The Role of Education, Religion, and Marital Status in Promoting Healthcare Utilisation and Contraceptive Awareness in Rural Ghana: Implications for Policy Interventions and Counselling

Kingsley Agyei-Sarpong

Tamale Technical University, Ghana

DOI: https://doi.org/10.51584/IJRIAS.2025.1002004

Received: 18 January 2025; Accepted: 25 January 2025; Published: 28 February 2025

ABSTRACT

Introduction: This study to explore the interdependent effects of education, religion, and marital status on healthcare utilization and contraceptive awareness in rural Ghana.

Methods: The study took a descriptive cross-sectional approach. Data was collected by questionnaires and semi-structured interviews. The study sample was 360 people. Using cluster, systematic, and basic random sampling, we recruited respondents. Chi-square test was used to analysed generational disparities among categorical variables resulting in $p < 0.00001$. Regression models were employed to explore mediating and moderating effects with Main effect of education: $p \leq 0.00063$, Main effect of marital status: $p \leq 0.0147$, Interaction term (education × marital status): $p \leq 0.0393$. Mediational analysis investigates the effects of religion-mediated education. Employing three-way ANOVA all obtained p-values were < 0.05. Finally, a chi-square test of independence was conducted to analyse generational differences in healthcare utilisation and contraceptive awareness which obtained $p \leq 0.0000566$. the analysis was conducted using SPSS 20.

Results: demographically, sample comprised 288 Christians (80.0%) and 72 Muslims (20.0%), with 66.7% having no formal education, 16.7% attaining basic education, and 22.2% completing senior high school or tertiary education. According to the study, religion mediates the relationship between education and contraceptive knowledge, although less than education itself. Regardless of degree, married people use healthcare more. Religion, education, and marital status strongly influence contraceptive attitudes. The survey also shows that younger generations use healthcare and are more aware of contraceptives.

Conclusion: This study has broad implications for improving reproductive health in varied situations. By considering education, religion, marital status, and generational disparities, policymakers and health professionals can create more effective, inclusive, and sustainable interventions. This comprehensive strategy could improve health disparities, empower communities, and promote informed health decision-making.

Keywords: Religion, education, marital status, healthcare, contraception

INTRODUCTION

Healthcare utilisation and contraceptive awareness are essential elements of public health, impacting individual well-being, population health outcomes, and socioeconomic development. Access to services is influenced not only by availability but also by social, cultural, and individual factors, including education, religion, and marital status. These factors may interact in intricate manners to influence attitudes, knowledge, and behaviours concerning healthcare and family planning (Wong & Ng, 2023).

Education serves as a crucial factor influencing health, providing individuals with the necessary knowledge and skills to effectively access and utilise healthcare services. This also promotes awareness and understanding of contraceptive methods, which are crucial for reproductive health and family planning (Kielmann et al., 2016). Education functions within a broader context. Religion, as a fundamental cultural construct, influences health behaviours by shaping beliefs and norms regarding healthcare and contraception. Marital status

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue II February 2025

influences healthcare utilisation and contraceptive awareness through factors like shared responsibilities, social support, and household dynamics (Smith et al., 2018).

Previous studies have emphasised the distinct roles of education, religion, and marital status; however, a notable gap persists in comprehending the interactions among these factors in influencing healthcare utilisation and contraceptive awareness. Understanding these dynamics is essential for the development of effective health policies and interventions, particularly in diverse contexts like rural and urban communities. This research seeks to fill existing gaps by analysing the mediating role of religion, the moderating effect of marital status, and the intersectional impact of these variables on health-related behaviours utilisation and contraceptive awareness in rural ghana. This study aims to elucidate dynamics that can guide the development of targeted health policies and interventions for various populations.

Context of the Research

Utilisation of Education and Healthcare

Education is consistently linked to enhanced health outcomes. Individuals with higher education levels are more inclined to utilise preventive healthcare services, comply with medical recommendations, and engage in informed health decision-making (Jansen et al., 2018). Research indicates a correlation between higher education levels and increased healthcare utilisation, as well as improved health literacy, which facilitates individuals' navigation of complex healthcare systems (Smith & Klein, 2020). Education is essential for enhancing awareness and acceptance of contraceptive methods, which contributes to effective family planning and lowers the incidence of unintended pregnancies (Brown et al., 2017).

Religion and Health Behaviours

The relationship between religion and health behaviours is a significant area of study. Research indicates that religious beliefs and practices can influence various health-related behaviours, including diet, exercise, and substance use (Mueller et al., 2001). Understanding this relationship can provide insights into public health strategies and interventions. Religion significantly influences health behaviours, shaping attitudes and decisions regarding healthcare and family planning. Religious teachings and cultural practices significantly influence individuals' perceptions of contemporary contraceptive methods and healthcare services. Certain religious affiliations may discourage contraceptive use based on doctrinal beliefs, whereas others may promote natural family planning methods (Jones, 2019). Examining the influence of religion on health behaviours is crucial for developing culturally appropriate interventions that correspond with community values and norms (Ahmed et al., 2018).

Marital Status and Healthcare Use

Marital status significantly influences healthcare utilisation and contraceptive awareness. Married individuals frequently experience social and financial support within the household, enhancing access to healthcare services and improving adherence to medical recommendations (Johnson & Lee, 2021). Unmarried, divorced, or widowed individuals may encounter obstacles including stigma, diminished social support, and financial limitations, which can influence their healthcare-seeking behaviours and awareness of contraceptive options. The observed differences underscore the necessity of incorporating marital status into health policy and program development.

Interdependent Effects

The independent roles of education, religion, and marital status are well-documented; however, their interdependent effects have not been thoroughly examined. Religious beliefs may mediate the relationship between education and contraceptive awareness, whereas marital status may moderate the association between education and healthcare utilisation. The interplay of these factors would yield distinct health behaviour patterns, particularly in culturally and socioeconomically diverse contexts (Smith et al., 2020).

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue II February 2025

Problem Statement

While education, religion, and marital status are recognised as significant influences on healthcare utilisation and contraceptive awareness, current research frequently analyses these variables independently. This approach does not adequately account for the complexity of interactions and the nuanced influences on health behaviours. Education is recognised for its role in improving health literacy and contraceptive awareness; however, its effects may be influenced by religious beliefs that oppose specific family planning practices (Ahmed et al., 2018). Marital status may influence the relationship between education and healthcare utilisation and contraceptive awareness in rural ghana, as married individuals may gain advantages from spousal support and collaborative decision-making (Brown et al., 2017).

Furthermore, the understanding of generational differences in healthcare utilisation and contraceptive awareness is limited. Generational differences in exposure to education, healthcare services, and societal norms contribute to variations in health behaviours and attitudes regarding family planning. Generational dynamics are significant in rapidly evolving societies, where younger cohorts may adopt modern contraceptive methods, in contrast to older generations who maintain traditional practices (Ozturk et al., 2020).

This study aims to investigate the interdependent effects of education, religion, and marital status on healthcare utilisation and contraceptive awareness, thereby addressing existing gaps in the literature. This research seeks to elucidate the factors influencing health behaviours across various populations through the examination of these relationships. The findings will aid in the formulation of targeted interventions and policies aimed at enhancing equitable access to healthcare and reproductive health services.

Main Objective

To explore the interdependent effects of education, religion, and marital status on healthcare utilization and contraceptive awareness.

Specific Objectives

1. To investigate the mediating role of religion in the relationship between education and contraceptive awareness.
2. To evaluate the moderating effect of marital status on the association between education and healthcare utilization.
3. To examine the intersection of education, religion, and marital status in shaping attitudes toward contraceptive methods in rural and urban settings.
4. To analyze generational differences in healthcare utilization and contraceptive awareness within the selected population.

Refined Null Hypotheses

1. H_{01}: Religion does not mediate the relationship between education and contraceptive awareness.
2. H_{02}: Marital status does not moderate the relationship between education and healthcare utilization.
3. H_{03}: There is no significant intersectional effect of education, religion, and marital status on attitudes toward contraceptive methods.
4. H_{04}: There are no significant generational differences in healthcare utilization and contraceptive awareness.

METHODOLOGY

Research Design

The research utilised a descriptive cross-sectional design to investigate the impact of education, religion, and marital status on healthcare utilisation and contraceptive awareness in the Chereponi District.

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue II February 2025

Study Area

The Chereponi District is located in the North East Region of Ghana, with an area of roughly 1,080 square kilometres. It adjoins the Gushegu Municipal to the west, Bunkpurugu Nyankpanduri District to the north, Saboba District to the south, and the Republic of Togo to the east, marked by the River Oti (Chereponi District, n.d.). The administrative capital of the district is Chereponi, which is predominantly rural, featuring population settlements dispersed throughout the district (Ghana Statistical Service, 2021). The district hosts multiple ethnic groups, prominently the Chokosis (Anufors), alongside lesser populations like the Bimobas, Moshies, Ewes, Konkombas, and Fulanis (Ministry of Food and Agriculture [MOFA], 2021). These groups enhance the socio-cultural diversity of the district, shaping local practices and attitudes of health and wellness.

The Chereponi District encounters considerable obstacles regarding healthcare access, infrastructure, and health outcomes. The district possesses restricted healthcare services, with the Chereponi Government Hospital serving as the primary health centre. Nonetheless, it is frequently underfunded, resulting in recurrent deficiencies of vital pharmaceuticals and medical supplies (Ghana Health Service, 2020). Rural regions, especially isolated villages, possess restricted access to healthcare services, resulting in inequities in health outcomes. These notwithstanding, the Chereponi District in Ghana is equipped with multiple health facilities that address the needs of its inhabitants. The 2024-2027 Composite Budget for the district indicates the presence of one hospital and four health centres, two of which are public. The district comprises one clinic and 21 Community-Based Health Planning and Services (CHPS) zones, of which 11 are equipped with structures and 10 are not (Ghana Health Service, 2024).

The district hospital delivers secondary healthcare services, managing various medical disorders and providing specialised care beyond primary health services. The health facilities and clinics generally provide primary healthcare services, emphasising preventative care, fundamental medical treatments, and maternity and child health services (World Health Organisation, 2023). The CHPS zones are crucial for providing primary healthcare within communities, focussing on preventive strategies and fundamental health services to improve accessibility, particularly in rural regions (Ministry of Health Ghana, 2022). Although the district possesses these resources, it is crucial to recognise that tertiary healthcare services, encompassing highly specialised medical care and advanced surgical interventions, are often administered by bigger regional or teaching hospitals. Residents in need of advanced care may have to pursue services beyond the district (Ghana Statistical Service, 2023).

Prevalent health concerns in Chereponi encompass malnutrition, particularly among youngsters, exacerbated by restricted access to nutritious food and insufficient health education. Malaria is a common ailment in the district, being endemic to several regions of northern Ghana. The incidence of stunting and underweight in children is a critical issue, as it is directly associated with inadequate nutrition and restricted healthcare access (Ghana Health Service, 2020).

Chereponi contends with elevated maternal and infant mortality rates, mostly attributable to insufficient healthcare infrastructure, the remoteness of health facilities, and limited understanding of appropriate prenatal and postnatal care (Ghana Statistical Service, 2021). The district's health measures, including community health programs and immunisation campaigns, have seen limited success in enhancing awareness; nonetheless, additional investments are required to improve overall health outcomes (Ghana Health Service, 2020).

The district's climate, marked by a pronounced wet and dry season, also affects health issues. Stagnant water bodies during the rainy season serve as hatching sites for malaria-carrying mosquitoes, intensifying the malaria load (MOFA, 2021). The region's reliance on subsistence agriculture, combined with intermittent droughts and unpredictable rainfall, frequently results in food insecurity, exacerbating nutritional deficiencies in children and increasing the prevalence of diet-related health problems, including stunting and anaemia (Chereponi District, n.d.).

The primarily agrarian economy of Chereponi, while essential for sustenance, often fails to ensure the economic stability required for obtaining quality healthcare. A significant portion of the population engages in subsistence farming, resulting in insufficient means to access healthcare services, pharmaceuticals, and

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue II February 2025

nutrition (Ghana Statistical Service, 2021). Furthermore, healthcare finance predominantly relies on out-of-pocket expenses, and the National Health Insurance Scheme (NHIS) has not comprehensively penetrated all regions, hence impeding access to treatment (Ghana Health Service, 2020).

Study Cohort

The research population comprised persons aged 18 and older residing in the Chereponi District, Ghana. This group comprises individuals with varied educational backgrounds, religious affiliations, and marital statuses, guaranteeing comprehensive representation.

Sample Size

The sample size for this study was determined using Cochran's formula for sample size estimation in a finite population. Z-score corresponding to the confidence level (1.96 for a 95% confidence level), margin of error (0.05, or 5%). For a population of 87,176 (Chereponi district population), the adjusted sample size formula results in 384.16 approximated to 384. Thus, the calculated sample size was 382 participants.

While the calculated sample size was 382, a sample size of 360 was selected for practical reasons, including resource constraints, time limitations, and the expected non-response rate. The slight reduction in sample size does not significantly affect the statistical power of the study, as the difference in margin of error is minimal, resulting in a margin of error of approximately 5.2% instead of 5%.

Sampling Methodology

A multistage sampling method was employed to improve representativeness:

Cluster Sampling: The Chereponi District was segmented into clusters according to villages to enhance geographic representation. Every hamlet in the district was regarded as an independent cluster, guaranteeing that the sample encompassed a wide range of geographical regions within the district. This phase facilitated the documentation of the population's diversity across rural, urban, and peri-urban regions, including potential disparities in health, education, and socioeconomic aspects (Kumar, 2019). The segmentation of the district into clusters ensured that the data obtained was unbiased towards any specific location and that both rural and urban regions were sufficiently represented.

Systematic Sampling: After the district was segmented into clusters (villages), systematic sampling was utilised to choose houses within each cluster. During this phase, households were systematically chosen at regular intervals (e.g., every fifth household) from a comprehensive list of all households within the cluster. This methodology was employed to mitigate selection bias and guarantee that families were chosen systematically rather than capriciously. Systematic sampling offered an effective method for picking households, ensuring unpredictability and minimising the potential for selection bias associated with convenience sampling or subjective choices.

Simple Random Sampling: Following the selection of houses, simple random sampling (the lotto system) was employed to determine qualifying individuals within each household. This strategy guaranteed that each participant within the selected families had an equal likelihood of being selected for participation in the study. The research employed random selection to avoid potential biases in participant choice and preserve the integrity of the sample. Simple random sampling was essential in ensuring that every member in the study population had an equal opportunity for inclusion, hence promoting fairness and minimising selection bias (Etikan et al., 2016).

These methods employed guaranteed extensive representation of various subpopulations within the Chereponi District.

Instrumentation

This research employed a structured questionnaire as the principal tool for data gathering. The questionnaire was meticulously crafted after review of literature to correspond with the study's aims, guaranteeing thorough

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue II February 2025

examination of the factors being studied: education, religion, marital status, healthcare utilisation, and contraceptive awareness. The instrument comprised multiple components, each focussing on distinct study dimensions.

Demographic Information: This component recorded respondents' background details, encompassing age, gender, educational attainment, religion, marital status, and family size. These characteristics established a basis for comprehending the context of the participants' behaviours and attitudes.

Healthcare Utilisation: This section's enquiries centred on the respondents' frequency of healthcare visits, selection of healthcare facilities (e.g., hospitals, clinics, or other means such as prayer), and their enrolment status in the National Health Insurance Scheme (NHIS).

Contraceptive Awareness and Utilisation: This part evaluated respondents' understanding of different contraceptive techniques, their current usage, and any obstacles to adoption. It also included elements to assess the impact of religious convictions and spousal endorsement on contraceptive choices.

Social and Cultural Influences: The enquiries examined the effects of community norms, religion doctrines, and familial dynamics on healthcare-seeking behaviour and contraceptive utilisation.

Instrument Validity and Reliability

To ascertain the validity of the questionnaire: Content Validity: Specialists in public health, demographics, and social science evaluated the questionnaire for pertinence, clarity, and thoroughness. Expert feedback guided modifications to improve the instrument's congruence with the study's aims.

Face Validity: A pilot study with 30 participants in a comparable environment facilitated the enhancement of the instrument (Creswell & Creswell, 2018).

Instrument's Reliability: Internal Consistency - Cronbach's alpha assessed the dependability of scaled items, with a threshold of 0.7 signifying adequate consistency (Tavakol & Dennick, 2011).

Test-retest reliability: the questionnaire was delivered to the pilot group on two occasions within a two-week interval, and the findings were compared to evaluate temporal stability.

standardised training: Data collectors underwent comprehensive training to ensure consistency and reduce bias in data gathering (WHO, 2019).

Data Validation: The implementation of double-entry and cross-verification techniques significantly reduced mistakes in data processing.

These measures guaranteed that the results accurately represented the target population's realities and enhanced the study's methodological rigour.

Management of the Instrument

The questionnaire was conducted through in-person interviews by trained enumerators proficient in the local language(s). This method guaranteed that respondents comprehended the questions entirely, especially those with restricted literacy skills. Enumerators complied with stringent ethical standards, which encompassed acquiring informed consent, guaranteeing anonymity, and honouring participants' right to withdraw from the study at any moment.

The instrument's standardised framework, along with its validation and pre-testing, guaranteed that the obtained data were reliable, accurate, and appropriate for answering the study objectives.

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue II February 2025

Approach for data collection

The data collection was conducted over a three-month period in rural settings (Chereponi District) to capture diverse perspectives. Enumerators were trained to ensure consistency in administering questionnaires and conducting interviews. Participation was voluntary, and informed consent was obtained from all respondents. The researchers interacted with participants and provided direct supervision to promote autonomous work. Questionnaires were collected on the same day, resulting in a 100% response rate.

Analysis of Data

The data gathered for this study were analysed through a combination of descriptive and inferential statistical techniques. These techniques offered insights into the relationships among demographic variables—education, religion, and marital status—and their impact on healthcare utilisation and contraceptive awareness. Descriptive statistics, encompassing frequencies and percentages, summarised the demographic characteristics of respondents, including educational background, religious affiliation, and marital status. Tables were employed to present these findings to enhance clarity and comprehension.

Inferential statistical methods were utilised to test the hypotheses and analyse the relationships and effects among the variables. The analysis concentrated on the subsequent aspects: Hypothesis 1 (Religion as a Mediator): A mediational analysis was performed utilising the PROCESS macro in SPSS to assess the mediating effect of religion on the relationship between education and contraceptive awareness. This study assessed the indirect impact of education on contraceptive awareness mediated by religion.

Hypothesis 2 (Marital Status as a Moderator): The moderating effect of marital status on the relationship between education and healthcare utilisation was evaluated through moderation analysis. This study examined interaction terms in regression models to assess the impact of marital status on the strength of this association.

Hypothesis 3 (Intersectional Effects): The intersectional effects of education, religion, and marital status on attitudes towards contraceptive methods were analysed through logistic regression analysis. This approach considered the joint influence of these factors on contraceptive awareness and attitudes.

Hypothesis 4 (Generational Differences): A chi-square test of independence was conducted to analyse generational differences in healthcare utilisation and contraceptive awareness. This test evaluated the statistical significance of differences in these variables among generational cohorts.

All analyses utilised SPSS version 20. The software was chosen for its strong statistical capabilities, especially in regression modelling and mediational analysis. Data visualisation was utilised to display results in tables and charts, thereby improving the interpretation and communication of findings. The results of the analysis indicate that all examined connections are statistically significant, hence validating the rejection of all null hypotheses (H01, H02, H03, and H04).

RESULTS AND DISCUSSIONS

Analysis of Results: Evaluation of Hypotheses

The subsequent parts encompass an investigation of each hypothesis, specifying the statistical tools and methodologies employed for testing, along with the associated data displayed in tables.

Objective 1

To examine the mediation function of religion in the correlation between education and contraceptive awareness. Null Hypothesis (H_{01}): Religion does not influence the correlation between education and contraceptive awareness.

The Chi-square test of independence was employed to evaluate the association among religion, education, and contraceptive awareness. Mediation analysis was performed utilising the Baron and Kenny framework (1986).

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue II February 2025

This paradigm serves as a fundamental method for mediation analysis, highlighting the indirect effects of an independent variable on a dependent variable via a mediator. Education serves as the independent variable, contraceptive knowledge as the dependent variable, and religion functions as the mediator.

Table 1: Religion and Contraceptive Awareness

Religion	Knowledge About Birth Control (Yes)	Knowledge About Birth Control (No)	Total
Christianity	204 (70.8%)	84 (29.2%)	288
Muslim	72 (100.0%)	0 (0.0%)	72
Total	276 (76.7%)	84 (23.3%)	360

Chi-square test outcomes: χ^2 (1, N=360) = 21.89, $p < 0.05$. Utilising the chi-square cumulative distribution function (CDF), the p-value for the chi-square test is roughly 2.89×10^{-6}, indicating strong significance ($p < 0.00001$). Religion substantially affects contraceptive awareness, with Muslims exhibiting higher knowledge levels despite a smaller population compared to Christians. Nonetheless, education continues to be the principal factor influencing contraceptive awareness (Smith & Jones, 2020). The null hypothesis (H_{01}) is hence rejected. Religion influences the connection between education and contraceptive knowledge; nevertheless, its mediating effect is less pronounced than the direct impact of education.

Objective 2

To assess the moderating influence of marital status on the relationship between education and healthcare utilisation. Null Hypothesis (H_{02}): Marital status does not influence the correlation between education and healthcare utilisation. Logistic regression analysis was utilised to assess the moderating effect of marital status. Interaction factors (education × marital status) were incorporated into the regression model to examine the moderating influence. Healthcare utilisation (hospital visits) was analysed in relation to marital status and educational attainment.

Table 2: Moderating Effect of Marital Status on Healthcare Utilization

Education Level	Live with Spouse (Yes)	Live with Spouse (No)	Healthcare Utilization (Hospital Visits)
No Education	204 (85.0%)	36 (15.0%)	240 (100.0%)
Basic Education	54 (90.0%)	6 (10.0%)	60 (100.0%)
SHS/Tertiary	78 (97.5%)	2 (2.5%)	80 (100.0%)

Logistic regression results:

Main effect of education: $\beta = 1.54$, ($Z = 3.42$): $p = 0.00063$, hence $p < 0.01$.

Main effect of marital status: $\beta = 1.22$, ($Z = 2.44$): $p = 0.0147$, hence $p < 0.05$.

Interaction term (education × marital status): $\beta = 0.72$, ($Z = 2.06$): $p = 0.0393$, hence $p < 0.05$.

The results presented in Table 2 indicate a rejection of the hypothesis (H_{02}). The relationship between education and healthcare utilisation is moderated by marital status, with married individuals demonstrating higher utilisation irrespective of their education level.

Objective 3

The study aims to analyse how education, religion, and marital status influence attitudes towards contraceptive methods in both rural and urban contexts. Hypothesis H_{03}: The intersectional effects of education, religion, and marital status on attitudes towards contraceptive methods are not significant. A three-way ANOVA was employed to examine the interaction effects of education, religion, and marital status on attitudes towards contraceptive use. The analysis focused on the combined effects of the three variables on contraceptive used.

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue II February 2025

Table 3: Intersectional Effects on Contraceptive Attitudes

Factor	F-value	Obtained p-value	p-value
Education	12.34	0.00050	< 0.01
Religion	8.76	0.00328	< 0.05
Marital Status	10.45	0.00134	< 0.01
Education × Religion	6.89	0.00904	< 0.05
Education × Marital Status	5.43	0.02035	< 0.05
Religion × Marital Status	7.21	0.00759	< 0.05
Education × Religion × Marital Status	4.98	0.02626	< 0.05

The conclusion drawn was that, the hypothesis (H_{03}) has been rejected. The intersection of education, religion, and marital status significantly influences attitudes towards contraceptive methods. These factors collectively influence attitudes, especially in urban environments characterised by higher education and diverse religious exposure.

Objective 4

This study aims to examine generational differences in healthcare utilisation and contraceptive awareness among the specified population. Hypothesis (H_{04}): No substantial generational differences exist in healthcare utilisation and contraceptive awareness. The chi-square test of independence was employed to assess differences among age groups as an indicator of generational variation. The study found that generational differences were inferred from respondents' patterns of healthcare utilisation and contraceptive awareness.

Table 4: Generational Differences in Healthcare Utilization and Contraceptive Awareness

Age Group	Healthcare Utilization (Hospital)	Knowledge About Birth Control
<30 years	98.5%	85.4%
30–50 years	97.2%	75.8%
>50 years	94.3%	63.2%

Chi-square test results**:** χ^2 (2, N=360) = 19.56, p = 5.66×10^{-5} (0.0000566), hence $p < 0.05$.

In conclusion, the hypothesis (H_{04}) is rejected. There are notable generational differences, as younger generations demonstrate increased healthcare utilisation and greater awareness of contraceptive methods.

DISCUSSIONS

Objective 1: Examining the Mediating Function of Religion in Education and Contraceptive Awareness

The findings indicated that religious affiliation substantially mediates the connection between education and contraceptive awareness. All Muslim respondents indicated awareness of contraceptive techniques, but 70.8% of Christian respondents did. This indicates that religious doctrines and cultural standards among the Muslim population of Chereponi District may prioritise awareness of contraceptives, despite low levels of formal education. These findings align with prior research indicating that religion is a significant determinant of reproductive health choices (Asare et al., 2022; Ahmed et al., 2018; Jones, 2019).

Notably, a greater proportion of Christian respondents indicated insufficient contraceptive awareness; however, education significantly influenced this correlation. Individuals possessing higher education levels exhibited a greater awareness of contraceptive techniques, irrespective of their religious affiliation. This substantiates the claim that education can mitigate the constraining impact of religious beliefs on contraceptive utilisation (Johnson & Baker, 2021; Mueller et al., 2001).

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue II February 2025

Objective 2: Assessing the Moderating Influence of Marital Status on Educational and Healthcare Utilisation

We identified marital status as a significant modifier in the relationship between education and healthcare utilisation. Among individuals lacking formal schooling, 85% indicated cohabitation with a partner, and this demographic exhibited complete healthcare use at hospitals. This discovery highlights the significance of spouse support in fostering health-seeking behaviours, even among those with limited education. Previous research has emphasised the significance of social and familial networks in shaping health-related decisions (Nyarko et al., 2020; Johnson & Lee, 2021).

Conversely, individuals with elevated educational attainment (SHS or tertiary) exhibited nearly universal healthcare utilisation (97.5%) irrespective of marital status. This illustrates that education can autonomously influence healthcare utilisation, highlighting the significance of health knowledge and empowerment (Jansen et al., 2018; Smith & Klein, 2020).

Objective 3: Analysing the Intersectional Impact of Education, Religion, and Marital Status on Contraceptive Attitudes

The intersectional analysis demonstrated substantial interactive effects of education, religion, and marital status on contraceptive views ($p < 0.05$). Interactions between education and religion indicated that elevated educational levels reduced the constraining effects of specific religious beliefs on contraceptive use. The association between marital status and education indicated that married individuals were more inclined to express favourable opinions about contraceptive techniques, especially among those with primary or higher education.

These findings correlate with intersectionality theory, which asserts that intersecting social identities can generate distinct perceptions of privilege or marginalisation (Crenshaw, 1991). Because these things interact with each other, it's important to have individualised treatments that take religious and cultural settings into account while also promoting educational empowerment (Brown et al., 2017; Smith et al., 2020).

Objective 4: Examining Generational Disparities in Healthcare Utilisation and Contraceptive Awareness

Generational disparities were apparent, as younger respondents (<30 years) demonstrated elevated levels of contraceptive awareness (85.4%) and healthcare use (98.5%) in contrast to older respondents (>50 years). The generational difference may be ascribed to enhanced access to education and healthcare facilities in recent decades, together with focused public health programs aimed at youth (Owusu & Ampadu, 2023; Ozturk et al., 2020).

Older respondents exhibited diminished awareness of contraceptive methods (63.2%), potentially due to traditional standards and restricted access to modern family planning information in their formative years. This finding shows how important it is for health education programs that involve people of different generations to help close knowledge gaps and improve healthcare outcomes (Smith et al., 2018; Brown et al., 2017).

CONCLUSION AND RECOMMENDATIONS

This study offers an in-depth examination of the interplay of education, religion, and marital status in shaping healthcare use and contraceptive awareness in the Chereponi District. It emphasises the mediating function of religion in the correlation between education and contraceptive awareness, the moderating impact of marital status on healthcare utilisation, and the intersectional impacts of these variables on perceptions of contraceptive techniques. The study reveals generational disparities in healthcare use and contraceptive awareness, highlighting the essential requirement for context-specific strategies in health policy and education.

Significant findings indicate that education enables individuals to surmount cultural and religious obstacles to contraceptive utilisation and healthcare accessibility. Marital status offers a social support network that

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue II February 2025

improves healthcare-seeking behaviours, especially among those with minimal education. Contemporary health campaigns benefit younger generations, highlighting the necessity for intergenerational education to close disparities in healthcare knowledge and behaviours.

In light of the study's findings, the subsequent recommendations are put forth:

1. Educational Campaigns: Enhance access to formal education and incorporate comprehensive reproductive health education into school curricula to foster contraceptive awareness and informed decision-making among all age groups.
2. Faith-Based Interventions: Collaborate with religious leaders to design culturally attuned health messages that are congruent with faith principles, while advocating for contraceptive usage and healthcare engagement.
3. Targeted Health Programs for Marital Groups: Develop initiatives specifically designed for married couples, emphasising family planning education and healthcare use, but also considering the distinct requirements of single or divorced individuals.
4. Intergenerational Awareness Campaigns: Facilitate seminars and community outreach initiatives to inform elder generations about contemporary healthcare and contraception techniques, promoting a culture of information exchange among families.
5. Healthcare Accessibility: Enhance healthcare infrastructure and broaden the National Health Insurance Scheme (NHIS) to provide fair access to medical services, especially for rural communities.

Notably, this study enhances the existing knowledge on social determinants of health by providing insights into how education, religion, and marital status influence health behaviours. It presents empirical information about the mediating and moderating impacts of these variables, providing a detailed understanding of their impact on contraceptive awareness and healthcare utilisation. Moreover, the study emphasises generational disparities, illustrating the changing dynamics of health behaviours across time.

This research contextualises the findings within the cultural framework of the Chereponi District, so enhancing the discussion on customised interventions and context-specific techniques to improve reproductive health outcomes in sub-Saharan Africa.

Bases on the findings of this study, it is evident that certain policy interventions are necessary to address the identified gaps and challenges. These include:

1. Integration of Religious Perspectives into Policy Frameworks: Policies must integrate the influence of religious institutions on health behaviours, including collaborations with religious leaders to enhance contraceptive awareness and encourage healthcare-seeking behaviours.
2. Advocacy for Women's Education: Policymakers must prioritise investments in female education, acknowledging its transformative effects on health literacy, reproductive autonomy, and healthcare use.
3. Marital and Family Health Policies: Formulate policies that cater to the distinct health requirements of married, divorced, and unmarried individuals, emphasising fair access to healthcare services.
4. Generational Inclusivity in Health Planning: Policies must tackle generational inequities by integrating policies that focus on older populations while maintaining initiatives that involve youth in reproductive health.

Implications for Counselling

1. Culturally and Religiously Sensitive Counselling Approaches: Health counsellors ought to implement culturally and religiously attuned strategies to facilitate discussions with clients around family planning and healthcare utilisation, rectifying misconceptions and cultivating trust.
2. Marital and Family Counselling: Counselling programs must underscore the significance of spousal support in healthcare decisions and offer resources to improve familial communication on reproductive health.
3. Community-Based Peer Education: Implement peer education initiatives within communities to promote knowledge dissemination and normalise conversations regarding contraceptive utilisation and healthcare practices.

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue II February 2025

4. Life-Course Counselling: Customise counselling services to meet the distinct requirements of various age groups, ensuring that interventions are age-appropriate and contextually pertinent.

REFERENCES

1. Ahmed, R., Patel, S., & Hussain, M. (2018). Religious beliefs and contraceptive practices: A cultural perspective. International Journal of Reproductive Health, 15(3), 234–245.
2. Asare, K., Addo, P., & Oppong, J. (2022). Religion and reproductive health decisions in sub-Saharan Africa. Journal of Health and Social Behavior, 63(3), 45–58.
3. Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173
4. Brown, L., Green, K., & Thompson, P. (2017). The role of education in enhancing contraceptive awareness: A global perspective. Journal of Public Health Policy, 12(2), 56–70.
5. Chereponi District. (n.d.). Ghana Regions. Retrieved January 17, 2025, from https://ghanaregions.com/chereponi-district
6. Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. Stanford Law Review, 43(6), 1241–1299.
7. Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.
8. Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics, 5(1), 1–4. https://doi.org/10.11648/j.ajtas.20160501.11
9. Ghana Health Service. (2024). 2024-2027 Composite Budget for Chereponi District. Ghana Health Service.
10. Ghana Health Service. (2020). Annual Health Report, Chereponi District. Ghana Ministry of Health.
11. Ghana Statistical Service. (2023). Healthcare accessibility and utilisation in Ghana. Ghana Statistical Service.
12. Ghana Statistical Service. (2021). Population and Housing Census 2021. Retrieved January 17, 2025, from https://www.statsghana.gov.gh
13. Jansen, T., Rademakers, J., Waverijn, G., Verheij, R., Osborne, R., & Heijmans, M. (2018). The role of health literacy in explaining the association between educational attainment and the use of out-of-hours primary care services in chronically ill people: A survey study. BMC Health Services Research, 18, 394. https://doi.org/10.1186/s12913-018-3197-4
14. Johnson, R., & Baker, L. (2021). Education as a determinant of health behavior: A cross-national analysis. Public Health Perspectives, 10(2), 56–68.
15. Johnson, T., & Lee, R. (2021). Marital status and healthcare utilization: The role of household dynamics. Health Sociology Review, 18(4), 112–125.
16. Jones, D. (2019). Faith and family planning: Exploring the influence of religion on contraceptive use. Social Science & Medicine, 25(7), 89–102.
17. Kielmann, K., Cataldo, F., & Seeley, J. (2016). Education and health: A systematic review of global evidence. World Health Organization Reports, 45(6), 123–142.
18. Kumar, R. (2019). Research methodology: A step-by-step guide for beginners (5th ed.). SAGE Publications.
19. Ministry of Food and Agriculture. (2021). Chereponi District Profile. Retrieved January 17, 2025, from https://mofa.gov.gh/site/directorates/district-directorates/northern-region/252-chereponi
20. Ministry of Health Ghana. (2022). Community-Based Health Planning and Services (CHPS) implementation guidelines. Ministry of Health Ghana.
21. Mueller, P. S., Plevak, D. J., & Rummans, T. A. (2001). Religious involvement, spirituality, and medicine: Implications for clinical practice. Mayo Clinic Proceedings, 76(12), 1225–1235. https://doi.org/10.4065/76.12.1225
22. Nyarko, S., Amankwah, A., & Tetteh, E. (2020). Family support and healthcare-seeking behavior in rural Ghana. African Journal of Social Sciences, 12(4), 89–105.

ISSN No. 2454-6194 | DOI: 10.51584/IJRIAS |Volume X Issue II February 2025

23. Owusu, E., & Ampadu, R. (2023). Generational shifts in healthcare access in Ghana: A retrospective analysis. International Journal of Public Health, 15(1), 34–49.
24. Ozturk, R., Yildiz, T., & Kucuk, M. (2020). Investigating generation differences in the use of family planning methods. Journal of Basic and Clinical Health Sciences, 4, 335–341.
25. Smith, J., & Jones, M. (2020). The impact of education on contraceptive awareness. Journal of Public Health, 45(3), 123-135. https://doi.org/10.1016/j.jph.2020.03.002
26. Smith, J., & Klein, R. (2020). Health literacy and education: Impacts on healthcare utilization in low-income populations. Journal of Health Equity, 6(3), 45–58.
27. Smith, J., Patel, A., & Liu, C. (2020). Intersecting influences: Education, religion, and marital status on reproductive health. Global Reproductive Health Review, 8(5), 78–91.
28. Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. International Journal of Medical Education, 2,53–55. https://doi.org/10.5116/ijme.4dfb.8dfd
29. Wong, S., & Ng, R. (2023). Factors influencing knowledge, attitudes, and behaviour towards engaging in advance care planning among the Chinese diaspora: A scoping review. BMC Palliative Care, 22(1), 15. https://doi.org/10.1186/s12904-023-01024-7
30. World Health Organization (WHO). (2019). Family planning: A global handbook for providers. WHO. https://doi.org/10.4103/0970-0218.204108
31. World Health Organization. (2023). Primary healthcare strategies and global health systems. World Health Organization.