Impact of COVID-19 on Violence Against Women and Girls in Addis Ababa

Alene Matsentu *, Negussie Shiferaw**, and Sewalem Tsega ***

Abstract

There is no doubt that promoting a safer, Gender-Based Violence (GBV) free environment for women and girls gives them greater safety and security, better health and education, and, more control over their life choices. The main objective of the study was to explore the impacts of COVID-19 in relation to violence against women and girls in Addis Ababa. A Cross-sectional study design with concurrent mixed study method was employed. Primary data was collected from 1084 women (15-49 years old) selected using three-stage stratified sampling procedure, 12 key informants and one case study. Data were collected using household survey questionnaire, key informant interview and in-depth interview guides. The odds of gender-based violence was higher by at least 1.6 times among women and girls who had no formal education and primary education compared to those who had secondary and above level of education. Women and girls residing in large household size (6+) had significantly higher odds of gender-based violence compared to those who were living in households with less than six members. Women and girls who were living in rented house were 1.3 times more likely to be exposed to gender-based violence compared to those living in their own house. There should be aggressive and continuous community education through behavioral change communication strategies that will eventually

^{*}Project cordinator at iFontiers, e-mail: adalmatsentu@gmail.com

^{**} PhD candidate at the College of Development Studies, Addis Ababa University, e-mail: negut2016@gmail.com

^{***}School of Psychology, Addis Ababa University, Corresponding Author of this manuscript. Email: sewalemtsega@yahoo.com

help to significantly promote knowledge and attitude on adverse effects of gender-based violence.

Key Words: COVID-19, Girls, Women, Violence, Impacts

1. INTRODUCTION

Violence against women and girls (VAWG) is a complex and multidimensional phenomenon. Recognition of violence as a health and right issue was underlined and strengthened by agreements and declarations at key international conferences during the 1990s, including the 1993 Vienna World Conference on Human Rights (Vienna Declaration, 1991), the 1994 Cairo International Conference on Population and Development (ICPD, 1994) and the 1995 Beijing Fourth World Conference on Women (Fourth World Conference on Women, 1995). Moreover, the 2000 Millennium Development Goals (MDGs) provided a framework within which the impact of violence could be measured against other developmental dimensions. In this regard, MDG-3 called for the promotion of women empowerment with a target to eliminate gender disparity in education (MDG, 2007). The 2030 Agenda for Sustainable Development Goals (SDGs) embraces gender equality and the empowerment of all women and girls. More specifically, the four SDG targets (5.2, 5.3, 16.1 and 16.2) directly targeted VAWG, and there are several targets by SDGs that are directly or indirectly aimed to prevent and reduce VAWG (United Nations, 2015).

Through these international agreements and initiatives, national and local governments have increasingly recognized the need to develop country specific multi-sectoral approaches for the prevention and response to violence against women and girls, and have committed themselves to implement the institutional and legislative reforms necessary to achieve this goal. Despite these progresses, however, women and girls are still at higher risk of experiencing violence due to a number of factors, including displacement, the breakdown of social structures, lack of proper law enforcement, the potential for further entrenchment of harmful gender norms, and the loss of livelihood opportunities for both men and women in the community, among others (Global Women's Institute and International Rescue Committee, 2006). The prevalence of intimate partner violence (IPV) in various Sub-Saharan Africa

(SSA) countries ranged from the lowest (13.9%) in South Africa to highest (97%) in rural Nigeria (Muluneh et al, 2020). In Eastern Africa countries, including Ethiopia and Uganda, 42% were most affected by all forms of intimate partner violence (IPV), followed by Western Africa (41.7%) (Muluneh et al, 2020). In the context of educational institutions, the overall prevalence of the gender-based violence among female youth was high in Sub-Saharan Africa (Beyene et al, 2019). The prevalence of gender-based violence is unacceptably high in Ethiopia. According to the 2016 Ethiopian Demographic and Health Survey (EDHS), among ever-married women aged 15-49 who had ever experienced sexual violence, 69% reported their current husband/partner as perpetrators. Over one-third of ever-married women, (34%) were survivors of physical, sexual, or emotional violence by their spouse, although marital rape is not recognized as a crime under the Ethiopian law (Kaukinen, 2020).

Although gender based domestic violence is common in developing countries, including Ethiopia, the recent VAWG is closely connected to the measures taken to contain and prevent the spread of COVID-19, including declarations of the states of emergency that restrict mobility and include selfinitiated stay-at-home options, requirements for quarantine and self-isolation, closing of schools and workplaces, and limiting the number of people in public transportation. These measures restricted mobility, livelihoods, gender equality and family support networks, leading to socioeconomic consequences, including increased gender-based violence disproportionately affected young women and girls (UNDP, 2020). As a result, many women and Girls were in 'lockdown' at home with their abusers while being cut off from normal support services due to COVID-19 pandemic worldwide. According to a UNDP brief report, pre-existing toxic social norms and gender inequalities, economic and social stress caused by the pandemic, coupled with restricted movement and social isolation measures, have led to an exponential increase in GBV (UNDP, 2020). The UNDP's brief report illustrates that since the outbreak of COVID-19, VAWG, particularly domestic violence has intensified alarmingly in different countries, for instance, in Argentina, France, Cyprus and Singapore, the domestic violence cases have increased by 25%, 30%, 30% and 33%, respectively during their

lockdown time in March 2020 (UNDP, 2020). Moreover, in China, Jianli County, Hubei province, a police report indicates a tripling of domestic violence cases in February 2020 compared with February 2019, estimating that 90% were related to the COVID-19 epidemic (Allen-Ebrahimian, 2020). Similarly, in Ethiopia, many women were trapped in their homes with their abusers, leaving them without the vital support and protection that they need. Without access to private spaces, many women struggle to make a call or seek help online (United Nations, 2020). This indicates that the victims may not go to the police immediately after the incident, in time to collect medical evidence and press charges against the perpetrator. The victims may consider that such services may not be available during the pandemic. As a result, many violence incidences including rape cases could go unreported and many women might endure repeated violence. Consequently, sufficient data on VAWG are not readily available to researchers and practitioners for evidencebased planning and response. Given the increasing demand of reliable and comparable data on VAWG by the government, academia, NGOs and donors community, there is a consensus that creating concrete indicators on VAWG is an important step towards achieving and understanding the various causes of domestic violence in the country. However, there is no established system for systematic collection and analysis of VAWG-related data, which would link various actors that play key roles in dealing with VAWG.

Nevertheless, more evidences were generated in different studies in relation with COVID-19 pandemic and its consequential factors associated, little attentions were given on the impact of health services, income and violence against girls and women with limited geographic range of coverage. In this regard, it is highly important to conduct studies to fill the gap in assessing the existing situation, underlying causes and magnitude of violence against women and girls and their income and utilization of health care services during the COVID-19 pandemic in Addis Ababa. Therefore, the objective of this study was to assess the impact of the COVID-19 pandemic on violence against women and girls in Addis Ababa.

Conceptual Framework

In general, women and girls are at high risk to GBV due to different a range of factors at their own homes and that of their families. Evidence showed that potential factors that increase such risks among women and girls include low level of education, previous exposure to violence (particularly as a child), social acceptance of violence, weak legal sanctions and lack of policies aimed at preventing or responding to VAWG (Fraser, 2012). The individual or intrapersonal factors are the biological and personal factors that influence how individuals behave and increase their likelihood of becoming a victim or perpetrator of violence, for instance, demographic characteristics (age, education, and income) (Krung et. al, 2002). The individual experiences are also related to gender norms and values that predispose women to abuse and men to be perpetrators of abuse. The relationship or interpersonal level refers to the interactions in social relationships, such as relationship between intimate partners and family, friends and other small groups, and practice of having multiple partners by men (Vetton, 2014). Acceptance of violencesupportive social norms is widespread among both women and men in Ethiopia: nearly two-thirds (63%) of Ethiopian women believe that a man is justified in beating his wife in some circumstances. In line with this, most incidents are unreported - 70% of women who experienced physical or sexual violence never sought help or told anyone - the 2016 Ethiopian Demographic and Health Survey (EDHS) indicates that nearly one-quarter (23%) of Ethiopian women have experienced physical violence at some point in their lives, and 10% of women aged 15-49 years have experienced sexual violence (Kaukinen, 2020).

Figure 1 shows the conceptual framework of this study which is adopted from the previous studies (Palermo et al, 2019; O'Donnell & Buvin, 2021).. The individual level factors, including age, education, religion, and marital status of the respondent are included in the conceptual framework to assess the impact of the COVID-19 pandemic on violence against women and girls. At household level, tenancy of the household, sex of the household, number of household members, and primary breadwinner of the household are considered to have a potential impact on the practice of gender-based violence. Similarly, income from employment and utilization of health-care services are considered as factors with potential impact during the pandemic

in the conceptual framework. Moreover, knowledge, practice and perception on COVID-19 preventive measures are taken as key factors to explore the impact of COVID-19 on violence against women and girls. In addition, having access to clean water, soap and other hygienic products during the pandemic could have impact on women and girls in practicing preventive measures as well. Furthermore, existence of COVID-19 victims at home and failure to maintain the previous economic activities are also considered as COVID-19 related factors (Figure 1).

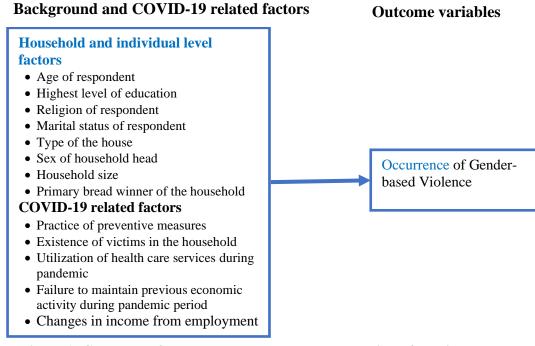


Figure 1: Conceptual framework developed based on review of previous studies (19, 20)

2. Materials and Methods

2.1. Study setting and population

The study was conducted in Addis Ababa City Administration based on sample respondents drawn from five randomly selected sub-cities, namely: Addis Ketema, Lideta, Akaki-Kality, Kirkos and Gullele. Women 15-49

years old were the target population for this study. In addition, the study involved officials from the government office (at sub-city and woreda levels), and participants from the Ethiopian Women Lawyers Association (EWLA) were involved as Key Informant. Furthermore, a gender-based violence survivor woman was considered as case study.

2.2. Data Sources and Study Design

The study used both primary and secondary data sources. It employed a cross-sectional study design with both quantitative and qualitative approaches concurrently. In cross-sectional study, data are collected at a specific point of time in the lives of the respondents, making analysis of cause-effect relationship among variables of interest difficult.

2.3. Sampling procedures

Three-stage sampling design was used once stratification by administration level was done to draw a representative sample from the study population. At the first stage, five sub-cities out of ten were randomly selected using computer-based randomization process. At this stage, Lideta, Gullele, Akaki-Kality, Addis Ketema and Kirkos sub-cities were randomly selected. In the second stage, two woredas were randomly drawn in each sub-city. At this stage, a total of 10 woredas were randomly selected. At the third stage, two Ketenas were randomly selected from each sampled woreda (except for, Gullele Woreda 08) in consultation with Woreda Women and Children Affairs Office experts. Following this, 54 households with 15-49 years old women were randomly selected per each Ketena for household survey based on the sample size determined. Accordingly, a woman (15-49 years of old) household was interviewed in each sampled household.

The sample size for household survey was calculated for each sampled subcity using the commonly used single population formula (CSA, 2016) with a confidence level of 95% (or Z=1.96) and an error of about 6% for proportions in large populations. Considering 10% non-response rate, a total of 1,074 households across the five sub-cities were estimated for quantitative data collection. Accordingly, a total of 1,084 households (including 10 households

from replacement) were interviewed to elicit the required information on the subject.

For qualitative data, purposive sampling technique was employed as the sampling strategy for the identification and selection of knowledgeable experts for key informant interview. Furthermore, snowball sampling approach was used to conduct In-depth Interview (IDI) with a victim of gender-based violence (as a case study) in selected target area in close collaboration with research stakeholders. In this regard, a total of 13 Key Informant Interviews (KII) and one case studies was conducted.

2.4. Data Collection

The primary data were collected using structured questionnaire, Key Informant Interview (KII) guide and In-depth Interview (IDI) guide for a case Study. A household survey questionnaire was prepared in English language and translated into Amharic to collect data on the background characteristics of the household and respondents, knowledge of the pandemic and its preventive measures, livelihood and income related issues, health seeking behavior and gander-based violence before and during COVID-19 outbreak. In addition, review of relevant documents was conducted for further enrichment of the study backgrounds and findings. The English version household survey questionnaire was translated into Amharic language to minimize misunderstanding of interviewers and respondents that would arise because of personal language barriers. In addition, KII guide was used to guide key informant interviews and collect relevant information from research participants. Besides, IDI guide was developed to gather detailed information for the case study and was employed to conduct in-depth VAWG assessment with exposed target women and girls. The qualitative approach was mainly focused to collect information on the causes and preventive approaches of VAWG using Key Informant Interviews (KIIs) and a case study. Qualitative data was collected at sub-city, woreda, and at the Ethiopian Women Lawyer Association (EWLA) as well as at survivors' level who has a direct involvement on women empowerment and violence against women and girls during the convid-19 pandemic. At sub-city level, Lideta, Addis Ketema, Akaki-Kality and Kirkos Sub-city were targeted where Woreda 07 and 09, 06 and 09, 04 and 11 and, 03 and 04 Woredas were selected in each sub-city, respectively.

Before commencement of data collection, a two-days training was provided to data collectors focusing on theoretical, practical and mock interviews supported by Computer Assisted Personal Interview (CAPI) to compliment and check whether the interviewers had similar understanding of the research concepts, objectives, methods and data collection tools. Household interviews were conducted with women 15-49 years old and data collection was carried out from October 02- 22, 2020.

2.5. Ethical Consideration

Regarding ethical issues, considering the sensitivity of the research topic, all activities involved in this study took research ethics into consideration in a careful manner. A detailed description of the study objectives was provided, and informed consent was sought from all respondents. Respondents were informed that they were entitled to stop responding or participating in the study at any time. Participants were also invited to renew their consent before answering questions relating to GBV. In addition, respondents were informed that any personal identification and information would not be shared to the third party and will be kept confidential and anonymized. During the process of data collection, the household questionnaire interview was conducted in separated room of their own home or compound in the absence of other household members, while the IDI with survivors were conducted outside their own home to protect privacy of the respondents.

2.6. Study Variables

Outcome Variables: The outcome variable "occurrence of gender-based violence during the COVID -19 pandemic" was assigned a value of 1 if the woman or girl was exposed to violence (i.e., physical violence, sexual violence, economic violence, sexual abuse, forced marriage or girls school dropout); and 0 if the woman/girl had not experienced any of the above mentioned violence during the pandemic.

Independent variables: Based on the conceptual framework provided in Figure 1 above, the explanatory variables were identified as individual and household level socioeconomic and demographic, and COVID-19 related variables. The socioeconomic and demographic variables included: age of respondent (1=15-24, 2= 25-34, 3=35-49); highest level of education (1=No formal education, 2=Primary, 3= Secondary+); respondent's religion (1=Orthodox, 2=Muslim, 3=Others); marital status of the respondent (1=married/living with partner, 2=divorced/separated/widowed, 3=single); Tenancy of the house (1=Owned, 0=Rented); Sex of the household head (1= male; 2=female); number of household members (1=1-6, 2=6+); and primary bread winner of the household (1=respondent, 2=husband/partner, 3= other household members).

The COVID-19 related factors comprised of: access to clean water(1=yes, 2= no); access to soap (1=yes, 2= no); access to other hygienic products (1=yes, 2= no); practice of preventive measures (1=yes, 2= no); and failure to maintain previous economic activity during COVID-19 (1=yes, 2=no) and existence of victim at household (1=yes, 2=no).

2.7. Statistical Analysis

STATA version 15.1 was used for data processing and analysis. Quantitative data analysis was conducted using unweighted data. Multicollinearity was tested using a correlation matrix with a cut-off of 0.6 known to cause concern in multicollinearity (Senaviratna & Cooray, 2019). An absolute correlation coefficient of less than 0.6 was observed among all predictors indicating the absence of multicollinearity. Descriptive analysis was performed to describe the study population. Bivariate logistic regression was used to assess unadjusted effects of each independent variables on the outcome variable. In addition, multivariable logistic regression was used to measure the adjusted effects of socioeconomic and demographic and COVID-19 related factors on GBV among women and girls. Furthermore, the qualitative audio recorded data were translated, transcribed, structured and interpreted thematically using content analysis to identify the patterns that emerge from text, by

grouping content into words, concepts, and themes. The relationship between all of the grouped contents or thematic were triangulated with the quantitative findings.

3. Results

3.1. Background Characteristics of the Study Participants

Table 1 shows the background characteristics of the study participants. It is seen that 39% of the respondents were aged 25-34 years group and almost the same proportion was reported to age group 35-39 years. More than 15% of the respondents were uneducated while 46.5% of the respondents are educated and had secondary and above level of education. Nearly 79% of respondents followed the Orthodox Christian religion. About 69% of the respondents were married or living with partners, and 38.7% of households were female headed. In relation to the type of tenancy of the house of the household, majority (71.4%) of the respondents reported that they were living in government, kebele or privately owned rented houses. More than 76% of respondents believed that coronavirus related measures (such as closing of all schools, restricting large gatherings and movement of people, quarantine, and physical distancing) affected their household's economic opportunities and livelihoods (not presented in Table 1). About 86% of respondents reported participating in certain economic activity before the coronavirus outbreak. Of these, almost half of respondents failed to maintain the previous economic activities. About 42% of respondents reported significant decline in their income from employment (i.e., wage and self-employment); and nearly 29% of respondents mentioned that they had no access to health care services (ante-natal care and post-natal care including child immunization, family planning services and, other health care services) due to the pandemic. About 79% of the respondents had practiced one or more protective measures (Table 1).

Table 1. Background characteristics of study participants in Addis Ababa, 2020.

Variable (N=1084)	Category	N	%
	15-24	240	22.14
Age of respondent	25-34	421	38.84
	35-49	423	39.02
Maternal education	No formal education	163	15.04
	Primary	417	38.47
	Secondary and above	504	46.49
	Orthodox Christian	853	78.69
Religion	Muslim	161	14.85
	Others	70	6.46
	Married/living with partner	743	68.54
Marital status	Divorced/separated/widowed	108	9.96
	Single	233	21.49
Tenancy of the house of the	Owned	310	28.60
household	Rented	774	71.40
Sex of the household head	Male	664	61.25
	Female	420	38.75
Household size	Less than 6	726	66.97
	6+	358	33.03
Primary breadwinner	Respondent	211	19.46
	Husband/partner	521	48.06
	Another household member	352	32.47
Employment income during	Decreased	453	41.79
pandemic	Not decreased	631	58.21
Utilization of health care	Yes	770	71.23
service during pandemic	No	311	28.77
D4! C 4!	Yes	856	78.97
Practice of prevention	103		
measures	No	228	21.03
measures failure to maintain previous		228 462	21.03 49.57
measures	No		
measures failure to maintain previous	No Yes	462	49.57

Source: Authors analysis using data collected in October, 2020.

3.2. Bivariate Analysis Results

Table 2 presents results from the bivariate analysis of the association between demographic and socioeconomic, as well as COVID-19 related factors gender-based violence. It is shown that both highest level of education, sex of household head and household size were significantly associated with gender-based violence from sociodemographic factors. Practice of preventive measures, change in employment income and utilization of health care services were significantly associated with practice of gender-based violence from COVID-19 related factors (Table 2).

Table 2. Bivariate associations between gender-based violence and selected predictors, Addis Ababa, 2020

Determinants (N=1084)	OR	SE	p-value	[95% LB, UB]
Demographic and Socioeconomic				
factors				
Age of respondents: (25-34)				
15-24	0.909	.167	0.603	[0.634, 1.302]
35-49	1.085	.152	0.588	[0.806, 1.463]
Education (No education)				
Primary education	0.928	.181	0.702	[0.633, 1.361]
Secondary and above	0.569	.112	0.004	[0.388, .836] ***
Religion (Muslim)				
Orthodox	0.845	.159	0.373	[0.584, 1.223]
Others	1.247	.378	0.466	[0.689, 2.258]
Marital status (Single)				
Married/living with partner	1.316	.228	0.113	[0.937, 1.849]
Divorced/separated/widowed	1.275	.335	0.355	[0.762, 2.133]
Tenancy of house (Owned)				
Rented	1.264	.194	0.126	[0.936, 1.708]
Household size (6+)				
Less than 6	1.387	.205	0.027	[1.034, 1.853] **
Sex of the household head (Female)				
Male	1.023	.142	0.868	[0.779, 1.244]
Primary bread winner (Husband/partner)				
Respondent	1.197	.211	0.308	[0.849,1.693]
Other members	.869	.136	0.368	[0.639,1.180]
COVID-19 related factors				
Practice of preventive measures (No)				
Yes	1.586	.282	0.009	[1.119,2.247] ***
Existence of victims in the household (No)				
Yes	1.081	.749	0.911	[0.278, 4.206]
Failure to maintain previous activity (No)				
Yes	.0.496	.245	0.156	[0.188, 1.307]
Change in employment income				
Yes	1.513	.208	0.003	[1.156, 1.981] ***
	115			

Utilization of health care services (No)				
Yes	.628	.099	0.003	[0.461, 0.856] ***

^{***} p<.01, ** p<.05, * p<.1; LB=Lower boundary, UB= Upper Boundary

Source: Authors analysis using data collected in October, 2020

3.3. Multivariable Analysis Results

Table 3 shows the multivariable logistic regression analysis results. To understand the impact of COVID-19 related factors on gender-based violence with and without the socioeconomic and demographic factors, we fitted two models using variables with a p-value < 0.2 from the bivariate analysis (Heinze &Dunkler, 2017). Firstly, the null model (Model 0, i.e., a model without independent variables) was fitted to determine whether the use of logistic regression modeling was appropriate for the analysis. The null model indicated statistically significant relation within occurrence of gender-based violence justifying the applicability of logistic regression for the analysis.

Secondly, Model I was fitted after including COVID-19 related predictors in the null model. Statistically significant relations in practice of gender-based violence and COVID-19 related factors were observed in this study. Women and girls who implemented preventive measures, including restriction with stay at home practice, had 1.47 times higher odds of gender-based violence as compared to those who did not practice the pandemic prevention measures. Women whose employment income decreased due to the pandemic had 1.55 times higher likelihood of experiencing gender-based violence as compared to those whose employment income did not change. Health care service user women and girls had 1.67 times higher odds of gender-based violence as compared with non-users (Table 3, Model I).

Thirdly, Model II was fitted after including socioeconomic and demographic predictors into the Model I. The table shows that women and girls who implemented COVID protective measures, whose employment income declined and those who utilized health care service had higher odds of experiencing gender-based violence than the reference categories. Women

and girls who had no formal education and primary education had at least 1.6 times higher odds of facing gender-based violence as compared to those who had secondary and above higher level of education. Women and girls from large household size (6+) had significantly higher likelihood of experiencing gender-based violence as compared to those who are living with less than six household members. Women and girls who are living in rented houses were 1.3 times more likely to be exposed to gender-based violence as compared to those living in the house they owned (Table 3).

Table 3. Multivariable Logistic Regression Model, Addis Ababa, 2020 (N=1084)

Model I

Model 0

	Model o	Model I	Miduel II
Attributes	OR. [CI]	OR. [CI]	OR. [CI]
Constant	0.397[0.348,0.453]	0.152[0.095,0.239]	0.166[0.087,0.318] ***
	***	***	
COVID-19 related attributes			
Practice of preventive			
measures: (No)			
Yes		1.47[1.021,2.118] **	1.59[1.097,2.303] **
Failure to maintain previous			
IGA: (No)			
Yes		1.04[0.766,1.142]	1.02[0.0743,1.387]
Employment Income (Not			
decreased)			
Decreased		1.55[1.142,2.107] ***	1.50[1.093,2.066] **
Health care services use: (No)			
Yes		1.67[1.176,2.360] ***	1.66[1.160, 2.389] ***
Socioeconomic and demographi	c attributes		
Education: (Secondary+)			
No formal education			1.66[1.057,2.609] **
Primary			1.703[1.222,2.374] ***
Marital Status: (Single)			
Married/living with partner			0.900[0.593,1.366]
Divorced/separated/widowed			0.780[0.426,1.427]
Household size (< 6)			
6+			0.724[0.523, 1.00] **
Type of house (owned			
Rented			1.283[0.918, 1.792]
AIC	1287.5	1075.2	1069.7
BIC	1292.5	1099.4	1122.9^
*** n < 01 ** n < 05 * n <	1 AMadallianas	tad within Madal II	

*** p < .01, ** p < .05, * p < .1 ^Model I is nested within Model II

Source: Authors analysis using data collected in October, 2020

Complying with the above quantitative findings, Key Informant Interviews (KIIs) carried with the expertise in Sub-Cities and Woreda level indicated that

the livelihood status has been highly or severely affected in reduction of their income during the pandemic. This was further justified that women and girls were highly affected due to the pandemic because most women or girls were economically dependent on temporary works like petty trade, washing clothes, prostitution and, selling coffee and tea).

In addition to this, participants of Key Informant Interview (KII) reported that the health of women and girls, including utilization of sexual and reproductive health services was adversely affected by COVID-19. The respondents further explained that the utilization of antenatal care (ANC) and postnatal care (PNC) services, and family planning (FP) supplies were not accessed as desired. More specifically, the case study participant, who was family planning (injection) user before the pandemic strongly underlined the impact of COVID-19 on reproductive health service. She learned from health facility officials that they could not get the intended family planning (injection) due to stock out and there was no service provided due to the pandemic. In the meantime, despite the fact that she tried to convince her husband that she could not get the injection contraceptive, (the only contraceptive method that gives her comfort), her husband forced to have sex without her consent. As a solution for not getting her pregnant, her husband forced to have uncommon type of sex with her (anal sex). Although she suggested that he uses a condom, he refused and kept on having forced anal sex without her will. Due to fear of divorce and separation with her children, she decided to tolerate him with painful sex until she gets the injective family planning method. Her frequent visit to health facilities did not give her an opportunity to have the contraceptive method of her choice, injection. As her husband continued having anal sex with her, which brought her too much physical pain and psychological trauma she explained her situation with the following statement:

"As it is my private issue, I reported it neither to legal centers nor did I share it to people closest to me. This is the first time I am telling someone my painful experience during the pandemic".

In this case study, the reader can understand that utilization of family planning services was interrupted because of COVID-19 outbreak that could have increased the sexual violence against women and girls.

4. Discussions

This study examined the effects of COVID-19 measures on violence against women and girls in Addis Ababa. We employed logistic regression to explore the effect of COVID-19 related factors on gender-based violence in the city administration. We found that women and girls who implemented preventive measures, including restriction with stay at home had 1.47 times higher odds of exposure to gender-based violence by partners as compared to those who did not practice the same during the pandemic. This indicates that the actions taken (for instance, stay at home, social distancing measures and isolation) to reduce the rate of pandemic had an impact on violence against women and girls, which is in line with other study finding (Profeta, Calo, Occhiuzzi, 2021). Besides, the practice of pandemic prevention measures, including restriction with stay at home had affected social protection and neighborhood security as well. Furthermore, the key informants also mentioned norms granting male control over female behavior and decision making, rigid gender roles, acceptance of violence as a way to resolve conflict, poverty and alcoholic use as the key reasons and drivers for the occurrence of genderbased violence.

The present study also found that although about 86% of women were engaged in economic activity before the pandemic outbreak, almost half of them failed to maintain such economic activity which has led to income decline. Similarly, other studies found that the pandemic has resulted in income reduction of women (Kehinde, 2020; Global Enterpreneurship Monitor, 2022; UN WOMEN, 2020 & Bergallo, 2021) that could have impact on violence against women and girls. Subsequently, our study finding found that women whose employment income declined due to pandemic had a significantly 1.55 times higher likelihood of gender-based violence, including economic violence as compared to their counterparts whose employment income did not change.

This study also found that women and girls who had primary education or less had 1.7 times higher odds of exposure to gender-based violence as compared to those who had secondary and above highest level of education. This finding has been elaborated by one of the case studies participants, who had low level of education and exposed to forced and unusual sexual violence (anal sex) by her husband due to interruption of family planning service provision as a result of the pandemic.

This study is not free from the limitation as it was conducted during the hot season of the COVID-19 pandemic. There are some limitations in this study. Firstly, although the study has included individual and household level factors along with COVID-19 related factors, there would be other important community, societal, organizational factors as recommended by socioecological model that are not included in this study. Secondly, this study shows demographic and socioeconomic factors associated with occurance of gender-based violence among women and girls but no causal relationship of the findings is implied here as the cross-sectional survey data impede causal inferences.

5. Conclusions and Recommendations

5.1. Conclusion

The impact of COVID-19 on violence against women and girls seems higher with women and girls who are less educated, from large household size and living in rented house. There should be aggressive and continuous community education through behavioral change communication strategies that will eventually help to significantly promote knowledge and attitude on adverse effects of gender-based violence. Beside to the gender-based violence, the pandemic has affected the household income generation and livelihood activities. There is a need to focus on women economic empowerment to address gender-based violence through ensuring economic independence.

5.2. Recommendations

The following recommendations are drawn to be used at different settings (at policy makers, practitioners and academic):

- At any circumstance, provision of consistent awareness creation towards the gender- based violence is the major flaw of anti-human rights declarations and ensuring the procedures of getting information about protective and supportive service is considered essential and necessary.
- All players (governmental, and, non-government organizations) shall give special attention or focus on women economic empowerment to address gender-based violence though eradicating poverty and ensuring economic independence.
- Expanding Psycho-Social Services (PSS) at different level shall substantially help to survivors in getting of rehabilitation services on their Post-Traumatic Stress Disorder (PTSD). In this context, universities and government offices are the key institution that could support undertaking of the services to tackle the problem.
- Governmental and non-governmental institutions should allocate the necessary professionals, finance and other alternative way-outs of service provisions during the pandemic outbreaks that would comprise the regular public service provisions, like, schools, health facilities, police stations and others.

Acknowledgement

We acknowledge the support by Initiative Africa.

Reference

- Vienna Declaration and Programme of Action. Adopted by the World Conference on Human Rights, Vienna, 14–25 June 1993. New York, NY, United Nations, 1993 (document A/CONF.157/23).
- International Conference on Population and Development (ICPD), Cairo, Egypt, 5–13 September 1994. New York, NY, United Nations, 1994 (document A/CONF.171/13).
- The Fourth World Conference on Women, Beijing, China, 4–15 September 1995. New York, NY, United Nations, 1995 (document A/CONF.177/20).
- United Nations, The Millennium Development Goals Report 2007, United Nations Department of Economic and Social Affairs, New York, June 2007.
- United Nations General Assembly. Transforming our world: the 2030 Agenda for Sustainable Development. New York, 2015.
- Global Women's Institute and the International Rescue Committee. No Safe Place: A Lifetime of Violence for Conflict-Affected Women and Girls in South Sudan. Washington DC: George Washington University and London: IRC; 2017.
- Muluneh MD, Stulz V, Francis L, Agho K. Gender based violence against women in sub-saharan africa: A systematic review and meta-analysis of cross-sectional studies. Int J Environ Res Public Health. 2020;17(3).
- Beyene AS, Chojenta C, Roba HS, Melka AS, Loxton D. Gender-based violence among female youths in educational institutions of Sub-Saharan Africa: A systematic review and meta-analysis 11 Medical and Health Sciences 1117 Public Health and Health Services. Syst Rev. 2019;8(1):1–14.
- Central Statistical Agency and ORC Macro (Senegal). Ethiopia Demographic and Health Survey 2016; Central Statistical Agency and ORC Macro: Calverton, MD, USA.
- Erika McAslan Fraser (2012). Risks, effects and prevalence of VAWG. Governance and Social Development Resource Center.
- Catherine Kaukinen, (2020). When Stay-at-Home Orders Leave Victims Unsafe at Home: Exploring the Risk and Consequences of Intimate Partner Violence during the COVID-19 Pandemic. Springer American

- Journal of Criminal Justice https://doi.org/10.1007/s12103-020-09533-5.
- UNDP (2020) Gender-Based Violence and COVID-19: UNDP Brief Empowered lives and Resilient Nations.
- Allen-Ebrahimian B. China's domestic violence epidemic. Axios2020 March7. Springer American Journal of Criminal Justice https://doi.org/10.1007/s12103-020-09533-5 https://www.axios.com/china-domestic-violence-coronavirus-quarantine-7b00c3ba-35bc-4d16-afddb76ecfb28882.
- United Nations, Policy Brief: The Impact of COVID-19 on Women, (9 April 2020), p. 17. https://www.un.org/sites/un2.un.org/files/policy_brief_on_covid_impact_on_women_9_apr_2020_updated.pdf
- Krung, EG, Mercy, JA, Dahlberg, LL, &Zwi, AB. (2002). The world report on violence and health. The Lancet, 360(9339), 1083-1088.
- Vetton, L. (2014). Rape and other forms of sexual violence in South Africa Institue of Security Studies Policy brief.
- Cochran, W. G. 1963. Sampling Techniques, 2nd Ed., New York: John Wiley and Sons, Inc.
- Central Statistical Agency (CSA) [Ethiopia] and ICF. Ethiopia Demographic and Health Survey 2016. 2016.
- Tia Palermo, Stephanie Zuilkowski, Sarah Quiñones, Graca Marwerwe, Hassan Kihanzah, Leah Prencipe A, Kajula L. REAL-TIME MONITORING OF COVID-19 IMPACTS AMONG ADOLESCENTS AND YOUNG PEOPLE, THEIR FAMILIES, AND COMMUNITIES IN SOUTHERN HIGHLANDS University at Buffalo. 2021;(July).
- Megan O' Donnell , Mayra Buvin, Development G. Center for Global Development Report Part Title: The Effects of Health Crises on Women and Girls: A Conceptual Framework Report Title: Promoting Women's

- Economic Empowerment in the COVID-19 Context Report Author:. 2021;25–8.
- Senaviratna NAMR, A. Cooray TMJ. Diagnosing Multicollinearity of Logistic Regression Model. Asian J Probab Stat. 2019;5(2):1–9.
- Heinze G, Dunkler D. Five myths about variable selection. Transpl Int. 2017;30(1):6–10.
- Profeta P, Calo X, Occhiuzzi R. COVID-19 and its economic impact on women and women's poverty: Insights from 5 European Countries. 2021;(May):61. Available from: https://www.europarl.europa.eu/RegData/etudes/STUD/2021/693183/I POL_STU(2021)693183_EN.pdf
- Kehinde Ajayi NBME and AH. Covid-19 Impacts on Women Factory Workers in Ethiopia Results From High-Frequency Phone Surveys. 2020; (June). Available from: http://www.worldbank.org/en/programs/africa-gender-innovation-lab
- Global Enterpreneurship Monitor. COVID-19 impacts on women in emerging economies: Insights and Indicators. 2022;1–64.
- UN WOMEN. the Effects of the Covid-19 Pandemic on Women and Businesses. 2020;1–18. Available from: https://asiapacific.unwomen.org/sites/default/files/Field Office ESEAsia/Docs/Publications/2020/07/200720_CEO interview_V20_Single page.pdf
- Bergallo BP, Mangini M, Magnelli M, Bercovich S. The impacts of COVID-19 on women's economic autonomy in Latin America and the Caribbean. Undp Lac C19 Policy Doc Ser. 2021;25(25):1–32