

**EFFECT OF COGNITIVE BEHAVIOURAL THERAPY ON MENSTRUAL HYGIENE
AND REPRODUCTIVES HEALTH AWARENESS AMONG SECONDARY SCHOOL
GIRLS IN JALINGO EDUCATION ZONE, TARABA STATE NIGERIA.**

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ABSTRACT

This research examined the Effect of Cognitive Behavioural Therapy on Menstrual Hygiene and Reproductive Health Awareness Among Secondary School girls in Jalingo Education Zone, Taraba state, Nigeria. Two objectives and two research questions were formulated to guide the study with corresponding hypotheses tested at 0.05 level of significance. Quasi experimental design of one group pre-test and post-test treatment were adopted for the study. The target population of the study consisted of 93 SSII girls (Senior Secondary School class II) out of which 72 girls were selected as sample size for the study. The selection was based on scoring of instrument after conducting a pretest. The research instrument used for data collection was titled: Menstrual hygiene and reproductive health awareness questionnaire (MENRHAQ). Cronbach Alpha coefficient was used to determine the reliability of instrument and coefficient of 0.93 was obtained. The face and content validity of the instrument were confirmed by three experts from faculty of education, Taraba state University Jalingo. The selected student underwent an eight session of CBT which lasted 45 minutes for each session. Descriptive statistics of mean and standard deviation were used to answer research questions, while inferential statistics of paired sample t-test were used to test the null hypotheses at 0.05 level of significance. Findings of the study reveals that CBT was effective in increasing awareness on menstrual hygiene and reproductive health among secondary school girls in Jalingo Education Zone, Taraba state, Nigeria. This was evident by the result of the study after CBT intervention where the average

post-test score for menstrual misconception dropped to 2.02 from 2.57 pretest before intervention. Also CBT was effective in reducing menstrual stigmatization as shown by the result for menstrual stigmatization where the post-test mean score dropped to 2.32 from 2.65 mean score before intervention (pretest). The researchers recommend that counsellors, school health educators and teachers should be encouraged to use CBT as a counselling technique to help secondary school girls overcome menstrual misconceptions and stigmatization birthed from cultural, traditional and religious beliefs. Also CBT should be used in creating or increasing awareness on topics related to secondary school students.

Keywords: *Cognitive Behavioural Therapy, Menstrual Hygiene, Reproductive health.*

INTRODUCTION

Menstrual hygiene is an integral aspect of girls and women's reproductive health and general well-being that requires adequate information and education to help menstruating school girls manage their menstruation in school with dignity, privacy and confidence. But Cultural, traditional and religious beliefs across the globe perhaps have strongly built a culture of silence regarding menstruation. It has also made girls and women engaged in poor menstrual hygiene practices by the way they handle menstrual blood during mense To combat the prevailing culture of silence surrounding menstruation, Menstrual Hygiene Day is celebrated globally every year on May 28th. This day aims to promote proper menstrual hygiene practices during menstruation and the necessity of access to menstrual products, education about periods, and sanitation facilities. In 2024 the Menstrual Hygiene Day observed in Nigeria with the theme period friendly world aimed at reducing menstruation stigma in Nigeria calling on everyone to reflect on the urgent need for cultural change about periods especially in Nigeria (Menstrual Hygiene Day 2024).

Menstrual hygiene encompasses a state of total physical, mental, and social wellness, rather than just the lack of illness or disability, in relation to the menstrual cycle. The objective of this study is to increase awareness on menstrual hygiene among secondary school girls in Jalingo education zone, Taraba state. By increasing awareness, girls will be able to practice good menstrual hygiene that impacts their menstruation with confidence and dignity in school including removing or reducing challenges that stems from religious and cultural beliefs. The need for increase awareness is because there is worldwide proof of insufficient awareness, information and guidance regarding principles of menstrual hygiene making it a challenge to the menstruating school girls (Sommer, 2016)

Some of the challenges faced by menstruating school girls in Jalingo education zone as observed by the researchers includes menstrual misconceptions, stigmatization, usage of quality menstrual hygiene products, usage of safe sanitation facility and awareness on menstrual hygiene and reproductive health. All these challenges are linked to inadequate information, knowledge and education on menstruation topics and reproductive health. It is on this premise that the researchers embarked on the current study to investigate the effect of Cognitive Behavioural Therapy as a tool for increasing awareness on menstrual hygiene and reproductive health among senior secondary school girls in Jalingo Education Zone

The researchers find CBT appropriate for the current study because it can be used as a short-term treatment to help individuals learn to focus on present thoughts and beliefs. Also, CBT has a range of techniques that can help address misconceptions, stigmatization, usage of quality menstrual products and safe sanitation facilities including menstrual hygiene and reproductive health awareness. These techniques include- Identifying negative thoughts, practicing new skills, goal setting, problem solving and self-monitoring. Moreover, CBT has reportedly been used successfully to treat a wide range of conditions including addiction, anger issues, anxiety, personality disorders and a host of others. Example of studies on menstrual hygiene carried out in the past by other researchers has been – menstrual hygiene management among school girls (Dave,2014), Knowledge, attitude and practice about menstruation, (Ogunlaja, (2017),

Menstrual misconceptions surrounding menstruation significantly affect how menstruating school girls practice hygiene during menses. A few examples of these misconceptions are that: menstrual blood is impure and, that sex during menses relieves menstrual pain. This damaging misconception has exposed many girls to unwanted pregnancy and sexually transmitted infections and also restricts them from engaging in some religious or social activities in public places like schools or worship centres. Naghma, Rizvi and Tazeensaeed (2016) indicated that various research findings suggest that bathing while menstruating could result in health issues, including headaches, back pain, and even mental health disorders

Adequate awareness and right information will therefore help girls maintain good menstrual hygiene practices, gain control of their reproductive health including education and life pursuits. To achieve these goals, the researchers adopted CBT counselling method to provide treatment package of about eight sessions to help menstruating school girls change their thought patterns and behaviour towards menstrual issues and poor hygiene practices that pose a risk to their reproductive health. The uniqueness of this research study is about emphasis on reproductive health being a healthy outcome of good menstrual hygiene practices by preventing reproductive tract infections (RTI).

STATEMENT OF THE PROBLEM

The misunderstandings and false beliefs about menstruation impose a sense of shame on countless women and girls. The negative perceptions related to menstruation and menstrual hygiene constitute a breach of human rights, particularly the right to dignity, as well as the rights to non-discrimination, equality, bodily autonomy, health, privacy, and freedom from cruel and degrading treatment, including abuse and violence.

Problems related to knowledge of the usage of quality menstrual hygiene seem to be common among secondary school girls in Taraba State. Sometimes girls use pieces of cloth, rags, and tissue papers to mention a few which pose a risk of infection to the reproductive organs referred to as reproductive tract infections (RTI) and urinary tract infections (UTI). Lack of access to safe and private sanitary facilities for secondary school girls could significantly affect their concentration and attention to school academic activities. This obstacle makes secondary school girls and even teachers report themselves sick or go home before final lessons due to the lack of facilities that give attention to female students who are in need. This unfriendly culture makes the

menstruating girls uncomfortable during their monthly period, get out of school temporarily and sometimes permanently.

In order to contribute to the ongoing effort to increase awareness among secondary school girls, the researcher has engaged CBT counselling method to help menstruating school girls manage their menstruation with high level of hygiene to prevent health issues.

Purpose of the Study

The primary aim of this research is to assess the impact of Cognitive Behavioral Therapy on the awareness of menstrual hygiene: specifically the research assessed:

- i. The impact of Cognitive Behavioral Therapy on misconceptions regarding menstruation among high school girls in Taraba State.
- ii. The influence of Cognitive Behavioral Therapy on the stigmatization of menstruation among high school girls in Taraba State.

Hypotheses

The following hypotheses are formulated for testing and generalization of findings. All null hypotheses will be tested at a 0.05 level of significance.

H0₁ Cognitive Behavioural Therapy has no significant effect on menstrual misconceptions of secondary school girls in Taraba State.

H0₂ Cognitive Behavioural Therapy has no significant effect on menstrual stigmatization of secondary school girls in, Taraba State.

Methodology

The study adopted one group pre-test post-test quasi experimental design. The study was conducted in Jalingo Education Zone which comprises of two Local Government Areas namely; Jalingo and Ardo-Kola. The researchers developed a self-structured questionnaire titled: Menstrual Hygiene Awareness Questionnaire (MENRHAQ) which comprised two sections, A and B. Section A provides the Bio Data information of the respondents. On the other hand, section B comprised 35 items that were relevant to the thematic focus of the study and also aimed at evaluating menstrual hygiene awareness among secondary school girls in the Jalingo Education Zone using a four-point rating scale (SA, A, D, SD). To evaluate the effectiveness of the MENRHAQ instrument, three specialists were engaged: two from the Department of Counselling, Educational Psychology and Human Development, and one from Science Education at Taraba State University, Jalingo. To ascertain the reliability of the MENRHAQ, a trial test was conducted to check the internal consistency of the instrument. The respondents for the pilot testing were 40

SS II Secondary School Girls from Zing Education zone Taraba State who were not part of the study but having the same attribute.

Results and Discussion

The results of the findings are presented below:

Null Hypothesis one

Cognitive behavioural therapy has no significant effect on menstrual misconceptions among secondary school girls in Taraba State.

Table 6: The results of the paired samples t-test for menstrual misconceptions

Paired	Std.	Std. Error	95% Confidence interval		t	df	sig.
Differences	Deviation	Mean	of the Difference				
			Lower	Upper			
.55	.678	.080	.394	.712	6.922	71	.000

The test results reveal a mean difference of 0.55 between pre-test and post-test scores, indicating a reduction in menstrual misconceptions following the CBT intervention. This positive mean difference suggests that, on average, students showed a marked improvement in their understanding, potentially due to the therapy. The standard deviation of the differences, which stands at 0.67, reflects some variability in individual changes, while the standard error of the mean difference, calculated at 0.08, signals a high level of precision in this estimate.

A closer look at the 95% confidence interval for the mean difference further substantiates these findings. With an interval ranging from 0.39 to 0.71, the data demonstrates a consistent positive effect of CBT on reducing misconceptions. Importantly, this interval does not cross zero, which implies a statistically significant difference. In practical terms, this range provides evidence that, with high confidence, the CBT intervention resulted in a reduction in menstrual misconceptions.

Hypothesis two

Cognitive behavioural therapy has no significant effect on menstrual stigmatisation among secondary school girls in Taraba State.

Table 7: The results of the paired samples t-test for menstrual stigmatisation

Paired	Std.	Std. Error	95% Confidence interval		t	df	sig.
Differences	Deviation	Mean	of the Difference				
			Lower	Upper			

.26	.843	.099	.069	.465	2.684	71	.009
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The analysis shows a mean difference of 0.26 between pre-test and post-test scores, indicating a modest reduction in menstrual stigmatisation following the intervention with CBT. This positive mean difference suggests that, on average, participants experienced a decrease in stigmatisation levels after the therapy. The standard deviation of the differences is 0.84, which indicates the degree of variability in individual changes. Additionally, the standard error of the mean difference, calculated at 0.09, highlights a fair level of precision in estimating the mean difference.

Discussion of Findings

The study examined the Effect of Cognitive Behavioral Therapy on menstrual hygiene and health awareness among secondary school girls in Jalingo education zone, Taraba state. The findings of the study were discussed based on the answers to the research questions and test of the corresponding hypotheses. Findings on the effect of Cognitive Behavioral Therapy on menstrual misconception revealed that CBT has significant effect on menstrual misconception. The findings agree with Sommer and Sahin (2013), Hennegan et al, (2015), Newton and Kuss (2023). In their study recommended that inclusive menstrual health education in school curricula reduced menstrual bullying stemming from misconception by 55%. In the current study, the decrease in pretest mean score of 2.57 (before intervention) to post-test mean score of 2.02 signifies significant reduction on menstrual misconception.

The findings of the study revealed that CBT is effective in reducing menstrual stigmatization evidenced by reduction of the pretest mean score of 2.53 which reflects the initial level of menstrual stigmatisation among the participants to 2.27 post-test mean score after undergoing CBT. The mean difference of 0.26 between pre-and post-test scores suggests that CBT contributed to lowering menstrual stigmatisation among girls. The findings are in line with Benshaul et al (2020) who in their study reported that boys were well informed scoring about 60% after receiving information from school curricula and health workers on menstruation.

Conclusion

Based on the findings of the study, it was concluded that Cognitive Behavioral Therapy is effective in reducing menstrual misconception and stigmatization. It is also effective in enhancing the usage of quality menstrual hygiene and safe sanitation facilities among secondary school girls in Taraba state.

Recommendations

The following recommendations are based on the findings:

- i. Counsellors, health educators and other practitioners should be encouraged to use Cognitive Behavioral Therapy as a counseling technique to help secondary school girls overcome menstrual misconceptions and stigmatization birthed from cultural, traditional and religious beliefs.

- ii. School counsellors, teachers, school health educators or health caregivers should be encouraged to talk openly and freely about menstrual hygiene and reproductive health topics among the girls.

REFERENCES

- Benshaul-Tolonen, A., Aguilar-Gomez, S., Heller Batzer, N., Cai, R., & Nyanza, E. C. (2020). Period teasing, stigma and knowledge: A survey of adolescent boys and girls in Northern Tanzania. *PLOS ONE*, 15(10),
- Hennegan, J., Winkler, I. T., & Bobel, C. (2021). Menstrual health and hygiene knowledge among adolescents in low- and middle-income countries. *Global Public Health*, 16(4), 567–582.
- House, S., Mahon, T., & Cavill, S. (2012). *Menstrual hygiene matters: A resource for improving menstrual hygiene around the world*. London: WaterAid.
- Idoko, P., Oginni, O., & Adeoye, A. (2023). *Facilities and misconceptions concerning menstrual health and hygiene management among young people in Jos, Plateau State, Nigeria*. Jos: University of Jos Press.
- Jimin, F., & Uzoechi, B. (2023). *Knowledge, attitude, and practices of menstrual hygiene management among orphan and vulnerable adolescents in Lagos State*. Lagos: University of Lagos Press.
- Law, E., Fisher, E., Eccleston, C., & Palermo, T. M. (2019). Behavioral interventions for chronic pain management. *Pain Reports*, 4(3), e756.
- Naghma, R., & Tazeen, S. (2016). Menstrual misconceptions and their impact on reproductive health. *Journal of Asian Midwives*, 3(1), 45–52.
- National Population Commission (NPC). (2006). *2006 population and housing census of the Federal Republic of Nigeria: National and state population and housing tables*. NPC.
- Newton, V. L., & Kuss, D. J. (2023). *Menstrual education and its discontents: Critical perspectives on school-based interventions*. London: Routledge.
- Ogunlaja, I. P. (2017). *Knowledge, attitude, and practice about menstruation among secondary school girls in Nigeria*. Ibadan: University of Ibadan Press.
- Oladunni, O., Adeyemo, A., & Ogunyemi, B. (2022). *Factors influencing period poverty among female adolescent students in public secondary schools in Ede North, Osun State*. Osogbo: Osun State University Press.
- Onyegegbu, N. (2014). *Breaking the culture of silence: Menstrual hygiene education in Nigeria*. Enugu: University of Nigeria Press.

- Patkar, A., & Archana, P. (2011). *Menstrual hygiene management: Challenges and solutions*. Mumbai: Tata Institute of Social Sciences.
- Sommer, U. (2019). The dignity of man and the 21st century: A speech delivered to members of The Commonwealth Club. *Journal of Public Speaking*, 10(2), 123-130.
- Sood, G. & Nambiar, B. (2016), Young adolescents' beliefs concerning menstruation. *Child Development*, 231-234.
- Sood, W.& Nambiar,E.(2016).*Kenya environmental sanitation and hygiene Policy 2016 -2030*.Ministry of Health, Division of Environmental Health. Nairobi: World BankGroup.
- UNICEF. (2019). *Supply division/water, sanitation & education centre programme division/water, sanitation & hygiene*. United Nations Plaza, New York, NY 10017, USA. Retrieved from <https://www.unicef.org>
- Uwadi, I. P., Nwachukwu, O. C., & Adekunle, A. O. (2022). Menstrual hygiene management inequalities among school girls in Badagry, Nigeria. *BMC Public Health*, 22(1), 455. <https://doi.org/10.1186/s12889-022-12854-9>
- WaterAid. (2013). *A neglected condition for the achievement of several millennium development goals*. London: WaterAid.
- WaterAid. (2019). Perceptions and practices on menstruation amongst Nigerian secondary school girls. *African Journal of Reproductive Health*, 23(1), 74-83. <https://doi.org/10.29063/ajrh2019/v23i1.7>
- WHO. (2019). *Menstrual health and hygiene: A public health and human rights issue*. Geneva: World Health Organization.
- WHO. (2019). *Menstrual health and hygiene: A public health and human rights issue*. Geneva: World Health Organization.
- Wilson, E., Haver, J., Torondel, B., Rubli, J., Amaya, E., & Schmitt, M. (2021). Understanding evidence that links menstrual health rights: A systematic review. *PLOS Global Public Health*, 1(9), e0000027
- Wilson, E., Haver, J., Torondel, B., Rubli, J., Amaya, E., & Schmitt, M. (2021). Understanding evidence that links menstrual health rights: A systematic review. *PLOS Global Public Health*, 1(9), e0000027
- [WSSCC. \(2013\). Breaking the silence on menstruation: A human rights imperative. Geneva: Water Supply and Sanitation Collaborative Council.](#)