

## SOCIO-CULTURAL PRACTICES AND WOMEN'S HEALTH IN TANZANIA

Dan Nyaronga and Roxana Toma

*Abstract*—This study examined whether female genital mutilation (FGM) is a risk factor for intimate partner violence (IPV) and its subtypes (e.g., physical violence, threat to harm, scream or curse, and insults or taking down), and whether there is a path association from FGM to IPV to depression among women in Tanzania. The study used cross-sectional data from a family and community health survey conducted in Tanzania in 2011. A total of 181 women aged 13-58 responded to the questions about female genital mutilation (FGM), intimate partner violence, and depression. FGM is associated with IPV including physical and emotional violence that are associated with depressive episodes among women in Tanzania. The study findings underscore the need for more screening of both domestic violence and mental health conditions in Tanzania to determine the prevalent of depression among women exposed to FGM and domestic violence, thus yield useful results for planning and implementing mental health services in the country.

*Keywords:* Female genital mutilation, intimate partner violence, depression.

### I. Introduction

Previous studies have suggested that patriarchal structure and a stereotypical notion of gender roles have led to legitimization of social-cultural practices that undermine women's health in Tanzania<sup>1, 2</sup>.

Serious forms of violence against women include FGM and IPV<sup>3</sup> that subsequently lead to depression<sup>4</sup>. Throughout the world, 120 million women have already undergone female genital mutilation, and another 2 million are at risk each year. Female genital mutilation (FGM), also known as female circumcision, is defined by the World Health Organization<sup>5</sup> as any procedure involving the alteration or excision of external female genitalia for non-medical reasons<sup>6, 7</sup>.

Three previous studies conducted in Egypt, Mali, and Ivory Coast have shown a positive association between FGM and intimate partner violence (IPV)<sup>6, 8, 3</sup>. Similarly, studies from developed countries have shown IPV to be associated with depression in women<sup>4, 9</sup>.

The present study, using path analysis and structural equation modeling (SEM) software, seeks to explore whether FGM is a risk factor for IPV (e.g., physical violence, threat to harm, scream or curse, and insults or talk down) and whether there is a path association between FGM, IPV, and depression among women in Tanzania.

---

Dan Nyaronga, Ph.D.<sup>1, 2</sup>

Roxana Toma, Ph.D.<sup>1, 2</sup>

---

<sup>1</sup>State University of New York, Empire State College, <sup>2</sup>United States of America

### A. Female Genital Mutilation (FGM) and Intimate Partner Violence (IPV)

According to Salihi and colleagues<sup>6</sup> a theoretical explanation of the association between FGM and IPV may be found in research on child violence and abuse. They propose that women with previous exposure to violence are more likely to experience violence later in life. Likewise, women who experience FGM as a form of violence in early childhood may be vulnerable to IPV as adults<sup>6</sup>. Childhood abuse, including FGM may interfere with a normal development of a person leading to a tolerance for abuse<sup>10, 11</sup>.

Although law has been enacted in Tanzania since 1998 to curb FGM<sup>12</sup> the practice is still common among 20 of 130 ethnic groups and among Somali immigrants to the country<sup>13</sup>. Although previous studies have examined positive association between FGM and IPV in African countries such as Egypt, Mali, and Ivory Coast, Africa as a continent is so diverse geographically and culturally, thus it makes sense to explore these relationships separately instead of generalizing the findings from West or North Africa to the East African region, especially in Tanzania, which in itself, is a diverse country with over 41 ethnic groups and different religious groups<sup>14</sup>.

Despite an estimated 18 percent of Tanzanian women being circumcised<sup>15, 16</sup> and more than 9 in 10 women believing that female circumcision should be stopped<sup>13</sup> little research has been conducted in Tanzania to unravel whether there is an association between FGM and IPV. Thus, using cross-sectional family and community survey data from Tanzania, this study investigates whether FGM is a risk factor for IPV.

### B. Intimate Partner Violence (IPV) and Depression

Another equally important human rights concern affecting women is intimate partner violence (IPV). With the exception of a few studies, such as Palestinian by Haj-Yahia<sup>9</sup> and Ethiopian study by Deyessa, Berhane, Alem, Ellsberg, Emmelin, Hogberg, and Kullgren<sup>17</sup> on the relationship between IPV and depression, the majority of previous studies drew on population data from high-income countries. Little is known about the relationship between IPV and depression in an African context, especially from a poor country like Tanzania, where the culture is very different from that of western developed countries. A couple of recent studies in Tanzania focused on the relationships between depression and food insecurity by Hadley & Patil<sup>18</sup> and depression in relationship to HIV/AIDS by Marwick & Kaaya<sup>19</sup>. However, little has been done in Tanzania to explore the relationship

between depression and IPV, despite one out of every two women in sub-Saharan Africa being a victim of IPV<sup>20, 21</sup>.

In Tanzania, more than one-third of all women (39%) have suffered from physical violence at some point since age 15, and one-third (33%) of them suffered from acts of violence during the past 12 months. One in five women have also experienced sexual violence, and 10% of them had their first sexual intercourse forced against their will. The consequences on both physical and mental health are devastating as abused women are more exposed to mental disorders and adverse mental health consequences<sup>22, 23</sup>.

A possible theory for why violence against women generates adverse mental health consequences including depression, is recurrent fear and learned helplessness<sup>9, 24</sup>. The aim of this study was to explore the prevalence of depression among women in Tanzania and whether it is associated with socio-cultural risk factors like FGM and IPV.

## II. Methodology

*A. Data:* The study used 336 in-home interview data from family and community health surveys conducted in Tanzania in 2011. We used a combination of random and snowball sampling techniques; we randomly selected individuals in the market places, schools, and other local community gatherings, to participate in the survey. These individuals also helped us identify adult men or women friends or members of their families who were also willing to participate in the survey. Responding to the interview questionnaire took approximately 30-45 minutes, although individual progress varied by how quickly they moved through the questions. All interviews were confidential and no interview materials were allowed outside the secured building. Extensive precautions were taken to maintain confidentiality and guard against deductive disclosure of participants' identities, and all protocols received Institutional Review Board approval. Questionnaires were delivered in Kiswahili, the major language of Tanzania and then translated into English for data entry and interpretation.

For the purposes of this study, we selected the 181 female respondents from the initial data set so that we could analyze the association between forced circumcision, abuse, and depression in women from Tanzania. For these data, the participants' ages ranged from 13 to 58 with a mean age of 25 years, 70% never went to college, 27% never went beyond elementary school, 25% were married and 71% were unemployed.

*B. Measures:* Female Genital Mutilation (FGM) was assessed from the survey item "Have you ever been forced to get circumcised," which was a dichotomous (Yes/No) variable. Intimate Partner Violence (IPV) was assessed from the survey items: (i) "How often does your partner threaten to harm you?" (ii) "How often does your partner scream or curse at you?" (iii) "How often does your partner insult or talk down to you?" (iv) "How often does your partner physically hurt you?" Each item was measured using a Likert scale

(Never/Rarely/Sometimes/Fairly Often/Frequently).

Depression was initially assessed using the 20 items CES-D depression scale developed by Radloff in 1977<sup>25</sup>. However, following results from the reliability analysis the scale was reduced to 13 items with a Cronbach's Alpha of 0.860 ("My appetite is poor," "I cannot shake the blues," "I have trouble keeping my mind focused," "I am depressed," "To me everything is an effort," "My life is a failure," "I am fearful," "I have restless sleep," "I am lonely," "I find people unfriendly," "I have crying spells," "I am sad," "People dislike me").

*C. Analysis:* The purpose of this data analysis was to model the linkages between forced circumcision, abuse and depression among women from Tanzania using path analysis and structural equation modeling (SEM) software. The theoretical model is that forced circumcision (FGM) leads to abuse (IPV) which in turn leads to depression. We tested this model to see whether women who were forced to get circumcised were more likely to experience IPV and also more likely to be depressed.

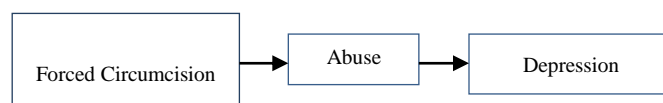


Figure 1: The Theoretical Model

Employing SEM techniques in this study is important because ordinary least square (OLS) regression can only provide us with knowledge of the independent variables that are significant in explaining variance in the dependent variable. However, with SEM we can create a chain of influence and understand the linkages between FGM, IPV and depression among women in Tanzania.

## III. Results

Because more than 5% of data were missing for some of the independent variables, data imputation was required in order to proceed to multivariate analysis. This was done using the expectation maximization algorithm; results from using the original data set were compared to results from using the imputed data set and conclusions did not differ.

Preliminary findings indicate that 11% of women have been forced to get circumcised. Table 1 below highlights frequencies for both depression and IPV:

Table 1: Frequencies

	Never (%)	Rarely (%)	Fairly often / Frequently (%)
Depressed	21	44.2	34.8
Insulted by partner or talked down to	49	27	24
Screamed at or cursed by partner	42	30	28
Threatened to be harmed by partner	49	18	33
Physically hurt	53	26	21

A model development approach was used whereby models have been perfected using SEM techniques such as significance of path coefficients and modification indexes. This process combined exploratory and confirmatory purposes and resulted in two alternative models that were supported by, and provided a good fit for the data (Please, see table 2 below).

Table 2: Alternative Models

	Depression measured by:	CMIN/p-value	NFI	RMSEA	AIC	PNFI
Model 1	Scale created based on the 13 survey items following Radloff's CES-D depression scale	8.080 p-value=0.426	0.977	0.007	46.080	0.521
Model 2	Stand-alone variable "I am depressed" measured as (Rarely/Sometimes/Occasionally/Mostly)	6.225 p-value=0.622	0.982	0.000	44.225	0.524

Results indicates that the likelihood ratio Chi-square (CMIN) p-value are higher than .05; the normed fit index (NFI) values are greater than .95; the root mean square error of approximation (RMSEA) values are less than .05; and parsimony normed fit indexes (PNFI) are higher than .50, thus relatively few parameters to estimate in relation to the number of variables and relationships.

A closer look at Table 2 indicates that, although both models are similar in fit, Model 2 is the best fitting model. It has the lowest AIC and the highest PNFI. Figure 2 depicts the final path model<sup>1</sup>.

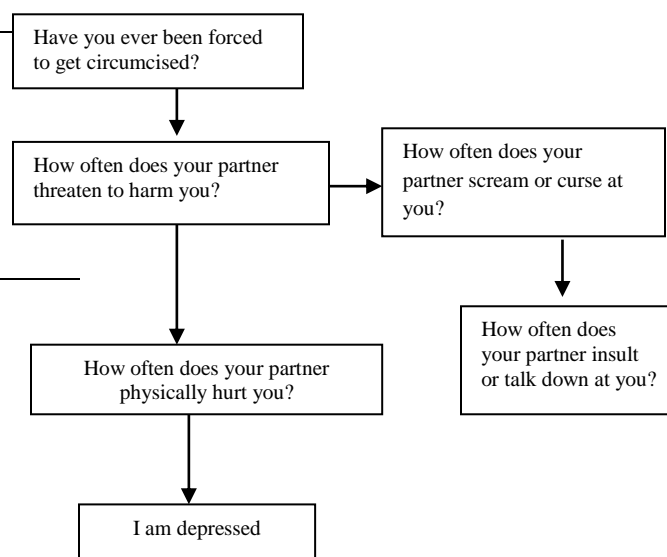


Figure 2: Final Path Model

All the paths in this model represent positive influences, except the one between forced circumcision and being threatened with harm by her partner, which represents a negative influence. Considering the way variables were measured-- "Have you ever been forced to get circumcised?" (1=Yes/2=No) and "How often does your partner threaten to harm you?" (1=Never/2=Rarely /3=Sometimes/4=Fairly Often/5=Frequently) the negative path coefficient tells us that if the female respondent was not forced to get circumcised, she is less likely to be threatened with harm from her partner.

Table 3 reports the structural coefficients in descending order of magnitude. Also called path coefficients, they are necessary to assess the strength of the paths in the model. In this model all the path coefficients are significant at the .05 level or better.

<sup>1</sup> For clarity purposes, the error terms were not included in the diagram.

Table 3: Path Coefficients

Structural Coefficients	Estimate
How often does your partner scream or curse at you → How often does your partner insult or talk down to you	0.701
How often does your partner threaten to harm you → How often does your partner scream or curse at you	0.687
How often does your partner threaten to harm you → How often does your partner physically hurt you	0.334
How often does your partner scream or curse at you → How often does your partner physically hurt you	0.322
How often does your partner physically hurt you → I am depressed	0.225
Have you ever been forced to get circumcised → How often does your partner threaten to harm you	-0.179

Table 4 reports the standardized total effects of FGM and IPV on depression, as well the direct and indirect effects.

Table 4: Standardized effects on Depression

	FGM	How often does your partner threaten to harm you	How often does your partner scream or curse at you	How often does your partner physically hurt you
Total Effects	-0.022	0.125	0.072	0.225
Direct Effects	0.000	0.000	0.000	0.225
Indirect Effects	-0.022	0.125	0.072	0.000

### III. Discussion/ Conclusion

Given the positive association between FGM, IPV and depression: first, efforts targeting FGM and IPV victims could integrate IPV and mental health screening and interventions as a comprehensive package to improve the health of women in Tanzania; second, attempts are needed to encourage legislative and perhaps executive measures to enforce FGM policies in Tanzania; third, there is a need to

identify and disseminate information on the public health ramifications of both FGM and IPV by promoting social norms through education and letting the public know that FGM and violent acts against women are unacceptable.

Although the study findings generated insights and in-depth understanding of depression effects of FGM and IPV in Tanzania, participants could have been subjected to both recall and social desirability bias during the interview that relied on self-report only. Overall this study expands previous knowledge of health concerns of women in Tanzania. The study findings underscore the need for more screening of both domestic violence and mental health conditions in Tanzania to determine the prevalent of depression among women exposed to FGM and domestic violence, thus yield useful results for planning and implementing mental health services in the country.

### References

- [1] M. Ellsberg, H. A. Jansen, L. Heise, C.H. Watts and C. Garcia-Moreno. (2008). "Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: an observational study. " Lancet371, no9619 (2008): 1165-1172
- [2] A. L. Pillay and A. J. Kriel. "Mental health problems in women attending district level services in South Africa." Social Science and Medicine63, (2006): 587-592.
- [3] K. Peltzer and S. Pengpid.. "Female genital mutilation and intimate partner violence in the Ivory Coast." Women's Health14, (2014): 13.
- [4] M. H. Hicks and Z. Li. "Partner violence and major depression in women: a community study of Chinese Americans." Journal of Nervous and Mental Disease191, no11 (2003):722-729.
- [5] World Health Organization. "Eliminating female genital mutilation: an interagency statement-OHCHR, UNAIDS, UNDP, UNECA, UNESCO, UNFPA, UNHCR, UNICEF, UNIFEM, WHO." (2008).
- [6] H. Salihu, E. August, J. Salemi, H. Weldezelasse, Y. Sarro, and A. Alio. "The association between female genital mutilation and intimate partner violence." BJOG2012, no119(2012): 1597–1605.
- [7] C. M. Braddy and J. A. Files. (2007). "Female genital mutilation: Cultural awareness and clinical considerations. "Journal of Midwifery Women's Health52, (2007):158–163.
- [8] A. Refaat, K. F. Dandash, M. H. Defrawi and M. Eyada. "Female genital mutilation and domestic violence among Egyptian women." Journal of Sex Marital Therapy27, no5 (2001): 593–598.
- [9] M. M. Haj-Yahia. "The impact of wife abuse on marital relations as revealed by the second Palestinian national survey on violence against women". Journal of Family Psychology16, no3 (2002): 273-285.

- [10] K. Lalor and R. McElvaney. "Child sexual abuse, links to later sexual exploitation/ high-risk sexual behavior, and prevention/treatment programs." *Trauma Violence Abuse*11, (2010): 159–177.
- [11] S. Desai, I. Arias, M. P. Thompson and K. C. Basile. "Childhood victimization and subsequent adult victimization assessed in a nationally representative sample of women and men." *Violence Victim*17, no6 (2002): 639–653.
- [12] E. H. Boyle, F. Songora and G. Foss. "International discourse and local politics: Anti-female-genital-cutting laws in Egypt, Tanzania, and the United States." *Social Problems*48, no 4 (2001): 524-544.
- [13] Center for Reproductive Law and Policy and International Federation of Women Lawyers. "Women of the World: Laws and Policies Affecting Their Reproductive Lives." NY: Center for Reproductive Law & Policy, 1997.
- [14] Central Intelligence Agency. "The World Fact book." Washington, DC: Central Intelligence Agency, 2001.
- [15] United States Department of State. "Country Reports on Human Rights Practices for 1995–2000: Africa," [http://www.state.gov/www/global/human\\_rights/hrp\\_reports\\_mainhp.html](http://www.state.gov/www/global/human_rights/hrp_reports_mainhp.html) (visited 7/23/2001).
- [16] A. A. Rouzi, N. Sahly, E. Alhachim and H. Abduljabbar. "Type I Female Genital Mutilation: A Cause of Completely Closed Vagina." *The Journal of Sexual Medicine* (2014).
- [17] N. Deyessa, Y. Berhane, A. Alem, M. Ellsberg, M. Emmelin, U. Hogberg, and G. Kullgren. "Intimate partner violence and depression among women in rural Ethiopia: a cross-sectional study." *Clinical Practice and Epidemiology in Mental Health*5, no8 (2009): 1-10.
- [18] C. Hadle and C. L. Patil. "Food insecurity in rural Tanzania is associated with maternal anxiety and depression." *American Journal of Human Biology* 18, no. 3 (2006): 359-368.
- [19] K. F. M. Marwick and S. F. Kaaya. "Prevalence of depression and anxiety disorders in HIV- positive outpatients in rural Tanzania, AIDS Care: Psychological and socio-medical aspects of AIDS/HIV." *AIDS Care*22, no4, (2010): 415-419
- [20] A. P. Alio, E. M. Daley, P. N. Nana, J. Duan and H. M. Salihu. "Intimate partner violence and contraception use among women in Sub-Saharan Africa." *International Journal of Gynecology Obstetrics* 107, no 1 (2009): 35–38.
- [21] A. M. Gómez, and I. S. Speizer. "Research Community-level intimate partner violence and the circumstances of first sex among young women from five African countries." (2010).
- [22] S. Douki, S. B. Zineb, F. Nacef and U. Halbreich. "Women's mental health in the Muslim world: Cultural, religious, and social issues." *Journal of Affective Disorders*102, (2007):177–189
- [23] C. Garcia-Moreno, L. Heise, H.A. Jansen., et al. "Public health. Violence against women." *Science* 310, no5752 (2005): 1282-1283.
- [24] M. Ellsberg, R. Pena, A. Herrera, J. Liljestrand and A. Winkvist. (2000). "Candies in hell: Women's experiences of violence in Nicaragua." *Social Science Medicine*51, no11 (2000): 1595-1610.
- [25] L.S. Radloff. "The CES-D Scale: A self-report depression scale for research in the general population." *Applied Psychological Measurement*1, no3 (1997): 385-401.

About Author(s)

Dr. Dan Nyaronga is a professor of Psychology at SUNY, Empire State College in New York.

Dr. Roxana Toma is a policy Studies professor, School for Graduate Studies, SUNY Empire State College in New York.

Given the positive association between FGM, IPV and depression, efforts targeting FGM and IPV victims could integrate IPV and mental health screening and interventions as a comprehensive package to improve the health of women in Tanzania