CORRELATES AND PREVALENCE OF FEMALE GENITAL MUTILATION IN MALI

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Abstract

Despite the declaration by WHO that female genital mutilation is a violation of human rights, Mali is amongst the 30 leading countries with the highest percentage of Female genital mutilation practice and acceptance. The study used secondary data sourced from Mali DHS conducted in 2012/13 and focused women aged between 15 and 49 years. 10424 women were surveyed and only 7704 were sure if they have or have not undergone female genital mutilation. Majority 5550 of the respondents have indicated that they have practice female genital mutilation. Based on bivariate analysis depicted that there no statistical association between female genital mutilation and age, type of place of residence, Marital Status and religion. The multivariate analysis pointed out that women who have practice female genital mutilation were more likely to refuse to have sex. In conclusion, female genital mutilation is a common and valuable practice in Mali however women needs to be empowered so that they can make an informed decision for their wellbeing.

Background

Female genital mutilation constitutes a violation of human rights, nevertheless, Mali out of the 30 countries is perceived as a leading country in terms of Female genital mutilation practice and acceptance. Globally, this practice is common practice in among 30 countries, and 200 million girls and women have experienced it (WHO; 2018). In Mali, 75 percentages of children and young (0-14 years) have endured female genital mutilation (UNICEF, 2018). Abdel-Azim (2013) demonstrated that one of the cultural and religious motives for justifying the practice of female genital mutilation in Mali is ensuring virginity before the marriage.

Female genital mutilation is defined by WHO (2018) as total removal of the female external genitalia or other injuries to the female genital organs for non-medical reasons. Female genital mutilation can be categorized into clitoridectomy (removal of part or all of the clitoris), excision (removing part or all of the clitoris and the inner labia), with or without removal of the labia majora and lastly, infibulation which is narrowing of the vaginal opening by creating a seal, formed by cutting and repositioning the labia (WHO 2018)

According to WHO (2018), the influence is brought by socio-cultural beliefs that if girls, as well as women, undergo female genital mutilation, they will be more conscious about the social being. Different studies have indicated that woman who experienced the procedure of female genital mutilation experience the high rate of pain, reduction of sexual satisfaction as

well as the desire for sexual intercourse and also causes the anxiety which ultimately results to depression (Berg and Denison, 2012; WHO,2018 and NHS 2018).

Study methods

Country perspective

Mali is located in interior Western Africa, South West of Algeria, north of Guinea, Cote d'Ivoire, and Burkina Faso, west of Niger and occupies a land of 1,240,192 square km (Central intelligence agency: 2018). According to the US Bureau of the Census cited by Central intelligence agency (2018), Mali has a total population of 18,429,893 million, 130 000 people living with HIV/AIDS. Like any other developing country, Mali has the highest number of children aged between 0 and 14 years accounting for 48.03% (male 4,449,790 female 4,402,076) (Central intelligence agency: 2018). Mali's economic growth depends mainly on gold mining and agricultural exports. The gross domestic product (GDP) was estimated at $41.22 billion in 2017 (Central intelligence agency: 2018).

Source of data

The data used for this paper was sourced from the 2012-2013 Mali Demographic and Health Survey published in 2015. The survey was conducted by INFO-STAT in collaboration with the Planning and Statistics Unit (CPS), Health Sector, Social Development and Family Promotion (SSDSPF), and the National Institute of Statistics (INSTAT), Ministry of Planning, Spatial Planning and Population (DHSM report 2012-2013).

According to Mali Demographic and health survey report (2012-2013), the main objective was to produce numerous socioeconomic, demographic, health and nutritional indicators at the level of the population and subpopulations of women aged 15-49, children under 5 and men of 15-59 years old. This paper, however, focused only on women aged 15-49.

Study variables

Female genital mutilation can be measure as clitoridectomy, excision, and infibulation. Clitoridectomy coded as flesh removed from a genital area in Mali DHS was in this study as a dependent variable. Independent variables included age, type of place of residence, Marital Status, Religion, the highest level of education, employment status, wealth index, refuse to have sex and decision-making about husband 'income.**Method of data analysis**

The data was analyzed using SPSS version 25, using univariate, bivariate and multivariate levels of measurement. The bivariate analysis specifically chi-square was used to measure the relationship between female genital mutilation and respondent characteristics. The last level of measurement used in the study is the binary logistic regression.

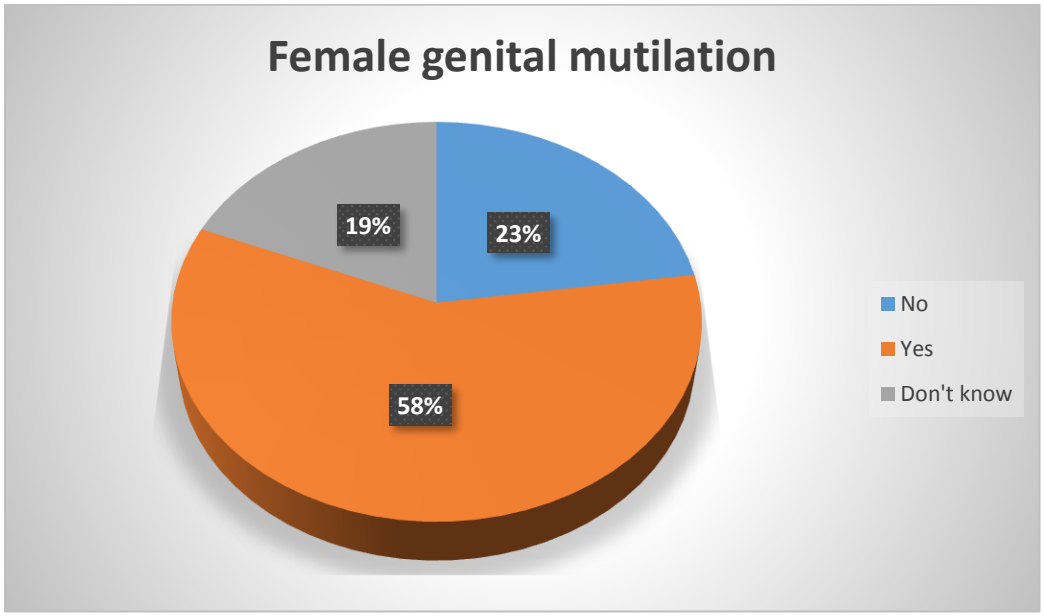
Results

Demographic and Socio-economic background of the studied population

The variables examined in this section are demographic, social and economic variables which one way or the other influence the decision to undergo female genital mutilation.

Female genital mutilation in Mali

Figure 1 gives a picture of a female genital mutilation practice in Mali. A total of 10424 women aged between 15 and 49 years were sampled. It can be observed that the majority (58) of women in this survey have undergone female genital mutilation. A possible explanation for such a huge number could be a cultural reason and societal value toward female genital mutilation.



Source: Mali DHS (2012/13)

Female genital mutilation and age.

Table 1 present the relationship between age group and Female Genital Mutilation practices in Mali. The study used individual data from Mali DHS, which has 7704 participants, who responded adequately to female genital mutilation. 5550 women indicated that they have experienced female genital mutilation. The age group that has practiced female genital mutilation is 25-29 years with 15%, followed by those between the ages of 15 and 19years, and 20-24 years with 13%. This means that female genital mutilation is mostly practiced by younger women. Age is however not statistically significant.

Table 1: Percentage distribution of female genital mutilation by age.

Age group	Female Genital Mutilation		Total	P-value
	No	Yes		
15-19	362	991	1353	
	4.7%	12.9%	17.6%	
20-24	391	988	1379	
	5.1%	12.8%	17.9%	
25-29	422	1138	1560	
	5.5%	14.8%	20.2%	0.671
30-34	347	875	1222	
	4.5%	11.4%	15.9%	
35-39	273	711	984	
	3.5%	9.2%	12.8%	
40-44	205	496	701	
	2.7%	6.4%	9.1%	
45-49	154	351	505	
	2.0%	4.6%	6.6%	
Total	2154	5550	7704	

Source: Mali DHS (2012/13)

Female genital mutilation and type of place of residence.

Table 2 depicts cross-tabulation and the significance level of women with Female genital mutilation and type of place of residence. About 50.4% of women in rural areas have experienced female genital mutilation as opposed to 21.6% for women in an urban area. The results showed a slight significant relationship between the type of place of residence and Female Genital Mutilation practices in Mali. The accessibility in information also plays an important role in limiting the female genital mutilation in urban areas, since majority of women and girls living in urban areas tend to be more exposed about the disadvantages of

practicing Female genital mutilation whereas rural women and girls tend to be less exposed and the intent is to gratify the social and cultural expectations within areas.

Table 2: Percentage distribution of female genital mutilation by type of place of resident

Type of place of resident	Female Genital Mutilation		Total	P-value
	No	Yes		
Urban	616	1667	2283	0.215
	8.0%	21.6%	29.6%	
Rural	1538	3883	5421	
	20.0%	50.4%	70.4%	
Total	2154	5550	7704	

Source: Mali DHS (2012/13)

Female genital mutilation and marital status.

The table gives the percentage distribution of female genital mutilation by marital status. Marital status is categories into never married, married and ever married which includes separated, widowed and divorced. The data indicated that 84% of women surveyed are married, and 60.5% within this category have experienced female genital mutilation.

Table 3: Percentage distribution of female genital mutilation by marital status.

Marital Status	Female Genital Mutilation		Total	P-value
	No	Yes		
Never Married	336	789	1125	
	4.4%	10.2%	14.6%	
Married	1776	4660	6436	0.273
	23.1%	60.5%	83.5%	
Ever Married	42	101	143	
	0.5%	1.3%	1.9%	
Total	2154	5550	7704	

Source: Mali DHS (2012/13)

Female genital mutilation by religion

Table 4 shows the relationship between religion and the female genital mutilation practice in Mali. The majority (94.6) of the respondent indicated that they follow the Muslim religion, hence the number of those who have undergone female genital mutilation. The result further

shows that there is no slight statistical relationship with a p-value of 0.171 between religion and female genital mutilation.

Table 4: Percentage distribution of female genital mutilation by religion

Religion	Female Genital Mutilation		Total	P-value
	No	Yes		
Muslim	2046	5240	7286	0.171
	26.6%	68.0%	94.6%	
Christians	78	197	275	
	1.0%	2.6%	3.6%	
Other religion	30	113	143	
	0.4%	1.5%	1.9%	
Total	2154	5550	7704	

Source: Mali DHS (2012/13)

Female genital mutilation by education

Table 5 gives the percentage distribution of female genital mutilation by the highest level of education. Out of 7704 women sampled, 75.3% reported that they have never attended school and the majority (54.8%) have undergone female genital mutilation. Only 87 women have indicated that they have attained the highest level of education, but the percentage of those who have undergone female genital mutilation is also high. This could mean that they experienced female genital mutilation whilst they were children and or female genital mutilation is one of their cultural norms.

Table 5: Percentage distribution of female genital mutilation by the highest level of education

Highest level of education	Female Genital Mutilation		Total	P-value
	No	Yes		
No education	1583	4218	5801	0.031
	20.5%	54.8%	75.3%	
Primary	210	543	753	
	2.7%	7.0%	9.8%	
Secondary	330	733	1063	
	4.3%	9.5%	13.8%	
Higher	31	56	87	
	0.4%	0.7%	1.1%	
Total	2154	5550	7704	

Source: Mali DHS (2012/13)

Female genital mutilation by employment status

Presented in table 6 is the percentage distribution of female genital mutilation by employment status. The results show that there is a strong association between employment status and female genital mutilation in Mali with P-value of 0.000, even though the percentage of those practicing female genital mutilation is high at 72%.

Table 6: Percentage distribution of female genital mutilation by employment status

Employment status	**Female Genital Mutilation**		Total	P-vale
	No	**Yes**		
Unemployed	1362	3026	4388	0.000
	17.7%	39.3%	57.0%	
Employed	792	2524	3316	
	10.3%	32.8%	43.0%	
Total	2154	5550	7704	

Source: Mali DHS (2012/13)

Female genital mutilation by wealth index

Table 7 depicts the percentage distribution of female genital mutilation by wealth index. The demographic and health survey program calculates the wealth index using easy-to-collect data on a household's ownership of selected assets, such as televisions and bicycles; materials used for housing construction; and types of water access and sanitation facilities. Based on the given description of the wealth index, many households of selected participated are regarded as the richest. Data presented in table two shows that there is a relationship between female genital mutilation and wealth index.

Table 7: Percentage distribution of female genital mutilation by wealth index

Wealth index	Female Genital Mutilation		Total	P-value
	No	Yes		
Poorest	369	1003	1372	
	4.8%	13.0%	17.8%	
Poorer	419	996	1415	
	5.4%	12.9%	18.4%	0.019
Middle	428	960	1388	
	5.6%	12.5%	18.0%	
Richer	394	1094	1488	
	5.1%	14.2%	19.3%	
Richest	544	1497	2041	
	7.1%	19.4%	26.5%	
Total	2154	5550	7704	

Source: Mali DHS (2012/13)

Female genital mutilation by the refusal to have sex

Table 8 demonstrates the percentage distribution of female genital mutilation by refusing to have sex. As presented in table 8, the percentage of women who have experienced female genital mutilation and refused to have sex is higher (14.1) than of those women who have not practiced female genital mutilation. The data further show that there is a strong statistical association between female genital mutilation and refusal to have sex.

Table 8: Percentage distribution of female genital mutilation by the refusal to have sex

Refuse sex	Female Genital Mutilation		Total	P-value
	No	Yes		
No	1432	3623	5055	0.000
	21.8%	55.3%	77.1%	
Yes	341	927	1268	
	5.2%	14.1%	19.3%	
Not sure	38	194	232	
	0.6%	3.0%	3.5%	
Total	1811	4744	6555	

Source: Mali DHS (2012/13)

Female genital mutilation by decision making on husband income

Table 9 shows the percentage distribution of female genital mutilation by decision making on the husband's income. The results show that many (84.4%) women have no say on the husband's earning.

Table 9: Percentage distribution of female genital mutilation by decision making on husband income

Decision making on husband income	Female Genital Mutilation		Total	Chi-square
	No	Yes		
Respondent alone	171	455	626	
	2.6%	7.0%	9.6%	
Respondent and husband/partner	59	290	349	
	0.9%	4.4%	5.3%	0.000
Husband/partner alone	1569	3952	5521	
	24.0%	60.4%	84.4%	
Other	8	7	15	
	0.1%	0.1%	0.2%	
Husband/partner has no earnings	2	32	34	
	0.0%	0.5%	0.5%	
Total	1809	4736	6545	

Source: Mali DHS (2012/13)

The effects of demographic and Socio-economic on the decision to undergo female genital mutilation

Table 10 gives the results of the binary logistic model on the effects of demographic and Socio-economic on the decision to undergo female genital mutilation**.** The reference categories of each dichotomous independent variables have an odd ratio value of '1.00'. Exponential β of dichotomous independent variables less than '1.00' means that the category of the variable has a decreasing likelihood of undergoing female genital mutilation compared to the reference category. Odd ratio values greater than '1.00' means increasing likelihood of undergoing female genital mutilation.

The results presented in table 10 shows that women who don't have any formal education are more likely to undergo female genital mutilation with an odds ratio (1.811). Employment status has a great effect on the decision to undergo female genital mutilation as indicated by a P-value of 0.000, thus employed women are more likely to practice female genital mutilation. Another variable measured in the binary logistic model is Wealth Index, the data shows that only two categories, namely; Poorer and Middle has a slight statistical significance and only

those women within the richest category have the highest likelihood of practicing female genital mutilation. Data have also shown that women who have undergone female genital mutilation are more (1.025) likely to refuse to have sex as opposed to those who never experienced it. Moreover, data have to reveal female genital mutilation is associated between female genital mutilation and decision making on husband/partner's earning and women whose husband/partner has no income are more likely to go for female genital mutilation.

Table 10: Binary logistic model

	B	**Sig.**	**Exp(B)**	**95% C.I. for EXP(B)**	
				Lower	**Upper**
Variables					
Highest educational level					
No education	.594	.071	1.811	.950	3.454
Primary	.498	.140	1.645	.849	3.189
Secondary	.277	.408	1.319	.685	2.542
High	1.00	1.00	1.00	1.00	1.00
Employment Status					
Unemployed	1.00	1.00	1.00	1.00	1.00
Employed	.346	.000	1.414	1.261	1.584
Wealth index					
Poorest	1.00	1.00	1.00	1.00	1.00
Poorer	-.160	.078	.853	.714	1.018
Middle	-.221	.015	.802	.672	.957
Richer	-.004	.962	.996	.829	1.195
Richest	.149	.133	1.161	.956	1.409
Refuse to have sex					
No	1.00	1.00	1.00	1.00	1.00
Yes	.025	.736	1.025	.889	1.182
Decision making on husband's earning					
Respondent alone	-2.067	.005	.127	.030	.536
Respondent and husband/ Partner	-1.413	.058	.243	.056	1.051
Husband/ partner alone	-2.042	.005	.130	.031	.544
Other	-2.792	.002	.061	.010	.373
Husband/ partner has no earning	1.00	1.00	1.00	1.00	1.00

Source: Mali DHS (2012/13)

Note 1.00 is a reference category & Exp (B) -odd ratios

Discussions.

In this study, the relationship between female genital mutilation and demographic and socioeconomic factors were analyzed.

The study focused on women within the age group of 15 and 49 years. About 5550 women out of 10424 have undergone female genital mutilation. It was found in this study that women with better socioeconomic status expect for educational level variable have the highest likelihood of practicing female genital mutilation. Age does not influence woman decision to practice female genital mutilation and the study also showed fluctuation in term of number of women going for such practice. The report by Teixeira and Lisboa (2016) gave an estimates of over 6 500 immigrant women in age 15 years or older were circumcised and 1,830 girls under 15 years undergone circumcision. Andro and Lesclingand (2016) have also proven that Female genital mutilation is mostly practiced by younger women (15-34). Bates *et al* (2011) indicated that in most societies in Mali, it is believed that if the clitoris of young women is not removed, they will not become matured women and it will be difficult to secure their marriages. Therefore, young adult's females are subjected to female genital mutilation circumcision due to the mere fact that they are not well informed about the risks associated with the exercise of female genital mutilation. It can be generally discussed that a high percentage of the practice of female genital mutilation among young women in Mail is influenced by social pressures.

The results of the study indicated that 84% of women who participated in the survey were married and majority (61%) have undergone female genital mutilation. Marriage in Mali is viewed as a possible factor which influences the practice of female genital mutilation since it exposes the majority of young women into early age at marriage and hinders their education opportunities(UNICEF, 2005).A qualitative study conducted by Amel et.al (2010) also found out that the majority of the participants were married, however, the participants indicated that uncircumcised woman in the study area had the least chance of getting married and their social status and livelihood are endangered.

Conclusion

Several conclusions can be reached from the results of this study. Firstly, female genital mutilation in Mali is a common cultural practice and it promotes marriage. Secondly, the level of education, wealth index and employment status of women seems not to have a significant influence on the decision to practice female genital mutilation. Lastly, the finding indicated that women who have experienced female genital mutilation are more likely to refuse to have sex, which confirms that female genital mutilation has a negative physical and psychological impact on the desire for sexual intercourse.

Recommendations.

- There is a need to conduct qualitative research in order to understand the value of female genital mutilation in Mali.
- Policymakers should consider mechanisms that will improve the level of education and literacy among females.
- Government or affected sectors such as WHO, UNFPA, UNICEF, and NHS should come up with an advocacy program that would empower women.

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