CHAPTER THREE
Data and Methods of Analysis

3.1 Introduction

This chapter discusses the sources of data used for analysis in the study. The chapter is divided into three sections. The first section describes the two sources of data. It also highlights the reasons for using both quantitative and qualitative research methods and explains how samples were selected in each. The second and third sections describe the procedures and methods used in this study for carrying out qualitative and quantitative analyses. Binary logistic and multinomial logistic regressions are the main statistical methods applied to the quantitative data while verbatim quotes from focus group discussions (FGDs) were used for qualitative research.

3.2 Sources of Data

The study used both quantitative and qualitative research methods. The Namibian Demographic and Health Survey (NDHS) conducted between September and December 2000 and focus group discussions conducted with young women aged 15-24 in June/July 2004 are the major sources of data used in this study. The NDHS provided secondary data for this study and primary data was generated from the focus groups discussions and are used to complement the quantitative results and provide more in-depth information, which cannot be provided by the DHS. The NDHS is the latest national dataset with information on contraceptive use and June 2004 was the convenient time to conduct focus groups discussions for this study. There was a period of 4 years between the survey and the interviews. This could

hold consequences for the conclusion. However, although attitudes change with time the change is usually slow and minimal.

Although the two methods overlap in practice, quantitative methods can identify "how" young women behave in certain circumstances, while qualitative methods especially focus group discussions are better equipped to answer the diagnostic question of "why". The quantitative research methods have advantages of systematic control of variables, rigorous sample selection which can be representative, highly structured design, pre-testing of questionnaires and many others (Brannen, 1995). There is no doubt that precise statistical information obtained through more careful mathematical elaboration of survey research is an invaluable tool in many policy decisions. Thus, quantitative research encompassed the whole of Namibia and therefore the results can be generalised to cover all Namibian young women aged 15-24 years.

But as with any method, there are also drawbacks. One of the major problems is that a quantitative survey is a highly structured design in which the respondent has to adapt his or her responses to previously determined alternatives (Folch-Lyon & Trost, 1981; Brannen, 1995). Therefore, such a method rarely elicits in-depth information on sensitive intimate areas (for instance sexual relations) and answers often reflect attitudes on a rational, normative level, while more emotionally based attitudes are not voiced. In addition to the possibility of obtaining erroneous information on sensitive areas, quantitative research is subject to underreporting of negative attitudes by some respondents due to concerns about social disapproval (Brannen, 1995; Pötsönen & Kontula, 1999). These drawbacks are often overcome by the use of qualitative research, in which participants are encouraged to disclose behaviour and attitudes that they might not consciously reveal in quantitative studies. Some participants often feel more comfortable and

secure in the company of people who share similar opinions, attitudes and behaviour or simply because they become carried away by the discussion. Thus the use of qualitative research and specifically focus groups discussion was considered in this study.

However, focus group discussions cannot be used to statistically quantify group norms, traits and characteristics but to expose their underlying attitudes and opinions. In focus group discussions, the "quality" of the response is important and the purpose is to detect directions of behaviour rather than magnitude (Folch-Lyon & Trost, 1981). Hence, focus group discussions are rigorous in the depth of the inquiry but not as rigorous in sample selection as quantitative surveys. Qualitative research methods are not considered a substitute for quantitative studies but as an important input to the latter and as a parallel source of distinct, rich and pertinent information. Qualitative research has in the last few decades, strengthened its position within health research (Pötsönen & Kontula, 1999). It has been realized that in addition to explaining things, one needs to understand the concepts, beliefs and meanings behind them. Ideally, different research methods and approaches are applied in parallel and complement each other (Brannen, 1995). FGDs are then used to examine the spectrum of values norms and meanings revealed in discussions by young women. Pötsönen & Kontula (1999) report that FGD method is useful for researching the concepts employed by the target group and their ideas and opinions on the topic under study. Since every research method obviously has its limitations and advantages, a multiple research approach is more capable of disclosing diverse dimensions of behaviour. This is the main reason why both qualitative, in particular, focus groups discussion and quantitative research methods were used in this study.

3.2.1 The Namibian Demographic and Health Survey

Data

The NDHS was a nationwide sample survey of women of reproductive age designed to provide information on women's reproductive histories, fertility, awareness and use of contraceptive methods, breastfeeding practices, nutritional status of mothers and young children, early childhood mortality and maternal mortality, maternal and child health and knowledge and behaviour regarding HIV/AIDS. The primary objective of the NDHS was to provide up-to-date demographic information and to produce regional demographic estimates and health indicators. The survey was conducted by the Ministry of Health and Social Services in collaboration with the Central Statistics Office. Technical assistance for the programme was provided by the MEASURE DHS+ project of Macro Systems International. The data were intended for use by programme managers and policymakers in order to evaluate and improve family planning and maternal and child health programmes.

Target population

A total of 6755 women aged between 15 and 49 years were successfully interviewed. Of these, 2748 women were aged 15-24. Because this research study focuses on the determinants of current contraceptive use and current method choice among young women, the sample was limited to young women (15-24 years old) who were exposed to the risk of conception at the time of the survey that is, those who were not pregnant at the time of the survey. This reduced the sample to 2576 young women, which included 1776 sexually active young women. Table 3.1 on the next page shows the age distribution of these young women.

Table 3.1: Age distribution of young women (15-24 years)

Age group	all young women		sexually active	
	N	%	N	%
15-19	1380	54	695	39
20-24	1196	46	1081	61
Total	**2576**	**100**	**1776**	**100**

Source: NDHS 2000

Sample design

Sample frame

The sample for the Namibian Demographic and Health Survey (NDHS) was designed to yield a nationally representative probability sample of 6500 completed interviews with women between the ages of 15 and 49 and 3000 men aged 15-59 regardless of their marital status, to be selected from 260 area units throughout the country. The sampling frame for the NDHS was the list of enumeration areas created by Central Bureau of Statistics for the Census conducted in 1991. The enumeration areas were stratified by urban and rural. The number of households in the enumeration areas served as a measure of size of the enumeration area. The 2000 NDHS is a stratified two-stage sample. In the first stage of selection, 260 primary sampling units (PSUs) (106 urban and 154 rural) were selected with a probability proportional to the number of households within the PSU. In the second stage, each selected PSU was divided into equally sized segments, one of which was randomly retained in the sample. All households residing in the selected segment were included in the sample and all women aged 15–49 listed in these households were eligible for individual interview.

Questionnaires

Three questionnaires were used for the 2000 NDHS: a Household questionnaire; a Women's questionnaire, and a Men's questionnaire. These questionnaires were based on the model survey instrument developed for the MEASURE DHS + programme. The individual questionnaire for women was based on the DHS model "B" questionnaire, which is designed for use in countries with low contraceptive prevalence and was adapted to the data needs of Namibia during consultations with specialists in reproductive health, child health and nutrition in Namibia. The Household questionnaire was used to enumerate all the usual members and visitors in the selected households and to collect information on the socio-economic position of the household. In the first part of the Household questionnaire, basic information was collected on the characteristics of each person listed as a household member. These include his/her age, sex, educational attainment and relationship to the head of household. The main purpose of the Household questionnaire was to identify women and men eligible for individual interview. In the second part of the Household questionnaire, questions were included on the dwelling units such as the number of rooms, the flooring materials, the source of water, the type of toilet facilities and the availability of a variety of consumer goods. The Woman's questionnaire was used to collect information from all women aged 15–49 years and covered topics such as background characteristics, reproductive history, knowledge and use of contraceptive methods, fertility preferences, maternal mortality, knowledge of HIV/AIDS etc. Only the Household and Women's questionnaires were used in this study (see Appendix 6).

Training and fieldwork

The survey instruments were pre-tested and the results were used to modify the survey instruments as necessary. Candidates for field positions were recruited on the basis of maturity, friendliness, level of education, language

ability and willingness to work away from home for a period of up to four months. The training programme included a detailed description of the content of the questionnaire, how to complete the questionnaire, interviewing techniques, and contraceptive methods. Fieldwork lasted four (4) months, and field teams were supervised frequently by trained supervisors.

Response rate

Table 3.2 presents information on the coverage of the 2000 NDHS samples including household and individual response rates. A total of 6849 households were selected in the sample, of which 6594 were reported occupied at the time the fieldwork was conducted. Interviews were completed in 6392 households or 97 per cent of the occupied households. In some selected households only children were found in the house during the fieldwork period these houses were therefore excluded from the study. In the interviewed households 7308 women were identified as eligible for the individual interview, of which 6755 (92 per cent) were successfully interviewed. Some eligible women listed as household members were not available at the time of interview.

Table 3.2: Results of the household and individual interviews, Namibia 2000

	Residence		
	Urban	**Rural**	**Total**
Household interviews			
Households sampled	3008	3841	6849
Households occupied	2876	3718	6594
Households interviewed	2760	3632	6392
Household response rate	**96.0**	**97.7**	**96.9**
Individual interview			
Number of eligible women	3392	3916	7308
Number of eligible women Interviewed	3102	3653	6755
Eligible women response rate	**91.5**	**93.3**	**92.4**

Source: NDHS, 2000

NDHS data quality assessment and limitations of the study

Retrospectively reported quantitative data are subject to various types of errors. Recall errors due to memory lapses, age misreporting and event omission (both deliberate and accidental) are common problems and can bias the results of even the most careful analysis. Therefore, evaluation of data quality is a crucial stage of the analysis. It is reported that a global assessment of the quality of DHS data collected in 22 countries did not detect any serious errors that could affect the demographic estimates, but apart from this, efforts should be made to evaluate non-sampling errors which results from retrospective data (Fathonah, 1996).

It is common that people are more likely to report their ages ending in 0 or 5 and sometimes ending with even numbers. It is, therefore, likely that heaping may occur at certain specific ages for women in both rural and urban areas. Hence, it is important to be cautious when performing any analysis, which involves women's age. The Myers's blended index is commonly used to measure overall digit preference in age reporting. The index can range from 0 if no age heaping is present to 90 if all ages were reported at a single digit. The problem of heaping in particular ages (if it exists) can, therefore, be slightly reduced by grouping women's ages within five-year age groups.

Eggleston et al. (2000) report that few studies have addressed the accuracy of data used to measure sexual behaviour. He emphasised that having accurate measures of the extent of adolescent sexual activity is important to help identify populations in need of family planning and STD services and to assess the impact of such programmes. Eggleston et al. (2000), however, report that sexual behaviour is difficult to measure accurately since self-reports serve as the only source of information. No independent record of sexual activity exists to serve as a good standard of measurement. When respondents are asked about sensitive topics such as sexual experience,

they might give what they consider socially desirable responses rather than accurate information. This type of misreporting is prevalent among adolescents who are not yet comfortable with their sexuality and who may be more sensitive than adults to the consequences of public knowledge of their sexual experience. It is also believed that if interviewers are the peers of participants, this would increase the accuracy and meaningfulness of responses.

This study notes several limitations. From the DHS, the behavioural outcomes among young women are based on self-reported information, which is subject to reporting errors and biases. The type of data collection procedures used (personal interviews) may have contributed to such errors. Furthermore, the study is based on cross sectional data, which implies that the direction of causal relationships cannot always be determined.

3.2.2 Focus Groups Discussions

The DHS by its nature does not collect in-depth information on understanding young women's basic perceptions and attitudes towards use of sexual and reproductive health services in order to understand specific problems and fears relating to sexual and reproductive health utilisation, including use and non-use of contraceptives and the method choice. The focus groups discussions were thus conducted to fill gaps, which cannot be addressed through quantitative analysis. The emphasis in the group discussions was on the in-depth investigation of respondents' attitudes and opinions through a guided discussion. In this study, qualitative focus group discussions complement the quantitative data collection. Focus group sessions integrate qualitative research techniques that are widely used to understand the psychological and behavioural underpinnings of human behaviour and to identify ways and means to influence these behaviours (Brannen, 1995;

Pötsönen & Kontula, 1999). Focus groups offer researchers the means to gain insight into the dynamic relationship of attitudes, opinions, motivations, concerns and problems related to current and projected human activity. This method has been found valuable in the areas of determinants of basic behaviour, reactions to specific stimuli, as a complement to numeric data, and as a source of information to develop quantitative research (Pötsönen & Kontula, 1999). For example, in family planning studies, focus group sessions can be used as an avenue to better understand behavioural and psychological rationales for use and non-use of contraceptives among the general population. Since groups contain only a small sample of people, the data are not capable of producing typical or projected information for the whole universe under study.

Composition of the groups

The researcher identified categories of young women whose views would be important to an understanding of health service utilisation, contraceptive use and contraceptive method choice. The following categories were chosen: married or never married young women (15-24 years); with or without children; current users, dropouts or those who have never used contraceptives; those who are in school or out of school; living in urban or rural areas. Six focus group discussions were conducted. Each group consisted of 8 to 10 participants. Those in school were interviewed separately from the out of school young women and the groups were homogeneous as to age.

Selecting participants

A key element of the focus group method is the selection of participants. Careful recruitment is vital to the entire process, since the inclusion of ineligible participants can result in less fruitful discussion. In this study, recruitment of participants for in-school young women was done with the

assistance of the school Principal and staff with consent from the parents, while for out-of school young women the Youth officers at the multipurpose youth centres rendered assistance in organising eligible young women for the discussion (Appendix 2). The researcher travelled to the regions to conduct the sessions with the young women who had been invited to participate. Eligible young women were required to sign the consent form if they agree to participate in the group discussion (Appendix 1). For those who were willing to participate but were below age 18, their parents signed the consent form (Appendix 3). The researcher held an information session with parents and their children who were eligible for interview to explain to them verbally what the study is all about and what their options were, before they sign the consent forms. Anonymity was assured as participants were informed that no real name would be revealed or published. No monetary or other inducements were offered at the time of recruitment.

Conducting the sessions

The group discussions were held in the afternoons for the young women who were in school and in the morning for young women who were out-of school, as these were the convenient times for the participants. Noms de plume nametags were provided for each respondent to establish the feeling of warmth and personal recognition. Soft drinks and light snacks were made available to make participants feel comfortable and at ease. The researcher explained to participants how important their opinions on the topic under discussion were. Participants were encouraged to express their points of view and experiences freely and spontaneously. The researcher followed an interview guide (Appendix 4) that ensured that the same subject matter was discussed in each group. However, apart from this guide, the discussions were left relatively unstructured and time was reserved for the exploration of particularly interesting areas that arose spontaneously. All discussions were audio recorded. But, besides the audio recording, the researcher took notes

on the discussion as it proceeded. After the first focus group discussions, the researcher listened to the audiotape in order to identify gaps and mistakes made and improve on the subsequent group discussions.

Limitations of focus groups

Focus groups do have their limitations. The participants are chosen scientifically but, as a group of 10 or 12 people, the findings cannot be projected onto the entire population. The results are dependent upon the interaction between the respondents and the moderator or researcher. The responses of each participant are not independent. A few dominant focus group members can skew the session. It is therefore the responsibility of the researcher to make sure that he/she has a good control of the focus group discussion.

3.3   Methods of Qualitative Analysis

Audiotapes were transcribed and those Focus group discussions that had been conducted in Oshiwambo were translated into English. Field notes were used to enhance and substantiate data from the transcripts Audio tapes of each focus group discussion were reviewed several times in order to get an adequate impression of the discussion climate and to make a verbatim transcription in which hesitations, silences, enthusiasm and other psychological indicators are noted. Findings, together with pertinent quotations, were then organised according to the theme discussed, so that differences of thoughts, beliefs and emotions of groups representing diverse characteristics would become evident. New themes emerged from the focus group discussions and these were also included in the analysis. Verbatim quotes, which were common in the focus groups, were considered for analysis. The verbatim quotes were also quoted as evidence to either reject or accept the research hypotheses. Furthermore, unique responses from

focus group discussions, which were not reported in other similar studies, were also included in the analysis. Table 3.3 below shows the age distribution of young women who participated in the group discussions.

Table 3.3: Age distribution of young women selected for the Focus Group Discussions
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Age group	number of participants	per cent
15-16	8	15
17-18	14	26
19-20	9	17
21-22	12	23
23-24	10	19
Total	**53**	**100**

Source: Focus group (2004)

3.4 Methods of Quantitative Analysis

Two related methods of analysis are to be adopted in this study. They are (a) Logistic regression models and (b) multinomial logistic model, which is a generalisation of the binary logistic model. They are discussed below:

3.4.1 Logistic regression

Binary logistic regression analysis was used to analyse the data because the response variable, current use of contraceptives, was classified into two categories: current use and current non-use. It was chosen as the most suitable method because of its ability to detect changes in measurements that are brought about by addition of new variables to the equation. In logistic regression, the dependent and independent variables do not need to have a linear relationship and data for variables do not need to be normally distributed. Logistic regression analyses were used to examine the influence of constructs in the behavioural change framework on contraceptive use. The

results of the logistic regression models are converted to odds ratios, which represent the effect of one unit change in the explanatory variable on the indicator of contraceptive use. Odds ratios larger than one indicate a greater likelihood of contraceptive use than for the reference category; odds ratios smaller than one indicate a smaller likelihood compared with the reference category.

The relevance of a particular independent variable as a predictor of contraceptive use can be determined by comparing the magnitude of the regression coefficient with that of its standard error. Evidence of the usefulness of the independent variable becomes apparent if the coefficient is much larger than its standard error. The overall form of the model was determined by the square of the multiple correlation coefficients between the dependent and independent variable (R^2), measuring the percentage of variation explained by the variables. The models assumed no relationships between the independent variables. On the other hand, nested models were tested with the likelihood ratio test.

The models were fitted to the data using backward stepwise procedure, where the full model was fitted but at every step, terms already in the model were checked to see if they were still significant. To test whether a variable is significant the t-value was produced for each variable coefficient. The value was used to test whether any levels of categorical variables could be combined or whether any term of categorical variables should be removed from the model. The 5% significance level was used as a basis for deciding if a particular variable should be retained in the model. In all cases a reference category was chosen. The models were interpreted in terms of the odds ratios. The odds ratios are generally obtained by taking the exponential of the parameter estimate (e^β) and used to compare odds between two groups.

The logit model is of the form

logit (p) $= \log(\frac{p}{1-p}) = \beta_0 + \beta_1 x_1 + ... + \beta_k x_x$

The odds of using contraceptive methods can equivalently be determined in terms of probability of current use, *p*, as

$$p = \frac{\exp(\beta_0 + \beta_1 x_1 + ... + \beta_k x_k)}{1 + \exp(\beta_0 + \beta_1 x_1 + ... + \beta_k x_k)} = \frac{1}{1 + e^z}$$

where $z = \beta_0 + \beta_1 x_1 + ... + \beta_k x_k$ (Retherford and Choe, 1993)

3.4.2 Multinomial logistic regression

Multinomial logistic model is a generalization of the binary logistic model. The response variable takes three or more categories. Details of the multinomial logistic model used are shown in the Appendix 5. A convenient way to present the effects of the predictor variables on an outcome based on multinomial models is in the form of estimated probabilities (Retherford and Choe, 1993). These probabilities are calculated for each covariate while the remaining covariates and community level random effects are held at their mean values. They represent the estimated probability of choosing a particular method when other factors are held constant. For comparability predicted probabilities for the logistic model of contraceptive use were presented.

In this study, the response variable is contraceptive method choice among the commonly used methods in Namibia (pill, injection, male condom and other methods). The interest is on investigating factors that influence a woman to use any of these methods. In the literature, several studies report that young women use Injectables more than other contraceptive methods, therefore, women using the injection will be in the reference category.

The multinomial logistic model is of the form:

$$\log(\frac{p_j}{p_J}) = \sum b_{jk} x_k$$

and this can be interpreted as the logarithm of the ratio of the odds of an individual belonging to category j for j = 1, 2, …….., j-1, to the odds of being in the reference category J. In applying the multinomial logistic model to contraceptive method choice, it is necessary to examine, carefully, some assumptions of the model. The assumption of mutual exclusiveness and exhaustiveness of the choices does not pose a serious problem. For women who may use more than one method concurrently, a choice has to be made about which method should be chosen as the one used. The assumption of independence is, therefore, important for applications of the multinomial logistic analysis (Retherford and Choe, 1993; Hedeker, 2003).

The coefficients of the multinomial logistic model can be estimated by means of the maximum likelihood method. Each coefficient can be tested for significance using the t-ratio statistics and the overall significance of the effects of one variable consisting of J-1 coefficients can be tested by the likelihood ratio statistics. If two Models are nested, for example, Model one nested in Model two, then the likelihood ratio test

$$-2\log(\frac{L(M1)}{L(M2)}) = -2\{l(Model1 - l(Model2)\}$$

has a chi-square distribution with degrees of freedom equal to $df_1 - df_2$, where L(M1) and L(M2) are the likelihood of the Model one and Model two respectively; l(Model 1) and l(Model 2) are the log likelihood for Model One and Model two respectively and $df_1 - df_2$ is the difference in degrees of freedom for the two models.

3.5 Analytic Strategy

The prevalence of specific contraceptive methods is determined by two related processes, namely: the decision to practise contraception and the choice of method. Therefore, these processes are modelled here in two stages. In the first stage I examine the determinants of the decision to use contraception. This analysis is based on data gathered from all young women who were ever sexually active (a total of 1776) in the NDHS. Contraceptives are mainly used for the purpose of limiting, delaying or spacing births (MOHSS, 1995). Thus it is sufficient to consider young women who are sexually active (ever had sexual relationships).

In the second stage, I examine determinants of the choice of methods among sexually active young women who are using contraceptives. The interest here is on examining which method is preferred by young women, why it is preferred and what the characteristics of young women are who are using a specific contraceptive method. Further analysis was carried out to examine the factors associated with condom use, where the sample is limited to sexually active young women currently using a method. Condom use is of great interest among young women because the researcher is also interested in knowing whether young women are responsible for their sexual behaviour by protecting themselves from STIs, including HIV.

Contraceptive use and method choice among young women in the same community are likely to be correlated as a result of unobserved factors such as the availability of specific methods at existing facilities or the community's perceptions of specific methods. To assess potential determinants of contraceptive use, the association between contraceptive use and socio-demographic and behavioural characteristics of respondents were examined through cross-tabulation. The Chi-square test was performed to decide which

variables had a relationship with use of contraceptives and were therefore statistically significant. The p-value for deciding the significance of the variable was set at 5%. Frequency tables were also constructed to examine the distribution of variables of interest.

Two models were fitted using logistic regression analysis. In the first analysis the focus was on the current use of contraceptives among young women. The response variable, current use of contraceptives was classified into two categories: current use and current non-use. The second analysis focused on the factors associated with condom use or non-use of condoms among young women. A multinomial logistic regression model for the multivariate analysis was also used to examine determinants of method choice among young women

3.6 Operational Definitions of Variables

Dependent variables

CCUSE	The variable measured contraceptive use among sexually active young women. It had two categories: those who were using any contraceptive method at the time of the survey and those who were not using any contraceptive method at the time of the survey
METCHOICE	The variable measure contraceptive methods choice. It was divided into four categories: those who were using injection, those who were using pills, those who were using male condom and those who were using any other contraceptive method (IUDs, traditional, female condom etc). Non-users of contraceptives were excluded.

CONDOMUS   The variable measured male condom use among
                  sexually active young women. It had two categories:
                  those who were using condom and those who were not
                  using condom.

Independent variables

AGEGRP   Respondent's age in 5-year categories. The categories
                  were recoded as 1 = 15-19 and 2 = 20-24. The reference
                  category was 15-19.

MARITSTA   The marital status of the respondent was measured as a
                  dichotomous variable where the respondent was either in
                  union or not in union. Those who were in union referred
                  to all respondents who were currently married or living as
                  married (cohabiting, living with partner) while those who
                  were not in union included all those who were single,
                  divorced, widowed etc. Those who were not in union
                  were the reference category.

LIVCHIL   The total number of living children the respondent had. It
                  was divided into two categories and coded as 0 = those
                  with no living child/ren and 1 = those with at least one
                  living child/ren. Those with no living child/ren were in the
                  reference category.

EDUCLEV   The respondents' highest level of educational attainment.
                  Categories included those who have never been to
                  school, those with primary education and those with
                  secondary or higher education. The reference category
                  was those who had never been to school.

RESIDENCE   The respondents' current place of residence in terms of
                  whether it was rural or urban. It was measured as a

dichotomous dummy variable with the reference category being urban residence.

HEALTHDIR   The health directorate in which the respondent reside. There are four (4) health directorates in Namibia namely: Northwest, Northeast, Central and South. Those residing in the Northwest were in the reference category.

DFPWM   Whether the respondent discusses family planning issues with her mother. It was coded as 0 = those who never discuss family planning issues with their mothers (reference category) and 1 = for those who discuss family planning issues with their mothers.

DFPWP   Whether the respondent discusses family planning issues with her partner. It was coded as 0 = those who never discuss family planning issues with their partners (reference category) and 1 = for those who discuss family planning issues with their partners.

DFPWF   Whether the respondent discusses family planning issues with her friends. It was coded as 0 = those who never discuss family planning issues with their friends (reference category) and 1 = for those who discuss family planning issues with their friends.

NEWSPAPER   Whether the respondent read a newspaper or a magazine at least once a week. It was coded as 0 = those who never read a newspaper in a week (reference category) and 1 = those who read a newspaper at least once a week.

RADIO   Whether the respondent listened to the radio at least once a week. It was coded as 0 = those who never listen to the radio in a week (reference category) and 1 = those who listened to radio at least once a week.

TIME   Measured the time it takes the respondent to reach the nearest health facility/centre. It was divided into two categories: those who take less than an hour to the nearest health centre (reference category) and those who take an hour or more.

3.7 Summary

This chapter outlines two sources of data that were used in this research study: 2000 NDHS, and focus groups discussions conducted with young women in Oshana, Ohangwena and Khomas regions. Analyses of interest include contraceptive use, and contraceptive method choice as well as condom use among young women. Binary logistic and multinomial logistic regression analyses were the main statistical methods used. The section also highlights the fact that results will be interpreted in terms of odds ratios and estimated probabilities.