

# ASSOCIATION BETWEEN GENDER-BASED VIOLENCE, WOMEN'S EMPOWERMENT, AND INSTITUTIONAL DELIVERY AMONG CURRENTLY MARRIED YOUNG WOMEN IN SUB-SAHARAN AFRICA

Akor Blessing O.<sup>1</sup> and Adedini Sunday A.<sup>2</sup>

1. University of Abuja Teaching Hospital Gwagwalada, FCT, Nigeria

2. Department of Demography and Social Statistics, Faculty of Social Science, Federal University Oye-Ekiti, Nigeria

## Corresponding author

Akor Blessing O.

University of Abuja Teaching Hospital Gwagwalada, FCT, Nigeria

blessingaj@yahoo.com

## ABSTRACT

**Background:** The age group designated as young people- that is from 10-24 years of age is a transition period during which young people experience a variety of changes that influence their needs, identities and behaviour. Gender-based violence (GBV) is an important public health problem. When combined with a lack of empowerment in women, it could severely constrain decision-making on critical issues such as health care seeking among women. This study examined the influence of GBV and women's empowerment, on institutional delivery among currently married young women in sub-Saharan Africa. **Methods:** Secondary data from the latest (2017-date) Demographic and Health Surveys from 11 Sub-Saharan African countries was used. Currently married young women from age 15-24 years were selected giving a sample size of 22,247. However, only 8621 respondents were interviewed for violence.

**Results:** The results showed the prevalence of GBV to be 35.4%. Less than one fifth of the women were empowered. About 41.9% delivered in a health institution. Binary logistic regression was used to determine how GBV and women's empowerment predict institutional delivery. A statistically significant relationship was seen between emotional and Physical GBV ( $p=0.002$ ,  $OR=0.854$ , 95% CI of 0.774-0.942) and ( $p<.001$ ,  $OR=0.724$ , 95% CI of 0.638-0.820) respectively. There was no significant association between sexual GBV and institutional delivery ( $p=0.127$ ,  $OR=1.198$ , 95% CI of 0.950-1.510). Total GBV was inversely related to institutional delivery ( $p<.001$ ,  $OR=0.788$ , and 95%CI of 0.719-0.865). The odds of delivering in an institution was twice higher among empowered women ( $p<0.001$ ,  $OR=2.029$ , 1.751-2.350).

**Conclusion:** The prevalence of GBV is still high in sub-Saharan Africa, and the proportion of empowered young women is alarmingly low putting them more at risk of gender-based violence. These two parameters have a significant influence on institutional delivery which has been proven to be an essential tool for improving maternal and child health outcomes.

**Keywords:** Gender, Violence. Delivery, Empowerment, Women

## Introduction

The girl child has been described as an endangered species.<sup>1</sup> This description is because of the multiple psycho-social threats that confront her life at every stage of development. She is oftentimes the victim of gender-based violence.<sup>2,3</sup> This often leaves her with long-lasting morbidities and sometimes mortality.<sup>4</sup> Gender-based violence (GBV) has been described as the world's most pervasive yet least visible human rights violation. It includes physical, sexual, and emotional harm inflicted on a person because of socially ascribed power imbalances between males and females.<sup>5</sup> Several factors could predispose an individual to GBV. One of these factors is the age group

of the individual.

For instance, the age group designated as young people- that is from 10-24 years of age, and its subgroup age 15-24 years traditionally called the youth period,<sup>6</sup> is a transition period during which young people experience a variety of physical, cognitive, emotional, economic and social changes that influence their needs, identities, and behaviour as well as their opportunities.<sup>7</sup> It is the period when several choices (like education, career, and even marriage) that will eventually define the individual are made. These choices eventually make an individual able or unable to fit appropriately into the larger society.

For instance, the choice of marrying early sometimes

confronts these young people, particularly in Sub-Saharan Africa where the socio-cultural inclination of the nations places the girl-child in a vulnerable position.<sup>9</sup> Due to such cultural practices, early marriage or child marriage remains commonplace and a major challenge in the region.<sup>10</sup> Marrying early is usually at the expense of education or skill acquisition with resultant vulnerable and unempowered women, who are dependent on others for survival.

Empowerment gives the strength and ability to make informed choices that keep young people safe.<sup>7</sup> Empowerment is the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives.<sup>6</sup> Reproductive empowerment on the other hand stands as an entity on its own. It is defined as both a transformative process and an outcome whereby individuals expand their capacity to make informed decisions about their reproductive lives, amplify their ability to participate meaningfully in public and private discussions related to sexuality, reproductive health, and fertility and act on their preferences to achieved desired reproductive outcomes free from violence retribution or fear.<sup>11</sup> The core theory of change for sustainable adolescent and youth livelihoods,<sup>6</sup> submits that properly empowered youths will have the voice to express themselves, and the willpower to take well-informed and beneficial decisions concerning their lives and the society at large. This will culminate in the development of a sense of autonomy, purpose, and personal empowerment which in turn leads them to contribute to the common good of their community as both financial and active citizens.<sup>6</sup> This implies that, empowered young people are likely to be free from violence, independent to take care of themselves, and make informed decisions concerning their healthcare and other issues of interest. Decisions like utilization of maternal health services are easy to make in the setting of well-empowered young people.<sup>10</sup>

Maternal health services like institutional delivery has been described as a key and proven intervention that reduce maternal death.<sup>12</sup> It ensures safe birth, reduces both actual and potential complications, and increases the survival of mothers and their newborns<sup>12</sup> Young people generally have poor health-seeking behaviour. They are unlikely to seek healthcare where and when due.<sup>13</sup> Several studies have shown that utilization of maternal health services is particularly low among adolescents and young people especially in low- and middle-income countries.<sup>3,8,13,14</sup>

Some of the barriers to access and utilization of maternal health services in young people are the issues

of physical and sexual violence.<sup>15</sup> These have been shown to threaten their social entitlements and equal participation.<sup>15</sup> Gender-based violence impacts negatively across all domains of a victim's life. Survivors of gender-based violence suffer devastating short- and long-term consequences to their physical and mental health (such as depression, anxiety, post-traumatic stress disorder (PTSD), and suicidal thoughts).<sup>16</sup> These consequences could constrain their socio-economic empowerment and ability to make beneficial decisions pertaining to their health care. One major implication of GBV and poor women empowerment is the inability of the victim to make independent useful decisions regarding key aspects of their individual life.<sup>4,8</sup>

This poor socio-economic placement/ empowerment of the women oftentimes is responsible for the high maternal mortality.<sup>10,11</sup> Every year more than half a million women die from preventable complications caused by childbirth or from pregnancy-related issues, most of which occur in low- and middle-income countries.<sup>3</sup> Effective utilisation of delivery care services has also been associated with a nations socioeconomic development and said to be enhanced in societies that strengthen investments in human capital and issues such as education, health systems, socio-economic well-being, and free access to services without gender discrimination.<sup>3,17</sup> Institutional delivery has been identified as a critical step in reducing negative maternal and newborn outcomes.<sup>8,14,15</sup>

A few studies have tried to show the association between women empowerment and violence on utilization of maternal health services.<sup>3,4,8,11</sup> However, there is a paucity of studies on the role of gender-based violence and women empowerment on institutional delivery- which has been described as one of the key interventions to prevent maternal deaths.<sup>11</sup> Hence, this study aimed at exploring the role of the duo in the uptake of institutional delivery among young women aged 15-24 in sub-Saharan African.

## Methods

The study utilized data from the most recent Demographic and Health Surveys (DHS) from selected sub-Saharan Africa countries. All Saharan African countries that had recent data (from 2017 to date) that were relevant to the study were selected. A total of 11 countries met the selection criteria. These were Benin, Cameroun, Gambia, Liberia, Madagascar, Mali, Mauritania, Nigeria, Rwanda, Sierra Leone, and Zambia. The data from the selected country were merged into one file using SPSS software version 23. Young women from age 15-24 years that were currently married were then selected giving a sample size of 22,247 respondents. However, only 8621

respondents were interviewed for violence.

## Variable Measurements

### Dependent Variable

The dependent variable in this study was institutional delivery which was defined as delivery in a healthcare facility be it private or public. This was not directly captured in the DHS. Instead, the place of delivery was captured with 16 different responses as follows:

Home, Respondent home, other home, public sector, Government hospital, Government health centre, Government health post, Other public sector, Private sector, Private hospital, Private clinic, Other private sector, non-governmental organisations, non-governmental health facility, non-governmental other health facility and others.

These responses were recoded into two categories- as '1' institutional delivery which constituted all deliveries in a health facility whether government or private (Government hospital, Government health centre, Government health post, Private hospital, Private clinic, non-governmental health facility, and non-governmental other health facility) while all other responses (Home, Respondent home, other home, public sector, Other public sector, Private sector, Other private sector, non-governmental organisations, and others) were grouped, coded as '0' and named non-institutional delivery.

### Independent Variable

The key independent variable was Gender-based violence (GBV). This was not captured directly in the data. However, the different forms of GBV were captured. Emotional and sexual GBV had direct questions such as ever experienced any emotional violence and ever forced to perform unwanted sexual acts respectively. There was no direct question for physical GBV hence all the questions for different perpetrators of physical violence were summed up to get physical violence. The questions included mother, father, daughter, friend, son, current boyfriend, past boyfriend etc person who has ever physically hurt the respondent. To get the total prevalence of GBV, all those who experienced either of the three were summed up to get the total number of those who experienced GBV. The responses were dichotomised into '0' Never experienced or '1' experienced GBV.

The second explanatory variable which served as an intervening variable was- women empowerment. It was created by recoding three different variables which were:

Highest educational level which originally had '0' for no education, '1' for primary education, '2' for secondary education and '3' for higher education. Considering the respondents' age (15-24) it is expected they should be

in secondary school or higher. Hence, the variable was recoded as '0' primary and below, '1' secondary education and higher.

Respondent currently working was categorized as '0'- no (not working currently) and '1'- yes (currently working)

Person who decides on respondent healthcare: this variable had six different responses as follows '1'- Respondent alone, '2'- Respondent and husband/partner, '3' Respondent and another person '4' Husband/partner alone '5' Someone else '6' Others. This was recoded into '0'- Respondent not involved (4-6) and '1'- Respondent involved (1-3)

The three dichotomized variables were then summed up to create a new variable Women empowerment which was coded as '0'- Not empowered and '1'- Empowered.

## Statistical Analysis

The data was analysed using SPSS version 23. A sample size weight was created for the pooled data. The data was weighted to adjust for the under- or over-sampling of different strata in sample selection. The prevalence/pattern of GBV was determined by running a univariate analysis on the data to determine the frequency/percentage of each of the different forms of GBV. The proportion of empowered women was determined by carrying out a frequency analysis of women's empowerment. The proportion of women who had institutional delivery was also determined by running a univariate analysis. At the bivariate level chi-square test was used to determine the association between dependent and the independent variables. Binary logistic regression was used to determine how GBV and women empowerment predict the outcome- institutional delivery.

## Results

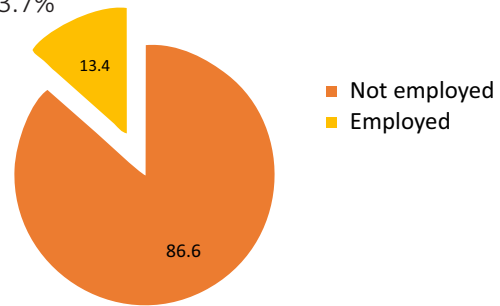
### Table 1: Sociodemographic characteristics of respondents

Table 1 is a summary of the sociodemographic characteristics of the respondents.

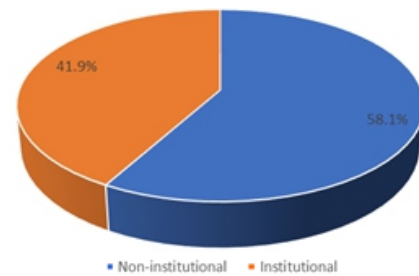
Respondents, from 20-24 years were 69.8%. 3/5(60%) of the respondents did not have age-appropriate education as they had only primary or no formal education. About half of the respondents (48.2%) were poor and 50.1% were not currently working. 56.6% of the respondents were not involved in healthcare decisions about themselves. 2/3 of them (69.4%) were rural residents. 58.1% of the respondents did not deliver in a healthcare institution while 7270(61.1%) were not currently working.

Variables	Frequency (n=22247)	Percentages (%)
<b>Age group</b>		
15-19	6712	30.2
20-24	15535	69.8
<b>Education</b>		
primary and below	15009	67.5
Secondary and above	7238	32.5
<b>Type of place of residence</b>		
Urban	6800	30.6
Rural	15447	69.4
<b>Health care decision</b>		
Involved	9661	43.4
Not involved	12586	56.6
<b>Currently working</b>		
Yes	11104	49.9
No	11143	50.1
<b>Religion</b>		
Christianity	6782	30.5
Islam	5727	25.7
Traditional	1084	4.9
Others	8655	38.9
<b>Wealth index</b>		
Poorest	5268	23.7
Poorer	5448	24.5
Middle	4694	21.1
Richer	4039	18.2
Richest	2798	12.5
<b>Institutional delivery</b>		
Yes	9318	41.9
No	12929	58.1

violence was experienced by 3.8% and physical violence was 13.7%



**Fig 3: Women empowerment**



**Fig 4: Institutional delivery**

Fig 4 shows the place of delivery of the women. 41.9% of the women delivered in a health institution.

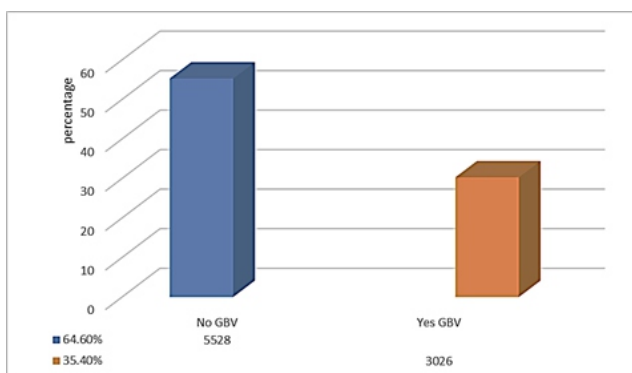
Table 2: Association between GBV, empowerment, and institutional delivery.

Table 2 shows the association between institutional delivery and the independent variables GBV and empowerment. There was a statistically significant relationship between the GBV and institutional delivery ( $\chi^2=31.402$ , p-value <0.001) empowerment was also statistically associated with institutional delivery ( $\chi^2=214.456$ , p-value <0.001)

Variables	Institutional delivery Freq (%)	No Institutional delivery. Freq (%)	Chi square ( $\chi^2$ )	p-value
<b>GBV</b>				
Yes	1523(50.3)	1503(49.7)	31.402	<0.001
No	2433(44.0)	3095(56.0)		
<b>Empowerment</b>				
Yes	816(29.2)	1976(70.8)	214.456	<0.001
No	7947(43.9)	10147(56.1)		

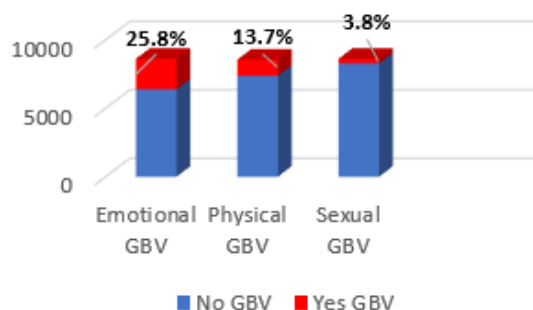
Table 3: Binary logistic regression model of predictors of institutional delivery

Table 3 below shows the predictors of institutional delivery. The results showed a statistically significant relationship between emotional and Physical GBV ( $P=0.002$ , OR= 0.854, 95% CI of 0.774-0.942) and ( $P<.001$ , OR=0.724, 95%CI of 0.638-0.820) respectively. Whereas there was no significant association between sexual GBV and institutional delivery ( $P=0.127$ , OR=1.198, 95% CI of 0.950-1.510). Total GBV was inversely related to institutional delivery



**Fig 1: prevalence of Gender-based violence**

N= 8,621. Figure 1 is a bar chart representing the proportion of young women with GBV. A total of 3026(35.4%) had experience GBV.



**Fig 2: Pattern of GBV**

N= 8,621 Figure 2 is a pictorial representation of the pattern of GBV. 25.8% had emotional violence, sexual

and the relationship was statistically significant ( $P < 0.001$ , OR = 0.788, and 95%CI of 0.719-0.865) The odds of delivering in an institution were 2 times significantly higher among women with more empowerment than those with less empowerment ( $P < 0.001$ , OR = 2.029, 1.751-2.350).

Independent variables	B (coefficient)	Sig.	Exp(B)- Odds ratio	95% CI for EXP(B)
Physical GBV	0.323	<0.001	0.724	0.638-0.820
Emotional GBV	0.158	0.002	0.854	0.774-0.942
Sexual GBV	-0.181	0.127	1.198	0.950-1.510
Total GBV	-0.254	<0.001	0.788	0.719-0.865
Empowerment	0.707	<0.001	2.029	1.751-2.350

## Discussion

This study set out to determine the association between GBV, women empowerment and institutional delivery in sub-Saharan Africa among currently married young women age 15-24 years.

Our study showed that more than one in three women experienced GBV. This was similar to the findings of UNICEF which reported that a third of women and girls in SSA were victims of violence.<sup>5</sup> A systematic review by Mulneh et, al gave a higher prevalence ranging from 42.3% to 67.7% in the same region.<sup>18</sup> This high prevalence could be attributable to methodological designs, or the socio-demographic profile of their study participants. The high prevalence of GBV in young people has been attributed to their increased vulnerability which often is a function of their lack of socio-economic independence.<sup>3</sup> In this study emotional violence was the commonest pattern of GBV occurring in approximately a quarter of the respondents while sexual violence was the least reported. These findings corroborate the findings of another study in Kenya among adolescents and young people.<sup>15</sup> In their study in eastern Nigeria, Chime et, al found that younger women below the age of 19 years were 23 times more likely to experience sexual violence than those greater than 40 years of age.<sup>20</sup> This buttresses the issue of vulnerability in young people. Young people are unlikely to be able to defend themselves both physically and psychologically, when faced with violence and could also be afraid to disclose violence hence empowering the perpetrators.

Only approximately one in 10 of the respondents were empowered. This partly could be attributed to the fact that the respondents were young people hence generally a dependent population. The indicators for empowerment in this study were highest educational qualification, current employment status, and

decision-making regarding healthcare. The majority of the respondents had no formal education or at best had just primary education. It was also observed that a significant proportion were not currently working and more than half of them were not involved in making decisions regarding their healthcare. These findings were similar to those in some other studies where lack of empowerment, poor social support, and low socioeconomic status were identified as predictors of gender-based violence.<sup>19-22</sup> The inability to make decisions concerning oneself will usually be a result of poor empowerment. Lack of resources especially finances will make one handicap in taking decisions even for their good. Hence lack of empowerment will naturally place individuals at a dependent and vulnerable position for violence.<sup>3,17</sup> In this study, women empowerment significantly predicted institutional delivery, the odds of delivery in an institution were twice more likely in empowered than unempowered women. This agrees with the theory of change which posits that properly empowered youths will have the voice to express themselves, and the willpower to make well-informed and logical decisions concerning their lives and the society at large.<sup>6</sup> About 2/3 of the respondents delivered outside a health institution. This finding was similar to findings in another study in Nepal which also reported 65% of deliveries at home.<sup>23</sup> A higher proportion of non-institutional delivery was even seen in a study in Ethiopia where 97% of rural women had home delivery.<sup>12</sup> The reason for this high percentage of home deliveries in the rural communities could be multiple ranging from lack of access to the health facilities to wrong myths regarding utilization of such facilities and even lack of finances. In this study, up-to a third of the respondents were urban dwellers and hence likely to have access to healthcare institutions which could explain the slightly better proportion of women delivering in healthcare institutions. Studies have shown that women's educational achievement, socioeconomic status, household economic status, and decision-making ability are linked with care seeking behaviour for maternal health care and thus a reduction in maternal mortality.<sup>3,10</sup> These indices were quite poor in this study as only about 1/3 had at least secondary education, approximately half of the respondents were poor and only one third were involved in taking decisions about their healthcare. This can explain why less than half of them delivered in an institution since less than a fifth of the respondents were empowered. Logistic regression was used to determine how gender-based violence and women empowerment predicted



institutional delivery. There was a statistically significant relationship between women empowerment and institutional delivery with a twice more likelihood of empowered women to have institutional delivery than the less empowered ones. This finding corroborates another study that determined the effect of different dimensions of empowerment (economic freedom, attitudes toward domestic violence, partner prohibitions, and decision-making) on reproductive health outcomes. It was discovered that the more empowered women utilized reproductive health services than their counterparts.<sup>15</sup> Another study in Ethiopia reported home delivery in 97% of women without formal education, and it reduced to 33% in those with higher education.<sup>11</sup> Utilisation of delivery care services have also been associated with socioeconomic development and said to be enhanced by societies that focus on general issues such as schooling, economic well-being, and gender-based discrimination.<sup>4,8</sup> GBV was significantly associated with institutional delivery, the coefficient of association was the negative direction implying that the possibility of delivery in an institution in GBV victims was unlikely. Though sexual violence had no statistically significant association with institutional delivery, emotional and physical violence were significantly associated with institutional delivery. While a lot of effort have been made to improve the quality of and access to health care services, the role of socioeconomic positioning of women on maternal health needs to be given a lot of attention. This will on the long run enhance the utilization of the healthcare services and achieve the desired goals of improved maternal and child health. Studies have shown that women's educational achievement, socioeconomic status, household economic status, and decision-making ability are linked with care seeking behaviour for maternal health care and thus a reduction in maternal mortality.<sup>7</sup>

In conclusion, the prevalence of GBV is still high in sub-Saharan Africa, and the proportion of empowered young women is alarmingly low putting them more at risk for gender-based violence. These two parameters have a significant influence on institutional delivery which has been proven to be an essential tool for improving maternal and child health outcomes. A lot of advocacy needs to be done especially in the area of empowering the girlchild if SDG goal 5-achieve gender equality and empower all women and girls, will be realized in sub-Saharan Africa.<sup>16</sup>

### **Ethical Approval**

The study utilized secondary data from the most recent

Demographic and Health Surveys (DHS) from selected sub-Saharan Africa countries. All Saharan African countries that had recent data (from 2017 to 2023) that were relevant to the study were selected. The DHS is a USAID funded project implemented by ICF, Ethical approval is gotten from the ICF IRB, host country IRB. The authors analysed the data using the terms of use and guide lines provided by the Data Repository. The Data was applied for and approval for use was granted.

### **Authors contribution**

Adedini SA did the conceptualisation, reading and supervision of manuscript, Akor B.O analysed and interpreted the data, and wrote the manuscript. Both authors read and approved the final manuscript.

### **Conflict of interest**

The authors declare no conflict of interest.

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