

INFLUENCE OF ISLAMIC VALUES ON PERSONAL HYGIENE AWARENESS AND PRACTICES AMONG MUSLIM SINGLE GIRLS IN MINNA METROPOLIS

Hussaini Muhammad

*Department of Islamic Studies, Umaru Sanda Ahmadu College of Education, Minna
husmusman13@gmail.com/+2349060069177*

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ABSTRACT

Personal hygiene plays a critical role in adolescent health, school participation, and academic performance, particularly among female students. In Islamic societies, hygiene is regarded not only as a public health requirement but also as a religious obligation. This study examined the relationship between Islamic values and personal hygiene awareness and practices among Muslim single girls in Minna Metropolis, Niger State. A descriptive survey research design was adopted. The study population comprised Muslim single girls aged 12–25 years, from which 150 respondents were selected using stratified and purposive sampling techniques. A total of 120 valid questionnaires were retrieved for analysis. Data were collected using a structured questionnaire with a reliability coefficient of $\alpha = 0.82$. Descriptive statistics (frequencies and percentages) were used to assess levels of awareness and hygiene practices, while the Chi-square test was employed to examine associations between Islamic hygiene teachings and reported hygiene behaviours. The findings indicated a high level of awareness of Islamic hygiene principles such as cleanliness, ritual purification, and modesty. The Chi-square analysis revealed a statistically significant association between exposure to Islamic hygiene teachings and hygiene awareness; however, reported practices were constrained by factors such as inadequate water supply, poor sanitation facilities in schools, and limited access to menstrual hygiene materials. The study concludes that Islamic education is associated with higher hygiene awareness, but environmental and infrastructural challenges limit the translation of knowledge into practice. It is recommended that faith-sensitive hygiene education be integrated into school health programmes alongside improvements in female-friendly sanitation facilities to support effective hygiene practices and enhance school participation among girls.

Keywords: Islamic values, adolescent girls, hygiene awareness, school sanitation, education.

Introduction

Personal hygiene is widely recognized as a fundamental determinant of health, well-being, and educational participation. Among adolescent girls, adequate hygiene practices are closely linked to physical health, school attendance, concentration, self-esteem, and academic performance (Sommer et al., 2015; UNESCO, 2014). Globally, inadequate hygiene (particularly poor menstrual hygiene management) has been associated with increased absenteeism, discomfort, and reduced classroom engagement among female students (UNICEF, 2019). These challenges are more pronounced in low- and middle-income countries, where access to water, sanitation facilities, and hygiene materials remains uneven.

In many Muslim societies, hygiene carries both health and religious significance. Islamic teachings strongly emphasize cleanliness as an integral component of faith, embedding personal hygiene within daily religious practice and social conduct (Al-Ghazali, 2004; Sachedina, 2009). Concepts such as *tahārah* (ritual purity), *wuḍū'*, *ghusl*, and menstrual regulations form part of the moral and spiritual framework guiding Muslim life. However, religious prescriptions alone do not automatically translate into effective hygiene practices, particularly where structural and environmental constraints exist. Studies have shown that Muslim girls in developing contexts often face challenges related to inadequate water supply, poor school sanitation, and limited access to menstrual hygiene materials, which restrict their ability to practice recommended hygiene behaviours despite high levels of religious awareness (Jewitt & Ryley, 2014; UNICEF, 2020).

In Nigeria, adolescent girls' hygiene practices are shaped by a complex interaction of cultural norms, religious values, socio-economic conditions, and school infrastructure. While national and international reports highlight persistent gaps in school sanitation and menstrual hygiene support, empirical studies examining how Islamic values intersect with hygiene awareness and practice among Muslim girls at the local level remain limited. In particular, there is a paucity of context-specific research focusing on northern Nigerian urban centres, where Islam plays a dominant role in shaping social norms and behaviour.

Minna Metropolis, the capital of Niger State, is a predominantly Muslim urban centre where adolescent girls are simultaneously influenced by Islamic teachings, formal education, peer interactions, socio-economic realities, and modern media. Despite the centrality of cleanliness in Islam, observable challenges related to water availability, sanitation facilities in schools, and menstrual hygiene support persist. Yet, little empirical evidence exists on the extent to which Islamic values shape hygiene awareness among Muslim single girls in this context, or how such awareness translates into daily hygiene practices within existing environmental constraints.

This gap in localized empirical evidence limits the development of culturally responsive and faith-sensitive school health interventions. Therefore, this study examines the influence of Islamic values on personal hygiene awareness among Muslim single girls in Minna Metropolis, with a view to identifying levels of awareness, patterns of practice, and contextual challenges affecting the application of hygienic knowledge. By situating religious values within a public health and educational framework, the study seeks to contribute evidence that can inform both policy and school-based hygiene programmes in predominantly Muslim settings.

Statement of the Problem

Despite the strong emphasis placed on cleanliness within Islamic teachings, observable hygiene-related challenges persist among Muslim adolescent girls in Minna Metropolis. Field observations indicate that many households and schools continue to face inadequate toilet facilities, unreliable access to clean water, and limited availability of sanitary materials. These

conditions undermine effective personal and menstrual hygiene practices, even among girls who possess adequate religious knowledge regarding cleanliness.

Similar structural and sanitation challenges have been documented across Nigeria, where poor household and school sanitation disproportionately affects female students (Akinwale & Ajayi, 2018; Federal Ministry of Education [FME], 2016). Poor menstrual hygiene management, in particular, has been identified as a significant contributor to school absenteeism, reduced classroom participation, and diminished academic engagement among adolescent girls (Sommer et al., 2015; UNESCO, 2014). While faith-based hygiene education has been shown to improve health awareness when aligned with culturally and religiously appropriate frameworks (Bhana et al., 2010), evidence suggests that awareness alone may not translate into consistent hygiene practices without supportive environmental conditions.

In Minna Metropolis, where Islamic values strongly shape social norms and daily behaviour, there is limited empirical evidence examining how Islamic education influences personal hygiene awareness and how such awareness relates to actual hygiene practices among Muslim single girls. The absence of localized data obscures the extent to which religious knowledge, environmental constraints, and socio-economic factors interact to shape hygiene outcomes. This gap limits the development of effective, faith-sensitive school health interventions. Addressing this gap is therefore essential for improving both public health and educational outcomes for Muslim adolescent girls in the study area.

Research Question

- i) What is the level of personal hygiene awareness among Muslim single girls in Minna Metropolis?
- ii) What are the personal hygiene practices of Muslim single girls in Minna Metropolis?
- iii) What challenges affect effective personal hygiene practices among Muslim single girls in Minna Metropolis?
- iv) Is there a significant association between Islamic education and personal hygiene awareness among Muslim single girls in Minna Metropolis?

Research Objective

- i) To assess the level of personal hygiene awareness among Muslim single girls in Minna Metropolis
- ii) To examine the personal hygiene practices of Muslim single girls in Minna Metropolis.
- iii) To identify challenges affecting effective personal hygiene practices among Muslim single girls in Minna Metropolis.
- iv) To examine the influence of Islamic education on personal hygiene awareness among Muslim single girls in Minna Metropolis

Research Hypothesis

- i) H₀₁: There is no significant level of personal hygiene awareness among Muslim single girls in Minna Metropolis.
- ii) H₀₂: There is no significant pattern of personal hygiene practices among Muslim single girls in Minna Metropolis.
- iii) H₀₃: There are no significant challenges affecting personal hygiene practices among Muslim single girls in Minna Metropolis.
- iv) H₀₄: There is no significant association between Islamic education and personal hygiene awareness among Muslim single girls in Minna Metropolis

Concept of Personal Hygiene

Personal hygiene refers to routine practices undertaken by individuals to maintain bodily cleanliness, health, and personal dignity. These practices include bathing, oral hygiene, menstrual hygiene management, hair and skin care, clean clothing, waste disposal, and basic environmental sanitation (WHO, 2018). Among adolescents and young adults, personal hygiene is particularly significant because it influences health outcomes, self-esteem, social acceptance, and school participation (Sommer et al., 2015; UNESCO, 2014).

From a public health perspective, hygiene behaviour is understood as a function of awareness (knowledge and beliefs) **and** practice (observable actions), **both of which are shaped** by individual, social, and environmental factors (Ajzen, 1991; UNICEF, 2019). In this study, personal hygiene awareness is operationalized through respondents' knowledge of hygiene principles, while hygiene practice is measured through self-reported routine behaviours such as bathing frequency, menstrual hygiene management, and use of sanitation facilities.

Personal Hygiene within the Islamic Value System

In Islam, personal hygiene is regarded as an integral component of religious life and moral conduct. Islamic teachings emphasise cleanliness as a prerequisite for worship and social interaction, as reflected in both the Qur'an and the Sunnah (Al-Ghazali, 2004; Sachedina, 2009). Core concepts such as ṭahārah (purification), wuḍū' (ablution), ghusl (full-body purification), and ḥayā' (modesty) collectively promote bodily cleanliness, dignified appearance, and environmental hygiene (Kamali, 2010). Empirically, religion functions as a normative framework that shapes health-related attitudes and awareness (Koenig, 2012). In this study, Islamic values are not treated as abstract doctrines but are operationalized through indicators such as exposure to Islamic education, understanding of cleanliness-related religious teachings, and perceived religious obligation toward hygiene practices.

Hygiene Awareness and Practice among Muslim Single Girls

Adolescent and young adult Muslim girls experience unique hygiene-related responsibilities linked to menstruation, modesty, and ritual purity. Research indicates that while religious instruction often enhances hygiene awareness, the translation of awareness into practice is frequently constrained by structural and socio-economic factors (Jewitt & Ryley, 2014; UNICEF, 2020). Studies conducted in Nigeria show that inadequate water supply, poor sanitation facilities, and limited access to menstrual hygiene materials significantly affect hygiene practices among female students (Akinwale & Ajayi, 2018; Federal Ministry of Education [FME], 2016).

Sommer et al. (2015) found that poor menstrual hygiene management contributes to school absenteeism and reduced academic engagement among adolescent girls. Similarly, a study by Mohammed and Larsen (2019) in northern Nigeria reported that despite high levels of hygiene awareness, girls' practices were limited by environmental constraints. These findings suggest a persistent awareness practice gap, particularly in low-resource, school-based settings.

Factors Influencing Hygiene Awareness among Muslim Girls

Hygiene awareness among Muslim girls is shaped by multiple interrelated factors. Islamic education, delivered through Islamiyyah schools, madrasah instruction, and parental guidance, plays a central role in transmitting hygiene-related knowledge and values (Bhana et al., 2010). Socio-economic status influences access to clean water, sanitary pads, soap, and private sanitation facilities, thereby affecting both awareness and practice (UNICEF, 2019).

Cultural practices surrounding menstruation may either reinforce or contradict Islamic teachings, sometimes leading to restrictive or unhygienic behaviours (Jewitt & Ryley, 2014). Peer influence has been shown to shape grooming habits and attitudes toward cleanliness during

adolescence (UNESCO, 2014), while media exposure can introduce both positive hygiene norms and unrealistic body standards (UNICEF, 2020). Additionally, the school environment, particularly the availability of clean toilets, water supply, and privacy, plays a critical role in determining whether girls can practice hygiene effectively during school hours (FME, 2016).

Empirical Review of Related Studies

Empirical studies on adolescent hygiene and menstrual hygiene management in Nigeria and other developing contexts have consistently reported associations between poor sanitation, inadequate menstrual support, and negative educational outcomes among female students (Akinwale & Ajayi, 2018; Sommer et al., 2015). However, many of these studies rely primarily on descriptive designs and focus largely on infrastructural deficits, with limited consideration of religious or cultural variables. International research suggests that faith-based health education can enhance hygiene awareness when aligned with local belief systems (Bhana et al., 2010; Koenig, 2012). Nevertheless, such studies often adopt qualitative methodologies or lack inferential testing, limiting their explanatory power. Within the Nigerian context, few empirical studies quantitatively examine the relationship between Islamic education and hygiene awareness among Muslim girls at the community or city level, particularly in northern urban centres.

Summary and Identified Research Gap

The reviewed literature indicates that personal hygiene among Muslim girls is influenced by religious values, socio-economic conditions, and environmental constraints. While Islamic teachings strongly promote cleanliness, empirical evidence linking Islamic education to measurable hygiene awareness remains limited, especially within specific Nigerian contexts. Furthermore, existing studies seldom integrate religious variables into quantitative hygiene research. This study addresses these gaps by examining the association between Islamic values and personal hygiene awareness among Muslim single girls in Minna Metropolis, while also identifying contextual challenges that affect hygiene practices.

Research Design

This study adopted a descriptive survey research design, which is appropriate for examining existing conditions, perceptions, and behaviours without manipulating variables. Descriptive surveys are widely used in public health and educational research to assess awareness, attitudes, and practices among defined populations (Creswell & Creswell, 2018). The design enabled the collection of quantitative data on personal hygiene awareness, hygiene practices, and perceived challenges, as well as the examination of associations between Islamic education and hygiene awareness.

Area of the Study

The study was conducted in Minna Metropolis, the Capital of Niger State, Nigeria. Minna is predominantly Muslim and comprises urban and Peri-urban communities with varying socio-economic characteristics. The metropolis hosts several public and private secondary schools, Islamiyyah schools, and tertiary institutions, making it suitable for examining the influence of Islamic values on hygiene awareness among Muslim girls.

Population of the Study

The target population consisted of Muslim single girls aged 12–25 years residing in Minna Metropolis. This age range includes adolescents and young adult women who are actively engaged in formal education or vocational activities and are expected to observe Islamic hygiene practices. Based on records obtained from selected schools and community leaders, the estimated population of Muslim single girls within the study area was approximately 3,200.

Sample Size and Sampling Techniques

A sample size of 150 respondents was selected for the study. This size was considered adequate for descriptive analysis and Chi-square testing, consistent with recommendations for survey research involving categorical data (Kothari, 2014). A multistage sampling approach was employed:

Stratified Sampling

Minna Metropolis was stratified into three major zones (central, eastern, and western districts) to ensure geographical representation.

Purposive Sampling:

Within each stratum, schools and communities with a predominantly Muslim population were purposively selected. This ensured that only Muslim single girls who met the study criteria were included.

Random Selection of Respondents:

Eligible respondents within the selected schools and communities were randomly approached and invited to participate. Out of the 150 questionnaires administered, 120 were correctly completed and returned, representing an 80% response rate, which is considered acceptable for social science research (Babbie, 2016).

Research Instrument

Data were collected using a structured questionnaire developed by the researcher based on reviewed literature and study objectives. The instrument comprised four sections:

- i) Section A: Demographic information
- ii) Section B: Personal hygiene awareness (knowledge of hygiene and Islamic teachings)
- iii) Section C: Personal hygiene practices (self-reported behaviours)
- iv) Section D: Challenges affecting hygiene practices

Items were structured using a Likert-type scale and close-ended questions to facilitate quantitative analysis.

Validity of the Instrument

To ensure content and face validity, the questionnaire was reviewed by experts in Islamic studies, health education, and measurement and evaluation. Their suggestions were incorporated to improve clarity, relevance, and alignment with the study objectives. This expert validation process ensured that the instrument adequately measured the intended constructs (Creswell & Creswell, 2018).

Reliability of the Instrument

A pilot study was conducted using 20 Muslim single girls selected from Paiko Town, a community outside the main study area. The data obtained were analyzed using Cronbach's Alpha to determine internal consistency. The analysis yielded a reliability coefficient of $\alpha = 0.82$, indicating a high level of internal consistency. According to Creswell and Creswell (2018), a reliability coefficient of 0.70 and above is acceptable for social science research; therefore, the instrument was deemed reliable for the main study.

Method of Data Collection

Data collection was conducted with the assistance of trained female research assistants, in order to respect cultural and religious sensitivities. Questionnaires were administered directly to respondents in selected schools and communities. Completed questionnaires were retrieved immediately or within an agreed time frame. In addition, brief informal interviews were conducted with selected respondents to support and contextualize the quantitative findings.

Ethical Considerations

Ethical standards were strictly observed throughout the study. Approval to conduct the research was obtained from relevant school authorities and community leaders. Informed consent was obtained from all respondents aged 18 years and above. For respondents aged 12–17 years, parental or guardian consent was obtained in addition to assent from the participants. Respondents were informed of the purpose of the study, assured of confidentiality, and informed that participation was voluntary. No identifying information was collected, and data were used strictly for academic purposes in line with ethical guidelines for social research (UNESCO, 2015).

Method of Data Analysis

Data collected were coded and analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics, including frequencies and percentages, were used to answer research questions related to hygiene awareness, practices, and challenges. The Chi-square test of independence was used to test the hypothesis on the association between Islamic education and personal hygiene awareness at a 0.05 level of significance. Contingency tables were generated to examine relationships between categorical variables, and results were interpreted based on calculated Chi-square values and corresponding p-values.

Data Presentation

Data collected from Muslim single girls in Minna Metropolis was analyzed. A total of 150 questionnaires were administered, out of which 120 were correctly completed and returned, representing an 80% response rate, which is considered adequate for survey research (Babbie, 2016). Data are presented using tables, percentages, and inferential statistics in line with the study objectives and hypotheses.

Table 1: Age Distribution of Respondents

Age Group (Years)	Frequency	Percentage (%)
12–15	28	23.3
16–18	54	45.0
19–22	26	21.7
23–25	12	10.0
Total	120	100.0

Table 1 shows that the majority of respondents (45.0%) were aged 16–18 years. This indicates that most participants fall within the adolescent stage, a period associated with heightened hygiene and menstrual management needs.

Table 2: Level of Personal Hygiene Awareness among Respondents

Level of Awareness	Frequency	Percentage (%)
High	78	65.0
Moderate	32	26.7
Low	10	8.3
Total	120	100.0

The results indicate that **65.0%** of respondents had a high level of personal hygiene awareness, particularly in areas such as bathing, menstrual hygiene, and cleanliness of clothing. This suggests that awareness of hygiene practices among Muslim single girls in the study area is generally high.

Table 3: Influence of Islamic Values on Hygiene Awareness

Response Category	Frequency	Percentage (%)
Strongly Agree	60	50.0

Agree	42	35.0
Disagree	12	10.0
Strongly Disagree	6	5.0
Total	120	100.0

A large proportion of respondents (85.0%) agreed or strongly agreed that Islamic values influence their awareness of personal hygiene. This highlights the perceived importance of religious teachings in shaping hygiene knowledge among the respondents.

Table 4: Challenges Affecting Personal Hygiene Practices

Challenge	Frequency	Percentage (%)
Water scarcity	48	40.0
Poor toilet facilities	36	30.0
Lack of sanitary materials	24	20.0
Cultural restrictions	12	10.0
Total	120	100.0

Water scarcity (40.0%) and poor toilet facilities (30.0%) were identified as the major challenges affecting effective personal hygiene practices. This indicates that environmental factors significantly constrain hygiene behaviour despite high awareness levels.

Test of Hypothesis

H₀: There is no significant association between Islamic education and personal hygiene awareness among Muslim single girls in Minna Metropolis.

Table 5: Chi-square Analysis of Islamic Education and Hygiene Awareness

Variable	χ^2	df	p-value	Decision
Islamic Education × Hygiene Awareness	12.46	4	0.014	Reject H ₀

Decision Rule:

The null hypothesis is rejected if $p < 0.05$.

The Chi-square result ($\chi^2 = 12.46$, $df = 4$, $p = 0.014$) indicates a statistically significant association between Islamic education and personal hygiene awareness among Muslim single girls in Minna Metropolis. This suggests that exposure to Islamic education is related to higher levels of hygiene awareness. However, this association does not imply causation.

Discussion of Findings

This study examined the relationship between Islamic values and personal hygiene awareness among Muslim single girls in Minna Metropolis, Niger State. The findings indicate a high level of hygiene awareness among the respondents, particularly in areas related to cleanliness, ritual purification, modesty, and menstrual hygiene. This suggests that Islamic teachings constitute an important normative framework shaping hygiene-related knowledge and attitudes among Muslim girls in the study area. The observed high awareness aligns with the Islamic behavioural framework, which emphasizes the interconnection between belief (*īmān*), knowledge (*‘ilm*), and action (*‘amal*) in guiding human behaviour (Al-Ghazali, 2004). Within this framework, religious teachings function as moral obligations rather than optional health advice, thereby strengthening internal motivation toward hygiene awareness. The significant association found between Islamic

education and hygiene awareness further supports this interpretation, indicating that exposure to structured religious instruction enhances understanding of hygiene-related responsibilities.

However, despite this high level of awareness, the study revealed notable constraints on actual hygiene practices. This awareness practice gap represents a critical finding and reflects the distinction between cognitive readiness and behavioural feasibility. While Islamic values appear effective in shaping knowledge and attitudes, their translation into consistent practice is mediated by environmental and socio-economic conditions. In Minna Metropolis, persistent challenges such as inadequate water supply, poorly maintained school toilets, and limited access to sanitary materials undermine girls' ability to act on their hygiene knowledge. This finding reinforces evidence from Jewitt and Ryley (2014) and UNICEF (2020), who argue that hygiene behaviour is contingent not only on awareness but also on the availability of enabling infrastructure.

From a socio-cultural perspective, the findings suggest that religious obligation alone cannot override material constraints. In many households and schools within Minna, water scarcity and inadequate sanitation infrastructure are structural issues beyond the control of individual girls. Consequently, even when hygiene practices are religiously mandated, compliance becomes situational rather than consistent. This supports behavioural health theories which posit that environmental barriers can significantly moderate the relationship between knowledge and practice (Ajzen, 1991).

In addition, the influence of family upbringing, Islamic education, and school environment identified in this study further highlights the multi-layered nature of hygiene behaviour. Families and religious institutions appear effective in transmitting hygiene awareness, while schools serve as critical spaces where awareness is either reinforced or undermined through infrastructure and policy. This finding is consistent with Akinwale and Ajayi (2018), who reported that religious and familial socialisation enhances hygiene awareness among Nigerian adolescent girls, but insufficient school facilities limit practical application.

Importantly, the context of Minna Metropolis adds nuance to these findings. As a predominantly Muslim urban centre experiencing rapid population growth, Minna faces increasing pressure on water and sanitation systems. These contextual realities help explain why high religious awareness does not automatically result in optimal hygiene practices. The findings therefore underscore the need to interpret hygiene behaviour within specific socio-environmental settings rather than attributing outcomes solely to individual or religious factors.

Overall, the study demonstrates that Islamic values are strongly associated with personal hygiene awareness among Muslim single girls, but that effective hygiene practice requires supportive environmental conditions. This underscores the importance of integrating faith-based hygiene education with infrastructural improvements in schools and communities. Without such integration, religious awareness may remain high while practical hygiene outcomes remain suboptimal.

Conclusion

This study examined the association between Islamic values and personal hygiene awareness among Muslim single girls in Minna Metropolis, Niger State. The findings indicate that Islamic teachings related to cleanliness, modesty, and ritual purification are strongly associated with higher levels of personal hygiene awareness among the respondents. Exposure to Islamic education and supportive family upbringing appears to play an important role in shaping positive attitudes toward hygiene. However, the study also reveals that high awareness does not consistently translate into optimal hygiene practices. Environmental and socio-economic constraints particularly inadequate school sanitation facilities, limited access to clean water, and

financial barriers to obtaining sanitary materials significantly affect the practical application of hygiene knowledge. These findings suggest that while Islamic values contribute meaningfully to hygiene awareness, their effectiveness in influencing daily hygiene behaviour is moderated by contextual factors. The implications of these challenges extend beyond personal health, affecting school attendance, comfort, participation, and overall educational engagement among adolescent girls. This underscores the importance of integrated school health interventions that combine faith-sensitive hygiene education with improvements in water supply, sanitation infrastructure, and menstrual hygiene support (UNESCO, 2014; Federal Ministry of Education [FME], 2016).

Recommendations

Based on the findings of this study, the following recommendations are proposed:

- i) The Niger State Ministry of Education and relevant government agencies should prioritise the provision and maintenance of adequate water, sanitation, and hygiene (WASH) facilities in schools. This includes ensuring reliable access to clean water, functional and gender-segregated toilets, and private spaces for menstrual hygiene management. Such infrastructural improvements are essential for enabling girls to practice hygiene behaviours consistent with their religious awareness.
- ii) School management should integrate comprehensive hygiene and menstrual health education into existing school health programmes. These programmes should be culturally and religiously sensitive, linking hygiene practices to Islamic values while also addressing practical health needs. Schools should also establish monitoring mechanisms to ensure sanitation facilities are clean, safe, and accessible.
- iii) Mosques, Islamiyyah schools, and religious organisations should collaborate with health educators to incorporate practical hygiene guidance into Islamic instruction. Emphasis should be placed not only on religious obligations related to cleanliness but also on practical strategies for maintaining hygiene in contexts of limited resources.
- iv) Curriculum developers should incorporate faith-sensitive hygiene education into civic, religious, and health education curricula at the basic and secondary school levels. Aligning public health messages with Islamic values can enhance acceptance and reinforce hygiene awareness among Muslim girls.
- v) Government and non-governmental organisations should support programmes that subsidise or provide menstrual hygiene materials to girls from low-income households. Improving access to sanitary products will reduce the gap between hygiene awareness and actual practice.
- vi) Community leaders and parents should be encouraged to support girls' hygiene practices by promoting open discussions around menstruation and personal hygiene, reducing stigma, and facilitating access to basic hygiene resources at home.

Limitations of the Study

Despite its contributions, the study has certain limitations. The use of a descriptive survey design and self-reported data may be subject to social desirability and recall biases. The sample size, though adequate for the analysis conducted, limits the generalizability of the findings beyond Minna Metropolis. Additionally, the study focused primarily on hygiene awareness and did not directly observe hygiene practices, which may have provided richer behavioural insights.

Suggestions for Further Research

Future studies could adopt mixed-methods or longitudinal designs to examine how hygiene awareness translates into sustained behaviour over time. Research involving direct observation of hygiene practices and broader samples across different regions of Niger State and northern Nigeria would enhance generalizability. Further studies could also explore the effectiveness of school-

based, faith-integrated hygiene interventions in reducing absenteeism and improving educational outcomes among Muslim girls.

References

- Akinwale, A. A., & Ajayi, O. O. (2018). School sanitation and menstrual hygiene management among adolescent girls in Nigeria. *African Journal of Educational Research*, 22(1), 45–58.
- Al-Ghazali, A. H. (2004). *Ihya' Ulum al-Din [Revival of the religious sciences]*. Dar al-Kutub al-Ilmiyyah.
- Bhana, D., Morrell, R., Shefer, T., & Ngabaza, S. (2010). South African teachers' responses to teenage pregnancy and teenage mothers in schools. *Culture, Health & Sexuality*, 12(8), 871–883. <https://doi.org/10.1080/13691058.2010.500398>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Federal Ministry of Education. (2016). *National school health policy*. Government Press.
- Jewitt, S., & Ryley, H. (2014). It's a girl thing: Menstruation, school attendance, spatial mobility and wider gender inequalities in Kenya. *Geoforum*, 56, 137–147. <https://doi.org/10.1016/j.geoforum.2014.07.006>
- Rosenstock, I. M. (1974). The health belief model and preventive health behavior. *Health Education Monographs*, 2(4), 354–386. <https://doi.org/10.1177/109019817400200405>
- Sachedina, A. (2009). *Islamic biomedical ethics: Principles and application*. Oxford University Press.
- Sommer, M., Hirsch, J. S., Nathanson, C., & Parker, R. G. (2015). Comfortably, safely, and without shame: Defining menstrual hygiene management as a public health issue. *American Journal of Public Health*, 105(7), 1302–1311. <https://doi.org/10.2105/AJPH.2014.302525>
- UNESCO. (2014). *Puberty education and menstrual hygiene management*. UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000227443>
- UNICEF. (2019). *Guidance on menstrual health and hygiene*. UNICEF. <https://www.unicef.org/documents/guidance-menstrual-health-and-hygiene>
- UNICEF. (2020). *Water, sanitation and hygiene in schools: Global baseline report*. UNICEF. <https://www.unicef.org/reports/wash-in-schools-global-baseline>

Theological References (APA 7th style)

- The Qur'an. (2004). *The Holy Qur'an* (M. Khan, Trans.). Darussalam. (Original work published ca. 610–632 CE)
- Sahih Muslim, Book 2, Hadith 1. (n.d.). In *Sa*