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Sustainability of Maternal Healthcare Services Delivery in a Conflict Stricken Environment: A Case Study of Yei Town, South Sudan

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Abstract

During war and in the post-conflict period, maternal mortality rate tends to remain high because of damaged clinical facilities and lack of health workers in armed conflict-stricken environments. This research offered a commentary and opportunity to understand the sustainability mechanisms used in delivery of maternal healthcare services in a conflict-stricken environment, specifically, South Sudan. The study adopted a descriptive research design and targeted community health workers and Yei community leaders, totaling to 80, who witnessed vicious cycles of conflicts for three decades in Yei. A mixed methodology was adopted where both quantitative and qualitative data was collected through questionnaires and focus group discussion. The data was analyzed through thematic, descriptive and inferential statistics. The study results indicated that none of the mechanisms deployed had a significant impact on sustainability of maternal healthcare in Yei Municipality ($\chi2$= 0.636, P = 0.585). In regard to the state of healthcare facilities, it was ascertained that the current number of staff ($\chi2$= 12.109, P = 0.003), ambulances ($\chi2$= 16.577, P = 0.000) and supply of electricity ($\chi2$= 15.609, P = 0.001) had a significant relationship with the sustainability of maternal healthcare (Accessible, adaptable and Affordable). The study further established that community-based organizations ($\chi2$= 9.553, P = 0.04), health workforce ($\chi2$= 13.918, P = 0.001) and civil organizations ($\chi2$= 12.109, P = 0.003) have a significant relationship with sustainability of maternal healthcare services delivery in Yei Municipality. The study recommended a need for investment in development of effective mechanisms to have a sustainable maternal healthcare. There is a need to improve the poor state of healthcare facilities in order to lead to sustainable maternal healthcare in Yei Municipality. The study recommended the local administration of Yei town, together with the federal and state government to come up with programmes as well as invest

towards improvement of the security in the town in order to make it easy for the women to access maternal healthcare.

Keywords: *Sustainability of Maternal Healthcare, Conflict-Stricken area, South Sudan*

1.1 BACKGROUND

In a conflict-stricken setting, it has been reasoned that maternal mortality can be a good measure of health services availability. Armed conflict-affected states often have among the worst indicators of maternal mortality of any countries in the world (Mendeley 2012). During war and in the post-conflict period, maternal mortality tends to remain at wartime levels, or even increases because of damaged clinical facilities and lack of health workers (Rubenstein, 2009). South Sudan has been in conflict for a better part since the year 1956 when Sudan gained independence. The result has been loss of about 2M people and displacement of more than double that number. A UNFPA (2006) survey documented a huge low maternal health status among women in this state mainly attributed to conflict. Conflict has negatively affected social determinants of health as argued by Faramand and Carballo (2006). Going by statistics, the country faces one of the lowest health statuses in the world as a result of massive deterioration for the last 50 years (Macklin, 2003). A SHHS (2006) report for the country showed that per 100000 lives, 2054 face maternal mortality, 102 out of 1000 lives at birth face infant mortality while 51 out of 100 face neonatal death. The situation is worse especially because of low control of reproductive decisions by women in South Sudan (Macklin, 2003; Jok, 1999; Faramand & Carballo, 2006).

Health services in South Sudan were already overwhelmed and poorly developed prior to conflicts, and got worse in the decades that followed. At the moment, this critical service is largely being administered by not for profit local and international organizations. The available facilities experience low capacity to operate, inadequate number of attendees and equipment in poor state. They are also surrounded by lack of roads and electricity as well as insecurity concerns (McGinn *et al*., 2011; Rietveld *et al*., 2006). To reduce supply-side barriers, international organizations provide about 70% of the health services in South Sudan (Michael *et al*., 2007). Yei town, one historical town situated in Central Equatorial State, south west of Juba city in South Sudan has been devastated by series conflicts due to its proximity to DRC and Uganda borders'. The vicious cycle of conflict since 1960s has negatively impacted on overall health services provision and other socio-economic activities (Downie, 2012).

One of the single most vital public health concerns that South Sudan faces is maternal mortality. Here, statistics reveal that a child has 3 more odds to die at birth than entering grade eight (Mgawadere *et al*. 2016). Girl child's development and education in South Sudan has been laden by early marriages. A WHO (2015) report revealed that one of the most abandoned health issues globally is maternal mortality. Data from the report showed that by the year 2003, Maternal Mortality Rate (MMR) in South Sudan was one thousand per a hundred thousand births but in the year 2013, it was seven hundred and thirty per a hundred thousand births. Despite the decrease, the rate is still alarming. The problem has been exacerbated by insecurity issues, inadequacy of competent staff, weak healthcare system and high rate of HIV. The odds of an average woman in the country dying in the process of giving birth stands at 1 out of 7. As a result, there was need to

interrogate the sustainability mechanisms used in delivery of maternal healthcare services in a conflict-stricken environment.

2.1 SUSTAINABILITY OF MATERNAL HEALTHCARE SERVICES IN A CONFLICT STRICKEN ENVIRONMENT

Bhandari, Sarma and Kutty (2015) interrogated the use of maternal health care services in Nepal after conflict and observed that in the conflict period, there was sustainable consumption of healthcare (antenatal care, delivery care, and postnatal care). This was mainly because the Nepalese government forced all health professionals back to duty and keep it posted on any war related injuries they had treated. Haar and Rubenstein (2012) on the other hand indicated that due to the legacy of conflict on the society and infrastructure, health in a fragile state is handicapped. In concurrence, Wyeth (2012) argued that during the period of war, maternal mortality greatly surged. In addition, girls and children, who seldom protect themselves, are at risk in such an environment. Those who are pregnant are likely to die from complications which may arise during pregnancy or during giving birth (Punamaki *et al*. 2018).

Chukwuma and Ekhator-Mobayode (2019) interrogated the consumption of maternal healthcare in a conflict-stricken area taking a case of Boko Haram insurgency in Nigeria. It was revealed unsustainable usage of healthcare in a conflict area. Gopalan, Silverwood, Salman and Howard (2019) also demonstrated that sustainable utilization of healthcare was not associated with conflicts at all in Egypt. On the contrary, Namasivayam et al. (2017) highlighted that in Uganda, the use of healthcare services in conflict-stricken areas was not sustainable. For the case of Zimbabwe, Bernstein (2018) highlighted that conflict did not affect sustainable utilization of healthcare services as shown by the figures of antenatal appointments, timing, utilization of skilled antenatal provider and delivery in a health facility. In South Sudan, Mugo *et al*. (2015) demonstrated that after the conflict, the region still faced drawbacks in delivery of maternal healthcare. This was due to displacements, destroyed infrastructure as well as government and human resource incapacitation. This is a view which Roberts *et al*. (2010) agreed with.

3.1 MATERNAL HEALTHCARE SERVICES IN SOUTH SUDAN

Based on the interrogation by Mugo *et al* (2018), South Sudan's healthcare system is a shamble. The system was already fragile before the war and after the war, devastations are unthinkable. The war caused a toll on 50 percent of the facilities which were destroyed. Political instability and insecurity add to the woes thus making access to health facilities an imagination and not a reality. The decades of war have had a toll on the systems which were already incapacitated. Even those facilities that survived the war are already not functional and those which are functional, face serious shortages of staff as well as operational efficiency. Shockingly, even if they were fully operational, insecurity and lack of roads would still hinder accessibility (Mugo *et al*, 2018). The depth of maternal healthcare setbacks in the country is immense. For instance, going by statistics, the MMR ratio is 2054 deaths per 100000 people, IMR is 102 deaths per 1000 births and for neonatal, its 51 deaths per 1000 births (SHHS, 2006). To exacerbate the scenario, women in this country have less control on matters reproductive (Macklin, 2003). As a national obligation, the war placed a huge responsibility on women to reproduce to replenish the already depleted population with no consideration of their health (Faramand & Carballo, 2006).

Other indicators demonstrate low consumption of antenatal care from qualified staff standing at 23 percent, deliveries headed by qualified personnel are also low at 10 percent as well as low rate

of accessing CS services at 2.2 percent. Reports also show increased rate of complications such as prolonged labour which occurs among 45 percent of women, infections which occurs among 49 percent of women and hemorrhage among 42 percent of women (SHHS, 2006). The utilization rate of family planning methods among women in South Sudan is less than 1.7%, and the most common method is the lactation amenorrhea method (LAM) (McGinn *et al.,* 2011). By the year 2006, in the larger Sudan, current and South combined, only a third of the women accessed antenatal care, 12.7 percent got it from a nurse or midwife while 14.5 percent had a traditional attendant at birth. Isolating South Sudan, only 9.8 percent of women received ANC (GoSS MoH & Southern Sudan Commission for Census, 2007). Four years later in the year 2010, only 40.3 percent of the women in South Sudan accessed ANC from skilled personnel but didn't meet the recommended number of 4 visits (MoH & National Bureau of Statistics, 2013).

4.1 RESEARCH METHODOLOGY

The study adopted a descriptive study design combining both qualitative and quantitative methods. The research design was suitable in providing an in-depth analysis of the sustainability of mechanisms of maternal healthcare services delivery in conflict settings. The target population was health officers of different levels/categories and Yei community leaders who witnessed vicious cycles of conflict in Yei and had opportunity to work or be involved in healthcare services delivery or coordination of such. In total, 40 health officers such as TBA and CHW, Yei PHCC ANC staff and Yei hospital maternity ward staff and ANC staff and 40 Yei community leaders term serving health workers in Yei municipality community were targeted. In total, 80 respondents were targeted. This target population was purposively sampled and to determine the respondents, snowballing was adopted where respondents referred others. The study adopted both questionnaires and FGDs to collect both quantitative and qualitative data. A total of 2 FGDs comprising of 4 members each were conducted. Qualitative data was collected through FGDs. A total of 4 randomly sampled community health workers of different levels and specialized department staff (Maternity ward staff and ANC staff) as well as 4 randomly sampled community leaders participated in the FGD. The methods of analysis were therefore both qualitative and quantitative.

5.1 RESEARCH FINDINGS AND DISCUSSION

This study targeted 40 health officers and 40 Yei community leaders and out of the number of questionnaires issued, 37 community health care workers and 40 community leaders responded to the questionnaires effectively. Additionally, 8 targeted respondents for the FGDs participated in the study yielding to an overall response rate of 96.6%.

Sustainability of Maternal Healthcare Services in Yei town

The sustainability of Maternal Healthcare Services Delivery in Conflict-Stricken Settings, specifically Yei Municipality was interrogated. The study results are as presented in Table 1.

Table 1: Sustainability of Maternal Healthcare Services

Indicators	Category	Response f (%)
Perception of Community Leaders		
Accessible, Adaptable and Affordable healthcare	Yes	10 (25%)
	No	30 (75%)
Supplies of drugs & medical equipment to the health facility	INGOs	30 (75%)
	UN	10 (25%)
Means used to Transport Medical Supplies	Vehicles	37 (92.5%)
	Motor Cycle	3 (7.5%)
Consistency in medical supplies	Yes	4 (10%)
	No	36 (90%)
Perception of Community Health Workers		
Accessible, Adaptable and Affordable healthcare	Yes	10 (27%)
	No	27 (73%)
Supplies of drugs & medical equipment to the health facility	INGOs	19 (51.4%)
	UN	15 (40.5%)
	Churches	3 (8.1%)
Means used to Transport Medical Supplies	Vehicles	36 (94.6%)
	Motor Cycle	2 (5.4%)
Consistency in medical supplies	Yes	2 (5.4%)
	No	35 (94.6%)

The results presented in Table 1 demonstrated that majority of the community leaders (75%) as well as community health workers (73%) indicated that the maternal healthcare services in the town were not accessible, adaptable and affordable healthcare. This implies that they were not sustainable. Additionally, a similar number of community leaders and 51.4% of the community health workers indicated that most of the drugs were supplied by INGOs. The role of the state in supply of drugs and medical equipment was very insignificant. The main transport method for the drugs according to 37 (92.5%) of the respondent's community leaders and 94.6% of the community health workers was vehicles. However, both respondents agreed that the supply of the drugs and medical equipment was not consistent. This demonstrated that maternal healthcare in a conflict-stricken environment of Yei Municipality was fragile and not sustainable. The findings are consistent with that of Borghi *et al*. (2006) who indicated that healthcare costs, associated with the fees, transport as well as costs of medicines in S. Sudan remain a fundamental challenge to receiving healthcare

In addition, the study sought to find out the maternal outcomes in Yei Municipality from the community health workers and the results are shown in Table 2.

Table 2: Perception of Community Health Workers on the Maternal Outcomes

Maternal Outcomes	Category	Response f (%)
Obstetric hemorrhage	Yes	37 (100%)
Postpartum hemorrhage	Yes	37 (100%)
Hysterectomy	Yes	37 (100%)
Renal failure	Yes	37 (100%)
Preeclampsia	Yes	35 (94.6%)
	No	2 (5.4%)

The results presented in Table 2 indicates that all the respondents agreed that at some point, cases of Obstetric hemorrhage, Postpartum hemorrhage, Hysterectomy and Renal failure have been experienced by women in the area. In addition, 35 (94.6%) of the community healthcare workers agreed that cases of Preeclampsia have been experienced. This demonstrates that women in Yei Municipality experiences high cases of negative maternal outcomes which can be linked to unsustainable maternal healthcare earlier demonstrated. This is consistent with the findings of Wyeth (2012) who argued that during the period of war, maternal mortality greatly surged and pregnant are likely to experience various forms of complications.

Mechanisms deployed to Sustain Provision of Maternal Healthcare Services

The study sought to examine the mechanisms deployed to sustain provision of maternal healthcare and the results are presented in Table 3

Table 3: Mechanisms deployed to Sustain Provision of Maternal Healthcare

Mechanisms deployed	Category	Response f (%)	Chi-Square test
Effective health resource tracking	Yes	2 (4.7%)	($\chi2$ = 0.636, P = 0.585)
	No	35 (95.3%)	
Performance based incentives for health workforce	Yes	2 (4.7%)	
	No	35 (95.3%)	
Effective health governance systems	Yes	2 (4.7%)	
	No	35 (95.3%)	
Sustainability planning	Yes	2 (4.7%)	
	No	35 (95.3%)	
Workforce capacity building	Yes	2 (4.7%)	
	No	35 (95.3%)	
Health delivery monitoring and evaluation	Yes	2 (4.7%)	
	No	35 (95.3%)	

The results presented in Table 3 indicate that majority of the community healthcare workers, 35 (95.3%) felt that health resource tracking was not effective, there was no performance-based incentives for health workforce, health governance systems were not effective, sustainability planning was lacking, workforce capacity building was absent and health delivery monitoring and evaluation was equally absent. The Chi-square test results indicated that the existing health resource tracking, performance-based incentives for health workforce, health governance systems,

sustainability planning, workforce capacity building and health delivery monitoring and evaluation mechanisms deployed in Yei Municipality are not sufficient to significantly impact sustainability of maternal healthcare in terms of delivery of accessible, affordable and adaptable in a significant manner ($\chi 2 = 0.636$, $P = 0.585$). Its impact is insignificant.

This implies that there is a need for investment in development of these mechanisms in order to have a significant impact on sustainability of maternal healthcare. This is because the available Health Resource Tracking is insufficient to have a significant impact on maternal healthcare, the performance Based Incentives for Health Workforce are insufficient to have a significant impact on maternal healthcare, the current Health Governance Systems are ineffective to have a significant impact on maternal healthcare, the existing Sustainability Planning framework is ineffective to have to a significant impact on maternal healthcare, the current workforce Capacity Building programmes are insufficient to have a significant impact on maternal healthcare, and the existing Health Delivery Monitoring and Evaluation is ineffective to have a significant impact on maternal healthcare. The findings imply that the healthcare actors in Yei Municipality have not effectively deployed practices to sustain provision of maternal healthcare services. These findings confirm that of Mugo *et al* (2018) who indicated that South Sudan's healthcare system is a shamble and the decades of war have had a toll on the systems which were already incapacitated. Little efforts were geared towards improving the situation and most of the mechanisms advanced towards rebuilding have been slow.

State of Health Facilities for provision of Maternal Healthcare Services

The study also determined the state of health facilities for provision of maternal healthcare services in a conflict-stricken environment. The summarized results of state of healthcare facilities for provision of maternal healthcare services is depicted in Table 4

Table 4: State of Healthcare Facilities for provision of Maternal Healthcare Services

Factor	Response f (%)		Chi-Square test
	Yes	**No**	
Perception of Community Healthcare Workers			
Adequacy Staff	4 (10.8%)	33 (89.2%)	($\chi2$= 12.109, P = 0.003)
Adequacy Drugs	1 (2.7%)	36 (97.3%)	($\chi2$= 0.381, P = 0.730)
Availability Ambulances	11 (29.7%)	26 (70.3%)	($\chi2$= 16.577, P = 0.001)
Availability Electricity	5 (13.5%)	32 (86.5%)	($\chi2$= 15.609, P = 0.001)
Availability Water	16 (43.2%)	21 (56.8%)	($\chi2$= 1.568, P = 0.190)
Availability Security	10 (27%)	27 (73%)	($\chi2$= 1.169, P = 0.248)
	Fair	**Good**	
Infrastructure Conditions	34 (91.9%)	3 (8.1%)	($\chi2$= 2.601, P = 1.72)
Perception of Community Leaders			
Statement	**Yes**	**No**	
Whether the healthcare facility in good condition	6 (15.00%)	34 (85.00%)	($\chi2$= 2.353, P = 0.125)
Whether the healthcare facility accessible to people with disabilities?	35 (87.50%)	5 (12.50%)	($\chi2$= 1.905, P = 0.168)
Whether the healthcare have sufficient lighting	5 (12.50%)	35 (87.50%)	($\chi2$= 0.686, P = 0.408)
Whether the healthcare have sufficient essential medicines	2 (5.00%)	38 (95.00%)	($\chi2$= 0.702, P = 0.402)
Whether the healthcare facility have sufficient physical infrastructure	4 (10.00%)	36 (90.00%)	($\chi2$= 1.481, P = 0.224)
Whether the infrastructure available (if any) functional	24 (60.00%)	16 (40.00%)	($\chi2$= 2.222, P = 0.136)

The results in Table 4 indicate that majority of the community health workers 89.2%, indicated that the staff is not adequate, 97.3% said that the drugs were not adequate, 91.9% showed that the infrastructure conditions was fair and 70.3% agreed that that the ambulances were not available nor adequate. In addition, 86.5% of the community health workers showed that electricity was not available in the healthcare facilities, 56.8% indicated that the facilities didn't have water and 73% indicated that the security was not available in the facilities. Furthermore, majority of the community leaders (85%) rated the healthcare facilities in the area as in poor state, 87.5% of them also felt that they have insufficient lights, 95% stated that it has inadequate essential medicines and physical infrastructure as shown by 90%. The few existing infrastructure was partly functional as agreed by 60% of the leaders. Generally, it can be indicated that the state of healthcare facilities in Yei Municipality was poor marred by inadequacy of staff, drugs, ambulance, water, poor security, and infrastructure state. These findings are consistent with that of Haar and Rubenstein (2012) who demonstrated that that due to the legacy of conflict on the society and infrastructure, health in a fragile state is handicapped. The fragile states after war have both political and economic instability as well as low workforce which lead to low chances of stabilizing healthcare.

Furthermore, the relationship between the state of healthcare facilities and sustainability of maternal healthcare (Accessible, adaptable and Affordable) was established through Chi-square

tests. The results showed that the current number of staff ($\chi2$= 12.109, P = 0.003), ambulances ($\chi2$= 16.577, P = 0.000) and supply of electricity ($\chi2$= 15.609, P = 0.001) had a significant relationship with the sustainability of maternal healthcare (Accessible, adaptable and Affordable). However, the current drugs supply is not adequate to lead sustainable maternal healthcare, infrastructure conditions are poor to lead sustainable maternal healthcare, the available water is not sufficient to lead sustainable maternal healthcare and the existing security level is not adequate to lead sustainable maternal healthcare. Similarly, the condition and accessibility of the healthcare facility to people with disability, availability of sufficient lighting, essential medicines and physical infrastructure as well as functionality of the available infrastructure were not sufficient to lead to sustainable maternal healthcare. This therefore calls for a need to improve the poor state of healthcare facilities in order to lead to sustainable maternal healthcare in Yei Municipality.

Actors involved in Sustainability of Maternal Healthcare Services Delivery

The study also gained an in-depth understanding of actors involved in sustainability of maternal healthcare services delivery in conflict-stricken settings. Both health workers and community leaders responded to the same questions as shown in Table 5.

Table 5: Actors involved in Sustainability of Maternal Healthcare Services Delivery

Actor	**Category**	**Response f (%)**	
Federal Government	Yes	7 (9.3%)	($\chi2$= 1.472, P = 0.479)
	No	70 (90.7%)	
State Government	No	77 (100%)	($\chi2$= 0.911, P = 0.613)
Healthcare Workforce	Yes	39 (51.2%)	**($\chi2$= 13.918, P = 0.001)**
	No	38 (48.8%)	
Community Based Organizations	Yes	73 (95.3%)	**($\chi2$= 9.553, P = 0.04)**
	No	4 (4.7%)	
Civil Organizations	Yes	73 (95.3%)	**($\chi2$= 12.109, P = 0.003)**
	No	4 (4.7%)	

The study outcome presented in Table 9 indicate that majority of the respondents, 70 (90.7%), indicated that the federal government does not actively participate in provision of maternal healthcare services, all the respondents indicated that state government doesn't not participate at all, 39 (51.2%) indicated that the healthcare workers were active, 73 (95.3%) indicated that the Community-based organizations and civil organizations were active. The main actors in provision of maternal healthcare services in Yei Municipality were healthcare workers, community-based organizations and civil organizations but the state and federal government were less active. These findings confirm that of Mugo *et al* (2018) who indicated that most of the efforts to improve South Sudan's healthcare system overtime has been directed by the INGOs and CBOs and the government has played little role in the process.

The relationship between the actors and sustainability of maternal healthcare services delivery was also determined. It was determined that community-based organizations ($\chi2$= 9.553, P = 0.04), health workforce ($\chi2$= 13.918, P = 0.001) and civil organizations ($\chi2$= 12.109, P = 0.003) have a significant relationship with sustainability of maternal healthcare services delivery in Yei Municipality. This implies that the role being played by community-based organizations, health

workforce and civil organizations leads to achievement of sustainability of maternal healthcare services delivery in Yei Municipality. The role of state and federal governments in South Sudan is insignificant in impacting sustainability of maternal healthcare services delivery in Yei in a significant manner. This calls for an improvement in their roles through dedication of more resources to healthcare in the municipality.

6.1 CONCLUSION

The study concluded that the healthcare actors in Yei Municipality have not effectively deployed practices to sustain provision of maternal healthcare services. The available Health Resource Tracking in Yei Municipality is insufficient to have a significant impact on maternal healthcare, the performance-based incentives for Health Workforce are insufficient to have a significant impact on maternal healthcare, the current Health Governance Systems are ineffective to have a significant impact on maternal healthcare, the existing Sustainability Planning framework is ineffective to have to a significant impact on maternal healthcare, the current workforce Capacity Building programmes are insufficient to have a significant impact on maternal healthcare, and the existing Health Delivery Monitoring and Evaluation is ineffective to have a significant impact on maternal healthcare. Another conclusion is that the state of healthcare facilities in Yei Municipality was poor marred by inadequacy of staff, drugs, ambulance, water, poor security, and infrastructure state.

In addition, the current drugs supply is not adequate to lead sustainable maternal healthcare, infrastructure conditions are poor to lead sustainable maternal healthcare, the available water is not sufficient to lead sustainable maternal healthcare and the existing security level is not adequate to lead sustainable maternal healthcare. In regard to actors involved in sustainability of maternal healthcare service provision, the study concludes that the role being played by community-based organizations, health workforce and civil organizations leads to achievement of sustainability of maternal healthcare services delivery in Yei Municipality while the role of state and federal governments in South Sudan is insignificant in impacting sustainability of maternal healthcare services delivery in Yei in a significant manner.

7.1 RECOMMENDATIONS

The study recommended there is a need for investment in development of effective mechanisms in order to have a sustainable maternal healthcare. The government and not-for profit organizations need to invest towards building of a strong Health Resource, enhancing the performance-based incentives for Health Workforce, development of stronger and effective Health Governance Systems, revising and improving the existing Sustainability Planning framework, revising and improving the current workforce Capacity Building programmes as well as revising and improving the current Health Delivery Monitoring and Evaluation framework. There is a need to improve the poor state of healthcare facilities in order to lead to sustainable maternal healthcare in Yei Municipality. Specifically, the healthcare service providers need to put in place mechanisms and invest more towards increasing the supply of drugs, improving the infrastructure conditions, increasing the supply of water, improving the security level and stabilizing provision of electricity.

The study recommended the local administration of Yei town, together with the federal and state government to come up with programmes as well as invest towards improvement of the security in the town in order to make it easy for the women to access maternal healthcare. This is because

women currently reflect low uptake of maternal healthcare services and most of deliveries take place at home due to conflicts. Given that the role of state and federal governments in South Sudan in provision of maternal healthcare services is insignificant in impacting sustainability of maternal healthcare services delivery in Yei in a significant manner, the study recommended these two actors to improve their roles through dedication of more resources to healthcare in the municipality.

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