



Effectiveness Of Menstrual Hygiene Education Programs: Rural Vs. Urban Approaches

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ABSTRACT

However, the efficiency of menstrual hygiene management can vary greatly depending on the context of the education programs that are implemented. This is despite the fact that it is an essential component of women's health. The purpose of this study is to assess the efficacy of menstrual hygiene education programs in both rural and urban settings, assessing the differences in outcomes and the problems that are encountered in each location. In this study, educational interventions in a rural location and an urban area are compared and contrasted with regard to the substance of the programs, the methods of delivery, and the consequences for the participants. In rural areas, programs frequently face obstacles such as restricted access to resources, lower levels of educational attainment, and cultural taboos that impede free conversation. These barriers might limit the effectiveness of the initiatives. On the other hand, urban programs have the advantage of having better access to resources, higher levels of educational support, and more open spaces for discussion; but, they are required to address a varied range of demographics and varying degrees of expertise. Data were gathered by conducting surveys, conducting interviews, and holding focus groups with program participants, educators, and community leaders in the community. When adapted to address unique local needs, such as culturally relevant material and practical resource distribution, rural programs show considerable benefits, according to the findings of the study. This is in contrast to urban programs, which generally achieve higher levels of awareness and improved menstrual hygiene habits. Based on the data, it appears that the effectiveness of menstrual hygiene education programs can be improved by adapting them to the specific obstacles that are present in both urban and rural settings. Programs in rural areas can benefit from community involvement and techniques that are culturally relevant, whereas programs in metropolitan areas can take advantage of superior resources and infrastructure to cover a wider variety of needs. The findings of this study highlight the significance of using context-specific methods in order to enhance the management of menstrual hygiene and overall health outcomes and outcomes for women.

Keywords: Menstrual Hygiene Management, Education Programs, Rural vs. Urban Settings, Effectiveness, Cultural Sensitivity, Resource Accessibility, Health Outcomes

Introduction

Since menstrual hygiene management (MHM) affects women's physical health, comfort, and capacity to engage in social activities, it is a crucial component of women's health and wellbeing. Maintaining proper menstrual hygiene is essential for a number of reasons, including avoiding reproductive health problems like rashes and infections and allowing women and girls to carry on with their daily lives undisturbed. There is a huge disparity in access to education and resources between rural and urban communities, despite the fact that MHM is widely recognized as being of fundamental importance. In rural areas, efficient management of menstrual hygiene can be difficult to achieve due to obstacles such as restricted availability to sanitary goods, lower levels of formal education, and strong cultural taboos. As a consequence of these obstacles, menstrual hygiene practices are frequently insufficient, which in turn leads to higher health risks. On the other hand, urban locations typically provide better access to resources and infrastructure than rural regions do. On the other hand, they are confronted with their own unique set of difficulties, such as a very diverse population that possesses varying degrees of prior knowledge and problems associated with overcrowding and sanitation. For the purpose of planning and executing specialized education programs that cater to the individual requirements of each setting, it is vital to have a better understanding of these distinctions. It is possible to improve menstrual hygiene practices and increase the success of programs by adapting them to the specific difficulties and opportunities that are present in rural and urban settings. This will ultimately lead to improved health outcomes for women and girls.

Significance of Menstrual Hygiene Management

It is possible to manage menstruation in a manner that is both sanitary and dignified through the utilization of the knowledge, behaviors, and resources that are included in menstrual hygiene management. Proper menstrual hygiene practices not only contribute to psychological well-being by eliminating feelings of discomfort and humiliation, but they also prevent health concerns such as infections and rashes from occurring. In addition, the management of menstrual hygiene that is effective enables women and girls to continue their everyday activities, such as schooling and job, without any interruptions.

Challenges in Rural and Urban Settings

Rural Areas:

There are a number of obstacles that have an effect on the efficiency of teaching programs when it comes to the management of menstrual hygiene in rural settings. The lack of access to resources such as sanitary goods and clean water, the lower levels of formal education, and the strongly ingrained cultural taboos are all examples of these factors that contribute to the issues. It is common for women and girls living in rural regions to face obstacles when attempting to obtain knowledge and goods related to menstruation hygiene. This can lead to inadequate menstrual hygiene practices and the associated health risks. In rural settings, the management of menstruation hygiene might be further complicated by cultural norms and traditional customs. In certain cases, menstruation is surrounded by stigma and silence, which prevents open conversation and education about the issues surrounding it. In addition, women may have a more difficult time efficiently managing their menstrual hygiene in rural locations since there may be a lack of infrastructure, such as adequate sanitation facilities.

Urban Areas:

When opposed to rural areas, urban settings typically offer superior access to a comprehensive range of resources and infrastructure. On the other hand, metropolitan surroundings come with their own unique set of difficulties. Due to the fact that metropolitan regions are home to a diverse population, educational programs need to be adapted to meet a wide range of cultural backgrounds, educational levels, and preexisting knowledge regarding menstrual hygiene. Although urban programs may reap the benefits of improved access to menstruation products and healthcare facilities, they must do so while simultaneously navigating the hurdles of addressing a population that is both varied and frequently migratory. Overcrowding and inadequate sanitation in particular neighborhoods are two additional problems that may be experienced in urban environments. These problems might have an impact on the management of menstrual hygiene procedures. In addition, the hectic pace of life that is prevalent in urban areas may reduce the amount of time that is available for comprehensive educational programs, which in turn may reduce the effectiveness of these programs.

Importance of Context-Specific Education Programs

The degree to which menstrual hygiene education programs are adapted to the particular circumstances of rural or urban settings can have a considerable impact on the degree to which they are successful in achieving their intended goals. Programs that address the lack of resources and include local cultural norms have the potential to be more successful in terms of their implementation in rural areas. These programs may include community-based approaches that involve local leaders and make use of methods that are culturally suitable in order to disseminate information.

On the other hand, urban initiatives might reap benefits by making use of the resources and infrastructure that are already in place. However, they are also need to face the issues that come with a diverse population and varying degrees of knowledge that was already present. It is possible that urban programs may need to implement novel approaches, such as digital platforms and community engagement, in order to effectively communicate with various subsets of the entire population.

METHODS

Over the course of two months, from September 1, 2016, to October 31, 2016, researchers from the A.J. Institute of Medical Sciences of Research Centre in Mangaluru, Karnataka, conducted a community-based cross-sectional study. Mangaluru was the site of the research. When conducting fieldwork, researchers visited both urban and rural locations. A total of 244 female adolescents, ranging in age from thirteen to eighteen, enrolled in ninth and tenth grades, were comprised in the study. The easy sampling approach was employed as the sample method. Twelve of these were from urban schools, while twelve came from rural ones.

Students' parents were asked to provide written informed consent before the research was conducted, and the university was consulted to get ethical approval. Course instructors were briefed on the study's goals before interviews began, and data came from a validated questionnaire administered in a semi-structured fashion to gather first-hand accounts. The survey asked participants to fill out a series of questions regarding their demographic information, their level of knowledge about menstruation and where they learned about it, the age at which they were first menstruating, how they disposed of menstrual absorbent, and what they do to manage their period hygiene (MHM). Additionally, the study looked into the various restrictions that are placed on menstruation at home, in society, and in educational institutions. Also, these limitations were the subject of questions. The children's socioeconomic status was accurately classified using the revised B.G. Prasad Socio-Economic Classification (SES). After each interview, the students participated in health education courses designed to teach them about proper MHM practices and provide them the tools to make informed decisions.

Statistical analysis

In order to do statistical analysis, the chi-square test and percentages were used. To find out if there was a statistically significant difference between the groups, we ran a study. A p-value less than 0.05 was necessary for the results to be deemed statistically significant.

RESULTS

A breakdown of the demographic features of the researched population is shown in the first table. A total of 244 female teenagers who were presently enrolled in school participated in this investigation. A total of 123 females attended schools in urban areas, making up 45.83 percent of the total, while 23 went to school in rural regions, making up 54.17% of the total. There were 132 female pupils in the rural school; 69 (52.27%) were ninth graders and 63 (46.72%) were tenth graders. In contrast, 55 (52.67%) of the 112 female students at the urban school were ninth graders, while 47.3% were tenth graders. Nearly three-quarters of the students surveyed in rural schools identified as Hindu, nearly one-fifth as Muslim, and nearly three percent as Christian. Of the students enrolled in urban schools, 38% were Christians, 28.5 were Muslims, and 63.3 were Hindus. Joint families accounted for 68.93% of rural schoolchildren, while separate nuclear families accounted for just 31.06%. This data suggests that nuclear families are less common and that combined families are the norm. On the other hand, there were 80.03 percent of female pupils in urban schools who were from nuclear families and 19.97 percent who were from mixed families. Among rural adolescent girls, 64.39 percent of respondents were from families with incomes below the poverty line (BPL), compared to 25.90 percent of urban respondents. The results show that those living in rural areas are more likely to be from lower-income households. Put it in context: of the parents whose children attended schools in rural areas, only 1.51% had completed high school and 4.54% had completed college. Conversely, among urban schoolchildren, 15.17 percent of dads and 8.03 percent of moms had finished high school.

Table 1: The study population's demographics (n = 244).

Variables	Rural (n=132)		Urban (n=112)	
	Frequency	%	Frequency	%
Religion				
Hindu	101	76.51	71	63.39
Muslim	26	19.69	32	28.57
Christian	05	03.78	09	08.03
Class distribution				
9 th standard	69	52.27	59	52.67
10 th standard	63	47.72	53	47.33
Father's education				
Illiterate	04	03.03	-	-
Primary school	53	40.15	31	27.67
High school	58	43.93	52	46.42
P.U.C/Diploma	11	08.33	12	10.71
Graduate	06	04.54	17	15.17
Mother's education				
Illiterate	03	02.27	03	02.67
Primary school	52	39.39	64	59.82
High school	60	45.45	21	18.75
P.U.C/Diploma	15	11.36	15	13.39
Graduate	02	01.51	09	08.03
Economic status				
APL	47	35.60	83	74.10
BPL	85	64.39	29	25.90
Type of family				
Nuclear	41	31.06	93	80.03
Joint	91	68.93	19	19.97

Table 2. Based on data about menarche and menstruation, the distribution of teenage girls in rural and urban areas (n = 244).

Variables	Rural (n=132)		Urban (n=112)	
	Frequency	%	Frequency	%
Age at menarche (in years)				
12 years and below	21	15.90	13	11.60
13	64	40.90	61	40.17
14	23	25.00	23	38.39
15	17	12.87	11	09.82
16 years and above	07	05.30	04	03.57
Mean age of menarche	12.71 ± 0.67 Years		12.57 ± 0.73 Years	
Regularity of periods				
Yes	92	69.69	77	68.75
No	40	30.31	35	31.25
Source of information about menarche and menstruation				
Mother	89	67.42	66	58.92
Sister	27	20.45	31	27.67
Friends	08	06.06	15	13.39
Teacher	05	03.78	-	-
Media	02	01.50	-	-
Others	01	0.75	-	-

Table 3: Based on their understanding of menstruation hygiene, teenage girls from rural and urban areas were distributed (n = 244).

Variables	Rural (n=132)		Urban (n=112)	
	Frequency	%	Frequency	%
Awareness of menstrual process				
Normal Physiological process	89	67.42	81	72.32
Disease process	24	18.18	16	14.28
Curse of God	03	02.27	-	-
Don't know	16	12.12	15	13.39
Experience of menarche				
Normal	62	46.96	79	70.53
Depressive/shocking	31	23.48	21	18.75
Others	39	29.54	12	10.71

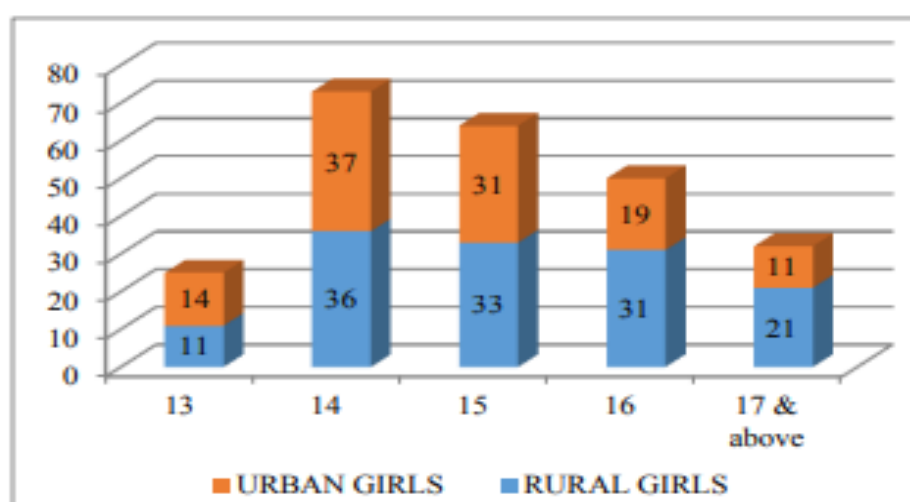
Table 4: Teenagers were distributed according to how hygienic they were throughout their periods (n = 244).

Practices during menstruation	Rural (n=132)		Urban (n=112)	
	Frequency	%	Frequency	%
Type of absorbent used				
Sanitary pad	65	49.24	73	65.17
New cloth	13	09.84	22	19.64
Old cloth	54	40.90	17	15.17
Frequency of change of absorbent				
Every 4-6 hrs	25	18.93	51	45.53
6-8 hrs	21	15.90	39	34.82
8-10 hrs	74	56.06	09	08.03
>10 hrs	12	09.09	13	11.60
Cleansing of external genitalia				
Twice daily	89	67.42	55	49.10
Once a day	35	26.05	51	45.53
Irregular	08	06.06	06	05.35
Method of disposal of sanitary pad/cloth				
Dustbin	72	54.54	79	70.53
Flush in toilet	07	05.30	11	09.82
Hide/others	53	40.14	22	19.64
Toilet facility at Home				
Yes	53	40.15	98	87.50
No	79	59.85	14	12.50

Table 5: Based on the limitations on their regular activities during menstruation, teenage females from rural and urban areas were distributed (n = 244).

Restrictions	Rural (n-132)		Urban (n-112)	
	Frequency	%	Frequency	%
Attend religious function	127	96.21	94	83.92
House hold chores	65	49.24	67	59.82
Outdoor games	113	85.60	47	41.96
Mingling with friends	67	50.75	09	08.03
Not allowed to sleep on routine bed	17	12.87	-	-
Helping mother in kitchen	86	65.15	26	23.21
Sleeping in separate room	79	59.84	17	15.17
Attending school	20	15.15	6	05.35
Touching family members	11	08.33	8	07.14

The study's population is represented by Figure 1, which shows the distribution of ages. The picture clearly shows that the sample population consisted of individuals aged 13 to 18. The average age of people living in rural areas was 15.11 (± 1.71) years, compared to 14.78 (± 1.94) years for those living in urban areas.

**Figure 1: Age distribution of teenage girls in rural and urban areas (n = 244).**

When we look at menarche average ages in urban and rural areas, we see that urban areas have a somewhat older average age of 12.71 years (standard deviation = 0.73 years). Table 2 displays the data, which may be accessed at this location. With a mean age of 12.61 years, the standard deviation of the age at which menarche occurred among all respondents was 0.81 years. Furthermore, when asked who they turned to for information on menarche and menstruation, participants in this study most often mentioned their mothers. Their sisters made up the next group of respondents, making up 24.08 percent of the total. Others who filled out the survey included friends, teachers, and journalists.

According to the data in Table 3, of the total number of respondents, 170 (or 69.67%) knew about menstruation before they reached menarche and thought it was something that happened naturally. Schoolgirls residing in urban regions had a greater level of knowledge (72.32%) than those residing in rural areas (67.42%). In contrast, these young women's reactions to their first periods varied. The responses of those living in rural areas, for instance, varied. Urban school respondents (64.5%) and rural school respondents (46.7%) both found it to be typical. Furthermore, a statistically significant disparity ($p < 0.01$) was discovered between the reactions of girls residing in rural areas and those residing in urban areas when it comes to the onset of their first menstrual period.

Table 4 shows that sanitary pad use was slightly higher among girls living in urban areas (65.17% vs. 49.24%) and among girls living in rural regions (60.24%). Not only that, but a very high level of statistical significance was found for this difference ($p = 0.022$). The number of times girls in rural schools changed their pads every eight hours was determined to be statistically significant ($p < 0.01$), compared to ninety females in metropolitan schools. The variation in the frequency of pad changes was also found to be a significant effect. Furthermore, it was noted that 67.42% of rural girls and 49.10% of urban females cleaned their external genitalia twice a day, whereas the latter group did not. There was a clear difference in this respect. Furthermore, a statistically significant difference in the frequency of external genital cleansing between girls from rural and urban areas was discovered during the research ($p = 0.009$). While the vast majority of schoolgirls in urban areas (87.50 percent) had access to such amenities in their homes, just 41.15 percent of schoolgirls in rural regions did. The researchers also discovered a statistically significant disparity ($p < 0.01$) in the availability of toilets in the households of females residing in rural and urban areas. There was a discernible change in this distinction.

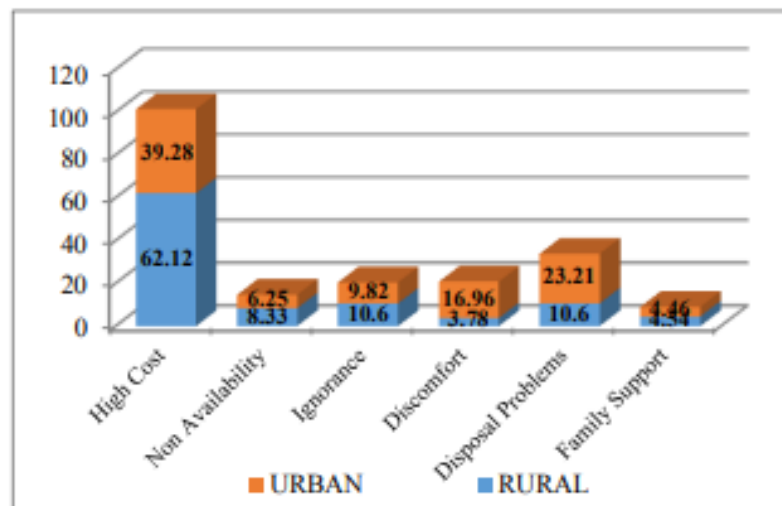


Figure 2: Reasons given by 106 adolescent females from both urban and rural areas for not using sanitary pads.

The "high cost" of sanitary pads was cited by 28.68% of survey takers as the main reason they did not use them, as seen in Figure 2. Challenges with disposal (19.67%), lack of knowledge (16.39%), and family support (13.52%) followed closely behind this.

Table 5 shows that among rural schoolgirls, 96.21% were forbidden to attend religious functions or even touch idols, whereas among urban schoolgirls, 83.92% were subject to the same prohibition. Schoolgirls in both rural and urban areas experienced this. A total of 41.96% of urban schoolgirls were forbade from playing outside, 5.35 % from attending school, and 23.21% from assisting their mothers in the kitchen. But the numbers were substantially higher for rural schoolgirls: 85.60 percent, 15.15 percent, and 65.15 percent were forbidden from engaging in such activities. Furthermore, it was found that there were statistically very significant differences in the limits of attending school (15.15% vs. 5.35%), playing outside (85.60% vs. 41.96%), and helping moms in the kitchen (65.15% vs. 23.21%).

DISCUSSION

Encouraging women to adopt adequate menstrual hygiene is crucial for their health, education, and dignity. The definition of Menstrual Hygiene Management (MHM) is "Articulation, awareness, information, and confidence to manage menstruation with safety and dignity using safe hygienic materials together with adequate water and agents and spaces for washing and bathing with soap and disposal of used menstrual absorbents with privacy and dignity." This idea was developed with the help of the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF).⁷ Girls' and women's social and psychological health are also impacted by inadequate menstrual hygiene practices, in addition to their physical health. Furthermore, it affects their physical well-being. Because of this, it is a serious violation of the right to health that everyone should have.

Evaluating Effectiveness: Key Considerations

When determining whether or not education programs on menstrual hygiene are effective, there are a number of aspects that need to be taken into consideration:

1. Content and Delivery:

- It is essential that the educational content be accurate and relevant to the subject matter. In order to promote menstrual hygiene and health, programs should include information that is both straightforward and supported by evidence.
- The delivery techniques ought to be suitable for the audience that can be expected to receive them. As an illustration, programs in rural areas can distribute knowledge through community gatherings or through the leadership of local leaders, whereas programs in metropolitan areas might use digital tools and multimedia components.

2. Participant Engagement:

- Learning and retention can be improved by engaging individuals through strategies that provide opportunities for interaction and participation. Workshops and participation in social media may be utilized by urban organizations, whilst hands-on demonstrations and discussions may be utilized in rural settings.

3. Access to Resources:

- Menstrual hygiene products should be readily available and reasonably priced, and effective programs should address both of these issues. It is possible that this will require cooperation with local organizations in order to distribute items in rural areas. On the other hand, urban programs may concentrate on making sure that products are available to populations that are not being served.

4. Cultural Sensitivity:

- Programs ought to be attentive to other cultures and respectful of the customs and traditions of the local community. Increasing acceptance and efficiency can be accomplished by gaining an understanding of and incorporating cultural ideas on menstruation.

5. Monitoring and Evaluation:

- For the purpose of determining the effectiveness of educational programs, continuous monitoring and evaluation are absolutely necessary. The collection of feedback from participants, the monitoring of changes in menstrual hygiene behaviors, and the implementation of adjustments to increase the success of the program are all associated with this.

The Need for Comparative Studies

In order to get useful insights into the ways in which diverse contexts influence the performance of programs, comparative studies that evaluate menstrual hygiene education programs in rural vs urban settings are conducted. These kind of studies have the potential to find best practices and obstacles that are specific to each context, which can lead to the development of solutions that are more tailored and effective. One way for policymakers and practitioners to have a better understanding of how to design and administer programs that are tailored to meet the specific requirements of their target populations is to compare the outcomes of programs that have been implemented in rural and urban areas. In order to improve menstrual hygiene management and the health outcomes for girls and women, it is crucial to obtain this information. Access to appropriate menstrual hygiene management is crucial for women and girls to protect their health and dignity. To build educational programs that are successful, it is essential to have a solid understanding of the distinctions in the obstacles and requirements that are present in urban and rural settings. Increasing the effectiveness of programs and enhancing menstrual hygiene behaviors across a wide range of groups can be accomplished by adapting these programs to the specific settings of the places in which they are implemented. Through the implementation of this strategy, women and girls all around the world will ultimately experience improved health outcomes and a greater level of participation in their day-to-day activities.

Conclusion

Overall, the results showed that schoolgirls' menstrual hygiene management (MHM) was not up to pace, regardless of whether they were in an urban or rural area. It was the same in both places. Conversely, compared to girls residing in rural areas, urban girls possessed a greater degree of knowledge regarding menarche and menstruation. This often-ignored problem requires an immediate paradigm shift toward a systematic and focused action that brings together various public and commercial service providers in a convergent and united effort. Knowing this, it's not surprising that this is a need right now.

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