects 80–90% of women, bacterial vaginosis 40–50%, and trichomoniasis 5–20% (5). Such infections often stem from inadequate menstrual hygiene practices.

A preliminary survey at the correctional facility, involving interviews with healthcare staff, revealed cases of vaginal discharge and groin fungal infections among inmates. Interviews with incarcerated women further highlighted poor MHM behaviors, such as changing pads only when soaked, neglecting handwashing before/after pad changes, improper disposal of used pads, and adherence to menstrual myths.

International regulations like *The United Nations Rules for the Treatment of Women Inmates and Non-Custodial Measures for Women Offenders* (the Bangkok Rules) emphasize providing female inmates with free hygiene products and facilities to uphold reproductive health and dignity. However, many prisons still face severe shortages of absorbent materials, underscoring the need for improved services, including adequate provision of menstrual supplies (7, 8).

Literature on reproductive health particularly MHM among incarcerated women in Indonesia remains limited, as research tends to focus on adolescent MHM practices in schools. This gap highlights the lack of understanding of female inmates menstrual hygiene experiences and challenges. Therefore, this study aims to explore MHM behaviors and influencing factors among inmates at Padang Women's Correctional Facility.

METHOD

Research Design

This study employed a qualitative phenomenological approach. Phenomenology is a methodological framework used to explore the subjective lived experiences of individuals.

Research Sites

The research was conducted at the Women's Correctional Facility in Padang, West Sumatra

Population and Sample

The population in this study were all female inmates at Padang Women's Correctional Facility. The informants consisted of 10 individuals selected using purposive sampling. The participants consisted of 10 individuals selected through purposive sampling. Key informants included correctional facility staff, primary informants were inmates, and additional informants were head correctional facility and health officers

Research Procedure

Qualitative data was collected through in-depth interviews using an interview guide developed from UNICEF guidelines, specifically the Guide to Menstrual Hygiene Materials (2019) and Tools for Assessing Menstrual Hygiene Management (2013), as well as observations.

Data Analysis

The data was analyzed using Interpretative Phenomenological Analysis (IPA), which involved the stages of reading and re-reading, initial noting, coding, developing emerging themes, examining patterns in each case, and data presentation.

This research has passed the ethical review by the Research Ethics Committee of the Faculty of Medicine, Andalas University, with the Ethical Clearance Certificate number 57/UN.16.2/KEP-FK/2024.

RESULTS AND DISCUSSION

1. Menstrual Hygiene Management Behaviors of Female Inmates

a. Menstrual Sanitation Products Used

The menstrual sanitation products used by female inmates include disposable pads, cloth, and tissue. This is reflected in the following quotes:

“Disposable pads. It’s simple, easy to wash, just throw it away.” IN4

“...there was a time when my period was heavy, I used cloth because the pads couldn’t handle it.” IN5

“Using tissue, as much as this, ask someone to split it into two, use the tissue and then throw it away.” IN4

Disposable pads are used by most female inmates during menstruation; however, if the pads run out, they use cloth or tissue depending on what is available.

The research findings identify that the menstrual hygiene management (MHM) behavior of female inmates is still inadequate, as indicated by the use of unhygienic absorbent materials, insufficient frequency of changing absorbent materials, showering only once a day when there is no water, and disposing of absorbent waste in the toilet. Clean absorbent materials are used to absorb and contain menstrual blood. UNICEF mentions that absorbent materials that can be used to absorb and contain menstrual blood include cloth, disposable pads, tampons, menstrual cups, period underwear, and reusable pads (9). The absorbent materials used by the inmates in this study include disposable pads, cloth, and tissue.

The results of the study show that most inmates use disposable sanitary pads because of their ease of use and disposal. However, inmates face difficulties in purchasing disposable pads because they do not always receive financial support from their families, and the prison does not provide them. The inability to buy pads has led inmates to turn to alternative sanitary products, which may be less hygienic, such as cloth and tissue. This is in line with Fetting's statement that female inmates often struggle to access proper absorbent materials in prison, leading them to use unhygienic alternatives like used cloth, towels, and toilet paper (10).

Cloth becomes an alternative for some inmates because it is economical and reusable, the use of cloth sanitation products can improve menstrual hygiene and reduce stigma if access to clean water is adequate (12). However, the use of reusable sanitation products like cloth increases the risk of Candida infections (13,14). Tissue is another solution used by inmates when they do not have pads. Using tissue to absorb menstrual blood can cause irritation or allergic reactions if it contains chemicals or fragrances. Kaur (2018) found that some women use tissue as a temporary alternative when pads are not available, and its use is associated with health issues such as irritation and infections (15).

b. Inadequate Frequency of Changing Menstrual Sanitation Products

The majority of female inmates change their menstrual sanitation products twice a day. They only change their products during morning and evening showers, and the limited availability of menstrual products is a reason for the infrequent changes. This is reflected in the following quotes:

“If you change pads often, there are many pads that run out, so I change pads only during morning and evening showers.” IN1

“3 times, frequently, but if we have pads, otherwise just 2 times.” IN5

According to prison guards, the lack of water causes inmates to change their menstrual products only once. This is reflected in the following quotes:

“...so if there is a lot of water, hygiene is maintained and pads are changed often, maybe 2 times from morning to afternoon. But now due to water shortages, it’s only once.”

This study found that the majority of female inmates change their absorbent materials twice a day. The limited availability of sanitary products and water results in inmates rarely changing their pads. A similar study conducted in Ugandan prisons also found that inmates infrequently change absorbent materials because these products must be saved for the following day. The availability of products is a major constraint that affects the frequency of changing absorbent materials and may increase the risk of infections and irritation. In line with previous research, prolonged use of absorbent materials can provide an environment for the growth of bacteria and fungi, leading to bacterial vaginosis or fungal infections (15).

c. Inadequate Frequency of Bathing

Informants generally bathe twice a day using soap and water. However, they report limitations in bathing facilities such as water and soap. This is expressed in the following quotes:

“Bathing, twice a day.” IN1
“Water often runs out, like around 11 o'clock, water stops. Water is limited, so I bathe sparingly. Sometimes I use only half a gallon of water.” IN2

Some informants also mentioned that if there is no water, they do not bathe and only change clothes, and during menstruation, they only change their pads.

This study found that the majority of female inmates shower twice a day using soap and water during menstruation; however, when there is no water, inmates shower only once a day or only change clothes and pads. Previous studies also reported that female inmates shower 2-3 times a day using water and soap (17). Showering only once a day during menstruation is an inadequate MHM behavior that can negatively impact health. Showering helps maintain personal hygiene during menstruation, improves comfort, prevents unpleasant odors, and reduces the risk of infections among inmates in prison (16,18)

d. Cleaning and Disposing of Menstrual Sanitation Product Waste

Some inmates discarding menstrual product waste directly into the trash can without wrapping it. This is supported by further explanation from prison guards, as seen in the following quote:

“Yes, because there are some troublemakers who intentionally discarding pads or don't wash them or just leave them.” IPL3

Improper disposal of menstrual product waste can pose a risk of infection to others. According to prison guards, many inmates still throw menstrual product waste into the toilet, causing blockages. This happens frequently, even though inmates have been warned not to dispose of menstrual waste in the toilet. This is illustrated in the following quote:

“There are some individuals who throw pads into the toilet. The last time was last month, last year there was a problem with the blocked bathroom.” IPL3

The study also found that some inmates dispose of sanitary product waste into the toilet, causing blockages. These findings are consistent with UNICEF Indonesia's statement that some women still dispose of menstrual product waste in toilets (19). Disposing of menstrual product waste in the toilet can cause environmental issues, as it may block drainage systems.

2. Factors Affecting Inmates' Menstrual Hygiene Management Behaviors

A. Restrictions During Menstruation

Restrictions on activities such as washing hair during menstruation are beliefs found in some cultures. The majority of inmates believe in and adhere to restrictions during menstruation, such as not washing their hair. It is believed that washing hair during menstruation can cause headaches. This belief is reflected in the following quotes:

“There are many, almost all like that in our room, I’m the only one who doesn’t follow it. They say it will cause headaches, but I don’t believe it.” IN3

“People say that, so even after 4 or 7 days, they don’t wash their hair. Even after 7 days, it’s not allowed, causing itchy scalp.” IN4

This study found that inmates have a prohibition against washing their hair during menstruation. They believe that washing their hair during menstruation can cause headaches. That cultural beliefs about menstruation commonly found in Indonesia, particularly in Jakarta, NTB, and NTT, include prohibitions against washing hair and bathing at night during the early stages of menstruation (20). Women in some communities in India also believe that washing hair during menstruation can lead to headaches or other illnesses. Other countries also have cultural beliefs related to menstruation, such as Afghanistan, India, and Iran, women do not bathe during menstruation (21).

B. Limited Water Supply

The water source in the prison is provided by PDAM (local water utility), and there are often issues such as low water pressure or no water supply. Water flow in the prison is limited to specific times, from 5-7 AM and 10-12 PM. This means inmates must store water for personal hygiene needs, but some do not have containers to store water. During the research, the water supply had been cut off for 2 days, forcing inmates to buy water privately. The issue of limited water availability is reflected in the following quote:

“Right now we are facing a water shortage because the PDAM water is off, so the room smells now. We had to order a gallon.” IN1

This issue was also confirmed by prison guards and health officers, who stated that water is indeed a major problem in the prison. This is illustrated in the following quotes:

“There are usually no complaints about the toilets, but the main issue is water because it often runs out or has low pressure.” IPL2

“It depends on the water supply, because as you know, the water often goes off.” IPK

Adequate water supply is a critical component of the WASH facilities that support Menstrual Hygiene Management (MHM). In many prisons, especially in developing countries, the availability of clean water is often limited. Some prisons in South Asia face difficulties in obtaining sufficient clean water for personal hygiene, especially during menstruation (22). Women in prisons face several barriers to practicing good menstrual hygiene, such as limited water supply. The lack of water supply makes it difficult for women to manage their menstruation effectively (11). According to the 2020 Regulation from the Directorate General of Corrections (Ditjenpas) on Prison Service Standards, the minimum water requirement for inmates in the prison is 60 liters per person per day, covering showering, washing, and toilet use. This regulation is expected to allow inmates to shower at least twice a day and wash once a day. However, the provision of clean water is adjusted based on the specific conditions of each prison (23). If the 60 liters per person per day standard is met, inmates will not lack water, which would allow them to change pads more frequently, shower more often, and wash the absorbent materials they use.

C. Limited Availability of Sanitary Pads

The majority of female inmates use disposable sanitary pads to manage menstrual blood. The availability of these pads also poses a challenge for inmates during menstruation. The prison does not provide sanitary

pads for the inmates; however, they can purchase them from a cooperative managed by the prison authorities. This issue is illustrated in the following quotes:

“Buy them yourself at the canteen. There’s no allocation.” IN1

“If we have money, it’s fine to buy them directly and use them right away. If there’s no money, how do we buy them? We just borrow one first; it’s not possible to borrow every day or ask every day.” IN4

The absence of disposable pads in prisons forces inmates to purchase their own pads, which becomes a challenge for them. As a result, many inmates are forced to use alternative materials to absorb menstrual blood. This highlights the prison's limitations in meeting menstrual hygiene needs, which could impact inmates' health. The limited availability of disposable pads in prison creates hygiene and health issues for inmates. Another study conducted in Wirogunan Prison in Yogyakarta found that the absence of sanitary pads in the prison meant that inmates had to buy them at the canteen or have them brought by family members (24). This situation differs from the study in Sidoarjo Class IIA Prison, where the prison provided one pack of pads to female inmates. However, its implementation was slightly hindered because some female inmates felt the pads provided were not suitable (25). As noted by Bergh (2015), many prisons have not adequately met the needs of inmates during menstruation, such as providing menstrual products. Therefore, it is not surprising that prison facilities are insufficient to support inmates' hygiene practices (26).

This study highlights the importance of authorities reviewing the implementation of policies related to menstrual hygiene product availability in prisons, in line with the regulations in the 2020 Prison Service Standards, which state that female inmates should be provided with free sanitary pads during menstruation.

D. Limited Soap Supply

Informants report that the prison provides bar soap at a rate of one bar every three months, along with shampoo and toothpaste. However, inmates feel that the limited soap supply is insufficient for their hygiene needs, so they have to purchase additional soap from the cooperative. This is reflected in the following quotes:

“Yes, the prison provides facilities with soap once every three months, along with toothpaste and dish soap. It’s meant for personal hygiene and washing.” IPL3

One inmate mentioned that due to insufficient soap and economic constraints, some inmates use dish soap for bathing, as illustrated in the following quote:

“There was a time when soap was available in the room. But here, due to economic issues, some use dish soap discreetly...” IN4

Shower facilities, such as soap, shampoo, and toothpaste, are provided by the prison authorities once every three months. Inmates have complained that the facilities provided are insufficient, forcing them to economize on their usage. Inmates are forced to buy soap, shampoo, and toothpaste at the prison cooperative due to the limited facilities provided. The lack of access to adequate sanitation facilities reduces the quality of life for female inmates (27). Without soap, inmates cannot effectively clean themselves, which can lead to the growth of pathogenic bacteria and increase the risk of infections.

E. Lack of MHM Information Sources

The lack of information sources related to Menstrual Hygiene Management (MHM) is acknowledged by all inmates in the prison. Until now, personal hygiene education has been provided in general terms, but specific education on menstrual hygiene has not been given. This is reflected in the following quotes:

“Not yet available.” IN1

“There isn’t any.” IN2

“Not yet available.” IN5

Prison guards and health officers also state that the absence of specific MHM education means that many menstrual myths are still prevalent among inmates.

All inmates acknowledged the lack of information sources related to MHM. Prison guards and health officers also shared the same sentiment, as there has been no education regarding MHM, and many menstruation myths are still followed by inmates. So far, hygiene education in prisons has only been provided in general terms, and there has been no specific education on menstrual hygiene. The lack of information received by inmates can lead to limited understanding of menstrual hygiene behaviors or even total indifference (24). Health education provided in prisons can play a role in disseminating information about MHM.

F. Social Support from Family and Friends

Some inmates receive menstrual sanitation products from family members who visit. This is reflected in the following quote:

“If I don’t buy from the canteen, my family brings them once a month, but it’s not enough, only eight pads.” IN4

Support from fellow inmates is also an important source of support within the prison. When a prisoner runs out of menstrual products and does not have money to buy more, other inmates will lend them menstrual products. This is illustrated in the following quote:

“So we use our friend’s supplies first, borrow pads from a friend, and then replace them when we have money.” IN5

The research findings show that some inmates receive disposable pads from family members who visit, while most inmates are given money by their families to purchase the pads. When inmates do not have money to buy pads but urgently need them, they borrow them from their roommates. The results of this study align with previous research on social support, which shows that the support given by family members makes inmates feel accepted by their families, even while incarcerated, and this can improve menstrual hygiene behavior in prison (27, 28).

Conclusion

This study concludes that the menstrual hygiene management (MHM) behaviors of some female inmates are still inadequate. Several factors influencing the inmates' ability to manage MHM were identified, including a lack of information on menstrual hygiene. The facilities within the prison also pose significant barriers to supporting menstrual hygiene practices, such as limited access to sanitary pads, water, and soap. Social support from family members and fellow inmates, in terms of providing and lending absorbent materials, has been a crucial factor in supporting menstrual hygiene management within the prison.

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