ENHANCING WELL-BEING: MENSTRUAL SANITATION PRACTICES AMONGST RURAL ADOLESCENT GIRLS IN TAMIL NADU, INDIA

Pema Choden Bhutia¹
Gnana Sanga Mithra S.²
Suriya S.³

ABSTRACT

Aim: A campaign to afford free sanitary pads to teen girls in countryside regions has been launched by the Tamil Nadu government in India. The menstrual well-being and sanitation follows of teens in a rural area of North Tamil Nadu, India are discussed in this paper, as well as their experiences utilising sanitary pads and discarded clothing.

Subject and Methods: 134 adolescent girls from four villages participated in a community-based study that lasted four months and used a pre- and post-design to collect qualitative and quantitative data. The awareness of menstruation and its practises, value of life, experience with and serenity with different clothes/pads, and symptoms of reproductive tract infections were all shielded in the questionnaires.

Results: At the baseline survey 90% of girls at the time were wearing worn-out clothing. Sixty-eight percent of teenage females who participated in the study stated pads remained their top optimal. None of them liked wearing worn-out clothing. The quality of life significantly increased after the insertion of pads (p 0.000). Self-reported signs of recurrent reproductive tract infections did not significantly decrease.

Conclusion: This study revealed that unhygienic behaviours, such as societal limitations on food and home chores, were extensively prevalent and that most adolescent females lacked the proper understanding regarding menstruation. This research underscores the need for menstrual hygiene education and awareness.

Keywords: Adolescent Girls, Menstruation, Menstrual Hygiene, Sanitary Pads.

MELHORANDO O BEM-ESTAR: PRÁTICAS DE SANEAMENTO MENSTRUAL ENTRE ADOLESCENTES DO INTERIOR EM TAMIL NADU, ÍNDIA

RESUMO

Objetivo: O governo Tamil Nadu lançou uma campanha para disponibilizar absorventes íntimos gratuitos para adolescentes do sexo feminino em regiões rurais na Índia. O bem-estar menstrual e as consequências do saneamento de adolescentes em uma área rural de Tamil Nadu do Norte, Índia, são discutidos neste artigo, bem como suas experiências utilizando absorventes e roupas descartadas.

Assunto e Métodos: 134 meninas adolescentes de quatro aldeias participaram de um estudo de base comunitária que durou quatro meses e usou um pré e pós-projeto para coletar dados qualitativos e quantitativos. A consciência da menstruação e suas práticas, o valor da vida, a experiência e a serenidade com diferentes roupas/almofadas e os sintomas de infecções do trato reprodutivo foram todos protegidos nos questionários.

Resultados: Na pesquisa de base, 90% das meninas da época estavam vestindo roupas desgastadas. Sessenta e oito por cento das mulheres adolescentes que participaram do estudo declararam que as almofadas permaneciam ótimas. Nenhum deles gostava de usar roupas desgastadas. A qualidade de vida aumentou significativamente após

¹ Hindustan Institute of Technology and Science (Deemed to be University), Chennai, India. E-mail: bhutiasangay1819@gmail.com Orcid: https://orcid.org/0000-0002-7728-9149
² Vinayaka Mission’s Law School, Vinayaka Mission’s Research Foundation (DU), Chennai, India. E-mail: sangamithra0212@gmail.com
³ Madras School of Social Work, Chennai, India. E-mail: suriyap@ce.iith.ac.in Orcid: https://orcid.org/0009-0002-4233-9953
a inserção de almofadas (p 0,000). Os sinais autorreferidos de infecções recorrentes do aparelho reprodutor não diminuíram significativamente.

Conclusão: Este estudo revelou que comportamentos anti-higiénicos, como limitações sociais em alimentação e tarefas domésticas, foram amplamente prevalentes e que a maioria das mulheres adolescentes não tinha a compreensão adequada em relação à menstruação. Esta pesquisa ressalta a necessidade de educação e conscientização sobre higiene menstrual.


MEJORAR EL BIENESTAR: PRÁCTICAS DE SANEAMIENTO MENSTRUAL ENTRE LAS ADOLESCENTES RURALES EN TAMIL NADU, INDIA

RESUMEN

Objetivo: El gobierno de Tamil Nadu (India) ha puesto en marcha una campaña para proporcionar compresas gratuitas a las adolescentes de las zonas rurales. En este artículo se analiza el bienestar menstrual y el seguimiento sanitario de las adolescentes de una zona rural del norte de Tamil Nadu (India), así como sus experiencias con el uso de compresas y ropa desechada.

Objeto y métodos: 134 adolescentes de cuatro aldeas participaron en un estudio comunitario que duró cuatro meses y utilizó un diseño previo y posterior para recopilar datos cualitativos y cuantitativos. En los cuestionarios se recogieron datos sobre el conocimiento de la menstruación y sus prácticas, el valor de la vida, la experiencia y la serenidad con distintas prendas/compresas y los síntomas de las infecciones del aparato reproductor.

Resultados: En la encuesta de referencia, el 90% de las chicas llevaban ropa desgastada. El 68% de las adolescentes que participaron en el estudio afirmaron que las compresas seguían siendo su mejor opción. A ninguna de ellas le gustaba llevar ropa usada. La calidad de vida aumentó significativamente tras la colocación de compresas (p 0,000). Los signos autodeclarados de infecciones recurrentes del tracto reproductor no disminuyeron significativamente.

Conclusiones: Este estudio reveló que los comportamientos antihigiénicos, como las limitaciones sociales en la alimentación y las tareas domésticas, estaban muy extendidos y que la mayoría de las adolescentes carecían de los conocimientos adecuados sobre la menstruación. Esta investigación subraya la necesidad de educar y concienciar sobre la higiene menstrual.

Palabras clave: Adolescentes, Menstruación, Higiene Menstrual, Compresas Higiénicas.

RGSA adota a Licença de Atribuição CC BY do Creative Commons (https://creativecommons.org/licenses/by/4.0/).

1 INTRODUCTION

Adolescence is defined by the World Health Organisation (WHO) as being between the ages of 10 and nineteen (The Hindu, 2015). Adolescence is a key stage when an individual forms their identity and transitions from childhood to maturity. Physical, psychological, emotional, and social changes that are crucial to the adolescent's wellness typically characterise this shift. Both parents and developing teenagers are significantly challenged by these developments (Kirk J, Sommer M. 2005) Menstruation commonly marks the beginning of adolescence in females, and this is seen as a crucial period that calls for special care.
Unfortunately, concerns around menstruation and menstrual cleanliness are frequently associated with certain taboos and sociocultural constraints, which have considerably changed our knowledge of menstruation and menstrual hygiene from a scientific perspective. About 200 million women and girls in poor nations are thought to struggle daily during their menstrual periods to get access to clean water for washing and convenient locations to change their pads (Raina D, Balodi G, 2014). Since the majority of women and girls who menstruate use unsanitary absorbents during their periods, access to sanitary products has been a significant barrier for them (Nehulkar P, 2016). Due to a scarcity of sanitary pads and accessibility to basic sanitation facilities that suit their privacy needs, adolescent females skip school during their periods.

Girls' health may be impacted by the hygienic habits they develop during the adolescent years in relation to menstruation. Menarche may be linked to taboos and misconceptions from our traditional society, which could be harmful to women's health, especially in terms of menstrual cleanliness (Kumar A, Srivastava K, 2011). In our culture, parents don't discuss sexual preferences with their developing daughters. The taboos surrounding this subject make it difficult for girls and women to express their wants and issues, which is the main driver behind the adoption of unsanitary practices during menstruation. Menstruation facts and its physiological effects should be explained to them before making any changes to menstrual practises (Adhikari P, 2007).

The state government of Tamil Nadu will give government schoolgirls free sanitary napkins as part of the TN Free Sanitary Napkin Scheme 2023. Furthermore, as part of the menstrual hygiene plan, women who are inpatients at government-run medical facilities will also receive complimentary sanitary pads. Girls between the ages of 10 and 19 would receive sanitary napkins from the Tamil Nadu state government. Additionally, as part of Tamil Nadu's Free Sanitary Napkins Scheme, the state government will purchase sanitary pads for inpatients in the 15-to-49 age range (The Hindu, 2023).

2 METHODS

In all four study villages, the survey was carried out from January to March 2023 among young women who resided in disadvantaged areas. All teenage girls, both those who attend school and those who do not. There were 134 eligible girls left after excluding individuals had not reached menarche, remained married, recently immigrated to the survey area, were already married, were not accessible for facts gathering at baseline. After describing the study's
specifics to the girls and their families, verbal consent was acquired. Mothers were not present, and privacy was maintained throughout the data collection process. The dataset did not contain any personally identifying information, and the principal investigator was the only person with access to it. Girls existed using cloths at baseline conventional sanitary napkins as part of the intervention. Principle investigator stayed the study villages regular to ensure the interference was actuality executed as planned.

3 DATA COLLECTION AND ANALYSIS

The approaches for gathering the data were both qualitative and quantitative. To learn the reasons behind their practises and preferences, open questions remained posed to the participants. Teenage girls' focus groups and observations of their reactions to questions about quality of life helped researchers develop the study's data collection technique. Female research assistants were trained to apply the tool during interviews with teenage females. Some of the inquiries centred on menstruation knowledge and information sources, menstrual perceptions and practises, including the use of cloths, value of life and RTI symptoms, bodily fluctuations during puberty, dietary and activity limitations through menstruation, and the kinds of pads that were used and their obtainability.

Every community and teenage girl had a code. The supervisor verified the accuracy of the data. For category factors pertaining to difficulties with value of life and RTIs, dichotomous variables were developed. To determine the significance of each variable, the proportion, difference in proportions, and t-test for coordinated pairs were computed. Pairs that were not matched were not compared. The SPSS-21 version was utilised for data analysis. After founding rapport, the principal investigator passed out interviews until inundation point for gathering new info was stretched, both in person and on a recorder. Interviews followed by dictation and translated into English. 36 adolescent girls were the subjects of six in-depth interviews and two focus group deliberations using rules in the local language, in four villages at baseline and afterward a period of four months of consuming sanitary pads.

4 FINDINGS

The 134 adolescent girls have a mean age of 13.7 years (range of 12–19 years). (93%) had at least a primary level of formal education, (80%) lived in affordable mud homes, (91%) were from the SC, (33.5%) attended school, and the remaining (36.6%) were either labourers.
or did housekeeping. 75 percent of the 45 (27.3%) participants came from families living below the poverty level. Their fathers were illiterate in one-third of cases, as were two-thirds of their mothers. Underweight (BMI 18.5; 30%). Only sixteen percent of the girls had access to appropriate bathrooms at home; the others used temporary facilities with plastic and stick walls that lacked a door, or running water. 79% of the girls had limits placed on what they may touch, nearly half had to sit apart while having their periods, and nearly half had their family members’ behaviours altered. A third or so were prohibited from leaving the house alone while having their periods.

Table 1

<table>
<thead>
<tr>
<th>Awareness about Menstruation</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Causes of Bodily changes after Menstruation</strong></td>
<td></td>
</tr>
<tr>
<td>I know</td>
<td>22</td>
</tr>
<tr>
<td>Not aware</td>
<td>112</td>
</tr>
<tr>
<td><strong>Awareness about Menstruation before first periods</strong></td>
<td></td>
</tr>
<tr>
<td>I know</td>
<td>51</td>
</tr>
<tr>
<td>I don’t know</td>
<td>83</td>
</tr>
<tr>
<td><strong>Medium of Information</strong></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>42</td>
</tr>
<tr>
<td>Teachers</td>
<td>30</td>
</tr>
<tr>
<td>Friends</td>
<td>41</td>
</tr>
<tr>
<td>Others</td>
<td>20</td>
</tr>
<tr>
<td><strong>Difference between path of Urination and Menstruation</strong></td>
<td></td>
</tr>
<tr>
<td>I know</td>
<td>20</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>41</td>
</tr>
<tr>
<td>Same</td>
<td>73</td>
</tr>
</tbody>
</table>

Source: Author’s

Table 1 demonstrates that most respondents had misconceptions regarding reproductive organs and menstrual physiology. Teenage girls experienced a lot of limitations, and most of them uses old clothes to handle their menstrual flow.

The girls acquired baths and washed their period cloths early in the morning, before other family members woke up or were absent as they didn’t have adequate privacy, in line with qualitative findings. They would use a large piece of cloth that could absorb more menstrual blood at work or school, but they were still perpetually concerned about ruining their outfits. Both their places of employment (farms) and the majority of their schools lacked restrooms. If there were restrooms in schools, they typically lacked running water. At the time of the baseline
survey, 51 girls were aware that there were sanitary pads on the market, whereas 83 of the 134 girls were still wearing old clothes.

Table 2

Using clothes at baseline and sanitary pads at the end of the survey

<table>
<thead>
<tr>
<th></th>
<th>Old Cloths Base Line Survey (n=134)</th>
<th>Sanitary Pads End line Survey (n=83)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absenteeism from School</td>
<td>Yes 24, No 120</td>
<td>Yes 0, No 83</td>
</tr>
<tr>
<td>Strains Visible to others while washing</td>
<td>Yes 114, No 20</td>
<td>NA</td>
</tr>
<tr>
<td>Skin Infection</td>
<td>Yes 73, No 61</td>
<td>Yes 0, No 0</td>
</tr>
<tr>
<td>Smell and uncomfortable</td>
<td>Yes 122, No 12</td>
<td>Yes 41, No 42</td>
</tr>
<tr>
<td>Disposal Issues</td>
<td>Yes 79, No 55</td>
<td>Yes 7, No 76</td>
</tr>
</tbody>
</table>

Source: Author's

When using sanitary pads instead of old cloth, problems like absenteeism from school or work, feeling clean, skin abrasions, ruined clothes, and bad odours were significantly reduced.

Table 2 compares quality of life issues with the two types of absorbent cloths/pads during menstruation. In addition, many more girls felt more ease wearing pads as opposed to old clothes.

"Old clothes become stiff after repeated use (three to four menstrual cycles), and we develop abrasions on the skin of our inner thighs."

"We feel dirty and ashamed because there are visible menstrual blood stains on old clothes, and it smells."

"With the old cloths, we feel unclean."
In terms of signs of reproductive tract infections (RTIs), 9 of 68 girls who used sanitary pads and 51 of 134 girls who used old cloth reported having vaginal discharge, respectively. “When sanitary pads were used instead of old cloth, the symptoms of discharge that are typically associated with RTIs (such as the presence of yellow or foul-smelling discharge or itching with white discharge) were less common, but the difference was not statistically significant (data not shown).” Adolescent females who used pads at baseline compared to those who utilised old clothes at baseline had significantly reduced prevalence of the majority of the unsatisfactory quality of life concerns (p.005).

“If there are pads in the community, we would like to utilise them”.

"Pads are superior because they don't require washing.

The frequency of RTI symptoms was same. When adolescent females used sanitary pads at end line instead of used old clothes at baseline, the majority of the negative quality of life difficulties were likewise much lower (p.005), with the exception of having their cloth ruined (p0.84) (data not shown). At the conclusion of the survey, 88% of adolescent females said that their first preference for menstruation needs was sanitary pads.

5 DISCUSSIONS

This study revealed that unsanitary practises, such as societal limitations regarding home chores and food items, were frequently practised and that the majority of adolescent girls lacked the proper understanding about menstruation. At the start of the study, the majority of the teenage girls were dressed in worn-out clothes. The use of used clothing has been associated with microbial growth, and the girls in this study showed a significant prevalence of RTI-like symptoms.

Similar findings have been made in various communities in South Asia and Africa regarding the low level of knowledge and bad practises (Lawan UM,2010). This research emphasises the need of menstrual hygiene education and awareness (Adhikari P, 2007). Family members' unfavourable attitudes regarding menstruation have also been documented in other studies. This study clearly demonstrates the need for methods to enhance menstruation hygiene among adolescent females in rural India. It also demonstrates the critical need for teen-friendly programmes that offer guidance on reproductive health and menstrual hygiene, both of which
have to be covered in the academic programme. In order to provide accurate and encouraging information to adolescent girls, female instructors, peer educators, and moms also require information on these topics and training. In addition, in order to eliminate the need for unsanitary practices and reproductive tract infections, in line with Millennium Development Goals 2, 3, and 7, water and sanitation at school, in workplaces, and at home need to be addressed.

ACKNOWLEDGEMENTS

I extend my sincere appreciation to Vinayaka Mission’s Research Foundation and Vinayaka Mission’s Law School for their invaluable support throughout the duration of this research project. Their provision of seed money has been instrumental in bringing this study to fruition. Their commitment to fostering academic inquiry has played a pivotal role in the success of this endeavour.

FUNDING

The financial backing for this research was made possible through the generous seed money provided by Vinayaka Mission's Research Foundation and Madras School of Social Work. These fundings are referenced as "VMRF/Seed Money/AY 2023-24/VMLS/1" and “MCJ Research Publication Grant, Madras School of Social Work” respectively. We are deeply grateful for their investment in our research, which has allowed us to explore and contribute to the field in a meaningful way.

DECLARATIONS

Informed Consent: We wish to acknowledge that all participants involved in this study provided informed consent before their inclusion. Clear and comprehensive information regarding the research objectives and data usage for publication was provided to each participant. Their voluntary participation has been fundamental to the integrity and validity of our findings.
ETHICAL APPROVAL

We are pleased to confirm that this research received ethical approval from the Ethics Review Committee. This approval underscores our commitment to upholding the highest ethical standards in conducting research. It ensures that the rights, well-being, and privacy of our participants were given utmost consideration.

CONFLICTS OF INTEREST

It is important to note that no conflicts of interest have arisen in the course of this research. Our commitment to unbiased and transparent research remains unwavering, and we have taken measures to ensure that personal or financial interests do not influence the objectivity of our work.
REFERENCES


