International Journal of Community Medicine and Public Health
Onak ET et al. Int J Community Med Public Health. 2024 Sep;11(9):3355-3363
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20242531

Original Research Article

Sociocultural factors influencing utilization of reproductive health services in selected South Sudan public health facilities

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Received: 07 July 2024
Revised: 26 July 2024
Accepted: 20 August 2024

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ABSTRACT

Background: Africa faces significant maternal health challenges, with nearly half of maternal deaths occurring in the region. Insufficient reproductive health services account for 18% of the global disease burden, disproportionately affecting women of reproductive age at 32%. Despite the benefits of family planning, only 13% of married women in Sub-Saharan Africa use contraceptives. This study aimed to identify sociocultural factors influencing the utilization of RHS in South Sudan's public health facilities.
Methods: Using a mixed-methods approach, the research combined a longitudinal ecological study and an analytical cross-sectional study. Data from the South Sudan Ministry of Health (2015-2020) were reviewed, and community members and health professionals were surveyed across four levels of the health system in Western and Central Equatoria states. The study focused on women aged 15-49, with 384 respondents selected from various counties.
Results: The study indicated that 72.5% of respondents utilized RHS, with family planning and STI prevention/management being the most common services (25.1% each). Maternal/newborn care and HIV counseling/testing followed at 18.1% and 15.3%, respectively. While RHS uptake increased overall, specific declines were noted in the third quarter of each year. Utilization was significantly higher among respondents aged 30 and older, urban residents, and those with higher educational levels.
Conclusions: The study highlights a positive trend in RHS uptake but underscores the need to address declines in specific services. Age, residence, and education significantly influence RHS utilization. Policy interventions should consider South Sudan's unique sociocultural contexts and demographics. Enhancing education and awareness, especially in rural areas, is crucial to improving RHS access and reducing maternal mortality rates.

Keywords: Sociocultural factors, Reproductive health services, Utilization, Public health facility, South Sudan

INTRODUCTION

Reproductive Health (RH) is a fundamental component of overall well-being, encompassing physical, mental, and social aspects that go beyond the mere absence of disease or infirmity, as defined by the World Health Organization.[1] RH extends to all matters related to the reproductive system, its functions, and processes. The United Nations Population Fund (UNPF) further emphasizes that RH includes the ability to reproduce, regulate fertility, engage in safe and fulfilling sexual relationships, and achieve successful outcomes in reproduction, such as infant and child survival, growth, and healthy development.[2] It also entails safe pregnancy and childbirth, risk-free fertility regulation, and the assurance of safe sexual experiences.

The WHO RH Strategy, established in 2004 and guided by international human rights principles, outlines the core elements of Sexual and Reproductive Health (SRH), aiming to enhance the well-being of communities.[3] These core aspects encompass improving antenatal, perinatal,

postpartum, and newborn care; providing high-quality family planning services, including infertility services; eliminating unsafe abortion; combating sexually transmitted infections, including HIV, reproductive tract infections, cervical cancer, and other gynaecological morbidities; and promoting sexual health. Additionally, the strategy underscores the critical importance of preventing and responding to violence against women to improve reproductive health outcomes.[4]

Despite some progress within the European Region, challenges persist. While the contraceptive prevalence rate has increased from 55.6% in 2000 to 61.2% in 2015, there remains a significant lack of information and awareness concerning critical RH issues such as sexuality, family planning, pregnancy, childbirth, sexually transmitted infections, infertility, cervical cancer prevention, and menopause.[5] The region faces complications in pregnancy and childbirth, unsafe abortions, reproductive tract infections, and sexual violence, which contribute to avoidable cancer-related deaths among women. Notably, there are disparities in RH within and between countries. A study in 13 European Union countries highlighted the higher proportion of women with unmet family planning needs among people living with HIV (PLHIV) compared to the general population.[6] New HIV infections in the European Region increased by 75% since 2005, and the region reported nearly 137,000 new HIV diagnoses in 2019.[7]

Contraception and abortion are significant concerns in Asia. In 2017, approximately 132 million women of reproductive age in Asia had an unmet need for modern contraception, leading to an estimated 53.8 million unintended pregnancies, two-thirds of which ended in abortion.[8] The majority of these abortions occurred in South and Central Asia, including India, and Eastern Asia, including China. Although the proportion of unsafe abortions is uncertain, it is estimated that 4.6 million women in Asia (excluding Eastern Asia) experience complications from unsafe abortions annually.[9]

Adolescent childbearing rates have decreased in most Asian and Pacific countries, but they remain high in South and South-West Asia, particularly in Bangladesh (35%), Nepal (21%), and India. South Asia also grapples with a high prevalence of child marriage, with 45% of women aged 20-24 reporting marriage before the age of 18 and 17% before the age of 15.[10] Maternal mortality related to pregnancy and childbirth affected approximately 85,000 women in the region in 2015, with 92% of these maternal deaths occurring in just 12 countries.[11]

In numerous African countries, the sexual and reproductive health (SRH) needs of young people are often overlooked and inadequately addressed, despite the evident and pressing demand for these services. With a population of around 1.2 billion, the continent has a substantial number of youths aged 15–24 years. In sub-Saharan Africa alone, there are 226 million young people, constituting 19% of the global youth population.[12] Women face a higher risk of death from communicable diseases, maternal and perinatal conditions, and nutritional deficiencies. About 30% of women worldwide, including 468 million aged 15-49, experience anaemia, with the majority living in Africa (48-57%) due to iron deficiency. Gender inequity, poverty, weak economic capacity, and sexual and gender-based violence, including Female Genital Mutilation (FGM), present significant obstacles to improving women's health in the African Region.[13]

Despite Africa accounting for one-tenth of the world's population and 20% of global births, nearly half of maternal deaths occur in this region. Poor reproductive health accounts for up to 18% of the global burden of disease and 32% of the total burden for women of reproductive age.[14] Access to essential RH interventions, particularly family planning, remains limited, with low contraceptive use (13%) and a high total fertility rate (5.5 children per woman) in Sub-Saharan Africa.[15] However, just as health outcomes have improved globally in the past two decades, South Sudan has also seen substantial progress, such as a decline in maternal mortality, neonatal mortality, infant mortality, and under-five stunting.[16] Access to RHS, including antenatal care and contraception, has significantly increased in Sub-Saharan Africa (United Nations, 2015).[17] Nevertheless, access to healthcare, especially RHS, remains a significant challenge in South Sudan due to persistent conflicts and a fragile peace process.[18]

In the East African region, including countries like Uganda, Tanzania, and Kenya, maternal mortality remains high compared to developed nations, highlighting the need for improved RHS.[19] The use of modern contraceptives is low, and unmet family planning needs affect a significant proportion of married women (United Nations, 2015).[20] In the context of South Sudan, capacity constraints and a challenging governance environment affect the implementation of basic health services and government policies. Reports suggest a lack of progress in building government capacity, and economic and social challenges, including budget cuts for health, inflation, and food insecurity, exacerbate the situation.[21-23] The economic crisis affects programs funded by donors, including RHS.[24] Consequently, the utilization and uptake of RHS in South Sudan are subject to these complexities, making this an issue of critical importance.

This study aims to understand and improve the utilization of RHS in South Sudan, a region plagued by conflict, fragile governance, and economic challenges. The prolonged instability and weak healthcare infrastructure have severely limited access to essential RHS, making this investigation crucial. The study is highly relevant as it seeks to develop strategies to enhance reproductive health outcomes, reduce maternal and infant mortality, and address unmet RH needs in conflict-affected regions.

Moreover, the findings will provide valuable insights for other nations facing similar challenges. The primary research question is: "What are the determinants of RHS utilization in South Sudan, and how do sociocultural factors impact these processes?" The study's specific objectives are to assess RHS uptake in selected public health facilities and examine the sociocultural factors influencing RHS utilization in these settings.

METHODS

The study utilized a mixed-methods approach comprising a longitudinal ecological study and an analytical cross-sectional study. The longitudinal component involved retrospective data analysis from South Sudan's Ministry of Health spanning 2015 to 2020. The cross-sectional study collected quantitative data from women of reproductive age visiting public health facilities in Western and Central Equatoria states. A structured questionnaire with closed-ended questions was administered through face-to-face interviews to assess RHS utilization and the impact of sociocultural factors. Written consent was obtained from participants, and confidentiality was maintained. Additionally, a standard data abstraction tool was used to extract utilization data from health facility records and the Health Management Information System database.

The theoretical framework was based on the Health Belief Model (HBM) and the Theory of Reasoned Action (TRA), which have been widely used to predict and explain the uptake of RHS. The HBM focuses on individual beliefs influencing decision-making, including perceived susceptibility, severity, benefits, barriers, and cues to action. The TRA examines attitudes towards behaviors, predicting that stronger intentions lead to a higher likelihood of performing specific behaviors. This framework facilitated a comprehensive examination of RHS utilization and sociodemographic influences, emphasizing the importance of eliminating restrictive eligibility criteria to empower women and young individuals to access family planning and reproductive health care services.

Study sites

The study took place in public health facilities across Western Equatoria and Central Equatoria states in South Sudan, a country where 83% of the population lives in rural areas with a low population density of 15 individuals per square kilometer. This rural landscape, coupled with mobile pastoral communities and restricted access due to prolonged conflicts, poses significant challenges to healthcare provision. Data collection was conducted at all four levels of the South Sudan health system: Boma Health Teams (community level), Primary Healthcare Units, Primary Healthcare Centers, and hospitals. These facilities are strategically aligned with the country's administrative subdivisions, catering to both rural and urban populations.

Sampling, recruitment of study participants and data collection

The study's primary respondents were women of reproductive age attending public health facilities in Western Equatoria and Central Equatoria, South Sudan. Using a multi-stage cluster random sampling method, the first stage involved systematically selecting a minimum of three public health facilities from a comprehensive list in each state. The second stage focused on selecting participants using a probability proportionate to size method. Based on population lists from the 2018 census, a sampling interval was calculated, and participants were chosen through a systematic random start number and subsequent intervals until the required sample size was reached.

Data collection was managed by the researcher and supported by five trained research assistants (RAs). These RAs received comprehensive training on the study's objectives, methodology, data collection tools, ethical considerations, confidentiality protocols, and field logistics. Participants provided written consent and were assured of the confidentiality of their information before face-to-face interviews commenced. Additionally, data abstraction forms were used to gather information on the intervention, evaluation setting, study population, outcomes, results, and study quality, divided into sections covering classification, descriptive information, and study quality.

Data analysis

The data analysis for the study involved entering questionnaires and data abstraction form responses into Microsoft Excel, then exporting to IBM SPSS version 23 for comprehensive analysis. Initially, data preparation included validation, editing, and coding. Descriptive statistics such as mean, median, mode, percentage, frequency, and range provided an overview of the data, while cross-tabulations examined relationships between variables across demographic groups. To test hypotheses, statistical significance was determined using p-values, with values less than 0.05 indicating significance. Inferential analyses, including correlation, regression, and one-way ANOVA, were employed to predict relationships and differences among variables, such as the impact of sociocultural factors on the utilization of reproductive health services.

Ethical considerations

Ethical considerations were central to the study, with approvals obtained from the Division of Research, Monitoring and Evaluation at the Ministry of Health, the Research Ethics Committee of South Sudan, and the Institutional Ethical Review Committee of Mount Kenya University. Formal permissions from relevant sectoral and departmental heads were also secured. Participants provided informed consent, assured of anonymity,

confidentiality, and the right to withdraw at any time without explanation. High ethical standards guided the data collection, security, and protection processes, with special adaptations for COVID-19 control, including providing protective equipment to minimize risks to both the research team and participants.

RESULTS

Socio-demographic characteristics

Table 1 provides a comprehensive overview of the demographic characteristics of the study's respondents. The data reveals that a significant portion of the participants (53.5%) were aged 30 years and older, while the remaining 46.5% were younger, with the age range spanning from 17 to 49 years. The mean age was calculated at 29.8 years, with a standard deviation of 7.80. Regarding marital status, the majority of respondents indicated that they were married (67.0%), followed by those who reported being single (20.5%). A smaller percentage of respondents identified as divorcees (6.3%), and another 6.3% stated they were widowed.

Geographically, over 80% of the participants resided in rural areas, while the remaining 18.5% lived in urban regions. The employment status of the respondents varied, with the highest proportion reporting being unemployed (30.3%), closely followed by those who identified as self-employed (30.3%). In terms of household wealth status, the analysis categorized a substantial majority of respondents (91.3%) as belonging to the "poor" category, as their household income fell below 500,000 South Sudanese Pounds (SSP) (Table 1).

Religiously, 87% of the respondents identified as Christians, while a smaller percentage (13.0%) stated they followed traditional belief systems. When examining the education level of the participants, it was found that 43.3% had completed their education up to the secondary school level, followed by 36.8% who had not attended any formal schooling. This rich demographic information lays the foundation for a more in-depth understanding of the study's participants (Table 1).

Level of utilization of reproductive health facilities

Services received in the selected public health facilities

The study's respondents, women of reproductive age visiting the designated public health facility, were surveyed to ascertain the types of services they had received at the facility over the previous 12 months. Figure 1 illustrates the outcomes, highlighting that family planning services (25.1%) and prevention and management of Sexually Transmitted Infections (STIs) (25.1%) were the most frequently utilized RHS among the surveyed women visiting these facilities. Additionally, maternal and newborn care services, as well as HIV counselling and testing, emerged as other commonly accessed services, accounting for 18.1% (290 respondents) and 15.3% (244 respondents) of the sampled population, respectively. These findings underscore the prevalence of specific RH services among the women utilizing these health facilities (Figure 1).

Table 1: Socio-demographic characteristics of women of reproductive health visiting selected public health facilities in South Sudan.

Variable	Category	Frequency	Percentage
State	Central Equatoria	232	58.0
	Western Equatoria	168	42.0
Age (years)	<30	186	46.5
	≥30	214	53.5
Marital status	Single	82	20.5
	Married	268	67.0
	Divorced	25	6.3
	Widowed	25	6.3
Place of residence	Urban	74	18.5
	Rural	326	81.5
Employ-ment status	In school or training	48	12.0
	Paid/wage/ paid in kind employed	19	4.8
	Self-employed	121	30.3
	Unemployed	173	43.3
	Unemployed but not seeking work for other reasons	39	9.8
Household wealth status	Poor (<500,000 SSP)	365	91.3
	Middle (500,000-1,000,000 SSP)	35	8.8
Religion	Christian	348	87.0
	Traditional	52	13.0
Education status	No school	147	36.8
	Only traditional/ non-formal school	53	13.3
	Dropped-out of school	27	6.8
	Completed secondary	173	43.3

Source: Research Data (2023).

Temporal patterns in reproductive health service clinic utilization in public health facilities from 2015 to 2020

The study investigated attendance trends at RHS clinics in public health facilities between 2015 and 2020, specifically focusing on services such as family planning, HIV counselling and testing, and maternal and newborn care. The data from women of reproductive age attending the RHS clinics during the first and third quarters of each year were analyzed and plotted, revealing notable patterns.

Table 2: Socio-cultural factors associated with reproductive health services utilization among women of reproductive age in South Sudan.

Variables	User of RH services N (%) (n=290)	Non-user of RH services N (%) (n=110)	OR (95% CI)	P value
State				
Central Equatoria	173 (59.7)	59 (53.6)	1	
Western Equatoria	117 (40.3)	51 (46.4)	1.197 (0.725-1.976)	0.482
Age				
Younger than 30 years	132 (45.5)	54 (49.1)	1	
30 years and older	158 (54.5)	56 (50.9)	0.571 (0.327-0.997)	0.049*
Marital status				
Married	186 (75.3)	82 (79.6)	1	
Single	61 (24.7)	21(20.4)	0.858 (0.437-1.685)	0.657
Place of residence				
Urban	60 (20.7)	14 (12.7)	1	
Rural	230 (79.3)	96 (87.3)	2.000 (1.012-3.950)	0.046*
Employment status				
Not employed	176 (60.7)	84 (76.4)	1	
Employed	114 (30.3)	26 (23.6)	0.631 (0.360-1.104)	0.107
Religion				
Christian	245 (84.5)	103 (93.6)	1	
Traditional	45 (15.5)	7 (6.4)	0.617 (0.242-1.572)	0.311
Education status				
No school/non-formal/dropped-out	138 (47.6)	89 (80.9)	1	
Completed secondary	152 (52.4)	21(19.1)	0.223 (0.122-0.406)	0.000**

Source: Research Data (2023); **. Correlation is significant at the 0.01 level; *. Correlation is significant at the 0.05 level

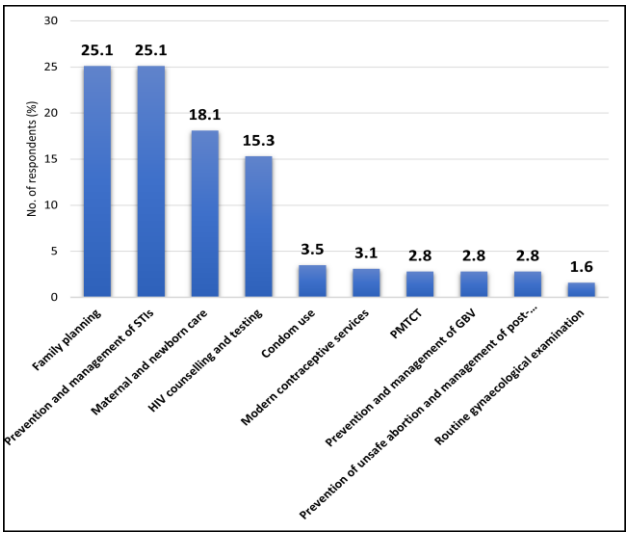

Figure 1: List of services received in the selected public health facilities in South Sudan.
Source: Research Data (2023).

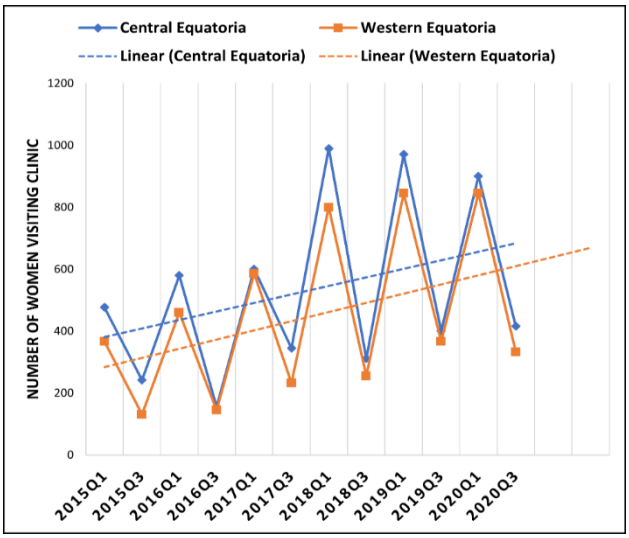

Figure 2: Scatter and trend plots of RHS visits in selected public health facilities.
Source: Research Data (2023).

Figure 2 demonstrates seasonal variations in clinic attendance for family planning, HIV counselling and testing, and maternal and newborn care services, with recurring peaks and troughs each year. The trend curve for all three services indicates a consistent increase in utilization from the first to the third quarters spanning from 2015 to 2020. Notably, the third quarter consistently shows a decline in attendance, highlighting these seasonal fluctuations in service utilization.

These findings underscore the dynamic nature of attendance at RHS clinics over the study period, characterized by seasonal fluctuations, while also highlighting the overall increasing trend in the utilization of family planning, HIV counselling and testing, and maternal and newborn care services from 2015 to 2020 (Figure 2).

Socio-cultural factors associated with reproductive health services utilization

Bivariable and multivariable logistic regression analyses were conducted to assess the relationship between various factors and the uptake/utilization of RHS. The results indicated significant associations. There was a statistically significant relationship between the age of the respondent and RHS utilization (p value=0.049). The odds ratio of 0.571 suggested a negative association, signifying that with each unit increase in the respondent's age, the odds of utilizing RHS decreased by a factor of 0.571. The 95% confidence interval ranged from 0.327 to 0.997, including the value 1, indicating some variability in the data but still supporting the tendency for lower utilization with increasing age (Table 2).

A significant relationship was also found between the place of residence (urban or rural) and RHS utilization (p-value = 0.046). The odds ratio of 2.000 indicated that individuals in urban areas had twice the odds of utilizing RHS compared to their rural counterparts. The 95% confidence interval ranged from 1.012 to 3.950, not including the value 1, which reinforced the significance of this association. In addition, there was a highly significant relationship between education status and RHS utilization (p value=0.000). The odds ratio of 0.223 highlighted those individuals with higher education levels had 0.223 times lower odds of utilizing RHS than those with lower education levels. The 95% confidence interval ranged from 0.223 to 0.406, excluding the value 1, further emphasizing the significance of this educational factor about RHS utilization (Table 2).

In summary, the research findings regarding socio-cultural factors influencing the uptake and utilization of RHS indicate the following: older age is associated with a decreased likelihood of utilizing RHS; individuals residing in urban areas have higher odds of utilizing RHS compared to those in rural areas; and higher education levels are associated with lower odds of utilizing RHS. These findings suggest that addressing socio-cultural factors such as age, place of residence, and education status is crucial in promoting and improving the uptake and utilization of RHS in the context of South Sudan.

DISCUSSION

Conceptual frameworks of the health belief model (HBM) and the theory of reasoned action (TRA)

The research findings on the uptake and utilization of RHS in selected South Sudan public health facilities were analyzed within the conceptual frameworks of the HBM and the TRA. These models offer critical insights into the determinants influencing individuals' decisions regarding RHS utilization, with the HBM focusing on health perceptions and the TRA emphasizing the role of attitudes and intentions.

The HBM was employed to examine the factors influencing the utilization of RHS. This model's core constructs perceived susceptibility, perceived severity, perceived benefits, perceived barriers, and cues to action were pivotal in understanding how individuals perceive and make decisions about engaging in RHS. Consistent with previous studies, our findings revealed that perceived susceptibility and severity of reproductive health issues are crucial motivators for individuals to engage in RHS. For example, perceived susceptibility, which varies among individuals, highlights the importance of threat perception in driving health behaviors. Similarly, perceived severity, influenced by emotional responses and cognitive assessments, underscores the role of perceived consequences of health problems in shaping behavior.[25] This aligns with the findings of Champion and Skinner, who observed that individuals are more likely to take preventive action when they perceive a higher level of risk.[26]

Moreover, the perceived benefits of utilizing RHS were found to significantly influence individuals' decision-making processes. When people believe that RHS are effective in addressing their health concerns, they are more likely to use these services. This finding echoes the results of Rosenstock et al who demonstrated that the perceived benefits of preventive health actions are strong predictors of behavior.[27] The study also emphasizes the role of cues to action, such as physical symptoms, mass media communications, interpersonal interactions, and advice from healthcare providers, as triggers for health behavior. These findings are consistent with the work of Janz and Becker, which highlighted that cues to action are essential in prompting individuals to engage in health-promoting behaviors.[28]

Parallel to the HBM, the TRA provided insights into the role of attitudes, subjective norms, and intentions in predicting health-related behaviors. The study findings demonstrated a significant correlation between attitudes toward RHS and the beliefs and outcome evaluations related to these services. This is consistent with Ajzen

and Fishbein's assertion that attitudes, formed by beliefs about the outcomes of behavior, play a crucial role in shaping intentions and, ultimately, behavior.[29] Our study found that the stronger an individual's intention to use RHS, the more likely they were to engage in the behavior, reinforcing the predictive power of intention in health behavior as posited by the TRA. Additionally, subjective norms, which reflect social pressures and expectations, were identified as significant determinants of the intention to utilize RHS. These results align with the findings of Montano and Kasprzyk, who noted that social influences are critical in shaping health-related intentions and behaviors.[21]

Level of uptake and utilization of reproductive health services in selected South Sudan public health facilities

The study revealed that a significant proportion of respondents (72.5%) had utilized RHS in the selected public health facilities, while 27.5% had not utilized any services in the past 12 months. This high level of utilization is notable, yet the findings also indicated that the majority of women (86.3%) did not receive all the RHS they were seeking, pointing to a gap in service provision. This aligns with the findings of a study by UNPF, which reported that approximately 23% of married or in-union women in Sub-Saharan Africa have an unmet need for RHS.[22] The discrepancy between the high demand for RHS and the actual receipt of services highlights the need for improvements in the availability and delivery of comprehensive RHS.

Among the various RHS, family planning and the prevention and management of sexually transmitted infections (STIs) were the most utilized, each accounting for 25.1% of the sampled population. This is consistent with the findings of WHO Africa, which reported that while a majority of women in Sub-Saharan Africa wish to delay or stop childbearing, only 28% use modern methods of family planning.[23] The utilization rates for maternal and newborn care (18.1%) and HIV counseling and testing (15.3%) were also significant, suggesting a broad range of RHS needs among the population. However, the study also found that a substantial portion of respondents (77.3%) were unaware that RHS were provided free of charge at public health facilities. This lack of awareness is a critical barrier to service utilization, as highlighted by previous research emphasizing the importance of public awareness campaigns in increasing access to healthcare services.[24]

The longitudinal analysis revealed seasonal variations in the utilization of RHS, with specific declines observed in family planning, HIV counseling and testing, and maternal and newborn care attendance during the third quarter of each year from 2015 to 2020. These findings suggest a need for targeted interventions to address the factors contributing to these seasonal declines. The study by Kane et al. similarly found that external factors, such as political stability, can significantly impact the utilization of RHS, underscoring the importance of context-specific strategies to maintain consistent access to services throughout the year.[25]

Socio-cultural factors associated with reproductive health services utilization

The study also explored the socio-cultural factors associated with RHS utilization, revealing that the majority of respondents (53.5%) were 30 years or older. The analysis demonstrated a significant relationship between age and RHS utilization, with a p value of 0.049. This suggests that age is a determinant of RHS utilization, with older women being less likely to utilize these services compared to their younger counterparts. This finding is in line with studies conducted in Kenya by Kinaro et al and Godia et al which found that cultural norms, lack of awareness, and different reproductive health needs at various life stages contribute to lower RHS utilization among older women.[26,27]

The study also found a statistically significant relationship between place of residence and RHS utilization, with a p-value of 0.046 indicating that individuals residing in urban areas were more likely to utilize RHS compared to those in rural areas. This finding is consistent with the results of a study by Sumankuuro et al which reported that women in rural areas face significant barriers to accessing RHS due to factors such as poor infrastructure, limited healthcare facilities, and lower levels of education.[28] The current study's findings suggest that improving access to healthcare facilities in rural areas, along with targeted awareness campaigns, could enhance RHS utilization among rural populations.

Finally, the educational level of respondents was found to be significantly related to RHS utilization, with a p value of 0.000 indicating a highly significant relationship. Interestingly, the study revealed that individuals with higher education levels had lower odds of utilizing RHS compared to those with lower education levels, a finding that contradicts previous studies by Aragie and Abate, which suggested that higher education is associated with greater familiarity and utilization of RHS.[29] This counterintuitive finding may be influenced by factors such as socioeconomic status, cultural beliefs, and personal preferences, highlighting the complexity of the relationship between education and health service utilization.

Overall, the findings of this study underscore the need for targeted interventions to address the socio-cultural barriers to RHS utilization, particularly among older women, rural populations, and individuals with lower levels of education. By improving access to healthcare facilities, increasing public awareness about available services, and addressing cultural norms and beliefs, it is possible to enhance the utilization of RHS and improve the overall well-being of women in South Sudan.

CONCLUSION

The study provides valuable insights into the utilization of RHS in selected public health facilities in South Sudan, framed within the conceptual frameworks of the HBM and the TRA. The findings reveal that individual perceptions of health risks, benefits, and social influences play a significant role in shaping reproductive health behaviors. The high level of RHS utilization observed, especially for family planning and STI management, reflects a strong demand for these services. However, the gap between demand and service provision, coupled with barriers such as lack of awareness and socio-cultural factors, highlights the need for targeted interventions to improve RHS delivery and access. The study underscores the importance of enhancing public awareness, particularly in rural areas and addressing socio-cultural barriers to ensure comprehensive and equitable access to reproductive health services for all women in South Sudan. This study has several limitations that should be considered when interpreting the findings. Firstly, the cross-sectional design of the study limits the ability to establish causality between the identified factors and RHS utilization. Additionally, the reliance on self-reported data may introduce recall bias or social desirability bias, potentially affecting the accuracy of the reported utilization rates. The study was also conducted in selected public health facilities, which may not fully represent the broader population of South Sudan. Finally, the influence of external factors, such as political instability and economic conditions, was not deeply explored, which could affect RHS utilization patterns. Future research should consider longitudinal designs and a broader geographic scope to validate these findings and provide a more comprehensive understanding of the factors influencing RHS utilization in South Sudan.

ACKNOWLEDGEMENTS

We would like to thank colleagues within the Ministry of Health, particularly the Public Health Officers and Surveillance Officers.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Onak ET, Odongo AO, Kariuki J. Sociocultural factors influencing utilization of reproductive health services in selected South Sudan public health facilities. Int J Community Med Public Health 2024;11:3355-63.