Breaking with Traditions: Who Are the Innovators that Support Ending Female Genital Mutilation in Burkina Faso

Short Abstract: Studies examining norms and behaviors around female genital mutilation (FGM) are needed to accelerate progress towards the elimination of this harmful practice. This study uses PMA data from a representative sample of women ages 15-49 from Burkina Faso. Two main outcomes related to innovative attitudes, norms and behaviors are used to determine which women who themselves experienced FGM are innovators for stopping the practice in the future. Results demonstrate that education and living in a Christian headed household are associated with having innovative attitudes and norms (e.g., believing personally that FGM should be abandoned and believing that the community thinks FGM should be abandoned). Conversely, girls and younger women (ages 15-24) are less likely to have innovative attitudes and norms than their older counterparts (ages 35+). In the analysis of women who experienced FGM and whether their daughter experienced FGM or they would practice FGM on a daughter, those who are not supportive of continuing the practice are more educated and Christian. Further, younger women are more likely to report that they would continue FGM than their older counterparts. Results are discussed in the context of strategies to eliminate FGM, particularly among women and communities where FGM is common.

Extended Abstract:

Background

Female Genital Mutilation (FGM) remains an important global priority as over 230 million girls and women currently alive have undergone the practice, and it is estimated that many more will experience it in the years to come.[1] The overwhelming majority of FGM cases across the world are in sub-Saharan Africa. Elimination of FGM is one of the targets related to Sustainable Development Goal 5 of achieving gender equality and empowering all women and girls. While some countries have made notable strides in the reduction of FGM, including Burkina Faso, the site of this study, complete elimination is a challenging endeavor. This is because progress takes time, particularly to change social norms and behaviors related to the practice. At this time, the key players in the field including UNICEF and UNFPA are calling for the need to accelerate programming progress to attain the 2030 country targets for FGM elimination.[2]

To identify if and how changes in FGM are underway, it is essential to examine social norms related to the behavior. A desk review was undertaken in 2020 on measuring social norms around FGM; this review led to the development of the ACT Framework that provides direction for monitoring and evaluation of FGM programming that can be used to track changes in a timelier fashion since prevalence takes a generation to show real change.[3] As social norms change to be less supportive of the practice, it is expected that behavior change will follow. This is consistent with the diffusion of innovations theory that identifies those persons who adopt an innovation first, recognizing that there are always others who delay adoption until the latest period (i.e., the laggards).[4] In this study, the innovation is attitudes, norms and behaviors that are consistent with the prevention and elimination of FGM. This paper examines who those innovators are in Burkina Faso, a country where many women still experience FGM, especially in

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[1] United Nations Children's Fund, Female Genital Mutilation: A global concern. 2024 Update, UNICEF, New York, 2024. https://data.unicef.org/resources/female-genital-mutilation-a-global-concern-2024/

[2] Ibid.

[3] Sood, Suruchi, Sarah Stevens, Kelli Kostizak, and Maho Okumura, 'ACT Framework', in The ACT Framework Package: Measuring social norms around FGM, United Nations Children's Fund, New York, N.Y., 2020.

[4] Rogers, E.M., *Diffusion of Innovations, Fifth Edition*, The Free Press, 2003.

rural areas; prevalence of FGM among women ages 15-49 in Burkina Faso based on the 2021 Demographic and Health Survey is 56% overall and 59% in rural areas[5].

Data and Methods

Using Phase 4 Burkina Faso data collected in late 2023-early 2024 by the Performance Monitoring for Action (PMA) program, which included ten questions on FGM, this study presents the prevalence of FGM and identifies factors associated with innovative FGM norms and behaviors. The PMA Burkina Faso survey target sample size was determined based on the modern contraceptive prevalence rate (mCPR) among all girls and women, with a 3% margin of error on national estimates and 5% on sub-national estimates. The sample was drawn as a two-stage clustered random sample and is representative at the national level and for urban and rural areas. For details on the PMA program, see the website here. In Burkina Faso in Phase 4, data were collected in 13 regions from 6,089 girls and women aged 15-49 years (response rate: 93.6%), comprising the cross-sectional sample used for the FGM module analysis.[6] All analyses use weights and adjust for survey clustering.

The Institut Supérieur des Sciences de la Population (ISSP) at the Université Joseph Ki-Zerbo in collaboration with Johns Hopkins Bloomberg School of Public Health conducted the PMA Phase 4 survey in Burkina Faso. Researchers received ethical approval for conducting the surveys from the Comité d'Ethique pour la Recherche en Santé (Burkina Faso - No. A14-2020) and the Johns Hopkins Bloomberg School of Public Health (IRB No. 12407). All interviewed respondents provided verbal informed consent that was documented electronically. Minors (15–17) received the adult consent and surveys in Burkina Faso. All consent procedures were approved by the aforementioned ethical review boards.

The sample for this study is those women who had ever heard of FGM (n=5,758; 94.7%), responded to the other questions about FGM and have full information on the other variables included in the analysis. The variable with the most missing information is religion, which is reported by the household respondent (n=228 respondents with missing religion, 3.75% of the sample). In the analysis sample (n=5,498), 23.4% live in urban areas, 53.4% have less than a primary education and 27.6% have secondary or higher education. The majority (76%) are married or partnered and 77% ever had a live birth. These demographic results are similar to the full PMA cross-sectional sample. Finally, as shown in Table 1, about 69.5% of women in the analysis sample experienced FGM; this is slightly higher than in the full PMA sample (63.5%) since those women who never heard of FGM are not included in the denominator.

The two key outcomes for this analysis are a) attitudes and norms around whether FGM should continue, and b) whether a woman has performed or would consider performing FGM on her daughter. First, each woman was asked a question about her attitude: "Do you think that FGM should be continued or should it be stopped?" Those women who report abandon are coded one and all others (continue or don't know) are coded zero. Second, women were asked an injunctive norm question: "Do you think your community expects you to continue to practice FGM or abandon FGM?" If the woman reported abandon or that FGM does not exist in her community she is coded one; all others (continue or don't know) are coded zero. Because of the high correlation between these two variables, we create a joint measure of her attitude and her perceived community norm. The four categories are: continue/continue; abandon/continue; continue/abandon; and abandon/abandon. The innovators are those who report abandon/abandon but the other group where women say abandon and that they perceive their

[5] INSD et ICF. 2023. *Enquête Démographique et de Santé du Burkina Faso 2021*. Ouagadougou, Burkina Faso et Rockville, Maryland, USA : INSD et ICF.

[6] Note that there is also a longitudinal sample in the PMA but those data are not used here as that sample is not representative.

community as continue (abandon/continue) are also considered innovators. Multinomial regression is performed to examine these four categories. As can be seen in Table 1, most women who did not experience FGM report "abandon/abandon" (greater than 85%). Thus, for this analysis of innovators, we are focused on who reports abandon among those who experienced FGM; the shaded columns represent the focused analysis sample. Among the women who experienced FGM, nearly 60% report abandon/abandon and about a quarter in rural areas and a fifth in urban areas report continue/continue. There is nearly 10% who report abandon/continue (innovative response) and who report continue/abandon.

The second outcome of interest is whether the woman reports that her daughter experienced FGM or that she would perform FGM on her daughter if she hasn't yet or has no daughters. All women who report that they would not perform FGM are considered innovators and coded one while all women who report that they have already performed FGM on their daughter or that they would do it are coded zero (non-innovators). Again, as seen above, nearly all women who did not experience FGM would not do it to their daughters. Thus, the innovator analysis focuses on those women who themselves experienced FGM; the analysis sample is shaded. As seen in Table 1, 57% of women who experienced FGM from rural areas and 69% of women from urban areas are innovators in terms of their behaviors or intended FGM behaviors for their daughters. Logistic regression analyses are performed among those who experienced FGM to determine demographic factors associated with being an innovator in terms of perspectives on the daughter's FGM.

Preliminary Results and Discussion

Preliminary multivariate results are shown in Tables 2 and 3. In brief, we find that among women who themselves experienced FGM, comparing those who report that they feel it should be abandoned and their community feels it should be abandoned (abandon/abandon) compared to those who feel it should be continued (continue/continue) we see that having secondary education and being Christian are consistently related to this innovative thinking (see Table 2). Interestingly, across the full sample as well as in rural and urban areas, we see that the younger women (15-24 and 25-34) are less likely to report that the practice should be abandoned than their older counterparts; this is somewhat surprising. Further, in the comparison of those women who report that they think it should be abandoned but their communities think it should be continued (abandon/continue) compared to those who think it should be continued, we find that the same characteristics matter, although only the younger age group is significant (and negative) compared to the oldest age group in the full sample and the rural sample (borderline significant in the urban sample). Further, among women in urban areas, those who practice a traditional religion compared to those who practice Christianity, are more likely to report abandon/continue than continue/continue. Finally, those women who report that they think men in their community make household decisions are less likely to say that their community thinks FGM should be abandoned and thus more likely to think their community (and themselves) think it should continue, particularly in the urban sample.

Table 3 provides results among women who experienced FGM on which ones have innovative perspectives on the daughter's FGM experience, that is they report that they have not and would not circumcise daughters. Here we see that women with secondary education have innovative perspectives in the full, rural and urban samples. Likewise Christian women are significantly more likely to have innovative perspectives compared to their Muslim counterparts across all samples. Age is the other factor associated with more innovative perspectives, but not in the hypothesized direction. In particular, the youngest women are less likely to provide the innovative response (i.e., do not circumcise daughters) than their older counterparts. In urban areas, women with five or more children compared to women with no children are also less likely to be innovators.

These results begin to identify who is changing their norms around FGM in Burkina Faso, especially among women who themselves experienced FGM. Education among women is an important protective factor for moving to innovative and positive social norms supporting the elimination of FGM. With an increasing emphasis on educational attainment, it is hypothesized that norms against FGM will continue to increase among those who will become parents in the future and be making decisions about FGM for their daughters.

Norms and behaviors that support the elimination of FGM were found among Christian women and conversely norms supporting the continuation were more common among Muslim women. Thus, programs seeking to reduce and eliminate FGM need to work closely with Muslim communities and Muslim religious leaders.

Interestingly, we find that younger women are more likely to have supportive social norms towards continuing FGM and are more likely to report that they would continue this practice with their daughters. This is surprising and requires greater exploration on whether this relates to changes in young women's exposure to pro-FGM messages compared to older women, older women being more likely to give the "expected" or socially desirable response, older women having a greater understanding of the negative reproductive health implications of FGM, or older women being more comfortable going against the norm as they become more autonomous decision-makers with age. This remains to be explored with qualitative data that would help to answer the why questions that are not possible to explore with the current data. This qualitive inquiry would be useful for informing programs that work with the youngest women in and out of school who will soon become mothers themselves.

This study begins to answer some questions about social norms and social norms measurement for the FGM community. Notably, a key research question in the FGM research agenda[7] is "What are the valid measures of change in social and gender norms and practices that should be used in the evaluation of FGM interventions?" Our results demonstrate that identifying both individual attitudes as well as injunctive norms and comparing these begins to identify who the innovators are and if progress is being made to get more women and other members of a community to change their beliefs and practices. These types of analyses can be used to inform whether programs are successfully changing norms and behaviors among those women who are most likely to continue the practice of FGM – that is those women who experienced FGM themselves. Programs in Burkina Faso need to target high prevalence communities and individuals who experienced the practice. This may include tailoring messages to Muslim communities and identifying how to reach less educated women and girls who are out of school. It is essential to implement activities with these groups to influence social norms and behaviors around FGM if the future generation of girls are to be protected from this harmful practice.

[7] Matanda Dennis and Lwanga-Walgwe Esther (2022). A Research Agenda to Strengthen Evidence Generation and Utilisation to Accelerate the Elimination of Female Genital Mutilation. UNFPA, UNICEF, WHO and Population Council, Kenya.

Table 1. Percentage of women reporting that FGM should be abandoned or continued based on their own perception and their perception of what the community expects

				Woman's FGM experience		Rural women		Urban women	
	Total	Rural	Urban	No	Yes	No FGM	Had FGM	No FGM	Had FGM
Self/Community perceptions:	n=5,487*	n=2,195*	n=3,292*	n=2,105*	n=3,382*	n=616*	n=1,579*	n=1,489*	n=1,803*
Continue/Continue	16.93	18.63	11.35	2.57	23.24	3.01	24.19	1.72	19.11
Abandon/Continue (innovators)	9.01	8.97	9.15	7.62	9.627	7.75	9.41	7.38	10.57
Continue/Abandon	6.99	7.50	5.31	3.16	8.67	4.05	8.72	1.45	8.43
Abandon/Abandon (innovators)	67.07	64.89	74.19	86.65	58.46	85.19	57.68	89.45	61.89
Experienced FGM	n=5,498*	n=2,198*	n=3,300*						
No	30.48	26.15	44.65						
Yes	69.52	73.85	55.35						
Performed or would consider performing FGM on daughter	n=5,498*	n=2,198*	n=3,300*	n=2,108*	n=3,390*	n=615*	n=1,583*	n=1,493*	n=1,807*
No (innovators)	70.25	66.93	81.1	96.05	58.94	95.73	56.74	96.65	68.56
Yes	29.75	33.07	18.9	3.95	41.06	4.29	43.26	3.35	31.44

*unweighted n's, all percentages are weighted; Shaded cells are women who experienced FGM and are main focus of multivariate analyses of innovators

Table 2. Multinomial logistic regression results of women's reports of whether FGM should be abandoned or continued based on her own perspective and her perceived community expections, among women who had FGM

	Model 1 - All women who had FGM			Model 2 - Rural women who had FGM			Model 3 - Urban women who had FGM		
	Continue/Abandon	Abandon/Continue	Abandon/Abandon	Continue/Abandon	Abandon/Continue	Abandon/Abandon	Continue/Abandon	Abandon/Continue	Abandon/Abandon
	vs.	vs.	vs.	vs.	vs.	vs.	vs.	vs.	vs.
Characteristic	Continue/Continue	Continue/Continue	Continue/Continue	Continue/Continue	Continue/Continue	Continue/Continue	Continue/Continue	Continue/Continue	Continue/Continue
Education level (Ref: None)									
Primary	-0.20 (0.32)	0.06 (0.36)	0.23 (0.17)	-0.28 (0.39)	0.08 (0.45)	0.29 (0.21)	0.00 (0.20)	0.09 (0.37)	0.06 (0.09)
Secondary or higher	-0.21 (0.40)	0.35 (0.17)+	0.85 (0.20)***	-0.32 (0.46)	0.10 (0.20)	0.72 (0.21)**	0.10 (0.24)	1.05 (0.25)***	1.16 (0.12)***
Age group (Ref: 35+)									
15-24	-0.55 (0.30)+	-1.12 (0.26)***	-1.32 (0.16)***	-0.47 (0.38)	-1.23 (0.31)**	-1.22 (0.17)***	-0.36 (0.37)	-0.79 (0.41)+	-1.43 (0.36)***
25-34	0.28 (0.23)	-0.21 (0.21)	-0.54 (0.07)***	0.38 (0.28)	-0.23 (0.27)	-0.53 (0.07)***	0.09 (0.26)	-0.06 (0.28)	-0.55 (0.19)*
Residence (Ref: Rural)									
Urban	0.21 (0.17)	0.05 (0.25)	0.12 (0.18)	na	na	na	na	na	na
Religion (Ref: Christian)¥									
Muslim	-0.44 (0.31)	-0.78 (0.18)***	-1.16 (0.20)***	-0.39 (0.37)	-0.79 (0.21)**	-1.19 (0.24)***	-0.54 (0.31)+	-0.77 (0.21)**	-1.05 (0.21)***
Traditional religion	-0.30 (0.44)	0.02 (0.34)	-0.19 (0.26)	-0.36 (0.49)	-0.02 (0.36)	-0.27 (0.28)	0.05 (0.71)	0.55 (0.15)**	1.05 (0.84)
Parity (Ref: None)									
1-2	-0.49 (0.54)	0.02 (0.44)	0.11 (0.23)	-0.91 (0.46)+	0.04 (0.58)	0.14 (0.29)	0.85 (0.56)	0.01 (0.26)	0.03 (0.38)
3-4	-0.67 (0.68)	-0.49 (0.34)	0.05 (0.26)	-1.03 (0.64)	-0.57 (0.45)	0.14 (0.32)	0.55 (0.57)	-0.26 (0.40)	-0.15 (0.49)
5+	-0.29 (0.56)	-0.59 (0.41)	0.18 (0.39)	-0.48 (0.54)	-0.69 (0.49)	0.35 (0.45)	0.24 (0.74)	-0.23 (0.46)	-0.51 (0.46)
Living arrangement									
Single/widowed/divorced (ref)									
Married/living together	-0.19 (0.49)	-0.42 (0.25)	-0.20 (0.21)	-0.02 (0.56)	-0.58 (0.33)	-0.24 (0.28)	-0.57 (0.43)	-0.07 (0.27)	-0.01 (0.28)
Men in community make HH decisions									
Disagree (ref)									
Agree	-0.62 (0.25)*	0.02 (0.31)	-0.29 (0.14)+	-0.61 (0.30)+	0.01 (0.40)	-0.20 (0.18)	-0.61 (0.23)*	-0.04 (0.36)	-0.62 (0.23)*
Worked in the last 7 days (Ref: No)									
Yes worked	-0.07 (0.17)	0.30 (0.28)	-0.08 (0.15)	-0.12 (0.19)	0.32 (0.34)	-0.12 (0.17)	0.24 (0.20)	0.33 (0.20)	0.16 (0.16)
Number of observations (unweighted)	n=3,382			n=1,579			n=1,803		

Note outcome is her Self/Community perspective; Codfficients(SE) presented; '+p ≤ 0.10; *p ≤ 0.05; **p ≤ 0.01; ***p ≤ 0.001; ¥ Note religion is based on head of household's reported religion

Table 3. Logistic regression results of women's reports of daughter not circumcised and not considering FGM for future daughters (innovators) compared to those who have circumcised or would circumcise future daughters among those who had FGM themselves

		All women who had FGM		
	All women	**All women**	**Rural**	**Urban**
Characteristic	Innovator - No to FGM for daughter	Innovator - No to FGM for daughter	Innovator - No to FGM for daughter	Innovator - No to FGM for daughter
Education level (Ref: None)				
Primary	0.10 (0.15)	0.11 (0.15)	0.12 (0.18)	0.11 (0.12)
Secondary or higher	0.70 (0.08)***	0.68 (0.10)***	0.55 (0.09)***	1.06 (0.12)***
Age group (Ref: 35+)				
15-24	-1.14 (0.35)**	-1.15 (0.43)*	-1.06 (0.51)+	-1.31 (0.25)***
25-34	-0.46 (0.16)**	-0.42 (0.17)*	-0.46 (0.22)+	-0.19 (0.18)
Residence (Ref: Rural)				
Urban	0.31 (0.22)	0.34 (0.23)	na	na
Religion (Ref: Christian)¥				
Muslim	-1.11 (0.21)***	-1.06 (0.21)***	-1.04 (0.24)***	-1.16 (0.16)***
Traditional religion	-0.26 (0.15)+	0.10 (0.19)	0.06 (0.21)	¥¥
Parity (Ref: None)				
1-2	0.06 (0.20)	0.12 (0.23)	0.19 (0.28)	-0.22 (0.24)
3-4	-0.14 (0.36)	-0.10 (0.37)	0.02 (0.45)	-0.47 (0.30)
5+	-0.43 (0.43)	-0.41 (0.47)	-0.26 (0.54)	-1.03 (0.31)**
Living arrangement				
Single/widowed/divorced (ref)				
Married/living together	0.04 (0.12)	-0.01 (0.10)	-0.06 (0.12)	0.21 (0.11)
Men in community make HH decisions				
Disagree (ref)				
Agree	0.04 (0.14)	-0.01 (0.14)	0.01 (0.17)	0.05 (0.17)
Worked in the last 7 days (Ref: No)				
Yes worked	-0.13 (0.11)	-0.12 (0.12)	-0.17 (0.13)	0.14 (0.09)
Mother FGM status (no FGM)				
Experienced FGM	-2.65 (0.21)***	na	na	na
Number of observations (unweighted)	n=5,498	n=3,390	n=1,583	n=1,779

+p ≤ 0.10; *p ≤ 0.05; **p ≤ 0.01; ***p ≤ 0.001; ¥ Note religion is based on head of household's reported religion; Reference group is - Yes to daughter FGM; ¥¥ Traditional religion dropped because no variability