CHAPTER III

RESEARCH METHODOLOGY

3.1 Study design

The study design was cross – sectional descriptive study concerning Knowledge attitude and practice of FGM on women aged 15-49 years old (reproductive age group) in Jijiga district of Somali regional state of Ethiopia.

3.2 Study area

The study was in Somali regional state of Ethiopia, Jijiga Zone, Jijiga district, which is located in the low land part of Eastern Ethiopia and South– west of Somali national regional state with arid and semiarid climate and predominately inhabited with Somali pastoralist ethnic group. Jijiga town is located 650 km far from the capital (Addis-Ababa) accessible via both by air and by road.

3.3 Study period

From February 10 to March 20/2007

3.4 Population

3.5 Source population

All women of reproductive age (15-49 years old)

3.6 Sample size

Sample size – was calculated from the source population of the town. The assumption was that a typical population distribution according to age group for Ethiopia – women in the age range 15 – 49 years account 21% of the total population and women aged 50 years and above was calculated and account 1.55% of total population. Thus, the projected population size of the town was 98,076, which is 50,355 male and 47,721 female, in the Jijiga town, by the year 2006. Source of total population is 1998 census Results for Somali Region. Volume – statistical Report.

The sample size was calculated by using the following Wayne W.Danial formula

The formula is $n = \dfrac{z^2 pq}{d^2}$

Where n = Sample size

z = Standard statistical value, under normal distribution curve, with significance level at 5% (Za/2=1.96)

P = Proportion of FGM in Somali region

q = 1 –p = 0.05

d = standard error 0.01

$n = \dfrac{z^2 pq}{d^2}$

$$\dfrac{(1-96)^2 \, x0.9x0.1}{(0.05)^2}$$

n = **138**

3.7 Study population

According to the result of the sample size calculation, the sample group was 138 women aged 15-49 years old residing in Jijiga town was interviewed for the survey, there fore the sample size of this study was at **(138)**

3.8 Sampling technique

The sample selection technique was used the simple random sampling technique Then, by the First house hold was selected by lottery method. Then was selected systematically and if the number of eligible above one a women was picked using lottery system. Thus systematic stratified sampling technique was used, there are 12 villages, and 6 of them were selected using stratified simple process.

3.9 Measurements

3.10 Independent Variables

Predisposing factors:

1. Socio-demographic characteristics: age, income, ethnic group, marital status and

2. Religion: necessary for spiritual cleanliness

Enabling factors:

1. Attitude towards FGM – general feeling towards the practice or to respond in favorable or on favorable manner towards FGM

2. Knowledge-range of information stored in the memory regarding FGM

3. Practice – overt behavior , habit related to & FGM

Reinforcing factors:

1. Community enforcement mechanism:,- E.g. divorce refusal to marry
   uncircumcised woman poems, songs that celebrate circumcision and deride

2. Society norms: -rite of passage needed for acceptability

3.11 Dependent Variables

1. Type of FGM practiced

2. FGM and related out comes (complication)

3. Prevalent of FGM

3.12 Method of Data Collection

Structured questionnaire was developed from WHO to collect data on knowledge, attitude and practice as well as type of FGM practice by the women and other Socio – economic and demographic variables based on. The questionnaire was pre-test on the study area using interviewers and small group of study population after translation. To evaluate questionnaire, its appropriateness to make sure that it was understandable and to know how much time was needed.

Instrumentation

The instruments used to collect data was as follows

Translation of the questionnaire

The translation of the questionnaire was done using experts on both language, Somali and English, two female and two male and then was pre-tested using 30

people with different age and all of them were women, then check for validity and reliability until we have adjusted.

Section 1 Questioner

1. Demographic Data

2. Knowledge of FGM

3. Attitude towards of FGM

4. Practice towards of FGM

Section 1

1. **The Demographic Data Questioner**, include: -age, income, ethnic group, marital status religion.

2. **The questionnaire on knowledge about FGM:** - FGM – related problem, reasons to practice the FGM. The investigator derive the questions on the questionnaire by using the check list questions and the multiple dichotomy method, it will code as 0 and 1 scale as follows.

Score Criteria

Correct response   **1**

Incorrect response **2**

The explanation of the score is as follows

A correct response mean the respondent consider the item is true

An incorrect response mean the respondent consider the item is false

Interpretation of score

There are 8 questions in this section of the questionnaire, and the total score range from 0-8 points.

-Low level   :   a score of 0-2

- Moderate level   :   a score of 3-5

- High level   :   a score of 6-8

3. **Questionnaire on Attitude towards FGM:** Includes beliefs and thought about FGM, and covers each aspect of attitude on FGM, there was a total of 17 questions that were compose both positive and negative statements, the score criteria for this was as follows

	Positive	Negative
Strongly agree	5	1
Agree	4	2
Disagree	2	4
Strongly disagree	1	5

Meanings of the corresponding scale are as follows

Strongly agree   means all the relevant statements correspond to the respondent's ideas or feeling.

Agree   most of the relevant statements correspond to the respondent's ideas or feeling.

Disagree   most of the relevant statements do not correspond to the respondent's Ideas or feeling.

Strongly disagree means all the relevant statements do not correspond to the respondent's Ideas or feeling.

Questionnaire on Attitude towards FGM which includes the type of FGM, who decide the practice and the age which the under gone the practice. The investigator derive the questions on the questionnaire by using the check list questions and the multiple dichotomy method, it was code as 0 and 1 scale as follows.

Score Criteria

Correct response 1

Incorrect response **0**

The explanation of the score is as follows

A correct response mean the respondent consider the item was true

An incorrect response mean the respondent consider the item was false

Interpretation of score

There are 7 questions in this section of the questionnaire, and the total score range from 0-7 points.

-Low level   :   a score of 0-2

- Moderate level   :   a score of 3-4

- High level   :   a score of 5-7

3.13 Recruitment and training of interview

2 health workers were trained for half a day on basic interviewing technique the method to fill questionnaire and appropriate recording. To keep confidentiality and bias.

The data was collected by interviewers and checked for its consistency and completeness by the principal investigator.

3.14 Data Analysis

The data was analyzed by SPSS computer program, and statistical analysis used was as follows

1) The frequency, mean, standard deviation percentage of the demographic data of the persons who respond to the question was distribute according to age, Income, Ethnic group, marital status, occupational status.

2) Chi-square was identify to describe the data for the association between two variable and.

3.15 Limitation of the study

- Only the reproductive group was study subject, and also this study was not specifically include the circumcisers (these who perform the practice)

- Translation discrepancies during communication were some limitations. On the translation of the Questioners discrepancies is expected when translated in to local language.

- The nature of the study and questions are sensitive to females of these societies.

- Some events like immediate complications, related to practice may not be easily remembered by some of the study subjects.

- Difficulty of reporting the exact type of FGM practiced because as it needs detailed physical examination.

3.16 Variable table

Table 2: Variable Table

Theory	Conceptual Variable	Operational Variables	Data collection method	Measurement scale	Criteria
Independent Var. Predisposing factors	Socio-demographic characteristics:	-Age, -income, -Ethnic group, -Marital status -religion	Structural Questionnaire	-Ratio -*Ratio* - *nominal* -*nominal*	Reproductive age
Enabling factors:	Knowledge Practice	information stored in the memory regarding FGM	Structural Questionnaire	Ordinal	High Medium Low
Reinforcing factors:	Attitude Community Enforcement Mechanism		Structural Questionnaire	Ordinal	High Medium Low
Dependent Variables	Society Norms:	overt behavior , habit related to & FGM	Structural Questionnaire	Ordinal Nominal	High Medium Low
	Type of FGM practiced	general feeling towards the practice or to respond in favorable or on favorable manner towards FGM 1,2,3or 4	Structural Questionnaire		
	FGM and related out comes (complication) Prevalence of FGM		Structural Questionnaire	Nominal	
		Any complication			
		Total of the women who under gone FGM	Structural Questionnaire	Ordinal	