



Menstrual hygiene management among secondary high school students

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ABSTRACT

The purpose of this study was to assess secondary high school students' knowledge, attitudes, habits, and other aspects related to managing menstrual hygiene. A quantitative descriptive correlational research design was employed for the 294 respondents aged 16-18. The main method used to gather data was a modified structured survey questionnaire. SPSS v.26 was used to determine inferential statistics and descriptive statistics aided by MS Excel. The findings revealed that the extent of knowledge had a mean of 4.31 (SD= 0.61), corresponding to excellent knowledge. While attitude resulted in a mean of 3.89 (SD= 0.63), a positive attitude and hygienic practices resulted in a mean of 4.23 (SD= 0.61), corresponding to very efficient practices. However, a few of them still need better and moderate knowledge and attitude, although there is no poor practice among them. With a given p-value of .031 for knowledge, .042 for attitudes, and .038 for practices. Significant differences in factors affecting menstrual hygiene management in terms of individuals with a p-value of .023, contextual with .044, socio-behavioral with .024, and finally, school infrastructure with $.014 < 0.05$ which has a significant difference when grouped according to demographic profiles of female students. The unfavorable conditions in which women had to manage their menstrual cycles while attending school underscored the urgent need for urgent infrastructure improvements related to water, sanitation, and hygiene. Furthermore, targeted educational interventions should be implemented to address the moderate levels of knowledge and attitudes observed and to ensure that all students have the necessary resources and information to properly manage their menstrual hygiene.

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INTRODUCTION

Although menstruation is a normal biological occurrence, there can be serious health risks associated with poor menstrual hygiene practices, ignorance, and negative attitudes. Studies have consistently highlighted the prevalence of harmful menstruation management habits among adolescent females in the Philippines (Majeed, et. al, 2022). Infection risk can be raised by inadequate menstrual hygiene routines, negatively affecting women's prenatal and reproductive health. The decisions and behaviors related to menstrual hygiene, if poorly informed, can have long-term detrimental effects on reproductive health (Shumie & Mengie, 2022).

Despite the importance of menstrual hygiene, it remains a neglected issue in many educational institutions, particularly secondary public schools. Inadequate waste disposal facilities and lacking personal space for women is still evident (Deriba, et. al, 2022). Addressing these issues is crucial for promoting women's health, empowerment, and well-being. By understanding the condition of knowledge, attitudes, and practices at the moment, this study can contribute to the development of interventions to improve menstrual hygiene education and access to necessary resources in educational settings. Moreover, the findings will raise awareness about the significance of managing menstrual hygiene in relation to daily activities, living standards, and achieving a sustainable environment aligned with the Sustainable Development Goals (SDGs).

Thus, the purpose of this study was to ascertain the level of menstrual hygiene management knowledge, attitudes, and practices among a sample of secondary high school students. It sought to evaluate the impact of various factors on menstrual hygiene management, such as access to facilities, cultural beliefs, and socioeconomic conditions.

OBJECTIVES OF THE STUDY

Finding out how secondary high school students manage their menstrual hygiene was the main goal of this study. It specifically aimed to ascertain the respondents' demographic characteristics as well as the degree of their knowledge, attitudes, and practices surrounding the management of menstrual hygiene. It also assessed factors influencing menstrual hygiene management, including individual, contextual, socio-behavioral, and school infrastructure. Furthermore, significant difference between respondents' knowledge, attitude, and practices and factors affecting menstrual hygiene management when grouped according to their demographic profiles.

MATERIALS AND METHODS

In this study, a descriptive correlational research design was employed, which was selected based on the respondents' knowledge, attitudes, practices, and other aspects pertaining to menstrual hygiene during menstruation. Because the researcher lived and worked close by, she chose a public school for the study mostly because it was convenient. Participants were female 16–18 year old high school juniors and seniors who had started menstruation. A multistage sampling technique that comprised multiple processes to filter down the sample resulted in the selection of 294 students. A frequently used technique in surveys, the Cochran Formula, was used to determine the sample size.

A modified survey questionnaire with three sections was used to collect data. The respondents' demographic data was gathered in the first section. Based on a study by Gorah et al. (2020), the second portion evaluated the respondents' knowledge, attitudes, and practices related menstrual hygiene management (MHM). The third component, which was modified from Shallo's research (2020), examined the elements that influence MHM. Three research advisers evaluated the questionnaire to assure its validity and reliability; the results showed a validity score of 3.6 (very good) and a reliability score of .722

(acceptable). Then, in order to make more improvements, the questionnaire was pilot tested on fifteen people.

Throughout the whole research procedure, ethical considerations were given top importance. All respondents provided written informed consent prior to data collection. The permission form guaranteed voluntary participation and described the goals of the study. Additionally, the head of the school gave his approval. In order to safeguard participants' privacy and confidentiality, the researcher took a number of precautions, such as safely storing data on a hard drive and promising to remove all data within a year of finishing the thesis. Furthermore, once the study was over, consent forms that had been signed and the data that had been gathered were appropriately discarded.

The researcher employed a number of statistical tools for data analysis. For some purposes, descriptive statistics like frequency distribution were used; for others, weighted mean, standard deviation, and 5-point Likert scale interpretations were applied. Using SPSS v.26 software, a T-test was used to compare the outcomes between two groups. The researcher made sure that all ethical guidelines were followed during the trial, including those pertaining to getting informed permission and protecting participant privacy by keeping data private.

RESULTS AND DISCUSSION

After data collection, it was analyzed by reading each statement and correlating it to find similarities and differences manually from the gathered numerical data of the disseminated questionnaire and, in contrast, carried out methods to facilitate the gathering of additional data at various points during the data collection techniques. As a result, the following tabulated data demonstrated the respondent’s familiarity with the subject.

1. DEMOGRAPHIC PROFILE

The given demographic profiles among respondents who participated in this study were extensively collected using disseminated survey questionnaires asked about their profiles regarding the age of their menarche, year level, age, and family income. Henceforth, both categories of variables as dichotomous chosen factors that exhibit variation in each term. As a result, the participants successfully answered all the distributed questionnaire items and were required to include the assessed respondent's profiles shown below.

Table 1: Demographic Profile of the Respondents

Age of Menarche	Frequency	Percentage
12	80	27.21
13	95	32.31
14	37	12.59
15	6	2.04
16	6	2.04
Year Level		
Grade 8	6	2.04
Grade 9	23	7.82
Grade 10	89	30.27
Grade 11	88	29.93
Grade 12	88	29.93
Age		
16	127	43.2

17	83	28.23
18	84	28.57
Family Income		
2,000	63	21.43
3,000	52	17.69
6,000	82	27.89
10,000	43	14.63
16,000	14	4.76
22,000	40	13.61

Understanding menstrual hygiene management (MHM) among these students is significantly impacted by the demographic profiles of the respondents, which are presented in Table 1. These profiles highlight noteworthy trends in the respondents' age at menarche, year level, age, and family income. It's interesting to note that 32.31% of respondents, or most, menarched at the age of 13. The fact that menstruation is starting early emphasizes the importance of providing younger pupils with specialized menstrual instruction so they are ready. Additionally, the survey discovered that, at 30.27% of the sample, Grade 10 pupils constituted the largest group. This concentration implies that since these pupils are in a critical developmental and educational period, interventions ought to be specially designed for this grade level.

Additionally, the age distribution reveals that 43.2% of respondents were 16 years old, suggesting that this age group can offer important insights on contemporary practices and issues because they have some experience managing menstruation. The examination of household income found that 27.89% of participants were from homes earning 6,000 per month, indicating that financial limitations could have a substantial influence on the availability of menstrual hygiene goods and resources. This emphasizes how crucial it is to take socioeconomic issues into account when creating treatments to enhance MHM.

2. EXTENT OF MENSTRUAL HYGIENE MANAGEMENT

The findings were presented significantly in various parts. In contrast, it comprised descriptive statistics and demonstrated the management level of menstruation hygiene concerning knowledge, attitude, and practices. Nevertheless, below are stated findings per variables.

A. KNOWLEDGE

Despite the least distributed mean, respondents generally possessed excellent and high knowledge of menstrual hygiene management, as evidenced by the table below, where the average mean of 4.31 corresponds to an overall excellent knowledge among themselves.

Table 2. *Extent of knowledge on menstrual hygiene management*

Statement	Mean	S. D	Interpretation
1. Menstruation is a biological phenomenon between individuals of 8-10 years old.	4.33	0.57	VGK
2. Information of menstruation travels from grandmothers to mothers and to girls	4.56	0.54	VGK
3. Menstruation results from shedding of the walls of the uterus	4.13	0.67	GK
4. Menarche (first period) doesn't come with fear and embarrassment	4.06	0.71	GK

5. I prefer to get my information on menstrual hygiene through internet	4.27	0.56	VGK
6. During menstruation, personal hygiene is important	4.65	0.52	VGK
7. Menstruation is bad blood washed away from the body	4.15	0.64	GK
Total	4.31	0.61	VGK

With an overall mean score of 4.31 and a standard deviation of 0.61, Table 2 reflects the depth of respondents' knowledge on menstrual hygiene management. It reveals a generally high level of understanding, signifying "Very Good Knowledge" (VGK). Notably, the statement underlining the significance of personal hygiene during menstruation had the highest mean score of 4.65, indicating that respondents are aware of the critical role hygiene plays in preventing infections and preserving wellbeing at this time. Furthermore, the statement on the transmission of menstrual knowledge from grandmothers to mothers to girls obtained a high mean score of 4.56. This implies that conventional family channels are still a major source of information regarding menstruation, which is both helpful and concerning due to the possibility of out-of-date information being passed down.

However, the statement regarding the emotional experience of menarche, specifically whether it comes without fear and embarrassment, had a lower mean score of 4.06, categorized as "Good Knowledge" (GK). This indicates that some respondents may still face emotional challenges when they first menstruate, underscoring the need for better emotional support and education to reduce stigma and negative feelings associated with menarche. Another important finding is the mean score of 4.15 for the belief that menstruation is "bad blood" being washed away from the body, which also falls under "Good Knowledge." This suggests that certain misconceptions about menstruation persist among the respondents, highlighting areas where education could be improved.

Upon critical analysis of these results, it becomes clear that although the respondents have a solid overall understanding of managing menstrual hygiene, there are gaps in their emotional support and the veracity of some of their views. In addition to covering the biological components of menstruation, educational programs ought to emphasize the importance of emotional and psychological support during the menarche. Furthermore, to guarantee that young women receive correct and comprehensive education on menstruation health, it is imperative to strike a balance between contemporary, evidence-based knowledge and traditional familial traditions. These observations highlight the significance of ongoing educational initiatives that advise and assist young women in successfully and self-assuredly managing their periods.

B. ATTITUDE

The table below presented the numerical results regarding the extent of attitude towards respondents regarding menstrual hygiene management.

Table 3: *Extent of attitude on menstrual hygiene management*

Statement	Mean	S. D.	Interpretation
1. I consider menstruation unclean.	2.64	0.78	MA
2. I manage menstrual blood discretely.	4.27	0.55	VPA

3.I wash my sanitary pad before throwing.	3.56	0.63	PA
4.I don't like doing my laundry during menstruation.	2.88	0.75	MA
5.I like to use soap and water to wash my hand	4.87	0.52	VPA
6.I like using sanitary pad during my menstruation	4.82	0.56	VPA
7.I don't consume certain food during menstruation	4.14	0.64	PA
Total	3.89	0.63	PA

A complex picture of respondents' opinions regarding the management of menstrual hygiene is presented in Table 3. Although the "Positive Attitude" (PA) is indicated by the overall mean score of 3.89, a closer look at the data reveals both areas that need improvement and strengths.

The fact that most respondents do not think menstruation is dirty is one of the most positive findings; this is demonstrated by the mean score of 2.64 for the statement "I consider menstruation unclean," which is classified as "Moderate Attitude" (MA). This is encouraging since it points to a move away from the stigmas attached to menstruation in the past. The moderate rating, however, suggests that views may still be influenced by some lingering discomfort or cultural stigmas. This enduring ambivalence highlights the necessity of ongoing educational initiatives to completely normalize menstruation and eradicate any residual stigmas associated with it.

On the other hand, the high ratings for things like "I manage menstrual blood discretely" (4.27) and "I like using sanitary pads during my menstruation" (4.82), which are both classified as "Very Positive Attitude" (VPA), show that the respondents are accustomed to the latest menstrual hygiene practices and products. This is encouraging evidence that contemporary methods of managing menstruation are being adopted. Nonetheless, the somewhat lower mean score of 3.56 for "I wash my sanitary pad before throwing" indicates that although most respondents are satisfied with their cleanliness habits, there may be variations in how consistently they follow certain habits. This disparity may be the result of things like ignorance or real-world challenges, indicating the need for focused education on the significance of carefully controlling menstrual waste in order to avoid health problems.

A discomfort related to menstruation-related duties is highlighted by the statement, "I don't like doing my laundry during menstruation," which has a mean score of 2.88. This moderate score indicates that managing period hygiene involves more than just using products; it also involves handling menstruation laundry, which can cause discomfort for certain people. This research emphasizes the need for workable solutions and networks of support to make handling menstruation-related tasks easier and less taxing.

Subsequent investigations ought to concentrate on comprehending the origins of these mild beliefs and unease. Deeper insights can be obtained, for example, by looking at the particular cultural, psychological, or logistical aspects influencing these attitudes. Furthermore, creating educational initiatives that not only impart knowledge but also offer helpful advice and emotional support might aid in bridging the knowledge gap. Interventions can become more successful in promoting a holistic and positive approach to menstruation by addressing both the cognitive and emotional components of managing menstrual hygiene.

C. PRACTICES

Based on the table below, the results highlighted that most respondents have very efficient practices during their menstrual period since the total mean was 4.23, with a corresponding interpretation of very efficient.

Table 4: *Extent of practice on menstrual hygiene management*

Statement	Mean	S. D	Interpretation
1. I use sanitary pad.	4.78	0.53	VE
2. I take analgesic drugs to ease my menstrual pain.	2.73	0.76	E
3. I use soft pant/underpants.	4.28	0.61	VE
4. I change my menstrual products at least three times a day.	4.82	0.56	VE
5. I wash my genitals during menstruation	4.86	0.53	VE
6. I consult my healthcare personnel whenever I have menorrhagia	3.89	0.65	E
Total	4.23	0.61	VE

Table 4 provides insights into the respondents' practices regarding menstrual hygiene management, with an overall mean score of 4.23 and a standard deviation of 0.61, indicating "Very Effective" (VE) practices. This high score suggests that respondents generally adhere to recommended practices for menstrual hygiene, but certain areas reveal both strengths and opportunities for improvement.

The practice of changing menstrual products at least three times a day, which scored 4.82, and the strong adherence to using sanitary pads, with a mean score of 4.78, are important findings. Both ratings demonstrate "Very Effective" (VE) habits, showing that respondents use sanitary pads and replace products frequently to ensure menstrual hygiene. Furthermore, the practice of cleaning one's genitalia when menstruating was rated as "Very Effective" (VE) with a mean score of 4.86, indicating a great commitment to personal hygiene during this time.

Still, there is always room for improvement in some processes. "I take analgesic drugs to ease my menstrual pain" received a score of 2.73, meaning it was classified as "Effective" (E). This lower score implies that although some respondents take analgesics for menstruation pain, there may not be a common practice or that there may be obstacles to using pain reduction techniques. This research suggests that in order to guarantee that everyone is able to adequately manage menstruation discomfort, more resources and education are required.

Following studies need to concentrate on comprehending the obstacles to efficient pain relief and the elements impacting the choice to seek medical attention from medical professionals for menstruation health concerns. Examining these factors may yield important information about how to make pain management and medical consultations more accessible and useful. Furthermore, educational initiatives should be created to fill in these knowledge gaps by offering helpful advice on how to manage period pain and promoting routine visits to medical specialists for any worrisome symptoms.

3.FACTORS OF MENSTRUAL HYGIENE MANAGEMENT

The following sections presented the factors of menstrual hygiene management in terms of the given parameters were as follows:

A. INDIVIDUAL FACTOR

Based on the data, it can be concluded that the most important element influencing the management of menstrual hygiene is "Parents' economic and educational status," as 68.37% of respondents agreed or strongly agreed with this statement. This implies that the resources and information available for managing menstrual hygiene are significantly shaped by the socioeconomic and educational constraints of parents. The results of this study highlight the necessity of focused interventions aimed at removing the financial obstacles that families must overcome in order to enhance menstrual hygiene habits.

With 64.95% of respondents agreeing or strongly agreeing that it influences menstrual hygiene management, "poverty and financial deprivation" is another important factor. The high proportion of agreement highlights the significance of giving low-income people financial support and subsidized menstruation products since it shows how financial restrictions can severely limit access to menstrual products and hygiene facilities. 58.85% of respondents agreed that "poor nutritional status" was a significant factor impacting menstrual hygiene. This suggests that inadequate nutrition is also thought to be a significant influence. This result highlights the necessity of all-encompassing nutrition and health programs that address nutritional requirements in addition to providing knowledge on menstrual hygiene.

The factor "Lack of personal hygiene and washing practices" has a significant effect on menstrual hygiene, as indicated by the 57.25% of respondents who agreed or strongly agreed with this statement. This implies that improper hygiene habits are a common problem, emphasizing the necessity of educational initiatives to support good hygiene and menstrual hygiene practices. On the other hand, the least number of respondents (47.27%) agreed that "Gender disparity and discrimination" had an impact on managing menstrual hygiene. Compared to other concerns, this one garnered less consensus, even though it is still a serious issue. This could indicate differing perceptions of the influence of gender-related concerns on menstrual hygiene, which merits more research.

Table 5. *Frequency and percentage distribution of individual factors affecting menstrual hygiene management*

Statement	Frequency	Percentage
1. Poverty and financial deprivation		
Strongly Agree	45	15.31
Agree	143	48.64
Disagree	71	24.15
Strongly Disagree	35	11.90
2. Parents economical and educational status		
Strongly Agree	54	18.37
Agree	147	50.00
Disagree	60	20.41
Strongly Disagree	33	11.22
3. Gender disparity and discrimination		
Strongly Agree	34	11.56
Agree	105	35.71
Disagree	91	30.95
Strongly Disagree	64	21.77
4. Poor nutritional status		
Strongly Agree	49	16.67
Agree	124	42.18
Disagree	100	34.01
Strongly Disagree	31	10.54
5. Lack of personal hygiene and washing practices		

Strongly Agree	87	29.59
Agree	82	27.89
Disagree	64	21.77
Strongly Disagree	61	20.75

B. CONTEXTUAL FACTOR

The frequency and percentage distribution of contextual factors influencing the management of menstrual hygiene are shown in Table 6, which highlights a number of important areas of concern. "Culture and tradition in society" is the most important contextual element found; 70.41% of respondents agreed or strongly agreed that cultural practices and societal norms have an impact on the management of menstrual hygiene. This research emphasizes how deeply ingrained cultural beliefs are in the formation of attitudes around menstruation. These attitudes can frequently result in stigmatization or restricting practices, which makes efforts to encourage good menstrual hygiene more difficult.

"Limited access to private and comfort places among women," which 74.49% of respondents agreed or strongly agreed with, is another important problem. This draws attention to the lack of facilities that many women encounter, especially while trying to manage their periods in privacy, which is crucial for preserving hygiene and dignity. Similarly, 68.03% of respondents cited "Lack of basic services like toilets and sanitary products" as a key problem, highlighting the necessity of better access to necessities like restrooms and supplies. With 62.58% of respondents in agreement, the "Lack of awareness and knowledge about menstruation" was also a key factor, indicating the need for more education and awareness programs. Lastly, 57.83% of respondents expressed concern about "Lack of adequate guidance on menstrual management in school," suggesting that educational institutions have a critical role to play in providing accurate information and support for managing menstrual hygiene.

Table 6. *Frequency and percentage distribution of contextual factors affecting menstrual hygiene management.*

Statement	Frequency	Percentage
1. Culture and tradition in society		
Strongly Agree	49	16.67
Agree	158	53.74
Disagree	58	19.73
Strongly Disagree	29	9.86
2. Limited access to private and comfort places among women.		
Strongly Agree	71	24.15
Agree	148	50.34
Disagree	56	19.05
Strongly Disagree	19	6.46
3. Lack of awareness and knowledge about menstruation.		
Strongly Agree	79	26.87
Agree	105	35.71
Disagree	71	24.15
Strongly Disagree	39	13.27
4. Lack of basic services like toilet and sanitary products		

Strongly Agree	58	19.73
Agree	142	48.30
Disagree	60	20.41
Strongly Disagree	34	11.56
5. Lack of adequate guidance on menstrual management in school.		
Strongly Agree	44	14.97
Agree	126	42.86
Disagree	92	31.29
Strongly Disagree	32	10.88

C. SOCIO-BEHAVIORAL FACTORS

Table 7 presents the frequency and percentage distribution of socio-behavioral factors affecting menstrual hygiene management, revealing significant insights into how social and psychological elements influence menstrual practices. With 74.15% of respondents agreeing or strongly agreeing that their family's cultural and religious values effect their management of menstrual hygiene, "Family background and beliefs" appeared as the most influential factor. This research highlights the critical role that families play in influencing menstrual-related attitudes and behaviors, indicating that in order to create supportive settings, treatments should focus on both individuals and their families.

Regarding "Depression and psychological distresses," which is another significant component, 55.10% of respondents agreed or strongly agreed that these mental health disorders have an impact on their menstrual hygiene routines. Given the strong correlation between psychological well-being and period health management, this underscores the importance of providing mental health assistance in addition to menstrual health education. Furthermore, 57.83% of respondents cited "Stigma and shame among friends and classmates" as a key cause, highlighting the widespread social constraints and stigmatization that can impede good menstrual hygiene. However, with slightly less agreement—47.96% for "Cultural inequalities and taboos" and 42.85% for "Discriminatory social norms"—cultural elements such as these were also acknowledged.

Interventions that normalize menstruation and encourage open communication are necessary to combat the stigma and shame surrounding it, particularly among friends and classmates. This will also help to lessen the social taboos that lead to inadequate menstrual hygiene practices. Subsequent investigations ought to probe more deeply into the particular cultural and societal norms that sustain these problems and investigate practical ways to challenge them. In order to ensure that menstruation individuals get the assistance necessary to manage both their physical and emotional well-being, there is also a need for mental health resources specifically designed to address the unique issues experienced by this population.

Table 7. Frequency and percentage distribution of socio-behavioral factors affecting menstrual hygiene management

Statement	Frequency	Percentage
Depression and psychological distresses		
Strongly Agree	30	10.20
Agree	132	44.90
Disagree	86	29.25
Strongly Disagree	46	15.65
Discriminatory social norms.		
Strongly Agree	20	6.80

Agree	106	36.05
Disagree	120	40.82
Strongly Disagree	48	16.33
Cultural inequalities and taboos.		
Strongly Agree	25	8.50
Agree	116	39.46
Disagree	105	35.71
Strongly Disagree	48	16.33
Family background and beliefs.		
Strongly Agree	43	14.63
Agree	175	59.52
Disagree	58	19.73
Strongly Disagree	18	6.12
Stigma and shame among friends and classmates.		
Strongly Agree	40	13.61
Agree	130	44.22
Disagree	80	27.21
Strongly Disagree	44	14.97

D. SCHOOL INFRASTRUCTURE

This variable was primarily used to measure and analyze how well school infrastructure supported students' good management of menstrual hygiene. Thus, these are the numerical results that follow.

The provided table above revealed that the lack of separate toilets with doors had the most significant impact based on the distributed frequency and percentage, composed of almost 200 respondents who agreed towards its influence on MHM with a corresponding percentage of approximately 62%. Besides, lack of privacy at school and unavailable infrastructure and decent comfort rooms posed an impact as 66 respondents (22.45%) and 110 (37.41%) agreed that the current condition of their school vicinity primarily affected effective menstrual management among students.

The lack of available WASH facilities in their school, as 138 and 57 respondents agreed that their respective school has no lack of private facilities which promote washing and clean sanitary among female students during menstruation. Finally, emphasis on the lack of available private facilities among female students has also accounted for 54 informants (18.37%) and 164 respondents, composed of almost 55.78% population of respondents, indicating its influence on MHM. To sum up, school infrastructure has the highest frequency and percentage distribution among informants, which entails that this factor had the highest impact and influence on the practical implementation of menstrual practices. This finding implies that their school had no lack of available facilities and private comfort rooms to accommodate their students in menstruation. The provided table above revealed that the lack of separate toilets with doors had the most significant impact based on the distributed frequency and percentage,

To prove the findings above, following the proposed study of Magayane and Meremo (2021), it was able to investigate secondary schools in the public sector primarily found numerous concerns with MHM procedures. There was a lack of managing menstrual hygiene management practice infrastructure, including toilets, separate areas for changing pads, accessible components, and water. It highlighted the significance of improved MHM facilities, including water, disposable devices, and discrete rooms for

changing pads. Katsuno et al. (2019) demonstrated that the condition of the school restrooms did not influence the frequency of sanitary napkin changes among the group under study. It does not imply disapproval of the cause-and-effect link, however.

Table 11: Frequency and percentage distribution of school infrastructure factors affecting menstrual hygiene management.

Statement	Frequency	Percentage
1. Lack of available private facilities among girl adolescent students		
Strongly Agree	54	18.37
Agree	164	55.78
Disagree	46	15.65
Strongly Disagree	30	10.20
2. Lack of privacy at school.		
Strongly Agree	67	22.79
Agree	142	48.30
Disagree	58	19.73
Strongly Disagree	27	9.18
3. Lack of WASH facilities in schools.		
Strongly Agree	57	19.39
Agree	138	46.94
Disagree	64	21.77
Strongly Disagree	35	11.90
4. Lack of separate toilets with doors.		
Strongly Agree	78	26.53
Agree	123	41.84
Disagree	49	16.67
Strongly Disagree	44	14.97
5. Unavailable infrastructures and decent comfort rooms.		
Strongly Agree	66	22.45
Agree	110	37.41
Disagree	92	31.29
Strongly Disagree	26	8.84

4. SIGNIFICANCE DIFFERENCE BETWEEN DEMOGRAPHIC PROFILE AND EXTENT OF KNOWLEDGE, ATTITUDE, PRACTICES ON MENSTRUAL HYGIENE MANAGEMENT

Table 9. Significant difference between profiles and extent of knowledge, attitude, and practices among respondents towards MHM

One-Sample Test

	Test Value = 0.05		Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
	T	df			Lower	Upper
Knowledge	6.75	12	.031	45.64000	15.67	
Attitude	10.64	25	.042	45.64000	12.56	

Practices	12.07	19	.038	45.64000	15.54
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Table 9 above showed the significant differences between the distributed demographic profile and the extent of knowledge, attitude, and practices. Overall, the given variables had all significant differences in the demographic profiles of female respondents since all their p-values were less than the stated test value of 0.05. The finding implied that the extent of knowledge, attitude, and practices significantly differed in respondents' demographic profiles with the implementation of menstrual health management. As a result, the research rejected the null hypothesis of this study and accepted the alternative hypothesis, which entails a significant difference between the demographic profiles of respondents and the extent of knowledge, attitude, and practices of female high school students toward menstrual management (Katsuno, 2019). Similarly, concluded that demographic profiles such as type of family status, age of menarche as well as educational background promote vital impacts on facilitating knowledge extent and practices among students towards effective implementation of menstrual management. Besides, it discovered a connection between age, educational status, and year level in managing menstrual hygiene. Our results show that teenage schoolgirls' menstrual hygiene was inadequate, and additional actions to work are vital on the variables (Mprah, et. al, 2022).

5. SIGNIFICANCE DIFFERENCE BETWEEN DEMOGRAPHIC PROFILE AND FACTORS AFFECTING MENSTRUAL HYGIENE MANAGEMENT

The numerical data showed below based on the stated value of each variable. In contrast, since all the values of each variable were lower compared to the 0.05-stated test value level, the researchers revealed that the factors influencing the effective implementation of menstrual hygiene management had a significant difference when grouped according to the demographic profiles of respondents.

Table 10. *Significant difference between profiles and factors affecting menstrual management among respondents.*

One-Sample Test						
	Test Value = 0.05		Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
	T	df			Upper	Lower
Demographic	5.28	7	.001	73.45000	40.57	106.33
Individual	13.23	39	.023	36.70000	31.09	42.31
Contextual	11.02	39	.044	36.70000	29.97	43.43
Sociobehavioral	10.30	39	.024	36.70000	29.49	43.91
School	11.25	39	.014	36.70000	30.10	43.30
Infrastructure						

CONCLUSION AND RECOMMENDATION

The study indicates that there are significant differences in adolescent girls' knowledge, attitudes, and practices (KAP) on menstrual hygiene management (MHM) according on their demographic profiles, which include age, year level, and family income. The findings indicate that girls' knowledge, attitudes, and practices about their menstrual health are influenced by these demographic traits. In particular, people with better socioeconomic standing and access to education typically possess more accurate knowledge, healthier attitudes, and improved MHM behaviors. On the other hand, girls from less fortunate homes or with restricted access to resources and information are at a disadvantage, which may have a detrimental effect on their general health and menstrual health.

Several suggestions are made to enhance teenage girls' management of menstrual hygiene (MHM) in light of the study's findings. First and foremost, it's critical to create and carry out focused educational initiatives that address the unique requirements of various demographic groups. Enhancing understanding, promoting good attitudes, and encouraging healthy practices linked to menstruation should be the goals of these initiatives, with a special emphasis on girls from underprivileged homes who might not have access to reliable information and resources. Involving communities and families in the educational process is also essential. Workshops and awareness campaigns that tackle cultural and social conventions that negatively impact attitudes and actions can foster more supportive environments for adolescent girls.

Improving access to basic supplies in schools is also crucial, as is making sure that every student has access to private restrooms, sanitary products, and appropriate WASH (Water, Sanitation, and Hygiene) amenities. To lessen differences in the availability of resources, schools in lower-income communities should receive extra attention. It is also advised to advocate for policies that would require menstrual health education to be taught in school curriculum and that would guarantee cooperation between governmental and non-governmental organizations in order to supply the resources and assistance that are required. In order to find more thorough and long-lasting solutions to the problems this study has uncovered, future research is encouraged to examine the long-term effects of demographic disparities on menstrual health outcomes and to assess the efficacy of tailored interventions.

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