

# A CROSS-SECTIONAL SURVEY TO ASSESS SOCIO-CULTURAL FACTORS INFLUENCING THE UTILIZATION OF ASRH SERVICES IN TONG PING AREA JUBA, SOUTH SUDAN.

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## Abstract

### Background:

Studies have documented poor outcomes of the utilization of ASRH services especially in poor countries mostly those affected by complex emergencies. Although estimates from 2020 indicate some improvement in RMNCAH in South Sudan, utilization of ASRH services in Tong Ping remained poor due to socio-demographic, socio-cultural, and community-related factors. The study examined the socio-cultural determinants influencing the utilization of ASRH services in the Tong Ping area, Juba South Sudan.

### Methodology:

a cross-sectional survey research design whereby 177 adolescents (18-19 years) were interviewed. Quantitative data was organized and analyzed through the utilization of the Statistical Package for Social Sciences and findings were presented using the percentage tables. Bivariate and Multivariate analyses were used to identify factors that categorically and jointly influence the utilization of ASRH.

### Result:

The study established that active peer education increased the utilization of ASRH with a significant threshold of  $P=0.049$ . A significant association was established between knowledge of family planning methods among adolescents and utilization of AHS ( $P=0.001$ ). The study further found out that there are limited or no public health facilities to provide ASRH in Tong Ping which led to expensive utilization. Community perception of reproductive health services was positively associated with utilization ( $P=0.049$ ).

### Conclusion:

Younger adolescents are inquisitive and have been adequately reached with SRH information and services. Utilization of SRH has been hampered because the assumed users are compromised. This means adolescents have limited knowledge about the use of Reproductive Health. Health care is usually sought more in critical conditions than preventive.

### Recommendation:

There should be active sensitization to increase awareness of service provisions, more training of adolescents, equipment available in health facilities with trained personnel and other resources, and the establishment of a health center around the Tong Ping area to bring free services closer to the communities and encourage peer education.

**Keywords:** ASRH services, Tong Ping, South Sudan, Adolescents, Submitted: 2023-02-18 Accepted: 2023-04-06

## 1. Background:

On the international scene, according to WHO, many adolescents have little access to information about health and life skills (UNICEF, 2019). Looking at the African perspective, there has been slow progress in eliminating child marriages yet it is a very important risk factor that adversely influences the lives and health of adolescents. According to Dr. Chandra (2015), early marriages expose girls to early pregnancies and childbirth. Dr. Symplice (2015) stated that adolescent pregnancy is the leading cause of death in the African region. Knowledge of reproductive health and contraception is low, and early marriage frequently means early motherhood; childbirth complications are the leading cause of death among South Sudanese girls aged 15 to 19 years (WHO, 2018).

According to Reajul and Kevin (2018), the South Sudan Household Health Survey of 2010 found that 26 percent of adolescent girls (aged 15–19 years) are mothers. World Bank (2016) stated that; The Adolescent Girls Initiative in South Sudan aimed at promoting the transition of adolescent girls from school to productive employment through innovative interventions. This is because adolescent girls are usually restricted to fewer opportunities and limited freedom to exercise their choices as compared to adolescent boys (World Bank, 2016). However, AGI which was implemented by BRAC closed shortly after the outbreak of conflicts in Juba in 2016.

## 2. Methodology:

### 2.1. Study Design:

A cross-sectional survey was conducted whereby a sample of the population was interviewed at a given time. This provided a measure of the degree and comparison of the relationship between the independent and dependent variables. The advantage was; information was gathered on existing groups without changing their experiences in any way.

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### 2.2. Sources of Data:

The study used both primary and secondary data. Primary data included an interview of the participants using questionnaires and secondary data came from journals, the internet, website links showing previous studies and dissertations, phone calls, and other sources like publications from WHO, UNICEF, UNMISS, and MOHRSS.

### 2.3. Study Population:

The targeted population from which the sample was drawn were adolescents between 18-19 years as defined by WHO. Organizations working in partnership with health services in South Sudan. These organizations were of different types, geographical locations, sizes, and experiences. In terms of the types, the partners were categorized as Local and International NGOs, Government departments under the MOH, Peace monitoring bodies including UNMISS, and orphanage homes. In terms of geographical locations, the partners were located and working in South Sudan. In terms of size and staffing, these organizations ranged between 10 and 100 staff. All these organizations had at a certain point monitored and reported on health, child protection, and humanitarian crisis in South Sudan. The reasons for selecting this nature of population were based on their similar mandate and characteristics as defined by Brain (1993). The study population consisted of 240 adolescents between the ages of 18 to 19 years of age.

### 2.4. Sample Size:

The study used Slovin's formula. This is a general equation used to estimate the population. This formula is derived from research assignments on google scholar.

The formula is described as:

$$\text{Sample Size} = N / (1 + N * e^2)$$

$$N = \text{population size (247)}$$

$$E = \text{margin of error (0.04)}$$

$$= 247 / (1 + 247 * 0.04^2)$$

$$= 247 / (1 + 247 * 0.0016)$$

$$= 247 / (1 + 0.3952)$$

$$= 247 / (1.3952)$$

$$\text{Sample size} = 177$$

## **2.5. Sampling Procedure:**

Probability Sampling Procedure was used to target the population which is believed to provide reliable data. According to the knowledge of this study, this sampling procedure was suitable for determining the population size and representing the population. The main focus criteria for sampling were the respondents' academic qualifications, social responsibilities, and past experiences.

## **2.6. Selection of Health Facilities:**

Stratified sampling was used to select the health facilities. The strata were the levels of the health facilities; community health centers were selected on the probability of their existence because they are few.

### **2.6.1. Selection of Local and International NGOs:**

Some International and Local NGOs which have child protection and humanitarian mandates were considered to participate in this study. This provided reliable and updated data concerning the area of study.

### **2.6.2. Selection of Community Participation:**

Reliable data was extracted from some church leaders and adolescents.

## **2.7. Exclusion Criteria:**

According to the Convention on the Rights of the Child (UNICEF, 1989), all people below 18 years are considered to be children. Therefore, the study excluded all adolescents below 18 years. Adolescents with mental disabilities were not included in this study.

## **2.8. Variables to be studied:**

The variables listed below were studied at the community level in the Tong Ping area in Juba, South Sudan. They were presented according to the issues enumerated in the specific objectives.

### **2.8.1. Socio-demographic Factors:**

were studied depending on the age, gender, employment status, educational level, tribe, period of stay in Tong Ping, perception of adolescents, and their preferred SRH services.

### **2.8.2. Socio-cultural Factors:**

Data was collected on the knowledge of adolescent SRH services and accessibility, willingness to use, ability to use, equity in delivery, costs incurred, feasibility, trust in services, and acceptance of adolescent health services by the community.

### **2.8.3. Community set-up:**

The study was conducted on support provided by the community health centers and clinics, availability of information concerning adolescent SRH and how it is disseminated, how often peers engage to talk positively about their health, how often adolescents visit health centers, and if they have ever used adolescent SRH services before.

### **2.8.4. The Utilization of adolescent SRH services:**

was studied according to the responses provided in the examination of socio-demographic factors, socio-cultural factors, community set-up, and policy issues. These were measured according to the number of participants who have ever utilized adolescent SRH services, how when, why, and where they seek these services. Responses from key informants informed the availability and challenges faced during the implementation of strategies.

In conclusion, the study measured how socio-demographic, socio-cultural, and community set-ups cause changes in the utilization of adolescent SRH services in Tong Ping.

## **2.9. Data Collection Tools and Techniques:**

### **2.9.1. Tools:**

Semi-structured questionnaires were administered to the study population. Interpretation of data collection tools was done to assist in the collection of guided data from participants who were challenged with English.

Key Informant Interview guides were administered to key personnel from WHO, MOHRSS, SMOH, PHCC, HPF, SRHD, CTSAMVM, UNMISS Headteachers, and church leaders.

Focus group discussions were held with some adolescents from churches and schools. All participants provided the data willingly after consenting to participate in the study.

### **2.10. Plan for Data Analysis:**

Data were entered using the Epi info 2002 software package and Excel master sheet and exported to the statistical package for social sciences version 20 for analysis. Bivariate correlation tests were used to check the relationship between the variables.

A tailed test using the Fisher Exact test was used to test the probability of the proportion at a 95% confidence interval. The chi-square test was employed to determine the association between variables at a significance threshold of  $P < 0.05$ .

Bivariate analysis was used to identify independent categorical factors that influence the utilization of ASRH services whereas multivariate analysis identified factors jointly influencing the utilization of adolescent SRH services.

Daily monitoring and supervision of the data collection by the principal investigator ensured quality control. The data collected was cross-checked at the end of each day and the necessary corrections were made.

### **2.11. Personal Data:**

Three research assistants with good knowledge of both English and the local language were recruited and trained to work with the PI during the study. The questionnaires and checklists were pre-tested before actual data collection and necessary changes were made.

### **2.12. Plan for Dissemination:**

This study was disseminated using the CDC (2015) guide. A dissemination plan is what helped a researcher get feedback on the results of the research whether it is a successful intervention or not (Alberta Mirambeau, 2015). In this study, the following were the key areas considered while conducting the research:

#### **2.12.1. Material:**

This included the nature of the data to be disseminated. In this case, the final research report was the material.

#### **2.12.2. Audience:**

The audience for this study was the NGOs, hospitals, peace monitors, and the community (churches and schools). After the approval of the research proposal, the ethical consideration process followed and then invitation letters were sent to the partners and respondents.

#### **2.12.3. Communication:**

The data was communicated through presentations and written products.

### **2.13. Ethical Issues:**

After a careful review of the research proposal by the Research Ethics Committee at Clarke International University, approval was issued to proceed with data collection. Application to MOHRERB for permission to conduct academic research in South Sudan was successfully approved. Approval to collect data was given by the MOH Research & Ethics Review Board in South Sudan. Informed consent from the respondents for the interview. Health education was given during fieldwork. Confidentiality was observed during data collection, storage, entry, analysis, and report writing and dissemination.

### **2.14. Risk Management Plan:**

The plan for risk management depended on the outcomes of the risk assessment. Since the current security situation in South Sudan is unpredictable, there was a possibility that fighting in South Sudan, including Juba was likely to re-occur. Therefore, the plan was to stop the data collection exercise as soon as the fighting starts. Data collection was safely conducted under strict adherence to South Sudan SOPs and IPC precautions.

### **2.15. Quality Control Measures:**

The following steps were taken to ensure the quality of the data.

1. Research team members were skilled with data collection techniques in both qualitative and quantitative skills, orientated on the objectives of the study, and trained in record taking and ethics before data collection. No payments were made to any participants. This helped a lot in minimizing biased data. In situations where a participant requested payments, that data was automatically excluded.

2. Day one of the orientation involved face-to-face talks and mock interviews. This was followed on day two with fieldwork to familiarize me with data collection tools to ensure the accuracy, consistency, uniformity, and validity of the dialogue.

1. Pre-testing the tools was done whereby; questionnaires, key informant guide, and FGD guide were pre-tested and refined according to the feedback generated from the pre-testing exercise before data collection started. This exercise validated the appropriateness of the tools whether it is too long or not, difficult or easy to understand, check for clarity of the questionnaire items, and eliminate ambiguity, difficult wording, or unacceptable questions. Research assistants were allowed to comment on the clarity of the questions and they were requested to make suggestions for improvement.

## **3. Results:**

### **3.1. Socio-cultural factors that influence the utilization of adolescent SRH services:**

The study assessed the socio-cultural factors influencing the utilization of SRH services in Tong Ping, South Sudan. Results in Table 3 revealed that 117(66.1%) compared to 60(33.9%) adolescents knew about the availability of adolescent counselling and SRH services in Tong Ping Juba Area, South Sudan.

45% of the participants reported that SRH services were accessible in Tong Ping Juba, South Sudan. Respondents were also asked about their

willingness to use SRH services. 68% of the adolescents in Tong Ping, Juba were willing to use SRH services as compared to only 32.0%. Findings are presented in Table 1 .

55% of the participants thought that early marriages and childbearing were influenced by cultural practices. The study also established that adolescent SRH services were non-discriminative. The findings revealed that 111(62.7%) compared to 66(37.3%) of the respondents felt that Adolescent SRH Services were non-discriminative in Tong Ping, Juba. Only 101(57.1%) of the participants reported that SRH were free in Tong Ping Juba and less than half (27.1%) of the parents in Tong Ping were willing to take their children to the adolescent/youth health services.

Regarding the volunteer use of adolescent SRH services, only 97(54.8%) of the respondents would volunteer to use the available adolescent SRH services. The results also revealed that 104(58.8%) of adolescents had received support to use the adolescent SRH services in Tong Ping Juba. 74% of the adolescent reported that it was safe to use adolescent health services in Tong Ping Juba area.

### **3.2. Socio-cultural Factors and the Level of influence on Utilization of adolescent SRH Services:**

The knowledge of the availability of AHS (p-value 0.030), willingness to use AHS when the need arises (p-value 0.035), non-service discrimination (p-value 0.040), and voluntary use of adolescent SRH services (p-value 0.003) were found to be associated with the utilization of Adolescent SRH Services in Tong Ping, Juba Area-South Sudan.

There was no association established between other socio-cultural factors and the utilization of adolescent SRH services among adolescents residing in Tong Ping Area Juba-South Sudan. These include; SRH accessibility (p-value 0.176), early marriage/childbearing (p-value 0.903), free services (p-value 0.142f), community safety (p-value 0.059), and parents taking younger adolescents to health services (p-value 0.349). these findings are presented in Table 2.

Table 1: Socio-cultural Influencers of SRH among adolescents of Tong Ping, South Sudan

Category	All 177, n (%)
<b>Had Knowledge of the availability of SRH services</b>	
Yes	117(66.1)
No	60(33.9)
<b>Accessibility of SRH in the Tong Ping community</b>	
Yes	81(45.8)
No	96(54.2)
<b>Willingness for adolescents to use these services</b>	
Yes	122(68.9)
No	55(31.1)
<b>Early marriages and child bearing influenced by cultural practices</b>	
Yes	98(55.4)
No	79(44.6)
<b>Adolescent SRH Services are non-discriminative</b>	
Yes	111(62.7)
No	66(37.3)
<b>Adolescent SRH Services are free of charge</b>	
Yes	101(57.1)
No	76(42.9)
<b>Parents taking their young adolescents to use the SRH services</b>	
Yes	48(27.1)
No	129(72.9)
<b>Adolescents volunteer to use the available adolescent SRH services</b>	
Yes	97(54.8)
No	80(45.2)
<b>Adolescents are supported to use SRH services by the community</b>	
Yes	104(58.8)
No	73(41.2)
<b>Safe to use adolescent SRH services in this community</b>	
Yes	132(74.6)
No	45(25.4)

#### 4. Discussion:

##### 4.1. Socio-cultural factors that influence the utilization of adolescent health services:

Although the majority of participants knew about the availability of SRH, Study findings revealed that the knowledge was insufficient for the utilization of the health services in Tong Ping, South Sudan. However much the MOHRSS has recognized and addressed maternal mortality, STIs, HIV/AIDS, and various SRHR issues, knowledge about the availability of adolescents'

needs and rights in their services has not been effectively communicated. This is evidenced by the study findings.

Interactions in the Focus Group Discussions indicated that South Sudan has a National Family Planning Health Policy (2013) which focuses on youths and adolescents as part of its objectives. The policy recommended the formulation of a national youth and adolescent reproductive health policy and strategy to ensure full access to quality and comprehensive youth-friendly reproductive health services, information, and protection,

Table 2: Socio-cultural factors and the influence on utilization of SRH health services.

Category	Utilized AHS in Tong Ping		$\chi^2$	p-value	OR(95% C.I)	p-value
	Yes n=82	No n=95				
<b>Had Knowledge about the availability of adolescent SRH services</b>						
Yes	61(52.1)	56(47.9)	4.684	0.030*	0.684(.329- 1.420)	.308
No	21(35.0)	39(65.0)			1	
<b>Accessible in the community?</b>						
Yes	42(51.9)	39(48.1)	1.833	0.176	0.839(.432- 1.628)	.604
No	40(41.7)	56(58.3)			1	
<b>Willingness for adolescents to use these services</b>						
Yes	63(51.6)	59(48.4)	4.455	0.035*	.676(.316- 1.443)	.311
No	19(34.5)	36(65.5)			1	
<b>Early marriages and child bearing influenced by cultural practices</b>						
Yes	45(45.9)	53(54.1)	0.015	0.903	.947(.496- 1.810)	.869
No	37(46.8)	42(53.2)			1	
<b>SRH Services are non-discriminative</b>						
Yes	58(52.3)	53(47.7)	4.202	0.040*	.747(.363- 1.536)	.427
No	24(36.4)	42(63.6)			1	
<b>SRH Services are free of charge</b>						

including FP information and services (MOHRSS, 2013). However, the study result indicates that the majority of respondents had experienced access challenges to adolescent health services.

The study agrees with Kubwimana, I. et al (2020) study which stated that adolescent health services could be available but inaccessible due to poor communication, lack of skilled health-care providers, or absence of healthcare facili-

ties within the Tong Ping area. While studying adolescent and youth health in Africa, Sr. Isabel (2019) noted that the high burden of HIV among adolescents and youth in Africa indicates that young people have limited access to the care and support they need to remain in good health and prevent transmission. During FGD meetings, several health policies, reproductive health SOPs, and other health guidelines were presented. How-

ever, these could not specify a clear road map for adolescent health care. This is one of the reasons why adolescent healthcare utilization is highly perceived as discriminative and costly.

Findings revealed that it is culturally unsafe to use adolescent health services. This agrees with the study conducted by Reajul and Kevin (2018) which indicated that getting pregnant at a young age before marriage is socially acceptable and an obvious proof of fertility to the communities otherwise one is considered infertile. It becomes socially insecure for a girl 13- 16 years not getting pregnant and yet considered sexually active.

## 5. Limitations:

Few studies have been made on the utilization of adolescent SRH services in South Sudan. There were no previous studies made on Utilization in the Tong Ping area. This made it difficult for this study to compare notes.

This study only focused on the utilization of adolescent sexual reproductive services in the Tong Ping area, therefore it may not apply to other parts of South Sudan.

Due to the current climate change around the globe, the hardest-to-reach parts of South Sudan have been affected. For example; it was very difficult to travel within the Tong Ping area by road due to heavy rains and floods.

The unpredictable security situation in South Sudan made it difficult for this study to take place. For example, there were frequent irregular roadblocks manned by people in casual wear, requesting travel documents and work permits. There were a couple of gun sounds heard within Tong Ping.

The lost trust among the communities and government led to the denial of access and data collection.

Due to the humanitarian crisis in South Sudan, most participants requested incentives to provide data.

COVID-19 Infection Prevention and Control precautions and Standard Operating Procedures involving travel and social gatherings hindered

the planned interaction with the target population. For example, wearing a mask while interacting with communities that do not embrace masks led the communities to discriminate against the data team. Team members who failed to shake hands were less welcome by some communities.

## 6. Acknowledgement:

The completion of this study could not have been possible without the expertise of Prof. John Charles Okiria, my research supervisor who worked tirelessly to see me produce an outstanding research report, by correcting my mistakes and giving correct procedures to use during the study.

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## 7. List of Abbreviations:

ASRH: Adolescent Sexual Reproductive Health  
FGD: Focus Group Discussion  
HIV: Human Immune Virus  
MOHRSS: Ministry of Health Republic of South Sudan  
STIs: Sexually Transmitted Diseases  
SRH: Sexual Reproductive Health  
RMNCAH: Reproductive Maternal Neonatal Child and Adolescent Health  
WHO: World Health Organization

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## Author biography

**Noelah Nanzira**, the founder of Mariana Medical Center was Born in 1983 in a village called Ki-

wuliliza. And later, her family moved to Buziga-Katuuso where she spent the rest of her life with her mother Josephine Nakivumbi, and father the late Kigongo Samuel.

Noelah is inspired by her children and close family. She spends almost half of her lifetime teaching and mentoring others especially those who are less privileged and vulnerable groups. She recently took a passionate job lecturing at Destiny University College of Juba.

Education:

Clarke international University MScPH (2023)

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Nsambya School of Nursing and Midwifery RN (2008)