

1 Assessment of Barriers of Behavioral Change to Stop FGM
2 Practice among Women of Kebri Beyah District, Somali Regional
3 State, Eastern Ethiopia

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7
8 **Abstract**

9 Background: Among harmful traditional practices, Female genital mutilation/cutting
10 (FGM/C) is widely practiced across the world. The practice involves either partial or total
11 removal of the female external genitalia for various reasons. FGM is documented to be rooted
12 in religious, personal and societal factors. FGM is documented to be widespread across
13 Ethiopia and is believed to be widely practiced in Somali region. Objectives: To assess barriers
14 of behavioral change to stop FGM practice among women of Kebri Beyah district in Somali
15 region, where the high prevalence of FGM is documented. Methods: A community-based
16 cross-section study design was applied. Both quantitative and qualitative methods were
17 employed to generate relevant evidence. A total of 633 households drawn from five randomly
18 selected kebeles involved in the quantitative part of the study. Participants identified
19 purposefully were involved in the qualitative study. While survey data was analyzed by SPSS
20 version 21. Multiple logistic regressions were carried out to examine the existence of a
21 relationship between intention to stop FGM and socio demographic characteristics.

22
23 *Index terms—*

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37 carried out to examine the existence of a relationship between intention to stop FGM and socio demographic
38 characteristics. On the other hand, qualitative data were analyzed thematically and the result was presented in
39 narration. The findings of the study can be utilized as baseline for further studies related to behavioral change
40 intervention.

41 I. Introduction a) Background II societies have behaviors and norms based on age, life style, gender and
42 social class. The norms often referred to as group-led beliefs about how the member behaves in a given context

2 B) STATEMENT OF PROBLEM

43 that may be beneficial or harmless but some may be harmful. However, culture is not static, it is a constant
44 flux, adapting and reforming that people will change their behavior when they understand the hazards and
45 indignity of harmful practices and when they realize that is possible to give up harmful practices [1]. Among
46 harmful traditional practices, Female genital mutilation/ cutting (FGM/C) is one of mostly practiced worldwide
47 and affecting almost all ethnic groups. It involves various procedures either partial or total removal of the
48 female external genitalia for non-medical reasons. It is deeprooted traditional practice; this practice is rooted
49 in religious, personal and societal beliefs within a frame of psycho-sexual and social reasons such as control of
50 women's sexuality and family honor, which is enforced by community mechanisms [2,3].

51 While reasons for the practice vary across cultural groups, social reasons may include FGM/C as an initiation
52 act for girls into womanhood, as an act of social integration and for the maintenance of social cohesion, socio-
53 economic reasons include beliefs that FGM/C is a prerequisite for marriage or an economic necessity in cases
54 where women are largely dependent on men, Religious reasons rest on the belief that it is a religious requirement,
55 Hygienic and aesthetic reasons for FGM/C include beliefs that the female genitalia are dirty and unsightly,
56 and health reasons include beliefs that FGM/C enhances fertility and child survival. FGM/C may also be an
57 important source of income for circumcisers [4].

58 Any type of FGM is considered as a violation of the human rights of girls and women, it is known to be
59 harmful to girls and women in many ways; the removal of or damage to healthy, normal genital tissue interferes
60 with the natural functioning of the body and causes several immediate and long-term physical, psychological and
61 sexual consequences [5].

62 It is estimated that about 100-140 million girls and women worldwide have undergone FGM, and each year a
63 further two million girls and women are at risk of this practice. It is performed on girls aged 4-12 years and in
64 some cultures as early as a few days after birth or as late as just before marriage [6].

65 Most of the girls and women affected live in 28 African countries, but also in the Middle East and Asia. They
66 are also increasingly found in Europe, Australia, New Zealand, Canada, and US, mostly among immigrants from
67 cultures where FGM is a tradition [7].

68 The prevalence of FGM according to figures from African countries shows a prevalence of more than 70%
69 in Burkina Faso, Djibouti, Egypt, Eritrea, Ethiopia, Guinea, Mali, Mauritania, Northern Sudan, and Somalia.
70 However, there is great variation in prevalence between and within countries, reflecting ethnicity and tradition
71 [4].

72 2 b) Statement of problem

73 Over the past decades, the traditional removal of vital and normal external genital tissue of girls (called female
74 circumcision (FC) and female genital mutilation or cutting (FGM\C) has become a major concern, and there has
75 been an international consensus to take all possible measures to abolish a practice that is internationally deemed
76 as a serious human rights and public health problem that concerns all sectors of society [9].

77 Like many other countries, FGM/C is a widely practiced in Ethiopian and it is one of the major socioeconomic
78 development problems of the country. The negative health implication of this practice increases the chance of
79 maternal mortality during childbirth [10].

80 FGM is widespread across Ethiopia and is practiced in the majority of regions and ethnic groups. According
81 to EDHS2005 the highest FGM practiced is the Somali region, the rate is 97.3% and the least is Gambela region
82 27.1% [11].

83 Yet 74.3% of Somali women believe FGM should continue, which is the highest percentage of women in any
84 region in Ethiopia to think so. This is despite 60.9% knowing of the harmful consequences of FGM [12].

85 Ethiopia outlawed female genital mutilation in 2004, but still the practice is deeply rooted; the penalties for
86 the practitioners range from a minimum of three months to a maximum of life in prison or monetary ??ines 14].

87 Laws can act as one tool to end the practice because they can empower the women and girls to refuse undergoing
88 mutilation. Experts on the subject of FGM, states clearly "In some cases people are informed about the practice
89 and are well educated but they cannot stand the belief that women can live with their clitoris not cut." She adds
90 that" the law is not meant to break up families and generations but "it sets the standards and informs what is
91 morally right or wrong" [15].

92 When people lack an awareness of how their behavior affects their health and wellbeing, they have little
93 reason to put themselves through the misery of changing the risk behaviors they have engaged in for many years.
94 Although increased knowledge creates a precondition for change, yet additional communal or self-influences
95 are needed to overcome the impediments to adopting and maintaining new behaviors [16] It was commonly
96 reported that most of those who went through the process FGM/C and the public at large claim to know about
97 the problem entailed in FGM/C and disapprove the practice; Nevertheless, recent studies attest that despite
98 relatively widespread awareness about consequences of FGM/C and disapproving attitude, four in five women
99 reported to have circumcised their daughters. Besides, still there are mothers who come out proactively to
100 support the practice in connection to sanitary reasons, to avoid shame and to respect cultures [12].

101 According to UNICEF's report, Education is misleading factor to explain variation of FGM/C practice since
102 the procedure takes place way before a girl is enrolled to school. Yet, it's important to note the fact that mother's
103 level of education is believed to determine daughters FGM/C status [10].

104 A study done in Kersa Demographic Surveillance and Health Research Center field site revealed that, only

105 one third of the respondents stated that they knowing of FGM being practiced in their community. Local healers
106 were the main performers of FGM. Women knew about the negative reproductive health effects of FGM and also
107 experienced these themselves. However, only a few had tried to stop the practice and the majority had taken no
108 steps to do so. This may be attributable to the fear of becoming alienated from the cultural system and fear of
109 isolation [19].

110 Among the Somali refugee community in Eastern Ethiopia, there was a considerable support for the
111 continuation of the practice particularly among women. The findings indicate a reported shift of FGM from
112 its severe form to milder clitoral cutting. More men than women positively viewed anti-FGM interventions, and
113 fewer men than women had the intention to let their daughters undergo FGM, indicating the need to involve
114 men in anti-FGM activities [13].

115 Several measures like IEC activities focusing on informing, promoting, motivating and teaching on FGM,
116 workshops and seminars, community outreach, anti-FGM lessons in literacy schools, Religious education, media
117 campaign and legal approach have been taken to bring about awareness on the harmful consequences of FGM
118 and to put an end over the past decade at international, regional, and national levels.

119 In spite of these efforts, update reports reveal there was still widespread of FGM in Somali regional state. And
120 this makes the study relevant and timely that plays important role to examine the barriers of behavioral change
121 to stop FGM practice in this community.

122 **3 c) Significance of study**

123 When people lack an awareness of how their behavior affects their health and wellbeing, they have little reason to
124 put themselves through the misery of changing the risk behaviors they have engaged in for many years. Although
125 increased knowledge creates a precondition for change, yet additional communal or self-influences are needed to
126 overcome the impediments to adopting and maintaining new behaviors There are large numbers of behavioral
127 change theories, but changing the behavior of FC requires a unique approach as it is a communal rather than
128 individual behavior. One of the main characteristics of FC is that even if each individual in the intermarried
129 group thinks of abandoning the practice, no single individual acting alone can succeed [30].

130 In Ethiopia, there are a number of FC programmes underway. Including IEC activities programs, which is
131 considered as essential steps for reaching behavior change in FGM, but there is no evidence as to whether or not
132 these programmes have changed people's positive attitudes toward the practice of FC, the aim of this study is
133 to identify the barriers of behavioral change to stop FGM practice. In addition to this, the study outcome will
134 help policy makers, local government, public health practitioners and other interesting organizations to design
135 appropriate intervention to stop FGM practice for the future female generation. Moreover, it serves as baseline
136 for further researches.

137 **4 II. Literature Review a) Historical overview of FGM**

138 The historical roots of FGM practice are not known but it appears in the ancient Egypt during the time of
139 Pharaoh's. The "FC" used in the 1980 mostly by western writers and it was indorsed by inter African committee
140 (IAC), on traditional practices affecting health of women and children, because of severity and irreversible of the
141 damage inflicted on the girl's body that has been termed FGM/C. This is currently the term used in all official
142 documents of united and other international documents instead over the use of female circumcision [21].

143 There is also little that can be said with certainty about the origin of different types of FGM. It seems most
144 unlikely that the practice spread initially from any single location. One possibility suggested by Seligman is that
145 FGM in the African and Arabian area are derived from ceremonies enacted by the Hamito-Semitic inhabitants
146 of the Red Sea Coast .As for infibulations, its distribution throughout the Sudan-Ethiopia-Somalia region might
147 indicate a relation with the Cushitic. Although often perceived to be a Muslim practice there can be no doubt
148 that FGM in Egypt, Sudan and Ethiopia dates from long before Islam or Christianity [23,24].

149 The practice is primary found in area where there is high poverty, child mortality, illiteracy, poor sanitation
150 and access to modern health care facilities. Religion, tradition, poor economic and social status of women are
151 among the most common factors reported to play a role for the practice to continue and exist [22].

152 Although the damage to female sexual organ and their function is extensive and irreversible, yet the true
153 magnitude of the problem is still underestimated due to limited information and mystery of the practice [25].

154 This practice is considered as one of major international and national problem as it does not only affect the
155 physical, mental and social life of women but also socio-economic development of many countries [10].

156 **5 b) Female circumcision globally**

157 FGM/C is universally practiced all over the world. According to UNICEF report based on a survey completed
158 by selected countries FGM is known to be prevalent in 27 African countries, Yemen and Iraqi Kurdistan where
159 125 million women and girls have undergone FGM. FGM/C is major public health issue, majority of women
160 worldwide have under gone the procedure. It is practiced in one form or another, in around 40 countries, mostly
161 in east and West Africa and also parts of Arabian Peninsula. As a result of migration from these areas it is now
162 also practiced in Europe and Australia and united state of America [9].

7 D) KNOWLEDGE AND ATTITUDE OF FGM PRACTICE

163 The highest prevalence rates are in 30 African countries, in a band that stretches from Senegal in West Africa
164 to Ethiopia on the east coast, as well as from Egypt in the north to Tanzania in the south. On the other hand
165 Egypt has the world's highest total number with 27.2 million women having undergone FGM, while Somalia has
166 the highest prevalence rate of FGM at 98% although, estimates about the prevalence of FGM vary by source [10].

167 A study shows that the percentage of circumcised women was 99.3%, infibulations is the commonest type of
168 circumcision used (75-78 %) Kenya 78 %, Eritrea 95.5 %, Egypt 97 %, Djibouti 98 %, Sudan 90 %, Ethiopia 70-90
169 % and the least prevalence countries including Uganda 5 %, Zaire 5 %, Togo 12%. The age of the circumcision
170 performed varies from one community to other, it may be done during infancy or childhood or adolescent and at
171 the time of marriage. It is thought that mainly performed between ages of 4-15 years average being 7.5 years,
172 demographic health survey of respective countries [8].

173 6 c) Female circumcision in Ethiopia

174 The distribution of female genital cutting in Ethiopia varies depending on ethnic origin and region. The National
175 Committee on Traditional Practices in Ethiopia carried out a national baseline survey to determine the prevalence
176 of this practice. Some 44,000 people were interviewed in a study reaching 65 of Ethiopia's 80 ethnic groups (urban
177 and rural) in all ten regions of the country. The results show that 72.7% of the female populations have undergone
178 a form of circumcision. Regional statistics from the survey revealed that prevalence ranges from 27.1% in the
179 Gambella region to 99.7% in the Somali region, and to more than 50% in the capital, Addis Ababa. Throughout
180 the country, half of all women who have undergone FGM have had clitoridectomy, and the remaining cases have
181 had their clitoris and/or labia minora cut. Nationwide, 6% of females affected by the procedure have undergone
182 infibulations. More than 80% of women in the Somali region are suffering as a result of infibulations, whereas
183 the prevalence is 60% in Afar [27,28].

184 A study conducted in JIGJIGA town revealed that the proportion of women who were genitally mutilated
185 was 96% with 52% of them undergone the most severe type of FGM -infibulations. The rest 48% of women had
186 undergone either FGM Type I or Type II; i.e., they were genitally mutilated but not infibulated [29].

187 A study conducted at national level in revealed that, the support for the continuation of females' genital
188 mutilation decreased from 42.8% (no education) to 2.0% (higher education). It was also observed that the
189 support for the continuation of the practice ranged from 76.0% (Somali) and 69.0% (Afar) to 13.3% (Dire Dawa)
190 and 5.9% (Addis Ababa), respectively [30].

191 7 d) Knowledge and Attitude of FGM Practice

192 There are four types of female genital cutting generally categorized as; clitoridectomy (Sunni) type which involves
193 the dissection and removal of the clitoral hood or fore skin of the clitoris; excision type which is more severe
194 involving the total removal of the clitoral, partial or total removal of the labia minora (small lips) leaving the vulva
195 open. Infibulations which is the crude form of gynecological operation involves excision and in this procedure
196 the clitoris and the labia minora are removed, the inner wall of the labia majora excised or scraped to produce a
197 raw surface [31].

198 All types of female genital mutilation involve removal or damage to the normal functioning of the external
199 female genitalia and can give rise to a range of well documented physical complications. They are irreversible
200 and their effects last a lifetime. Studies on health effects of FGM shown this practice has negative consequences
201 for delivery, first sexual intercourse, and during menstruation. Studies on the psychological effects of FGM are
202 scarce and need to be given due emphasis, given that FGM is one of the reported risk factors for post-traumatic
203 stress disorder in women [32,33,[34][35][36][37][38].

204 A study done in Sudan mentioned that 45 person of women interviewed and believed that as it is a good
205 production because of it is promote cleanliness, and keep virginity, more than 80 % of men and women were
206 against and 40 % respondent unaware that FGM/C is banned by law.8.3% of female respondents thought FGM
207 would increase their chance of marriage, while 78.1% of female were unsure as to whether this would affect
208 their chance of marriage, 74.8% of male preferred to marry uncircumcised women, 65% of respondents said that
209 mothers were responsible in taking the decision, while grand mother and father were responsible in 52% and
210 25% of cases respectively. 94.2% of female aware of the complication caused by FGM, 50% of female especially
211 the Muslim respondents claimed that FGM is recommended by their religious and 88.1% of women had negative
212 attitude towards FGM practice [52].

213 According to source of genital mutilation affords young women status in their societies and assures that they
214 will be acceptable brides. This practice continues even though men who have had sexual intercourse with
215 mutilated and intact women prefer the experience with later. Another factor that contributes to the continuation
216 of the mutilation practice is that, the only autonomous profession open to women in many societies, are those of
217 traditional midwife and circumciser [6].

218 According to study in entitled female genital mutilation a new challenge for health service; most children or
219 women are circumcised by local women and traditional midwives often the intervention is part of cultural rituals
220 that make the transition to womanhood and preparation for marriage (10).The highest rate of use of medical
221 personnel to perform FGM can be found in Egypt (61%), Kenya (34%), and Sudan (36%), with rates of 9%

222 and 13%, respectively, in Guinea and Nigeria. Similarly, 90% of FGM is performed in Guinea and Eritrea by
223 traditional/ local healers [18].

224 Study done by Egyptian care society, show that 39% of study women perpetuated FGM/C due to custom. 80%
225 believed that practice should continue. 15-20% refuses to give opinion on FGM/C. 60% believed that FGM/C
226 was religious practice. 72% husbands prefer to wives to FGM/C. 45% believes that it prevented adultery [6].

227 A study done in Bale zone revealed that 26.7% of the respondents had intention for the continuation of FGM.
228 Religion, safeguarding virginity, tradition, and social values were the major reasons for the perpetuation of this
229 practice [19].

230 The majority, however, are village midwives who either interested in their living by performing operation or
231 enjoying a position of status in their village and able to wide considerable influence over women. The reason and
232 the motivation why the practice is continue for allowing girls to undergo FGM/C given present for confusion,
233 they are contradictory to each other and in contradiction of biological facts. On the other hand, a study done in
234 Hargeisa district revealed that 88.8% of the respondents were aware of the possibility of HIV transmission [2,22].

235 47.9% of mother had favorable attitude to continue FGM were and with unfavorable attitude were 52.1% that
236 is to discontinue the practice. The mechanism by which FGM might cause adverse obstetric outcomes is unclear,
237 but they can be predicted according to the type of FGM performed; more severe complications are anticipated
238 after type 2 than type 3 FGM. The presence of scar tissue which is less elastic than the perineal and vaginal
239 tissue following the procedure would cause obstruction, tears, and/or a need for episiotomy [39,40].

240 A World Health Organization study in six African countries revealed that the annual cost of FGM related
241 obstetric complications amounted to \$3.7 million and ranged from 0.1%-1% of government spending on health
242 care for women aged 15-45 years; This poses a significant economic burden on poor countries, when forced to
243 spend a huge amount of money on outcomes of a traditional non medical procedure [6].

244 A study done in JIGJIGA town revealed that Episiotomies occurred among 61% of women who were delivering
245 for the first time and 28.1% of women delivering for the second time. The rates of instrumental and cesarean
246 deliveries among the first-time deliveries were 6.6% and 3.1%, respectively; while they were 3.2% and 1.3% among
247 the second-time deliveries, respectively. Among primi-parous 36.2% women reported having had complicated
248 postnatal period; 22.5%, prolonged lab our; 10.3%, perineal tear and 9.8%, heavy bleeding. [29]. In addition to
249 the above mentioned complications, FGM/C procedure has also the potential to transmit HIV and cause fistula.

250 In addition to the negative health consequences of FGM/C, it is vital to highlight that the practice reflects a
251 gender inequality that establishes an extreme form of female discrimination. Progress towards its abandonment
252 may therefore contribute to the empowerment of women (MDG 3), an improvement of maternal health (MDG
253 5) and a reduction in child mortality (MDG 4). Accordingly, for the good health and human rights of women
254 and children, the United Nations has denounced all forms of the practice, rejecting any shift towards accepting
255 milder forms as well as towards the medicalization of the practice [40].

256 8 e) Intervention to stop FGM/C

257 The first programme for the prevention of female genital mutilation (FGM), which started in the mid-1970s
258 focused on promoting, informing, motivating and teaching on the adverse health effects of FGM, in order to break
259 the taboo surrounding this harmful traditional practice. The efforts to stop practice of FGM, used information,
260 education and communication (IEC) materials, such as leaflets, booklets, training manuals and guidebooks for
261 professionals. These IEC activities were often conducted with a focus on awareness rising rather than behavior
262 change and thus focused on short time results, since behavior change takes time [3].

263 Health education intervention had a positive impact on the attitude of women towards FGM. However, for
264 sustainable behavioral change that will lead to end FGM practice placing FGM elimination efforts within a
265 comprehensive development strategy and larger context of reproductive health is needed [67].

266 While the provision of continued and informed care for women who have been affected by FGM/C is crucial,
267 the key to improving the health and lives of women at risk rests in the numerous prevention and eradication
268 strategies that have been implemented worldwide in an attempt to bring the practice of FGM/C to an end. Some
269 have proven more effective than others [41].

270 Changing behavior to FGM (or any other undesired practice such as smoking or the practice of unsafe sex
271 which might lead to HIV infection) requires a particular approach. To better understand this process of behavior
272 change, several theories have been developed that explain individual or community behavior change [42].

273 BCC is also used to promote, sustain and maintain individual, community and societal behavior change; it is
274 recognizes that skill building might be needed in order to sustain the change in behavior, for example on how to
275 resist pressure, and how to establish community support [44].

276 Recent developments in communication recognize the need to move beyond top-down communication towards
277 horizontal and participatory approaches. Such approaches incorporate the concept of enabling environments (e.g.
278 breaking the taboo/silence) and contextual factors (e.g. pressure of grandmother to excise a girl) and are framed
279 by the concept of communication for social change [45].

280 While legal and political measures are fundamental to ending FGM/C, community based "While government
281 action is necessary to create a political and legal environment that deters people from practicing FGM/C, it is
282 ultimately the women, their families and their communities who must be convinced to abandon the practice"
283 [15].

284 FGM is a dangerous and potentially lifethreatening procedure to with women and girls in many countries are
285 subjected has been viewed as a human right violation in many countries. More recently, parliamentarians from all
286 over Africa met in Dakar, to push for a continent-wide ban on FGM and calling on UN to pass a general assembly
287 resolution appealing for a global FGM ban, as it violates human rights they argued members of parliament from
288 African nation also exchange lessons learned and action to take to achieve the ban and resolution some 17 African
289 states have banned FGM, among them Ethiopia, Burkina Faso, Togo, Senegal and Uganda [10].

290 Programmatically, there are a number of institutions that are engaged in the fight against FGM/C in Ethiopia.
291 These institutions have joined hands by establishing networks against FGM/C. there are more than forty six local
292 CSOs that have one or more FGM/C focused intervention. Despite this the persistence of FGM/C is believed to
293 be associated with individual, social and cultural factors, interventions were not particularly focused. This may
294 also affected the whole endeavor of stopping the practice of FGM/C [17].

295 Kembatta menti gezzime (KMG) is an Ethiopiabased indigenous human right and development NGO that
296 envisions a society where women are free from all forms of discrimination and violence and where they are able
297 to attain justice, equity and equality for themselves, their families and their communities [12].

298 9 III. Objectives

299 10 IV. Methodology a) Study area

300 The study was conducted in Kebri Beyah district, Fafaan zone, Somali Regional State of Ethiopia, which is
301 located in lowland part of Eastern Ethiopia It is located at 50 kilometers east of Somali regional state capital
302 city (Jigjiga). Based on CSA2007 population of Kebri Beyah district were 165,518 in which 89,703 were men and
303 75,815 were women [48] and it composed of 29 kebeles. It has six health center and 27 health post. It is selected
304 since various ethnical group exist that manifest cultural diversity which may contribute valuable information. A
305 widespread practice and considerable support for the continuation of the FGM practice were also reported.

306 11 b) Study design and period

307 A community based cross-sectional study with quantitative and qualitative methods was conducted among women
308 of reproductive age groups at Kebri Beyah district from August 2014 to June 2015.

309 12 c) Source population

310 The source populations were all women of reproductive age group living in KEBRI BEYAH district.

311 13 d) Study population

312 The study participants were women of reproductive age group who met the inclusion criteria.

313 14 e) Inclusion criteria

314 All women of reproductive age group (15-49years old) in the districtf) Exclusion criteria ? Critically sick ?
315 Mentally ill ? Unable to hear.

316 15 g) Sample size determination

317 The sample size was determined by using a single population proportion formula and calculated by Epi info.
318 Contingency 10 % for refusal and absenteeism was added. $384 + 10\% * 1.5 =$ Design effect was considered 1.5.

319 16 h) Sampling procedure

320 A total of 633 households sample were selected by using Multi-Stage Sampling procedure;

321 ? All 29 kebeles of KEBRI BEYAH districts were grouped into five categories based on their direction ? From
322 each category, one kebeles was selected randomly based on the resources in our hand by using simple random
323 sampling by lottery method ? The total sample size was distributed to the selected five kebeles proportional to
324 their total households ? From each kebeles households, households were selected using systematic sampling until
325 the allocated sample size achieved ? Individual aged 15-49 years old in the households were randomly selected
326 for interviewed ? When there was more than one reproductive age women in one household only one person was
327 selected using lottery method ? If the specified age was not found in the household or not available that time
328 three repeated visit were made, then the nearest household was replaced. Purposive sampling technique was
329 utilized for qualitative approach. i) Data collection procedures i. Quantitative method Data was collected by
330 trained female local data collectors who completed grade 10 and had previous experience in data collection using
331 face to face interview administered questionnaire which was developed from reviewing others studies and modified
332 according to variables then translated into local language (Somali). Training was given for data collectors and
333 supervisor on collection technique and objective of the study, Questionnaire, sampling methods and securing
334 informed verbal consent from the study participants for three day at KEBRI BEYAH by investigator.

335 The questionnaire used in this survey was addressed socio-demographic characteristics of respondent,
336 knowledge related to FGM, types and side effect of FGM, sources of information to stop FGM, preferred settings

337 (home, health institution, religious organization and community base organization) and means of communication
338 (drama, song, news and discussion), attitude and intention to stop FGM practice as well as to identify barriers
339 to stop FGM practice.

340 The respondents were interviewed at home by interviewers and the data collection process based on self-report
341 and no inspection of genitalia was performed. The questionnaire was pre-tested on 10% of total sample size at
342 other kebeles & the necessary arrangements & corrections were made to standardize & ensure its validity.

343 ii. Qualitative method Focus group discussion (FGD) was conducted to obtain deep information related to;
344 participant's knowledge on FGM, sources of information for positive behavioral change, altitude and intention
345 to stop FGM and finally to suggest any means that bring positive behavioral change to stop FGM practice. A
346 total of three FGD session (two for women separately and one for community leaders) were hold for 60minutes
347 for each session and moderated by principal investigator with assistance of trained note taker and tape recorder
348 and later transcribed. The discussion was held in private setting and quit environment. Semi structured topic
349 guide was used to guide the discussion.

350 17 j) Data quality management

351 Before embarking upon data collection, pretest was conducted in another kebele to ensure the validity of the
352 survey tool & to standardize the questionnaire. Supervisors & the principal investigator were made frequent
353 checks on the data collection and each discussion was taken note and tape recorded. Finally, the investigator
354 transcribed the tape record after each section. The transcription was checked by interviewees to ensure the
355 completeness & consistency of the gathered information.

356 18 k) Data Analysis

357 Quantitative data was entered and cleaned by using Epi data version 3.11 and analyzed by using SPSS version
358 21 package. The data will be coded on pre arranged coding sheet by the principal investigator, after all the
359 necessary data collected and checked their completeness. Descriptive statistics were used to calculate the mean
360 and standard deviation for continuous variables and frequency for categorical variables. Bivariate analysis and
361 cross-tabulation was used to see the relationship and effect of the identified factors on FGM prevention with their
362 crude OR association. Multiple logistic regressions were performed to see the effect of independents variables on
363 dependent variables while controlling effect of others.95% C.I with Adjusted odds ratios were used to interpret the
364 result. The qualitative data, the different ideas in the text were merged in their thematic areas, and a thematic
365 analysis was employed manually. Then, the result was presented in narration by triangulating the quantitative
366 finding. ? Barriers: Factors considered by the individuals to be obstacles to sop FGM practice.

367 ? Knowledge: Eight questions were asked to assess knowledge of FGM and correct answer was given score 1
368 while incorrect answer was given score 0.

369 The score varied from 0-8. The sum was computed and those who scored above the mean were labeled as
370 having 'good knowledge' while those who score below mean labeled as 'poor knowledge'.

371 ? Attitude: Individuals' predisposition to respond in a favorable or an unfavorable manner towards the
372 prevention FGM. lickert scale were used to assess attitude of participants and five question were asked and the
373 scale were measured as follow; The score varied from 5-25 and the sum was computed and those who scored
374 above the mean were labeled as having ' positive attitude' while those who score below mean labeled as 'negative
375 attitude'.

376 ? Practice: An overt behavior or habit of women towards FGM and being circumcised is evidence for FGM
377 practice.

378 ? Intention to stop FGM: The women's plan to carry on with practice by subjecting their own daughter to FGM
379 in the future. Measuring an intention using a single variable may not be practical for this study, Seven questions
380 were presented to the study participants specially Q501, Q504, Q506 and Q507 are considered and correct answer
381 will be given score 1 and incorrect answer 0. And great change=2, low change=1 and no change=0 was given
382 score. The sum was computed and those who scored above the mean were labeled as having 'intention to stop"
383 whiles those who score below mean labeled as "intention to practice."

384 19 n) Ethical consideration

385 Ethical clearance was obtained from the ethnical clearance committees of the School of Public Health, AAU.
386 Official letter was written by School of Public Health to Somali Regional Health Bureau and other concerned
387 bodies to allow implement the study.

388 The objective and importance of the study was explained & informed consent was obtained from each
389 participant. Privacy and confidentiality was maintained at all levels of the study. Participant's who were unwilling
390 to participate in the study & those who went to quit from the study at any juncture were informed to do so
391 without any restriction.

20 V. Result a) Socio-demographic characteristics of respondents

A total of 633 households were planned for study and 620 households were successfully interviewed with an overall response rate of 98%.

Most of the respondents 261(42.1%) were in age group of 15-24 year and 244(39%) were in age group 25-34. The mean age of study participants was $27.14 \pm (7.67)$ years, with minimum and maximum value 15 and 49 years, respectively. The majority of the respondents, 576 (92.9%) were Muslim, while 27(4.4%) were orthodox.

Majority of respondents were Somali, 513 (82.7%) followed by Amhara, 50(8.1%), Oromo, 48(7.7%) and others, 9(1.5%). Finding on marital status, shows that, 403 (65%) of respondents were married, while 151(24.4%) were single.

Education accomplishment of participant shows that nearly, 343 ??

21 b) Communication related to FGM prevention

Four hundred thirty nine (70.8%) of respondents heard FGM messages on radio. Among this, most of the respondents 169(38.4%) listened FGM at least once in two weeks in three weeks on radio, followed, at least once in two weeks, 100 ??22.7%).

Two hundred sixty one (42.1%) of respondents heard FGM messages on television. Among this, 89(34.1%) were watched television at least once in two weeks in three weeks, followed, 54(20.7%), at least once in two weeks, 52(19.9%). Four hundred forty three (71.5%) of respondents have not read printed materials related to FGM for the last four weeks. Two hundred ninety two (47.1%) know that FGM cause HIV/AIDS to females. Four hundred ninety seven (80.2%) of respondents mentioned FGM cause excessive bleeding, 475(76.6%) of participants believed that FGM cause difficult of lab our during child birth. About 500(80.6%) of respondents responded FGM negatively affect the future sexual relation of women. And 503(81.1%) of respondents thought that FGM is harmful tradition and should be stopped. Among this 259(52.5%) considered health education were the possible means to stop FGM, followed 207(41.1%), legal action. Almost half of the respondents, 313(50.5%) perform FGM for religious purpose, followed, 229(36.9%) for culture, 74(11.9%) to ensure virginity. Computing the knowledge score of study participants, 557(89.9%) has good knowledge, while the remained 63(10.2%) have poor knowledge regarding to FGM. Most of participants divided FGM into two types; Sunni (gudniinka sunniga) and pharaonic (gudniinka fircooniga). Several reasons are used to justify FGM practice, religious and custom are the commonest reasons for FGM practice. In addition to this, there is also an expectation that men desire to marry only circumcised women, while virginity and an intact hymen is given high respect and marriage of them know the negative health effects of this practice and some of them have experienced these problem.

"FGM is a long period standing traditional practice and most of people classify into two types Sunni (removal of the tip of the clitoris) and phraonic (removal of prepuce), it's religiously recommended as well as culturally required, so that majority of this community respect and practice FGM."(29 years old married woman). Some of participants mentioned that men prefer to marry women that were subjected FGM whether it's Sunni or pharaonic types.

"I remember that, one of my friends has lost her future, because of she was not circumcised. Her fiancé asked her whether she was circumcised or not, one day before Nikah (engagement) and I realized that men desire to marry only circumcised women." (28 years old married woman) Most of study participants believe that; FGM is religiously recommended in order to protect premarital sex (sinada) and this also increases the chance of marriage.

"FGM is religiously recommended and mandatory so we are expected to perform because there is various hadith that commend us to practice, the following hadith to argue that it is required as part of the Sunnah or Tradition of the Prophet: 'Um Atiyyat al-Ansariyyah said: A woman used to perform circumcision in Medina. The Prophet (pbuh) said to her: Do not cut too severely as that is better for a woman and more desirable for a husband's." (25 years old unmarried woman) 41 years old married woman also stated the following reason, "I believe that FGM practice whether it's sunni or phraonic because I inherited from my grandparents. I consider as mandatory according to my religion and it's also one of my cultural identities that I should have to maintain." Majority of the participants mentioned that, Traditional birth attendants were the main performers of this practice.

"The traditional birth attendant's were circumcising our daughter by unhygienic procedure in our home and this increase the risk of infection and other sever disease."(32 years old married woman).

Most of the study participants knew that FGM had health-related problems, including recurrent pain, pain during first sexual intercourse, the retention of urine and menstruation, and infection and complications during delivery.

445 **22** "I experienced various problem during menstruation I feel
446 sever pain and the blood doesn't come out properly and
447 on my first delivery, I developed prolonged lab our and
448 infection." (26 years old married woman) d) Source of
449 information to increase knowledge related to FGM

450 The commonest source of information that helped the participants to increase their FGM related knowledge were
451 health professionals 242(39%), followed, family 116(18.7%) and religious leader 65(10.5%). Participants are asked
452 their source of information used to stop FGM practice in their community. Majority of the participants stated
453 that radio is the commonest source of information while some of the participants mention health professionals,
454 religious leaders, women's organizations, schools and community leaders also deliver information related to FGM
455 to the community, while some of them criticized EIC activities.

456 For instance a 21 years old unmarried woman mentioned that; "Workshops and training are always given to
457 health professionals, community leaders, religious leaders and youth in order to sensitize all harmful effect of
458 FGM.

459 **23** " "I have never attended any training but I heard from
460 the radio that FGM is harmful should stopped."(32years old
461 married woman) "I have seen Community leaders and other
462 organize public speech and outreach activities, sometimes
463 in market and public area to create awareness on harmful
464 effect of FGM to bring positive behavior to the commu-
465 nity."(19years old unmarried woman)

466 "I heard FGM related massages like, FGM stories, drama and songs were broadcasted on radio once in every two
467 or three weeks. I also heard few religious leaders give public lecture Friday prayer (qhudba) to confirm female
468 circumcision particularly pharaonic type is not recommended in Islam."(26years old married woman)

469 And limited efforts of IEC activities were used deliver information in order to bring positive behavior to stop
470 FGM.

471 **24** "There is no doubt that IEC activities are only performed by
472 only health workers and it is not holistic approach because,
473 community members are not included."(36years old married
474 woman) "Once, I was participated a training toward FGM
475 awareness most of trainer criticized IEC work activities, it
476 were not focusing on rural area where information gap exist,
477 the rural people have not access to attend trainings and
478 workshops which is important to bring positive behavioral."
479 (35years old married woman) f) Practice of FGM among
480 women

481 Majority of study participants 542(87.4%) reported FGM is currently practiced in their community, while
482 483(77.9%) of respondents have undergone FGM themselves. Among those undergone FGM, 265(54.8%) were
483 circumcised at age 5-9 years, followed by, 149(30.8%) who were circumcised at age10-15 years. Most of the
484 respondents reported to have gone through Sunni type of circumcision 386(79.9%) and the remaining 97(20.1%)
485 were subjected pharaonic type.

486 More than half of respondents, 312(50.3%) reported that traditional birth attendants were the main
487 circumciser, followed by, 224(36.1%), village women and 67(10.8%), health professionals. Commonest type of
488 instruments used to perform FGM were blade razor 395(63.7%), followed, knife 152(24.5%), scissor 69 (11.1%)
489 and 4(0.6%), others. And most of respondents 435(70.2%) reported that mother decide to perform FGM to
490 their daughters, followed by, 153(24.7%), father and 32(5.2%) for both mother and father. women to stop
491 FGM practice Five hundred two 81% of study participants have changed their previous attitude, after received
492 various information related to FGM. While 370(59.7%) of respondents were believed that circumcision make

28 "ANTI-FGM CLUBS SHOULD ENCOURAGED BY PROVIDING TECHNICAL, MATERIAL AS WELL AS FINANCIAL SUPPORT, STRENGTHENING COMMUNITY PARTICIPATION FOR EACH AND EVERY ACTIVITIES DESIGNED TO STOP AND BRING POSITIVE

BEHAVIORAL CHANGE TOWARDS FGM PRACTICE AND EFFECTIVE AND SMOOTH WORKING RELATION WITH RELIGIOUS LEADER AND LOCAL ADMINISTRATION SHOULD BE CREATED."(36YEARS OLD COMMUNITY LEADER MAN)

Women physically clean and hygiene when compared to uncircumcised women. On the other hand, most of
Majority of participants, 493(90.5%) have the intention to stop FGM practice. 189(90.5%)
of participants have intended to practice FGM in the future. Regarding the negative health effect of FGM,
493(79.5%) of respondents were experienced negative health effects related to FGM. Among this, 333(67.5%)
had developed low change of behavior to stop FGM, 117 (23.7%) indicated that they have no change, only
28(5.7%), had developed great behavioral change and 15(3%) did not report their level of the behavior change
after encountered the negative health effect of FGM.

25 i) Identified barriers of intention to stop FGM practice

One hundred forty four (23.2%) of the respondents reported that the barriers to stop FGM were related to low involvement of community in FGM prevention and controlling programs, followed by, 125(20.2) were due to presence of gender inequality, 104(16.8%) were fear of social stigma and pressure, 98(15.8%) were blamed due to lack of legal measure to The majority of the study participants were highly supporting the continuation of female circumcision either Sunni or pharaonic and intended to circumcise their daughters in the future to fulfill their obligation of being Muslim, to avoid shame and social stigma and to protect their family's dignity while some of them think that stopping FGM is foreign driven agenda.

"I believe, we inherited this practice from our mother's because it has its own importance and respect. Therefore, we have to maintain and transfer o next generation." (31 years married woman)

"Uncircumcised girl can't control her sexual desire and maintain her virginity until she gets married compared to circumcised girl, if she lose her virginity, she chance of marriage."(42years old married woman)

"The circumcision of both girls and boys are mandatory aspects. According to our sheria, parents are expected to circumcise their children. If not so they haven't fulfilled their obligation as being Muslim."(36years old married woman)

"I have four daughters, I already circumcised the oldest one, and the remaining three are still too young to be circumcised but I plan to circumcise them in the future.

26 "(27years old married woman)

"There is strong traditional that existed for long period of time and if the government ban all forms of circumcision (Sunni and pharaonic) through legal means it may develop conflict and that people think that, government is against their religion and tradition and this may put the administration at risk."(19years old unmarried woman)

27 Suggestions of means of bringing positive behavioral change

Majority of study participants are recommended; IEC efforts, religious leader mobilization, legal action, establishing Anti-FGM clubs, strengthening community participation, providing printed materials to rural area and women's active participation, while others, emphasize women's education to stop FGM practice.

"Religious leader should be mobilized and go to outreach to deliver messages relate to health effect of FGM and to correct the misunderstanding of that FGM is religious demanded, workshop should be designed to deliver information related to FGM prevention mechanisms to bring positive attitude to the community, establishing Anti-FGM committee consists of members of different sectors for instance; local administration, NGO, teachers, youth, women's origination, health care providers and religious leader and public discussion should be made to the community by using all forms of

28 "Anti-FGM clubs should encouraged by providing technical, material as well as financial support, strengthening community participation for each and every activities designed to stop and bring positive behavioral change towards FGM practice, and effective and smooth working relation with religious leader and local administration should be created."(36years old community leader man)

"Legal measures are the only ways to stop FGM practice in our community because for the last five years different activities were conducted to create awareness about the negative health effect of FGM but some members of the community are still performing this practice therefore, those who are willing to FGM and those who are performing should be taken legal action in order to show this practice is legally prohibited."(29years old community leader man)

"Education is the only powerful tool that can bring positive behavioral change towards FGM prevention because the education status of female contributes great to her attitude whether to practice or to stop FGM."(23years old married woman)

29 j) Relations of socio-demographic variables and intention to stop FGM practice among women of reproductive age group

In binary logistic analysis, Somali ethnic group have less (COR = 0.61; 95% CI: 0.37, 0.99) intention to stop female FGM compared to those who were amhara and Oromo.

According to marital status, women who were single 1.69 times more intention to stop female genital cutting (COR = 1.69; 95% CI: 1.10, 2.6) compared to those who were married. Illiterate women have lower odds of intention to stop female genital cutting (COR = 0.47; 95% CI: 0.33, 0.67) than those who were literate. Odds of intending to stop of FGC were also high among those who have radio at their home (COR = 1.62; 95% CI: 1.10, 2.34) compared to women who have not radio at home. While those who have television at home were 2.33 times more intention to stop FGM (COR = 2.33; 95% CI: 1.63, 3.33) compared to those have not television at home. Multivariate analysis of socio demographic variables in relation to intention to stop the female genital cutting showed that odds of intending to stop FGC was 0.62 times less likely among illiterate women compared to literate (AOR=0.62; 95% CI: 0.42, 0.91). Those who have television at home have 1.89 times more intention to stop FGM than those who have not television at home (AOR=1.89; 95% CI: 1.29, 2.77).

30 Variable

Intention Odd ratio k) Relation of socio demographic variables and knowledge of women towards FGM Among socio demographic variables, marital status, education, having radio and television shows that association with knowledge towards FGM. It shows that respondents who were single were 0.36 times less likely to acquire good knowledge towards FGM compared to married women. Similarly being illiterate shows 3.13 times more likely to acquire good knowledge towards FGM compared to being literate. Participants who have radio were 0.55 times less likely to access good knowledge towards FGM compared to those who have not radio. Moreover those who have television 0.2 times less likely to acquire good knowledge towards FGM compared to those have not television. Being having television at household shows significant association in multiple logistic regressions; it shows those who have television at home 0.27 times less likely to access good knowledge towards FGM compared to those have not television at home (AOR=0.27, 95% CI (0.13-0.55)).

31 VI. Discussion

This community based-cross sectional study has attempted to identify the barriers of behavioral change to stop FGM practice and their associated factors among women of reproductive age in Kebri Beyah district.

Our study finding showed that 69.5% of the respondents had intention to stop FGC practice in the future. This finding is consistency with other findings although the figure greater than these findings [5]. These might be due to adequate knowledge about negative health effect of FGM among women in our study. Our study findings, is also comparable to study from Tanzania revealed that 76% of the circumcised women were in favor of not performing FGM on their daughters, while 24% did, another study in Guinea revealed that, support for the continuation of FGM was significantly higher among women 68% than among men 51%, indicating more attitudinal support for FGM discontinuation among men than women [61,62].

The present finding shows that 89.8% of respondents have good knowledge towards FGM, while 10.2% of the women have poor knowledge about FGM. This finding is comparable with a study done in Addis Ababa which was 92% of women had good knowledge. On the other hand a study done in Somalia revealed that, about 66.9% of women had good knowledge on the effects of FGM [50,56]. In contrast to our current findings, a study done in northwest Ethiopia shows that 46.2% of women had good knowledge about the ill health effect of FGM and 53.8% of the mothers had poor knowledge about the ill health effect of FGM [57]. This discrepancy might be due to the difference of the operational definition of the studies.

In our current study finding shows that, the most health effect more than 80.2% of respondents reported, FGM cause excessive bleeding, while 76.6%, difficult of lab our in addition to this infection, painful menstruation and painful sexual contact were also reported as negative effect of FGM. Similar study done in Somalia showed that, infection 60%, bleeding 20%, and 68% difficult of labour to be the main ill effect of FGM [53]. This is consistency with our study finding.

The current study revealed that, Attitude of women towards FGM practice was 28.5% have positive/favorable attitude towards FGM practice meaning less than half of them believe to continue FGM practice among their daughters and 68.5% have negative/unfavorable attitude towards FGM this implies that majority of them believe to discourage FGM practice. Similarly a study done in eastern Ethiopia shows that, 47.9% of women have positive/favorable attitude, while 52.1% of women have unfavorable attitude against FGM practice [57] Odd ratio might be due to combination efforts from different stalk holders against FGM in this region. The present study revealed that 87.4% of women reported FGC was largely practiced in the study area. This finding is comparable with the other finding in Ethiopia which reported the prevalence of FGC among the women to be 98%, this shows the prevalence of FGC were still high in this area [49].

In our study findings, the type of FGM most commonly practiced was clitoridectomy (Sunni type), and a few women were also subjected infibulations (pharaonic) type, which is the most severe form of FGM. Our

31 VI. DISCUSSION

607 of women in the Somali region have been victims of the most severe form of FGM [19]. These findings are
608 inconsistency with our study finding which shows, 20.1% had undergone the severe form of FGM (pharaonic
609 type). These might be due to current anti-FGM intervention carried out in the area.

610 About 77.9% of interviewed women were subjected to FGM, almost all undergone the procedure before the
611 at age between 5-9 years and this finding is comparable to other surveys that have found 90% of girls who have
612 undergone FGM aged 5-14 years, although practices vary from country to country, FGM are generally done
613 among girls younger than 10 years. When subjected to the procedure, and another study shows that, half of
614 cutting in Ethiopia, Mali, and Mauritania were initiated before age of 5 years, whereas in Yemen about 76% of
615 cutting were started at not more than two weeks of age [1].

616 In this study, more than half FGM procedures were performed by traditional birth attendants, mostly by using
617 unhygienic procedures in the community, this increasing the risk of infection and later reproductive complications
618 in women undergo FGM. And our present findings are comparable to the Ethiopia DHS 2000 report; more than
619 92% of the practices were performed by traditional circumcisers [6]. On the other hand, in some countries,
620 medical personnel, including doctors, nurses, and certified midwives perform FGM under anesthesia in health
621 care facilities, even though it is forbidden and subject to prosecution in the west. The highest rate of use of
622 medical personnel to perform FGM can be found in Egypt (61%), Kenya (34%), and Sudan (36%), with rates of
623 9% and 13%, respectively [49]. These findings were inconsistency with our present study findings.

624 Our current study shows that about 63.7% of the procedure was performed by using blade razor. This finding
625 is consistency with other findings shows that, the cutting is mostly done with razor blades but some continue to
626 use knives in the country side as in the old days when razors were not available in Somali region [22].

627 The present study found that religious requirement 50.1% were the most common reasons for FGM practice
628 among the study participants. FGM is performed for various reasons, including preventing women from
629 hyperactivity in sexual practice and early initiation of sexual intercourse before marriage. This finding is in
630 line with other findings were reported by 30% of Kenyan women who supported this practice to ensure virginity.
631 Similarly, more than half of Egyptian women believed that FGM would prevent adultery and that it is proof of
632 a girl's virginity and perceived that it improves marriage prospects for unmarried girls in Nigeria. This shows
633 that traditional and religious reasons for practicing FGM are also widely accepted by females in the societies in
634 different regions. However, the association between religion and FGM needs further research in Ethiopia. It is
635 quite evident that the perception and acceptance of harmful traditional practices, including FGM, is widespread
636 across all regions, regardless of religious practices [19,53].

637 In this study about 37.1% of respondents perceived that FGM exposes a woman for HIV. Our finding is
638 inconsistency with a study done in Hargeisa district, Somalia, revealed that 88.8% of the respondents were aware
639 of the possibility of HIV transmission [22]. This discrepancy might be considered only women as our study
640 subjects. Furthermore, there might be variation in accessing sources of information among these study subjects.

641 Many women still believe that the chance of uncircumcised women to be married is very low and they are
642 directly or indirectly forced to circumcise their daughters or support the practice. In a traditional society like
643 Ethiopia or Somalia, marital decisions are mainly made by men or by the parent of the girl. In such society, men
644 prefer to marry circumcised women and mothers worry about their daughters thinking that an uncircumcised girl
645 would not be married and becoming less attractive to men in terms of intactness, similarly a study in Eastern
646 Ethiopia depicted the preference of men to be married to circumcised woman, this suggests that it would be
647 very easy for women to abandon any type of FGM, if the husbands do not expect it, indicating the importance
648 of involving men in anti-FGM campaigns. Although men generally prefer to marry women who have undergone
649 FGM, there are studies in some settings that have shown the preference of men to marry women who have not
650 undergone the procedure [51].

651 Our study also attempted to ascertain women's feelings after experience serious outcomes of FGM which
652 many women have faced various problems through out their life. 79.5% of women who had experienced the
653 negative health effect of FGM, among these women, 67.5% of them developed low behavioral change while
654 others approached it as a normal phenomenon and none had attempted to stop the practice in their community.
655 Although, most of women had adequate knowledge about the potentially serious reproductive outcomes of FGM
656 and this finding is comparable to other studies [46,68].

657 In this study finding health institution were the preferred setting of communication and drama was the
658 commonest means of delivering FGM related information and this finding is comparable to a study done
659 eastern Ethiopia shows that Anti-FGM committee, health institutions and training on anti-FGM activities
660 were mentioned as the major sources of information about possible immediate and long-term risks of health
661 complications associated with FGM. Another study done in Nigeria also showed that exposure to multimedia
662 campaigns had a significant impact on changing attitudes and promoting the intention to stop FGM, another
663 study also revealed that radio and visual education material were the preferred channels to deliver information
664 related to FGM to bring positive behavioral change [26,63].

665 The identified barriers were lack of community participation in Anti FGM activities. Although various
666 organizations are operating in this area, the community members were not incorporated the interventional
667 activities to end FGM practice. In addition to this, lack of encouragement and commitment of community

670 against FGM, due to their limited scope and dependence to their husbands. This finding is inconsistency with a
671 study done in Somalia that show community member were given first priority, "community can create suitable
672 solution for their own problem" and this might bring positive intention towards FGM practice [26].

673 The current finding shows that, socio demographic variables of this study have not shown significant association
674 with attitude of women towards FGM practice. On the other hand our study findings indicate, among the
675 socio-demographic variables, educational status and having television at home were significantly associated with
676 intention of stopping FGM. Nowadays television became the most powerful tools for communication but most
677 of this community has not television at household level to access information related to FGM and this also have
678 significant association with knowledge of participants. While other studies also showed that the level of education
679 of women has a decisive role on the practice of FGM [51,59]. This indicates that targeting the education of women
680 is important in this population.

681 **32 VII. Strengths and Limitations of Study**

682 **33 Strengths**

683 Use of both quantitative and qualitative methods of data collection Gives baseline information for further study
684 Limitations Bias related to social desirability; since the study is self reporting, there is more likelihood of the
685 participants to give culturally acceptable answer.

686 Lack of standardized questionnaire related to this specific topic.

687 **34 VIII. Conclusion**

688 The findings of the current study have indicated that intention of women to stop FGM can be influenced by some
689 socio demographic characteristics like marital status and having television at household to access information
690 related to FGM.

691 This study shows prevalence of FGM is still high in KEBRI BEYAH district although most of study participants
692 have positive intention to stop FGM practice for the future.

693 In this study most of the respondents justified for the continuation of this practice as religion demand and
694 custom. In addition to this some of them circumcise their daughter to avoid social pressure and stigma. And
695 practice can disappear if the current interventional activities directed towards the alleviation of stigmatization.

696 This study shows that majority of respondents have good knowledge and negative attitude towards FGM
697 practice. And these are good indicators to bring positive behavior, while conclude education and ethnicity of
698 participants were inversely associated the intention of women to stop FGM in the future and this indicates the
699 importance of women education to end FGM.

700 We conclude the findings of this study mass media was the major sources of information pertaining to end
701 FGM particularly radio was cited as the commonest source of information used bring positive behavioral change
702 towards FGM practice likewise previous studies and health institutions and religion organization were most
703 preferred settings to achieve the desired behavioral change to stop female circumcision while Drama and group
704 discussion were considered to be the best means of communicating FGM messages to bring positive behavior, on
705 the other hand, IEC activities were criticized for not addressing rural area.

706 Lack of community member participation in community based anti FGM interventional programs, lack
707 of community leader commitment, Inappropriate IEC work and stigmatization as well as social pressure to
708 uncircumcised women were considered to be the major I would also like to extend my deepest thanks to all
709 my colleagues and experts from different institutions that helped me in providing valuable information and
710 supports to undertake my study and also the ADDIS ABABA university libraries staff for providing me relevant
711 literatures.

712 I would like to acknowledge the Somali regional health office, KEBRI BEYAH administration office and
713 respective offices of the selected kebeles deserve my appreciation for letting me undertake the study in the
714 district and facilitating everything for smooth implementation of the study.

715 Last but not the least I would like to pass my appreciation to supervision, interviewer and the entire IX.
716 Recommendation

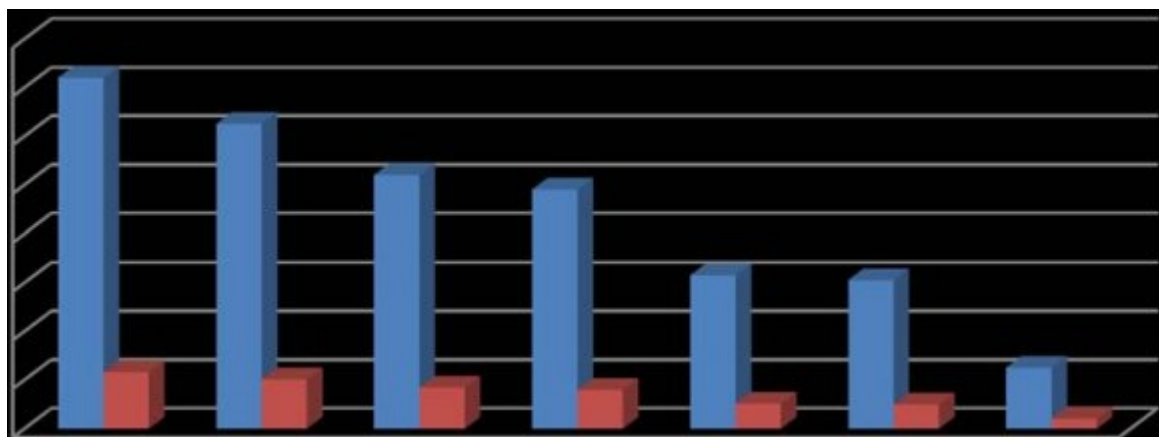


Figure 1:

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Medical Research

Figure 2: Table 1 :

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Variable

Figure 3: Table 2 :

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Variable

Figure 4: Table 3 :

4

Variable	Frequency	Year 2016 Volume XVI Issue VI Ver- sion I D D D D) K (%
Source of information		
Family	116	18.7
Peers	53	8.5
Religious leader	65	10.5
Health professionals	242	39
Radio	57	9.2
Television	27	4.4
Teacher	14	2.3
Anti-FGM clubs	45	7.3
Others	1	0.2

[Note: © 2016 Global Journals Inc. (US)]

Figure 5: Table 4 :

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Variable

Figure 6: Table 5 :

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Variable

Figure 7: Table 6 :

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Variable

Figure 8: Table 7 :

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Medical Research	Age group	15-24	n=431	n=189	COR	AOR
Re- search	25-34	71(27.2%)	190(72.8%)	1.55(0.97-2.47)	1.25(0.76-2)	
	35-49	75(31%)	167(69%)	1.29(0.81-2.05)	1.9)	1
status	Muslim	43(36.8%)	74(63.2%)	0.56((0.26-1.2)	1	0.86(0.33-2.23)
	Marital	180(31.3%)	396(68.8%)	1.69(1.10-2.6)	**	1
Global Jour- nal of	Single	34(22.5%)	117(77.5%)	0.61(0.37-0.99)	**	1
	Married	155(33%)	314(67%)	1.45(0.79-2.66)	1	1.4(0.88-2.23)
Ethnicity	Somali	165(%)	348(%)	0.47(0.33-0.67)		0.62(0.42-0.91)
	Others	24(22.4%)	83(77.6%)	1		**
Occupational status	Employed	15(23.8%)	48(76.2%)	1.62(1.1-2.3)	**	0.75(0.5-1.13)
	Unemployed	174(31.2%)	383(68.8%)	1		1
Educational status	Illiterate	128(37.3%)	215(62.7%)	2.33(1.63-3.33)	**	0.52(0.36-0.77)
	Literate	61(22%)	216(78%)	1		1
Radio	Yes	129(27.9%)	334(72.1%)	1		1
	No	60(38.2%)	97(61.8%)	1		1
Television	Yes	63(21.4%)	232(78.6%)	2.33(1.63-3.33)	**	0.52(0.36-0.77)
	No	126(38.8%)	199(61.2%)	1		1

[Note: ** =significance CI= confidence interval COR= crude odds ratio AOR= adjusted odds ratio © 2016 Global Journals Inc. (US)]

Figure 10: Table 9 :

Variable	Knowledge		Odd ratio	AOR
	n=557	n=63	COR	
Age group				
15-24	245(93.9%)	16(6.1%)	0.44(0.21-0.93)	0.61(0.28-1.33)
25-34	210(86.8%)	32(13.2%)	1(0.53-2)	1.14(0.57-2.26)
35-49	102(87.2%)	15(12.8)	1	1
Religion				
Muslim	514(89.2%)	62(10.8%)	5.18(0.7-38.3)	3(0.31-28.9)
Non Muslim	43(97.7%)	1(2.3%)	1	1
Marital status				
Single	144(95.4%)	7(4.6%)	0.36(0.16-0.8) **	0.54(0.23-1.27)
Married	413(88.1%)	56(11.9%)	1	1
Ethnicity				
Somali	455(88.7%)	58(11.3%)	2.6(1.02-6.64)	1.55(0.52-4.56)
Others	102(95.3%)	5(4.7%)	1	1
Occupational status				
Employed	61(96.8%)	2(3.2%)	0.26(0.64-1.12)	0.38(0.08-1.66)
Unemployed	496(89%)	15(12.8%)	1	1
Educational status				
Illiterate	294(85.7%)	49(14.3%)	3.13(1.7-5.8) **	1.9(0.99-3.67)
Literate	263(94.9%)	14(5.1%)	1	1
Radio				
Yes	423(91.4%)	40(8.6%)	0.55(0.31-0.95) **	0.78(0.43-1.4)
No	134(85.4%)	23(14.6%)	1	1
Television				
Yes	284(96.3%)	11(3.7%)	0.2(0.1-0.4) **	0.27(0.13-0.55) **
No	273(84%)	52(16%)	1	1

** =significance CI= confidence interval COR= crude odds ratio AOR= adjusted odds ratio

1) Relation of socio demographic variables and attitude of women towards FGM

Among the socio demographic variables, only ethnicity shows a weak association in binary logistic regression. It shows that Somali respondents were 1.53 times more likely to have negative attitude towards FGM compared to Oromo and Amhara ethnic group. And the socio demographic variables did not show significant association with attitude of respondents under multiple

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Variable	n=410	Attitude n=210	COR	AOR
Age group				
15-24	95(36.4%)	166(63.6%)	0.84(0.53-1.33)	0.93(0.57-1.5)
25-34	77(31.8%)	165(68.2%)	1(0.64-1.65)	1(0.65-1.69)
35-49	38(32.5%)	79(67.5%)	1	1
Religion				
Muslim	191(33.2%)	385(66.8%)		1.1(0.5-2.3)
Non Muslim	19(43.2%)		1	1
Marital status				
Single	59(39.1%)	92(60.9%)	0.74(0.5-1.58)	0.8(0.53-1.2)
Married	151(32.2%)	318(67.8%)	1	1
Ethnicity				
Somali	165(32.2%)	348(67.8%)	1.53(1.11-2.3) **	1.41(0.83-2.4)
Others	45(42.1%)	62(57.9%)	1	1
Occupational status				
Employed	23(36.5%)	40(63.5%)	0.88(0.51-1.51)	0.93(0.54-1.62)
Unemployed	187(33.56%)	370(66.4%)	1	1
Educational status				
Illiterate	113(32.9%)	230(67.1%)	1.1(0.73-1.53)	1(0.69-1.43)
Literate	97(35%)	180(65%)	1	
Radio				
Yes	155(33.5%)	308(66.5%)	1(0.73-1.56)	1.11(0.74-1.64)
No	55(35%)	102(65%)	1	1
Television				
Yes	105(35.6%)	190(64.4%)	0.86(0.62-1.2)	0.87(0.61-1.25)
No	105(32.3%)	220(67.7%)	1	1

** =significance CI= confidence interval COR= crude odds ratio AOR= adjusted odds ratio

Figure 12: Table 11 :

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