

**MALE REPRODUCTIVE HEALTH CHALLENGES AND CONJUGAL
RELATIONSHIPS AMONG THE YORUBA IN LAGOS AND OSUN STATES OF
NIGERIA**

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**BEING A RESEARCH WORK CARRIED OUT IN PARTIAL FULFILLMENT
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DECLARATION

I, **AMOO, Emmanuel Olagunju**, declare that this thesis is my own original work and that no portion of the work referred to in the thesis has been or will be submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

AMOO, Emmanuel Olagunju

Signature & Date

CERTIFICATION

The undersigned certify that they have read and hereby recommend for acceptance by Covenant University a thesis entitled: “Male Reproductive Health Challenges and Conjugal Relationships among the Yoruba in Lagos and Osun State of Nigeria” in partial fulfillment of the requirements for the degree of Doctor of Philosophy (Ph.D) in Demography and Social Statistics of Covenant University, Ota, Nigeria.

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DEDICATION

Dedicated with affection, to the loving memory of my late Parents:
Chief (Pa) Thomas Ojo Amoo and Madam Felicia Oladunni Ige Amoo.
The valiant 'men' that taught me to do my best in whatever I pursue.

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AMOO, Emmanuel Olagunju

Abstract

The involvement of men in the concept and treatment of reproductive health has only been in the context of the supportive roles they are expected to play without taking cognizance of the fact that men also have reproductive health needs. Till date, the impact of male reproductive health challenges within the conjugal relationship has not been brought to limelight or conspicuous in the literature. This study examined male reproductive health challenges and conjugal relationship among the Yoruba in the Southwest geopolitical zone of Nigeria. The study locations consist of eight wards that were randomly selected from two local government areas chosen from the two states that were selected from the Southwest geopolitical zone in Nigeria. The target population consists of married men with reproductive health challenges and their spouses. Both quantitative and qualitative research techniques were adopted in the data gathering. The structured interview covered 432 husbands and 435 wives that were selected following “key-informant-leading approach”. Six focus group discussions were held in the two states of study among two age groups of (15-34 years) and (35-74 years). In addition, in-depth interviews were conducted with stakeholders. Quantitative data were analyzed using univariate, bivariate and multivariate logistic regression analysis. Five models were specified with each taking its root from the conceptual framework. The qualitative data were analyzed using content analysis that was moderated with content observation technique.

The first model considered the interrelationships between selected socio-demographic characteristics and male reproductive health diseases. In this model, age (p-value = 0.0000), religion (Christianity, p-value = 0.001, Islam, p-value = 0.018), occupational status (p-value = 0.000) and education (p = 0.0000) were significantly related to the incidence of male reproductive health challenges. Those in ages 15-34 years and 35-54 years are 27.7 and 5.5 times more likely to experience male reproductive health diseases than those in age group 55-74 (the reference category) at p-value of 0.000. Christians and Muslims are 19.6 times and 8.6 times more likely to have male reproductive health challenges than those that practice traditional religion. Model II estimated the effects of male reproductive health challenges on marital satisfaction. It revealed that prostate cancer, erectile dysfunction, low sperm count and gonorrhoea are negatively associated

with marital satisfaction. However, only erectile dysfunction and low sperm count are statistically significant at p-value of 0.005 and 0.0053 respectively. The analysis revealed that where the husband experiences erectile dysfunction, prostate cancer or gonorrhoea, the couples are 0.064, 0.898 and 0.583 times (respectively) less likely to enjoy marital satisfaction.

The third model shows that age group 35-54 years, higher educational attainment and couple's income are negatively associated with couple's closeness. It revealed that wives would likely stay with their husbands irrespective of sexual health dysfunction if they earn higher income. However, higher educational attainment are negatively related with couple's closeness where the challenge is present. Prominent among the coping strategies employed by the affected wives are: seeking intervention from their religious leaders (p-value = 0.000), violent behaviour (p-value = 0.000) while those that report to family's doctor would be 16.742 times more likely to keep their marriage. Other models revealed that age groups 15-34 years and 35-54 years are negatively related to changing sexual pattern (p-values = 0.023 and 0.019 respectively). The result indicated that wives in higher occupational cadre such as senior executive, senior military officer and middle officers would be 0.050, 0.216 and 0.367 times less likely to change their sexual pattern compared to the unemployed. Where spouses are staying or sleeping together, there exists 0.271 less likelihood of the wife looking for other sexual partners.

The study concludes that age, education and religious affiliation are vital in the assessment of the incidence of male reproductive health challenges. It is paramount for marriage counselors, social workers and other health officials to focus on erectile dysfunction and low sperm count as major determinants of sustainable marriage and marital happiness. Governments and other stakeholders should focus on massive public awareness on male reproductive health diseases in order to promote happiness in conjugal relationship. The author therefore suggests women empowerment and establishment of robust specialized reproductive healthcare services in all the nooks and crannies of Nigeria for effective servicing of the health needs of men who are experiencing any sexual problem. Finally, the prevalence of these challenges in the study locations should be seen as window of opportunity for therapists to find solutions.

CHAPTER ONE

INTRODUCTION

1.0 Background to the study

Marriage is pleasant and admirable within the socio-cultural context of most societies including sub-Saharan Africa. Every conjugal union is envisioned to bring harmonious relationship, satisfaction that is demonstrated by bearing of children, non-family violence and enduring marriage, among other things (Bledsoe & Cohen, 1993; Isiugo-Abanihe, 2003). These expectations are more demanding especially in this part of the world where marriage is highly associated with maturity, economic status and value of children (Isiugo-Abanihe, 1994; Adewuyi & Ogunjuyigbe, 2003; Isiugo-Abanihe, 2003; Togunde & Newman, 2005; Zenaida & Fernando, 2007; Mayer & Trommsdorff, 2010). The presence and nurturing of sexual diseases therefore constitute mitigations against the realization of most of these objectives.

Male sexual challenges portend danger to marital relationship. Most often, men with sexual reproductive challenges have lower desire for sexual activity, experience erectile dysfunction, difficulty in achieving orgasm and several other defects that are capable of disrupting marital and sexual happiness including other damaging effects such as sterility (Rust *et al*, 1988; Dunn, Croft & Hackett, 1999; Arduca, 2003; Murat *et al*, 2005; Warwick, 2006). About 10-20 percent of men who are victims of testicular cancer, for example, participate less in sexual activity with concomitant challenges in their marital lives (Schover, Leslie & Eschenbach, 1985; Dunn *et al*, 1999; Geidam, Yawe, Adebayo & Idrisa, 2008). Specifically, among the consequences of male sexual dysfunction is either wife's separation or divorce in addition to its link with stress and anxiety in over one-quarter of the victims (Schover *et al*, 1985; Rust *et al*, 1988; Dunn *et al*, 1999; John & Sharon, 2006; Bodenmann, Ledermann & Bradbury, 2007; Geidam *et al*, 2008). Men's sexual dysfunctions (such as impotence and premature ejaculation) are noted to be predominantly associated with marital dissatisfaction and, among women, the level of marital discord is higher when their partners have sexual challenge than when the women have sexual problem themselves (Rust *et al*, 1988; Dunn *et al*, 1999; Murat *et al*, 2005).

Reproductive health dysfunction is a mixture of problems that has biological, psychosocial and demographic components (Arduca, 2003; Amidu *et al*, 2011). Its multi-faceted impacts account for why it is now occupying the urgent attention round the globe. Besides, the occurrence of sexual dysfunction in the marital context will have implications for both partners and the society. Common cause of domestic violence has been traceable to sexual dysfunction of the partners. Succinctly put, reproductive health diseases especially within marriage mar the image of marriage as a lifelong commitment for harmonious and blissful living (Christian, 2006; Geidam *et al*, 2008). However, while the issues of family, marriage, divorce and women's reproductive health have been given individual attention in literature, little or no attention has been paid to male reproductive health challenges as they affects conjugal relationships by researchers (Isiugo-Abanihe, 1994; Caldwell, 1996; Federal Ministry of Health (FMOH), 2002; Population Council and United Nations Population Fund, 2002; Isiugo-Abanihe, 2003; Bezeruk & Cassy, 2005). While the severity of male reproductive health diseases are better confirmed medically, the responsiveness of the family to the challenges emanating therein, community's perception as well as wife's management of the situation can be measured by social investigation.

Ethnicity is a key stratification dimension within the country that shapes reproductive attitudes and behaviour (Kritz & Makinwa-Adebusoye, 1995). However, despite the diverse cultural groups in Nigeria with different disposition to family and relationship issues, the attempt towards assessing these phenomena are not too conspicuous in the literature especially among a single cultural or ethnic group. Thus, the study focused on the social and cultural implications of male sexual diseases as they impair reproductive activity of the husbands, the ensuing level of harmony and satisfaction or disharmony and dissatisfaction among the couples concerned. The study examined the effects of male reproductive health challenges on conjugal relationship among couples in a mono-cultural setting using the Yoruba of Southwestern Nigeria as a case study. The research is an exploratory study to give voice to the prevention of marital disintegration and the enhancement of enduring conjugal relationship irrespective of the sexual challenges the husband might face. It is also meant to encourage early prevention of sexual challenges and the establishment of effective forms of prevention, as light is shed on the likely implications of the diseases on the marital relationship, the entire family, community and the nation as a whole.

1.1 Statement of the problem

Intimacy in marriage is a life-long aspiration that every couple desires. This desire is glowing and sometimes exceeding that of preceding generations. However, the preponderance of divorce, separations and family violence among couples highlights rarity of conjugal bliss in recent times.

Nearly two million divorce cases were reported in 2010 in China and the annual rate has been 7.65 percent (Adegoke, 2010). In United States of America, the divorce rate is 5.2 percent and remains as high as 5.5 percent in Sweden and between 80 and 151 per 1000 marriages in Italy (Vignoli & Ferro, 2009). Worldwide, 32 percent of marriages are terminated before their fifth anniversary, 62 percent do so before their 10th anniversary (Martin & Bumpass, 1989; National Centre for Health Statistics, 1993; U.S. Census Bureau, 2011). Couples without children are rampant reaching 33 percent in Austria, 55 percent in Denmark and 36 percent in France (Hantrais, Philipov & Billari, .2005). Specific rates are difficult to establish for Nigeria. Till date, Nigerians marry to have children and marriage has meaning only when a child is born and more often if the child survives. Marital fertility is thus essential in Nigeria; childlessness is often regarded as an aberration, and the victims are often pitied or stigmatized (Isiugo-Abanihe, 1994). Extra-marital affairs and extra-marital births are unprecedentedly high in addition to preponderance of lone parents. There is decline in marital stability and the number of times that people marry is increasing coupled with high rate of multiple partnerships in Nigeria (Isiugo-Abanihe, 1994, 2003; Omideyi, 1987). In the same vein, the incidence of male reproductive health challenges is real and up to three-quarters of married men experience one form or the other. Twenty-eight percent of men experience burning on urination and 17 percent had clinically diagnosed reproductive health problems (Laumann *et al*, 1999; Dunn, Das & Das, 2004; Bayer Healthcare, 2008; Purva, 2007; Amidu *et al*, 2011). However, there is a complete reticence in reporting or lack of knowledge about the symptoms.

Marital instability, marital disruption or marital disintegration are various terminologies used to describe the embroilment of spouses in disagreement, agitations, quarrels, outright struggle, inflicting injuries, complete disharmony, litigation, separation and annulment of the marriage bond. These are common features of most marriages today and have remained a concern in view of its damaging consequences

on the family and also because other negative implications are not socially, economically and politically neutral. Several factors have been suspected and there is no known popular initiative to douse or curb this demographic problem till date. Income, educational attainment, religious practice, employment and occupational status, etc have been (in different perspectives) found to be positively related to marital satisfaction (Morokoff & Gilliland, 1993; Henrick & Hendrick, 2002; Aina, 2004; Brezsnayak & Whisma, 2004; Bodenmann & Cina, 2006; John & Sharon, 2006; Omorogbe, Obetoh & Odion, 2010). However, little or nothing has been said on what could happen if the husband has reproductive health challenge. What happens when the couple could not produce a child due to reproductive health challenge experienced by the husband? Would these parameters behave the same? In reality what will the wife do if her husband is faced with reproductive health challenges? Specifically, the issues related to family, marriage, divorce and female reproductive health have been exhaustively discussed in the literature but researchers have only paid little attention to male reproductive health challenges within conjugal union. Hitherto, wherever male reproductive issue is mentioned, it is always in the context of the responsibilities that they are encouraged to assume, without taking cognizance of the fact that challenges of reproductive health emanate from men (Caldwell, 1996; Biddlecom & Greene, 1997; Sternberg & Hubley, 2004). However, this study does not intend to deal with the phenomena of marriages, domestic violence or conflict per se. Rather, it is concerned with the influence of male reproductive health challenges in conjugal relationship in the context of a mono cultural setting from the Yoruba in Nigeria.

1.2 Justification for the study

Any phenomenon that is noted for, acclaimed or even assumed to be detrimental or harmful (in one way or the other) to the survival or sustenance of family and whose end is not in focus despite the current improved modern medicines and technologies, demands a thorough investigation. Dysfunctional syndrome in male's reproductive health has remained a worrisome disease in the world today. While its prevalence rate is extremely hidden, it cannot be denied and the damaging effects are visibly un-ignorable within the family and the society.

Men have unique reproductive health needs that historically have not been addressed over the years (Department of Health and Human Services (DHHS), 2003; Isiugo-Abanihe, 2003; Sternberg & Hubley, 2004). These needs, however, cannot be treated in isolation without assessing the burdens borne by primary carriers (i.e. men) and possibly the major co-host (i.e. women) of such diseases. It is until then that efforts tailored towards addressing men's reproductive health challenges and needs can yield benefits, not only for the victims, but also the family and the society in general.

While it is believed that the severity and nature of this sickness vary and differ between cultures and ages, the silence on this sickness has not been helpful. The simple fact that no man desires or feels comfortable with this 'burning heat' implies that the society would be happy if much more information is available on these diseases to engender immediate and permanent solution. Thus, this study was embarked upon to throw light on the consequences of these types of sickness through more empirical investigations. Disintegration of families with their attendant problems is inimical to the progress and development of any society. Thus, a formidable and immediate solution is desirable. This study is, therefore, intended to provide information that will help improve the status of reproductive health in the communities sampled by bringing to the fore the socio-demographic correlates of male reproductive health challenges.

Health is a state in which an organism or all its parts perform their functions normally or properly. It is a state of physical and mental well being, which includes absence of illness, presence of strength (vigour) and resistance to diseases. Deficiency in any or all of these means a condition of ill health. The dysfunction of any part of the body system or organ is tantamount to debility and/or disability on the affected part(s) and sickness on the entire body and thereby affecting the overall health condition. Succinctly put, a man that is suffering from reproductive health problems (say prostate for example) could be regarded as disabled since his manly and vital organ is deformed. Prostate, as an example of reproductive health challenges faced by men, is a threat to continuity of life and must be nipped in the bud, thus making this study timely and apposite especially in Southwest geo-political zone of Nigeria.

On one hand, men are in most cases, carriers of major deadly diseases, they accumulate more partners over their lifetime (Barick, 2010). Ordinarily, most advances towards sexual incidence are always from men and they are therefore initiators than otherwise. Therefore, several unvoiced reproductive health needs are suspected to be for men folk, and the hope is that this research would be benevolent in exposing those unmet needs of male reproductive health. On the other hand, men could also be at risk of unintended fatherhood, STIs, etc because they are more likely to be misinformed about sexuality and reproductive health. They do not ask questions in most cases and are always ready and willing to engage in sexual activity whenever the opportunity comes. For such category of gender, the outcome of this study and its utilization will pay off. The study will help them to have adequate knowledge of the impact which they can exert on the society, beginning with their family and concerning reproductive health matters. Thus, this study was directed towards the explanation of various interconnections between reproductive health of men and relationship within the conjugal level. Recently, the emerging awareness of the important roles that men can play in improving their own health as well as the health of their partners has led to an increase in the number of programmes focusing on male involvement. Examples of these include male involvement in safe motherhood, family planning, STIs control and reduction in gender violence (United Nations, 1994; UNFPA, 1995; Zulu, 1998; WHO, 2002). Despite the increasing male involvement in programmes, a sound knowledge-based programme would be needed that will incorporate thorough diagnosis of the male reproductive health challenges as they affect marital relationships.

However, while this study is not to recommend medical solution or attempt to treat sicknesses and diseases to be discovered, it explored the experience of men with reproductive health imbalances/dysfunction and the partners' (wives') way of coping with the situation. It also among others, shed light on the prevalence of men's reproductive health problems among the ethnic group studied and provided opportunity for all solution providers in developing and directing their services to the affected group of people appropriately. It is hoped that the revelation from this study would make partners to strengthen their bonds of love and allow others to tolerate the victims instead of stigmatizing them. The study was out to help improve the status of reproductive health in the communities sampled. It also brought to the fore the socio-

economic correlates of male reproductive health challenges and proffered strategies for enduring conjugal relationship without disturbing the growth of family relationship (including affairs like family businesses) irrespective of the existence of husband's reproductive health deformity. These were achieved by identifying and documenting the coping strategies that the spouses of the affected husbands are adopting. It is believed the outcomes will assist in the formulation of adequate solutions for strengthening the sustenance of families in the study areas, as well as sub-Saharan Africa and the world at large.

The supportive roles of male have been overemphasized (Caldwell, 1996; Biddlecom & Greene, 1997; Sternberg & Hubley, 2004), conscious efforts are now necessary towards highlighting and meeting the reproductive health needs of men. What are the inherent challenges men faces in terms of their sexual health needs and what facilities are available to meet these needs. This rather than only encouraging them to assume certain responsibilities to assist women in realizing their health needs would enhance equity in reproductive health services. Specifically, men's challenges in this regard should therefore occupy a priority position since without them some other problems of reproductive health experienced by women may not have arisen. This study is poised to analyze, document and explain the social, cultural and environmental factors that influence men's reproductive health and conjugal relationship and how these two issues affect each other.

1.3 Research Questions

Several questions could be raised concerning this sensitive study coupled with the fact that expectations are very high and diverse. However, in order to allow for critical observations and meaningful practicable suggestions, the study focused and provided answers to the following research questions:

1. What are the common male reproductive health challenges in the study areas?
2. What are the demographic correlates of male reproductive health challenges, i.e. what male reproductive health challenges are associated with different demographic groups by age, occupation, education, etc?

3. What are the interconnectivities between deficiencies in male reproductive health/activities within marriage and conflict/harmony in the relationship with respect to couples' cultural and social background?
4. How do couples manage their relationships despite husbands' reproductive health challenges?
5. What are the developmental policy options that can improve the reproductive health of couples and the well-being of their families?

1.4 Objectives of the study

The thrust of this study is to investigate the interactions between male reproductive health challenges and conjugal relationships. The specific objectives are as indicated hereunder:

1. To identify the proportion and the characteristics of married males with reproductive health challenges in the study area;
2. To determine the extent to which male reproductive health challenges influence couples' conjugal relationships;
3. To identify the coping strategies of couples in situation where the husbands have reproductive health challenges;
4. To determine the relationship between couples' patterns of sexual behaviour and reproductive health diseases such as prostate cancer, testicular cancer and andropause.

1.5 Hypotheses

Hypotheses are formulated to determine the degree of influence of various demographic and socio-demographic variables on men's reproductive health challenges and their influences on conjugal family relationship. The hypotheses to be tested are the following:

1. The probability of experiencing a male reproductive health disease has no relationship with respondents' socio-demographic characteristics.
2. The husband's reproductive health status (presence/absence of RH defect) does not significantly influence the level of conjugal relationship (couples' closeness) among the couples.

3. Coping strategies among high-income status' couples whose husbands have reproductive health challenges can significantly influence the level of conjugal relationship (couples' closeness indices).
4. The pattern of sexual behaviour of couples whose husbands have reproductive health challenges varies with socio-demographic characteristics and community perception of men's reproductive health defects.

1.6 Definition of Terms

Andropause: Andropause is an endocrine state in men, characterized by a significant decline in the production of testosterone; dehydroepiandrosterone; and other hormones such as human growth hormone. Andropause symptoms are related to the lack of androgens including depression, reproductive health dysfunction, and osteoporosis. Andropause may also result from hormonal ablation therapy for malignant diseases.

Attitudes: It is the sum of beliefs about a particular behaviour weighted by evaluations of these beliefs.

Behavioural intention: This is a function of both attitudes toward a behaviour and subjective norms toward that behaviour, which has been found to predict actual behaviour.

Conjugal partner: as applies here refers to an individual of opposite sex that is legally joined to another person as husband or wife. It is the union between a male and female spouse.

Conjugal Relationships: These are the forms of committed relationships between two individuals (male and female) as recognized by the law, constitution or customs of a country. Conjugal relationship specifically implies the relationship within marriage. It is the relationship within the context of conjugal union solemnized by marriage legally permitted for sexual union.

Erectile Dysfunction: This implies the inability of a male to develop or maintain an erection during sexual intercourse due to either psychological or biological reasons.

Gender: The behavioural, cultural, or psychological traits typically associated with (or socially expected of) male or female. This is a socially learned idea and changes depending on culture.

Gender roles: Gender roles are a set of behaviour normally associated with male and female, respectively, in a given social group or system. These are behavioural codes that society expects male and female to observe.

Male Infertility: This is a biological problem that implies inability of a man to produce sperm capable of making a woman pregnant. A sexual gymnast may be infertile and, conversely, a fully fertile man may have any kind of sexual challenges.

Male Reproductive Health: is defined as a state of male's physical, mental, and social well being in all matters relating to reproductive system, at all stages of life.

Prostate: Prostate cancer is a malignancy of one of the major male sex glands. The prostate is about the size of a walnut and lies just behind the urinary bladder. A tumor in the prostate interferes with proper control of the bladder and normal sexual functioning.

Sex: It is the classification of individuals based on genitalia as commonly male or females. This is a biological/anatomical trait.

Sexual health: Sexual health is described as a state of physical, mental and social well-being in relation to sexuality which requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence.

Socio-Demographic Characteristics: they are specific parameters pertaining to a every member of the population or group of people. They are characteristics that are expressed statistically such as age, sex, education level, income level, marital status, occupation, religion, birth rate, death rate, average size of a family, average age at marriage.

Subjective norms: It looks at the influence of people in one's social environment on the behavioural intentions of man. The beliefs of people, weighted by the importance one attributes to each of their opinions, will influence one's behavioural intention.

Testicular Cancer: It is known as cancer of the testes. It occurs when germ cells (the cells that become sperm) experience abnormal growth. Germ cells, like stem cells, have the potential to form any cell in the body. Normally this ability is dormant until the sperm fertilizes an egg. When germ cells become cancerous, they multiply unchecked; forming a mass of cells called a tumor, and invades normal tissue (Warwick, 2006; Burnett, 2006; WHO, 2010).

1.7 Apriori Expectations

Apriori expectations in this study include bringing to the fore those socio-cultural correlates of male reproductive health challenges and proffering strategies for enduring conjugal relationship without disturbing the growth of family irrespective of the existence of husband's reproductive health deformity.

Another basic expectation from this study is that it will contribute to the body of knowledge by filling the gap of dearth of information on interconnections between male reproductive health challenges and conjugal relationships especially in a mono-cultural setting of Yoruba in Lagos and Osun states of Nigeria. The study represents part of the efforts to provide current, timely and credible data on male reproductive health challenges and shed light on indicators for monitoring and evaluating enduring conjugal relationships. It is also meant to cover the types, nature, incidence and prevalence of male reproductive health challenges. In addition, it is hoped to reveal the hidden difficulties in accessing healthcare facilities by husbands and to assess the strategies for sustaining an enduring relationship between couples, irrespective of the existence of sexual dysfunctionality.

This research will offer insight into health services equity. The reproductive health needs of both gender should be adequately met. Male reproductive health will promote gender equality in all spheres of life, including family and community life, while in addition, encourage and enable men to take responsibility for their sexual and reproductive behaviour and their social and family roles (Programme of Action, UN ICPD, 1994; FHI, 2009).

1.8 Structure of the Thesis

The thesis is organized in chapters with each chapter covering a specific theme. There are seven chapters in all. Chapter one deals with the introduction that comprises of the background to the study, the statement of research problem, justification for the study, the research objectives, the research questions, research hypotheses, definition of basic concepts used, apriori expectation and the overview of the thesis structure.

Chapter two is the literature review and features most of the existing information on male reproductive health challenges. It contains the discussion in International

Conference on Population and Development (ICPD) in 1994, the Hague forum on issues related to male reproductive health challenges and the Millennium Development Goals as they relate to male reproductive health challenges. The next chapter covers the methodology, the scope of the study, determination of sample size and the sampling technique adopted in selecting the respondents. The procedure for the analysis of data, models specification and fieldwork experience were detailed in this chapter.

Data analysis and discussions are presented in chapters four, five and six. Specifically, chapter four features the univariate analysis of the data. It contains information on socio-demographic characteristics of the respondents population, level of social development and health facilities in the locations studied, the desired and actual family size of the respondents interviewed, level of intimacy among the couples, male reproductive health challenges and interspousal communication, issues of disagreement and management of such disagreement within conjugal relationship and respondents' living condition. It also features the level of awareness of male reproductive health challenges, the prevalence of reproductive health challenges, and the wives coping strategies. Chapter five covers the bivariate analysis of the data. This is the segment where cross comparison between selected variables of interest were presented. Among the relationships presented are the demographic characteristics and experience of male reproductive health challenges, relationship between male reproductive health challenges and conjugal harmony, male reproductive health challenges and issues of disagreement between the couples and fertility behaviour among couples whose husbands have reproductive health challenges.

Chapter six covers the multivariate analysis of the data. It contains the tests of hypotheses formulated and presented in models. Model I is principally concerned with logistic regression on interrelationships between some selected demographic characteristics and incidence of male reproductive health challenges. Model II features the logistic estimate of the effects of male reproductive health challenges on conjugal relationship. Model III illustrates the interconnections between couple closeness and socio-demographic variables among couples where the husbands is experiencing reproductive health challenges. Model IV estimated the effects of coping strategies on

the odds of conjugal relationship where the husband is having reproductive health challenges. Model V is concerned itself with the effects of socio-demographic variables on change in the sexual patterns of wives that have husbands with reproductive health challenges.

The summary, conclusion and recommendations are presented in chapter seven. The chapter, among other things, contains the contributions to knowledge, implications for directions and, lastly, the suggestions for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.1.0 Introduction

This chapter is mainly devoted to literature review. However, it is segmented into different sub-themes for logical presentation of the assessment of the current state of knowledge on male reproductive health challenges and conjugal relationship. This pattern also shaped the study notwithstanding that most of the key findings hereafter confirmed or refuted some of the generalizations contained in the literature. The first part of this chapter deals with the concepts of male reproductive health challenges and marriage. The second segment focuses on conjugal relationship within the context of African cultures in general and Yoruba society in particular and their indicators. In the third part, reproductive health issues that emanated from the International Conference on Population and Development (ICPD) 1994, Hague Forum of 1999 and the global agreements on reproductive health as contained in Millennium Development Goals (MDGs) were reviewed. The fourth part contains general information on various male reproductive health challenges such as prostate cancer, plausible solutions to prostate cancer, andropause, sexually transmitted Infections (STIs), Acquired Immune Deficiency Syndrome (AIDS), gonorrhoea and erectile dysfunction. Relevant theories such as theory of way of coping, theory of marriage, rational choice theory, selection theory and theory of reasoned action were considered in the theoretical framework. The last segment dealt with conceptual framework where the expected interrelationships among various proposed variables were schematized and discussed. The last segment contains the hypotheses formulated for the study.

2.1.1 Concept of Male Reproductive Health Challenges and Marriage

Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes (United Nations, 1994; Lamb & Siegel, 2004). Reproductive health includes the rights of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of

family planning of their choice. It is the constellation of methods, techniques and services that contribute to reproductive well-being of individuals (United Nations, 1995; Stan, 1996; Sternberg & Hubley, 2004; Siegel, 2012). Some components of reproductive health include sexual behaviour, sexual dysfunction, Testicular Dysgenesis Syndrome (TDS), sexually transmitted diseases (STD), HIV/AIDS services, family planning, abortion-related services, pregnancy, childbirth and postpartum care, breastfeeding and maternal and infant nutrition, and infertility services, to mention but few (Stan, 1996; Willson, 2001; Arduca, 2003; Siegel, 2012). Several of these components have been extensively covered but focusing on only women though with little reference to men involvement. However, the fact that the majority of these components do not occur to women in isolation implies that both women and their partners are involved. Critical focus on men who play dominant roles in many of the components of reproductive health is therefore necessary.

Specifically, male reproductive health challenges could be perceived as all problems that are associated with the male reproductive health system. It could be defined, according to International Conference on Population and Development (ICPD), Cairo, 1994 as a state of a man's physical, mental, and social well being in all matters relating to the reproductive systems, at all stages of his life (ICDP, 1994; Caldwell, 1996; Family Health International, 2009). A good male reproductive health implies that the man is able to have a satisfying and safe sex life, and possesses the capability to reproduce, coupled with freedom to decide if, when, and how often to do so in conjunction with his spouse. It includes information about access to safe, effective, affordable, and acceptable methods of family planning of his choice, and the right to appropriate health-care services that enable men to safely overcome all reproductive health dysfunctions (ICDP, 1994).

On one hand, reproductive health conditions are basically measured by a combination of self-reporting, clinical examinations and laboratory analyses. However, the perception of individuals and the society (i.e. community) of what is healthy and unhealthy reproductive status is crucial to reporting, diagnosis, treatment and management of reproductive health disease. In addition, the tolerance or stigmatization and health seeking behaviour of respondents are also sine-qua-non to health status of the victims and their relationships in the society (Lamb & Siegel,

2004) especially within the marriage. On the other hand, many of the conditions of male reproductive health are not considered serious from a medical point of view and the victims live with them as part of reproductive functioning (Lamb & Siegel, 2004; Warwick, 2006). This is real since most of these conditions might not affect a man's general functioning. In addition, because of limited access to medical services in less developed nations, majority of men are unaware of having a definite illness until it shows up in their sexual incapability and wife's infertility (Sternberg & Hubley, 2004; Warwick, 2006). However, while there is a culture of silence on male reproductive health defects which include the reporting of reproductive morbidity, its several complex interactions with structures of men-women relationship especially in marriage calls for serious concern. Murat *et al* (2005) observed that male reproductive health represents a strong component that can influence several areas of marital relationship. These suspected areas include, the general marital life, harmony between spouses, peace at home, spouses's perception of each other, the way partners evaluate their relationships, motivation in problem solving, meaning of marriage, excitement of the relation and level of friendship with spouse (Murat *et al*, 2005).

Generally, male reproductive health problems relate to difficulties encountered at any stage of the reproductive health act (that is, malfunctioning in reproductive health activities, arousal, orgasm, impotency, testicular infections, etc) which could manifest in gonorrhea, HIV/AIDS, erectile dysfunction, infertility, etc. The presence of any of these diseases could directly or indirectly distort or inhibit both couple from enjoying their sexual activity and or production of offspring (Warwick, 2006; Paul, 2006). Until now, deficiency in any of these areas was borne by the victims silently; however, the situation has taken a new dimension. Nowadays, many women are refusing to silently endure years of frustrating and non-intimate sex the way their mothers did. This has been pushing their husbands in desperate search for solutions to their reproductive health challenges. The appalling emergence of innumerable reproductive health therapists/consultants and the drive for new reproductive health information especially in sub-Saharan African region of the world is a pointer to the preponderance of such problems and the desire of the victims in seeking solution. Therefore, there is a need to bring to limelight by way of documentation, the hidden reproductive health problems being experienced by men in order to provide effective

solutions and stem the various forms of conjugal violence, confusions and discontentment within the marriage and the family associated with the problems.

Although, reproductive health in marital life acquires different meanings, its interactions exceed the extent of a simple relationship between a man and a woman. It is also a fact that damages in the family could transmit to irreparable damage in the society, which makes marital reproductive health problem a delicate issue in the society. Thus, an evaluation of reproductive challenges, especially when the problem is emanating from the head of the family is very exigent. In addition, because the structure and management of the family are inseparable from enduring family sustenance coupled with cultural orientation, it follows that every problem emanating in the family and within a culture can only be effectively resolved through such cultural approaches. This, by the way implies that, any attempt to adopt or employ foreign experiences or methodologies to African cultural oriented issues could create further problems or at least render the outcome misleading. Thus, to provide comprehensive solutions to male reproductive challenges (as they affect individual families), a thorough assessment and analysis of experiences within the socio-cultural setting where the challenges emanate would be required. In this regard, a predominantly mono-cultural setting from the Yoruba of southwestern Nigeria was used as a case study to understand the interwoven connections between male reproductive health challenges and the degree of relationship within the conjugal union. Therefore, the study focused on cultural analysis of the dysfunctional reproductive health obligations, the inherent satisfaction or dissatisfaction and the coping strategies being employed towards the management, keeping or long sustenance of marriage in this cultural setting.

Marriage as used in this context implies a social and legal union of persons of opposite sex, which may be established by civil, religious, or other means as recognized by the laws of each society or country (Isiugo-Abanihe, 1994; Becker, 1973; Keeley, 1974; Bledsoe & Cohen, 1993; Isiugo-Abanihe, 1994; Jejeebhoy, 2000; Isiugo-Abanihe, 2003; Stan, 2008). It is an embodiment of an institution that creates kinship where interpersonal relationships, intimate and sexual relationships are acknowledged in a variety of ways, depending on the culture or subculture in which the parties reside or found themselves. It could also be a consensual union in which

marital union is established without recorded legal ceremony (Isiugo-Abanihe, 1994; Khattab, 2007; Yusuf, 2007; Stan, 2008). Patterns vary by culture, religion and to some extent by place of residence. While the bride pays a token in one culture, it is the tradition for the bridegroom to pay in other and in other culture, consensual arrangement is allowed where nothing is paid (Keeley, 1974 and 1979; Isiugo-Abanihe, 1994; Stan, 2008). Notwithstanding however, marriage is practically voluntary either by the persons marrying or their parents hence the choice and preference are established. However, the patterns of marriage have major implications on the labour force participation, allocation of leisure or household resources.

In this regard, a marriage is taken as consummated when a man and a woman enter into a socially sanctioned relationship recognized by themselves and their community to be more or less permanent (Biddlecom & Greene, 1997; Isiugo-Abanihe, 1994; Gwen, 2004). In this research, a man and a woman joined together with exclusive lifetime bonds as husband and wife is referred to as a couple. This institution of marriage is globally recognized and as far back as historical references go, virtually every human being who has lived to adulthood has gotten married (Gwen, 2004). However, the nature of the relationship between the duo varied widely across cultures. In addition, there is widely societal permissiveness in marriage whereby spouses may live together or separately, share meals or eat at different times, sleep on the same bed or different rooms, spend their leisure together or separately and can provide each other with emotional support, etc. The plausible sustenance of these components and spouses' satisfaction go beyond marriage itself to include a gamut of interactions amongst several determinant factors especially within the marriage such as healthy condition of the couple.

Although conjugal relationship could be shrouded with ambiguity, the threats to marriages, these days, are becoming more alarming and a cursory observation indicates that it is not separable from men's role in reproductive health obligations within the conjugal union (Zulu, 1998; USAID, 2003; Ghosh, 2004). Thus, the apriori impression is that men's challenges in reproductive activities could decrease the degree of intimacy between the partners and portend danger for the marriage. Omideyi (1990) asserted that the existence of conflict within marriage is entwined

with emotional dissatisfaction within the marriage and diminished status of wife. She noted that a conjugal role deprivation is expressed in strained relationship within the marriage (i.e. between the couple). Corroborating this view were Gavin and Donovan (2002) who reeled out the likely devastations that could trail reproductive health dysfunctions, and submitted that, where either partner has frequent dysfunction or low reproductive health performance, both partners could eventually retreat into separate mental worlds of worries and frustrations. Thus, it is envisioned that without a proper understanding of the social and behavioural consequences of men's reproductive health challenges, it might be extremely difficult, if not impossible, to understand the interconnection amongst the determinants of enduring conjugal relationship within any socio-cultural setting.

The above observation is apt to imply that any deficiency in conjugal expectations, which could not be divorced from reproductive health performance or status, could engender strained relationship in marriage and can culminate in divorce, among other things. This study is therefore poised to confirm and unearth such associations between, and among, various factors within marriage in the case of reproductive health challenged husbands. Succinctly put, efficiency or deficiency in husband's reproductive activities could produce efficiency and/or deficiency in marital relationship between the duo. The task of this study therefore is to, among other things, assess the current position of male reproductive health challenges. Furthermore, the study addressed how the challenges are being managed, the attitude of the spouse and society, communication process between the couples and determined the types of sexual behavioural changes adopted by the wives because of husbands sexual problems.

The dominance of men in sub-Saharan African culture coupled with the biological reasons in the face of inequalities in society make men to be the central focus in matters related to marital stability and spouse infertility. This arrangement of male dominance and female dependence has untold implications in this era of HIV/AIDS. Most of these implications are fundamental and could possibly affect social and economic spheres of life. Male reproductive health challenges could be threats to the achievement of millennium development goals (MDGs) especially in the areas of morbidity and mortality reduction (Wusu & Isiugo-Abanihe, 2008). Thus, it is

important to bring out and explain the interrelationships between fundamental issues of life that can impinge on continuity of life, for example, male reproductive health challenges and conjugal relationship. The study is, therefore, tailored towards promotion and improvement of understanding of the underlying factors that link male's reproductive health challenges and conjugal relationships. It is anticipated that the interrelationship discovered would help policy makers, programme managers, community/opinion leaders and governments, as it were, in decision-making and the formulation of appropriate policies to improve the wellbeing of the families and their communities.

Men's reproductive health difficulty is not status related but often occurs when a man is in a sexual relationship or married. The problems may begin early in a person's life or it may develop after an individual has previously experienced enjoyable and satisfying sex. The problem may develop gradually over time or could occur suddenly as a total or partial inability to participate in one or more stages of the reproductive act. Irrespective of the causes and timing, the imprints of this disability on marital life are enormous and cannot be overemphasized. For example, Rust *et al* (1988) investigated the relation between marital unhappiness and reproductive health dysfunctions and observed that the relationship between marital happiness and reproductive health condition was stronger in men than in women.

Donnelly (1993) found that marriages with impaired harmonious relationship between the couples are not always happy and satisfactory and noted that an inactive sexual life of a couple is an indication of the presence of some other problems in the marriage. An active reproductive health relation among the couple is therefore seen as a binding catalyst for stable family, marriage and relationship between the couples (Khattab, 2007; Yusuf, 2007). Morokoff and Gilliland (1993) confirmed that reproductive health satisfaction and frequency of intercourse are related to happiness in marriage. The duo also indicated that, among reproductive health dysfunctional couples, the degree of marital happiness declines and could account for negative emotional responses. In another study, Frank *et al* (1978) showed that the level of reproductive health satisfaction had an impact on the relationship between spouses. This finding was corroborated by Lawrence *et al* (1995) who also added that the phenomenon of sexual health dissatisfaction has impact on the quality of the relationship between the

couples. Therefore, this study investigated the impact of husband's reproductive health deficiency on marital bliss especially among the Yoruba couples of southwestern Nigeria. Thus, accordingly, efforts were directed at evaluating conjugal relationship in various homes with reproductive health dysfunction as experienced by their husbands.

It is known that men are notorious for failing to pay attention to their health, and in most cases when wrongs are discovered about their reproductive parts, they often feel embarrassed to take bold steps in correcting them or seeking for solution (FHI, 2009). However, if action is not taken to resolve any wrong discovered on any part of the body, it can degenerate into total debility of not only the affected part(s) but also the entire body. Men's understanding about reproductive health is considered marginal. Men are always reluctant to use reproductive health services and they know even little about their own or women's sexuality. Men hardly communicate about sexuality in their relationships and often believe many sexual myths without regard for family planning programmes because they see them as a conspiracy to undermine their power (Frank, 1977; FHI, 2009).

Substantial volumes of literature have therefore covered female reproductive health problems like infertility, STI, HIV/AIDS and breast cancer in the face of dearth of information on their male counterparts (Frank *et al*, 1977; Martine, 1999; Pelto, 1999; Saraswati & Leonard, 2000). Where there are seemingly related studies on male reproductive health, they were not considered as priority issues. For example, the report of a survey sponsored by USAID in 1996 indicated that the funding agency (USAID cooperating agencies) lacked clear guidance on the priority that they should place on this issue. That what is required is models about how to integrate men into existing programme in a way that can enhance services to women (Interagency Gender Working Group (IGWG), 1998). The priority remained unclear until recently and the vacuum created has not been filled in terms of adequate understanding of the impact of male reproductive health in the society especially within the family. Studies that could therefore enhance the bridging of this gap should be encouraged.

In addition, considering the danger inherent in male reproductive health challenges, concerted effort were made through this study to unravel and bring to limelight the

silence surrounding male reproductive health challenges in order to prevent the inevitable dangerous consequences associated with such problems such as couple separation, violence at home, disharmony, divorce, to mention but few. Notwithstanding the perceived general reluctance umbrella hovering on the types and severity of reproductive health challenges that men face, this research aimed at finding the prevalence of male reproductive health problems, especially as being experienced among the husbands in the southwestern Nigeria.

In the general perspective, the major identification of male reproductive health challenges is when the wife or the family could not reproduce a child. When this occurs, the public assumes the wife is infertile or barren. Infertility is a derived concept that implies the biological inability of a man or woman to contribute to conception. An infertile woman can be described as a woman who is unable to carry a pregnancy to full term and an infertile man refers to any man who cannot 'perform' sexually or unable to impregnate a woman. Medically, a woman is considered infertile if she has not conceived after 12 months of contraceptive-free intercourse. It covers also those under the age of 34 years who have not conceived after 6 months of contraceptive-free intercourse or if they are over 35 years and cannot carry pregnancy to term. Notwithstanding, infertility could be described as sub-infertility if the couple has tried unsuccessfully to have a child for a whole year. There are also primary and secondary infertility. Couples with primary infertility are completely unable to conceive while those with secondary infertility have difficulty conceiving after miscarriage and technically, secondary infertility is not present if there has been a change of partners (Atkins, 2007).

Until recently, family planning and reproductive health services of female have been the major focus. In the past, this focus made sense since most family planning methods were female dependent, and women were disproportionately affected by the negative consequences of unintended pregnancy and sexually transmitted infections (Robert, 2007). Again, with the onset of the AIDS epidemic, reproductive health professionals have increasingly concentrated on female reproductive health with relatively little or insignificant attention being paid to the male's aspect of reproductive health. Therefore, in order to reduce the reproductive health challenges, it is important to examine the incidence and prevalence of such reproductive health

problems and their degrees of threats to family relationships. This study is not advocating for the supportive role of the male in family planning or reproductive health (Zulu, 1998). This is believed to have been extensively covered by other studies. This study precisely assessed the threat to family existence by the male reproductive health challenges.

Men's reproductive health needs are numerous. Men begin having sexual intercourse as early as 15 or less in the developing world and remain sexually active for over a period of 10 years before marriage. Between these periods several things transpire and necessary guide is needed on their sexual behaviour. It should be noted that among the crucial and potential consequences of sexual activity for men is contacting or transmitting sexual diseases. In analyzing men reproductive health needs, Sonfield (2002) indicated that one in six American men who are in age group of 15-49 experience genital herpes while about 500-600 cases of chlamydia and gonorrhoea are reported annually. However, up to 50 percent and 30 percent of these diseases respectively are not reported annually among men in their 20s. Although, most of the men's reproductive health diseases are not ordinarily visible or with noticeable symptoms, the damaging effects are fatal and could include sterility, vulnerability to HIV/AIDS or other unwanted STIs that could endanger their partners' pregnancies or further health and fertility (Sonfield, 2002).

Men generally suffer lack of awareness of their reproductive health needs, they face unplanned pregnancy, early fatherhood (Flanigan, Huffman & Smith, 2002; Action Health Incorporated, 2009), involvement in multiple partners, many wives as the case in Nigeria and other regions in sub-Saharan Africa (Isiugo-Abanihe, 1994 and 2003). They engage in cohabitations, low usage of condom, face the challenge of sprenache, first intercourse, first birth and many desire no more children. Also, other needs could be how to overcome infertility problems, self-awareness skills to guide against violence/coercive relationships (e.g. sugar mummies episode in Nigeria), medical attention, counseling in order to make informed and positive decisions to become responsible father of responsible children, effective communication with partners on sexual matters and so on.

Till date, little attention is paid to these challenges both from the government and other stakeholders. There exist several women's health centers but there are relatively no equivalent health facilities for men, and where they exist, the facilities are often underutilized. The most recent data suggested that men make up only two percent of the clients in the federally funded family planning programmes in United States of America. The data indicated that many times, the services for men are housed in settings where the staff lack training in male sexuality and reproductive health and where providers' attitudes about men's involvement in reproductive health may compromise the quality of service delivery (Greene & Lindsay, 2005; Robert, 2007).

It is also puzzling that in societies where the facility providers have made efforts to make their services male-friendly, they have to be struggling with underutilization. This is because, men in general, are less likely to access healthcare and they often lack accurate information about their reproductive healthcare. This is to say that information about male reproductive health needs and the need to seek for such is absent or inadequate. The onus is therefore on the new generation of demographers and health stakeholders to ensure that adequate information is readily accessible to men in this regard. This will ensure the success of any investment on reproductive health in, and for, the developing nations and the world at large.

2.1.2 Conjugal Relationships and their indicators

Conjugal relationship specifically implies a relationship within the context of a conjugal union solemnized by marriage (John & Sharon, 2006; David, Douglas & Lundquist, 2007; National Defense and the Canadian Forces, 2009). Marriage, by the way, connotes a legal recognition of a sexual union. Conjugal relationship is a consensual union and varies somewhat from one country to another (Isiugo-Abanihe, 1994 and 2003; David, *et al* 2007). Conjugal relationships are forms of committed relationships between two individuals (male and female) as recognized by the constitution of the Federal Republic of Nigeria. These relationships include marriages and common-law partnerships where members also have the right to enjoy the same recognition and benefits as persons in marriages. A conjugal relationship is more than a physical relationship. It is regarded as a mutually dependent relationship between a man and a woman that has some permanence and the same level of commitment

whether as married couple or as being joined in common-law union. Conjugal partners could also be persons of the same sex who are legally joined together as couples especially in countries where this is applicable. However, while the persons of the same sex could be joined together in other societies, this study concentrated only on the union between a male and female spouse. This is regarded as conjugal union based on the tenet of the constitution of Federal Republic of Nigeria.

According to some prescribed laws guiding Canadian visa requirements for couples, married couples are regarded as those that have been in a relationship at least for one year and have been married or living together, or married but with evidence of impediments to their living or staying together. This study considered only couples that have lived together for at least six months prior to the period of the research. However, two people cannot be described as married if the duo could have lived together but chose not to, indicating that they did not have the level of commitment required of a conjugal relationship. They cannot be described as married if both partners are not yet, at the point where they are, ready to live together; or where they live apart but could not show any evidence of an impediment that prevented each other from living together.

Conjugal relationships also include cohabitation where a man and his female partner reside together in a marriage-like relationship. It covers relationship between partners that live together in a marriage-like relationship but are experiencing separation due to occupational related reasons such as military or involuntary separation, whereby the concerned partners can resume cohabitation at the end of such period. Examples of involuntary separations include, but not limited to, separation due to temporary duty (when either of the parties is away for duty outside the couples' place of usual residence) or unaccompanied posting.

However, partners in conjugal relationships, unlike other relationships, must be able to demonstrate intention to live together as husband and wife and the relationship must be expressed and solemnized by law(s) of the land. They must exemplify the reasons for separation if they are living apart. Beside, conjugal partners must show the existence of shared 'financier' or some economic arrangements and ownership of property. The 'financier' is usually either expressed or implied. For example, in sub-

Saharan Africa, the husband is usually assumed to be the head, the decision-taker, and the financier, breadwinner of the family and the overall head of the conjugal relationship. In Nigeria, the men are dominant in the family as heads, as custodians of lineage interests, as protectors and providers of the family (Isiugo-Abanihe, 2003). This makes it more important that conjugal partners to be assessed on the basis of length of time they spent together as couples and on some levels of social behaviour that include the couples' recognition by the society and they also representing themselves in the community as married or common-law partners.

Partners in a relationship of this kind, therefore, will definitely have so many things in common and be interdependent. Whatever occurs to one party will be felt by the other party and every action or inaction of a party automatically transmits certain proportionate effect to the other partners and the bond between them. When the affected person is the head, upon which the entire family and its affairs are anchored, the enormity of the consequences becomes felt by the couple. Specifically, apart from evidence or demonstration of their intention to live together as husband and wife (either as expressed or solemnized by law(s) of the land), conjugal relationships between couples are measurable using the following derived indicators. These indicators are as follows:

- The length of time they spent together as couple
- Frequency of discussion on family's, children's issues, etc
- Frequency of sexual mating
- Disclosure/withholding of secrets from each other
- Whether they live together or stay apart
- What sections of accommodation they shared together (living arrangements)
- The existence of shared 'financier' or some economic arrangements and ownership of property

2.1.3 International Conference on Population and Development (ICPD) 1994 and Male Reproductive Health

In the years preceding 1994, every attempt towards population reduction has been directed to women's reproductive health via maternal and child health related

programmes especially in the area of family planning and reduction in child and infant mortality (Maina-Ahlberg *et al*, 1998). Men's issues were virtually excluded from the field of reproductive and sexual health until its articulation in the International Conference for Population and Development (ICPD) in Cairo (1994) and International Conference on Women in Beijing 1995 (United Nations, 1994a, 1994b; UNFPA, 1995; WHO, 2002; UNDP, 2005; United Nations, 2008).

The International Conference on Population and Development was held in Cairo in 1994 and was attended by about 20,000 delegates from different spheres of life and different life's endeavours including the media, NGOs, various governments, UN agencies, etc. (United Nations, 1994). The conference provided a forum for discussions on a variety of population issues. These include immigration, infant mortality, birth control, family planning, women's education, women's protection from unsafe abortion services, etc. The conference delegates achieved consensus on four basic qualitative and quantitative objectives. These objectives were (then) regarded as fundamental to harnessing population factors for development. Some of these objectives include, the recommendation of universal education in all countries by 2015, especially the provision of wider access to women for secondary and higher education, vocational and technical training. In addition, countries were enjoined to ensure a reduction in infant and child mortality as well as maternal mortality, with a time limit of year 2015.

However, there were discussions in the forum for the improvement of access to reproductive and sexual health services. While the forum redefined the population agenda with a major paradigm shift away from demographic targets towards individual reproductive needs (Martine *et al* 1999), a critical review of the document indicates that some aspects of the reproductive health have been over-emphasized in the forum. Examples of such are family-planning counseling, pre-natal care, safe delivery and post-natal care, prevention and appropriate treatment of infertility, prevention and management of abortion, treatment of reproductive tract infections, sexually transmitted diseases and other reproductive health conditions, to mention but few. In the ICPD conference, the need for male's involvement in reproductive health was identified as means of encouraging men's responsibility as sexual partners, husband and fathers (Martine *et al*, 1999; Saraswati & Leonard, 2000). It is apposite

to submit that there was a great oversight. The consensual recommendations ignored the basic fact that most of the identified population problems do not occur to women in isolation. The men have been the major carriers of these diseases and potent agents in their spread. Notwithstanding the wide acknowledgment that men's sexual behaviour has direct effects on women's health, the ICPD paid only lip service to men's own reproductive health concerns (Basu, 1996; Martine, 1999). Therefore, it is considered inadequate and unrepresentative to focus only on women's experience on these issues to the neglect of the men's.

Notwithstanding, the resulting programme of action has remained the steering document for the United Nations Population Fund (UNFPA) until date. It is also observed that final Programme of Action (PoA) was the first clarion call for a critical shift of focus in the population field. However, several observations could also be made regarding the PoA. The programme of action (PoA) is concerned with achieving demographic targets, largely through the provision of family planning services. It also emphasized improvement in individuals' quality of life. In addition, new drive emerged concerning the untapped fundamental role of women in development, not just as beneficiaries of services but also as active agents of change. It addressed the problem of unsafe abortion and called for programmes for adolescents and men. This inclusion of men marked the beginning of integration of male reproductive health in reproductive health analysis. Finally, the programme of action stressed the importance of quality family planning services as integral part of reproductive health, and that attention should be focused on safe pregnancy, sexually transmitted diseases and HIV/AIDS. Specifically, the 1994 International Conference on Population and Development (ICPD) held in Cairo and the 1995 United Nations Fourth World Conference on Women, held in Beijing, laid practical foundation for improvement in women's reproductive health in all key areas of sexuality, safe motherhood, fertility regulation, avoidance of sexually transmitted diseases, pregnancy and childbirth, and children's health (Saraswati & Leonard, 2000).

This inclusion of men reproductive health in reproductive health analysis (taking its root from ICPD 1994), geared up actions from different countries. Several countries became preoccupied with the goal of harmonization and the pursuit of the recommendations from the programme of action but with little effort in developing

indicators for the broader reproductive health services and policies as recommended in the ICPD. The first initial known efforts included the work by International Planned Parenthood Federation, (IPPF) Western Hemisphere Region and the USAID funded Evaluation project (Caldwell, 1996). USAID identified six indicators of reproductive health, which include reproductive health interventions, including safe pregnancy, post-abortion care, breastfeeding, STDs, HIV, and adolescents. It is also obvious from the above that men have been completely left out either by commission or omission. This has therefore created a vacuum and exerted a limit on the laudable objectives of reproductive health as envisioned by ICDP. Therefore, there is a need for other indicators of assessing progress in promoting sexual and reproductive health at the national level, using measures that go beyond service indicators to capture elements of broader social change.

2.1.4 Hague Forum 1999 and Male Reproductive Health Challenges

Amongst other efforts at integrating male reproductive health into population and development issues was the International Forum for the operational review and appraisal of the implementation of the programme of actions (PoA) of the International Conference on Population and Development (ICPD) that met in Hague, Netherlands in February, 1999. This preceded the special session of the General Assembly that was held in July of the same year. The operational review was an integral part of the five-year review of the implementation of the ICPD Programme of Action with specific discussions on adolescent reproductive health and reproductive health programmes and male involvement in reproductive health, among others.

Specifically, in a drive towards the successful implementation of the programme of action, master plans for development were formulated in Hague from the series of round table and technical meetings organized by UNFPA. The Hague Forum provided action-oriented operational perspectives to guide UNFPA in further implementation of the ICPD Programme of Action. The forum focused on five substantive themes. It assessed country-level operations and experience in the implementation of the Programme of Action (PoA). The five themes were: (1) creating an enabling environment for the further implementation of the ICPD Programme of Action; (2) reproductive health, including family planning and sexual

health; and reproductive rights; (3) gender equality, equity and empowerment of women; (4) strengthening of partnerships and; (5) resource flows and financing for implementation of the ICPD Programme of Action. However, the Hague Forum recognized the importance and complexity inherent in male reproductive health, but the ensuing clamour was pro-women rather than equality or balance of attention between male and female reproductive health.

2.1.5 Millennium Development Goals (MDGs) and Male Reproductive Health Challenges

The goals of Millennium Development were pivoted upon the basic assumption that the world at large possesses the capability of improving the lives of its inhabitants including reproductive health conditions. The goals were captured under eight goals of development as identified and agreed upon by the 189 Nations including 147 heads of state and governments of those nations in World Millennium Summit organized by UN and held in Cairo in September, 2000. The action plan for the achievement of these set goals led to the commissioning of UN Millennium Project that focused on, among other things, population and reproductive health within the context of MDGs. The underlining basis of the project is to utilize the inherent potential of international community in addressing the challenge of extreme poverty around the world.

Greene *et al* (2005) viewed MDGs as lacking explicit objective on reproductive health despite the fact that it is widely understood that its goals cannot be achieved without considering sexual and reproductive health. Also, the pursuit of a one-gender approach on sexual and reproductive health is a narrower and unbalanced agenda. Besides, it might fail to deliver most of MDG's expectations especially woman-centered MDG goals 3 (promoting gender equality and empowering women) and 4 and 5 (improved child and maternal health) (Greene *et al*, 2005; Oyekanmi, 2008). However, despite, the fact that the MDGs contain no clearly spelt-out target on sexual and reproductive health, apart from its call for unhindered access to services related to it, the emerging UN millennium projects recognized that MDGs cannot be achieved, especially in low-income economies, without special attention being focused on population issues (UNDP, 2005). The projects gave credence to maternal-child mortality reduction, treatment of STI and HIV/AIDS. It also specifically indicated that access to reproductive health and service are indispensable to

poverty/hunger eradication, achievement of gender equality, women empowerment and other MDGs; and that where disparities in access is prominent, it is both the symptom and the contributor to poverty and gender inequality.

Hitherto the MDGs, the gender biased in health policies, disproportionate public investment on health, gaps in maternal healthcare and sexual health services were conspicuous in virtually all developing nations, including some middle-level income economies. However, the MDGs do not portend any ray of hope as well. The omission of male reproductive health among the goals implies the omission of a dominant party in reproductive health system. This therefore misrepresents the assurance that programmes emanated therein could achieve gender equality. This situation is apt to conjecture that gender equality objective could be a mirage without addressing systematic challenges relating to the promotion of sexual and reproductive health especially as it relates to men. General expectations were such that strategic plans would have been deployed in the developing countries to include male reproductive health in their health policies. This hope is yet to be fulfilled, as there is no clear line of action or known policy on male reproductive health in Nigeria and most countries of sub-Saharan Africa currently. Therefore, it could be inferred that the scope of sexual and reproductive health as envisioned by MDGs and UN Millennium project (including other adjunct groups) has been on universal access to sexual reproductive health services, family planning, safe motherhood, treatment of HIV/AIDS, education and (only) men involvement. The omission of male reproductive health poses a great limitation to MDGs realization, taking into cognizance that reproductive health is not one-gender (or single-sex) based. Besides, it is obvious that universal access is not achievable without ensuring a balance of action between the two sexes. Male reproductive health has long been neglected or forgotten. Thus, a wake-up or re-awakening (as the case might be) at this 21st century is expedient. Male inclusion in reproductive health is important to millennium development goals (RHPWG, 2004). Attempt to achieve this would also require adequate understanding of interconnections between male reproductive health challenges and ensuing relationship with their spouses.

It is no gainsaying, that universal access to SRH services and information are integral part of the instruments to fight STI/HIV/AIDS, however the duo must be mutually

reinforcing (UNDP, 2005). Effective access can be recorded if segregation and treatment are made on various challenges experience by different categories of gender. However, since women's and girls' reproductive health challenges have been well-entrenched and covered till date, a diversification to males would be monumentally rewarding, not only in terms of equal gender empowerment but also for sustainable development in general.

2.2.0 OVERVIEW OF MALE REPRODUCTIVE HEALTH CHALLENGES

Men's reproductive health challenges are myriad and diverse in nature. They go beyond issues of sexually transmitted diseases (STD) services and family planning. They are embodiment of, but not limited to, sexual dysfunction, prostate cancer, andropause, low testosterone, infertility, testosterone misuse and hypospadias. They also include Testicular Dysgenesis Syndrome (TDS) like testicular cancer; which result in couples' infertility, infection of Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS), stigmatization, etc; with possible concomitant effects of severance of family relationship (Willson, 2001; Kate, Susmita & Rumeli, 2004; Bezeruk & Cassy, 2005; Andrology Australia, 2007). Peculiarity of reproductive health challenges related to men range from erection difficulty, rapid or delayed ejaculation, uneven reproductive health status, performance or sexual incompatibility with partner, feeling of pressure by their spouse's sexual level and so on (Kate *et al*, 2004; Bezeruk & Cassy, 2005; Andrology Australia, 2007).

Succinctly put, reproductive health addresses the reproductive processes, functions and system at all stages of life. Reproductive health problem relates to impairment in any or all the processes, functions and reproductive system that may prevent or disturb a man and his spouse to have a responsible, satisfying and safe sex life (United Nations, 1994a; United Nations, 1995; Stan, 1996; Lamb & Siegel, 2004; WHO, 2004; Siegel, 2012). This might or might not make them incapable to reproduce and enjoy the freedom to decide if, when and how often to do so (WHO, 2004; WHO, 2010). A male reproductive health challenge could therefore be described as any condition that affects any stage of the sexual response cycle of a man. They are such difficulties during any stage of the sexual act or non-manifestation of productivity in conception that could prevent the individual or couple from enjoying sexual activity or

fulfillment in marital life (Eyler & Biggs, 2007; Lentz, 2007). Few of the common ones are described below:

2.2.1 Prostate Cancer

One of the most crucial reproductive health challenges in men is prostate cancer (EngenderHealth, 2008). Prostate cancer is an enlargement of the prostate gland that lies just below the bladder in males (Warwick, 2006). The gland is normally responsible for the transportation and nourishment to the sperm. Its enlargement compresses the urethra, blocks the urinary flow to some degree, causes erectile dysfunction, capable of spreading cancer of lungs, bones and lymph and, possesses serious threat to health when the ability to empty bladder is interfered with (Jan-Erik *et al*, 2004; Warwick, 2006; Purva, 2007; Jan-Erik, 2008).

Prostate cancer is cancerous development in the prostate enclosed in the male reproductive system. Although, it is a slow-growing, symptom-free cancer, it could spread (metastasize) from the prostate to other parts of the body, particularly the bones and lymph nodes. Among the several harmful effects of prostate cancer are pain or difficulty when urinating, problems during sexual intercourse, erectile dysfunction and impotency (Purva, 2007; EngenderHealth, 2008; WHO, 2010). Prostate cancer tends to develop in men over the age of fifty. Although it is one of the most prevalent types of cancer in men, many never have symptoms, undergo no therapy, and eventually die of other causes (Purva, 2007; Jan-Erik, 2008). Prostate cancer may affect men in their 40s and above and about 50 percent of men in their 40s and 50s and 70 percent of men in their 60s and 90 percent of men between 70-80 years are easily the victims of this infection (Jan-Erik *et al*, 2004; Jan-Erik, 2008). The risk factors among others include its damaging or disruption effects on conjugal relationship as sexual life and activity of the victim (men) becomes impaired.

The understanding from the literature in terms of causes, effects and treatment of prostate cancer show numerous approaches to the disease though they are contingent upon the clinical scenario of the disease. It can be detected by indication of the symptoms, through physical examination, prostate specific antigen (PSA), CT scans, bone scans (to assess the degree of spread) and by biopsy examination under a microscope. However it can be treated by surgery, radiation therapy, proton therapy,

hormonal therapy, chemotherapy, cryosurgery and 'high intensity focused ultrasound' (HIFU). The consideration for treatment of this disease is based on expected beneficial and harmful effects as well as the patient survival and his quality of life.

Amongst prominent factors implicated in the development of cancer are genetics and diet. It is also understood that the critical aspects of prostate cancer is in its evaluation of the stage or determination of the degree of spread of the cancer. Since the selection of effective therapies is contingent upon proper diagnosis, the non-availability of correct information and inadequate reporting of the incidence could likely hinder appropriate solution to these menaces. In the medical arena, the recognized most common system is Tumor/Nodes/Metastases (TNM system). Its components include the size of the tumor, the number of involved lymph nodes and the presence of any other metastases.

The most important distinction made by any staging system is whether or not the cancer is still confined to the prostate. In the TNM system, clinical T1 and T2 cancers are found only in the prostate, while T3 and T4 cancers have spread elsewhere. Among several tests that can be used for evidence of spread are computed tomography (which evaluate spread within the pelvis), bone scans to look for spread to the bones, and endorectal coil magnetic resonance imaging to closely evaluate the prostatic capsule and the seminal vesicles while bone scans reveals osteoblastic appearance. Early diagnosis and treatment is suggested as the best approach to prostate cancer.

The plausible solutions to prostate cancer could be more medical than otherwise. This section thus highlights some of the effective suppressants or medical solutions as contained in the literature (American Cancer Society, 2005; National Cancer Institute (NCI), 2005; Paul, 2006; Warwick, 2006; Purva, 2007). Dietary intake has been noted to be a major means of preventing prostate cancer through a continuous intake of vitamin-enriched food (Tan Robert, 2001; Women's Health Connection, 2003). Likely good vitamins necessary includes vitamin B6, selenium, vitamin E, lycopene, and soy foods. Purva (2007) indicated that lycopene (found in tomatoes) could be effective in reducing the risk of prostate cancer. Also, lower blood levels of vitamin D is suspected as capable of increasing the risk of prostate cancer. Besides, the incidence of prostate cancer has been linked to lower exposure to ultraviolet (UV)

light due to the fact that ultra violet light exposure can increase vitamin D in the body (Warwick, 2006).

These studies also indicated that selenium mineral could also protect against prostate cancer. Thus, men that live in parts of the world with high levels of selenium could possibly be less affected than their counterparts in other parts of the world. Selenium is an essential trace mineral that functions largely in the form of proteins (called seleno-proteins) which normally act as enzymes that can help in preventing damage to body cells especially damage by oxidants in the environment and those produced by normal metabolism. Recommended dietary allowance is about 55 micrograms of selenium per day for adult (men and women) and about 60 micrograms per day for pregnant women while 70 micrograms per day is recommended for women during lactation. Food sources of selenium include seafood, meats (e.g. kidney and liver) and some grains and seeds. Too much selenium (selenosis) may cause reversible balding and brittle nails, give a garlic odor to the breath, and cause intestinal distress, weakness and slowed mental functioning. Its deficiency can cause keshan disease, a fatal heart muscle disease such as cardiomyopathy.

Most of these studies are in doubt whether green tea could help in preventing prostate cancer due to its polyphenol content or not. Excessive multivitamins are among the controversial causes of the diseases and it is thus advisable that those taking multivitamins never exceed the stated daily dose on the label. In addition, these studies show that daily use of anti-inflammatory medicines such as aspirin, ibuprofen, or naproxens have the tendency of reducing the risk of prostate cancer. The use of the cholesterol-lowering drugs known as the 'statins' may also decrease prostate cancer risk. Infection or inflammation of the prostate (prostatitis) may increase the chance for prostate cancer. In particular, infection with the sexually transmitted infections chlamydia, gonorrhoea, or syphilis seems to increase risk. While obesity and elevated blood levels of testosterone were among the suspected enhancers of the risk of prostate cancer, vegetable could help in reducing the chances of getting prostate cancer (Purva, 2007). Nevertheless, the authenticity of all these suggested therapy and causes were not confirmed in this study and further clarification might be necessary to ascertain causative relationship.

2.2.2 Andropause

While menopause refers to the end of a woman's reproductive years, andropause is the end of a male's reproductive years. Andropause generally refers to male menopause and it is a real physiological state of hormone deficiency (Tan Robert, 2001; Women's Health Connection, 2003). Andropause is a product of a biological change in men during their life. It is often compared with female menopause. Nevertheless, while menopause is a complete cessation of reproductive ability caused by the shutting down of the female reproductive system, andropause is a decline in the male hormone testosterone (Tan, 2001). Its effects manifest in loss of energy and concentration, depression, and mood swings. Also, in some cases, the man's reproductive health system is completely stopped, whereas; in some, it may not. Others could experience bouts of impotence.

Andropause is usually caused by a very gradual testosterone deficiency and the decline occurs at 10 percent in every decade from the age of 30 (Tan, 2001). This implies that testosterone declines at 1% per year in a man. Men who work in the pharmaceutical industry, plastics factories, near incinerators, and on farms that use pesticides are commonly at high-risk for early andropause (Tan, 2001).

Detection and diagnosis of this defect is shrouded with difficulties. This is due to the fact that men generally do not discuss symptoms as their women counterparts do (Tan, 2001; Women's Health Connection, 2003). Amongst the factors that influence the decline in hormones are excess weight, especially abdominal obesity, illness, stressful events/exercise, tobacco/drug/alcohol abuse and depression or mental illness. It is also amazing to know that reduction in sexual activity can accelerate andropause.

Andropause is a sexual challenge that does not follow any known sampling distribution. In the same vein, the symptoms are not uniform rather it is individual specific. Testosterone deficiency is a major determinant of andropause though its effects can also manifest in the category of physical, impaired cardiovascular health, mental feeling of insecurity and decrease in sexual libido. In terms of physical health, andropause can influence balding head, reduction in body hair, especially armpits and genital area, decreased muscle mass, with increased body fat, reduction in strength

and stamina (feeling weak or tired very often), decreased testicle size, enlargement of prostate and urinary difficulties or discomfort.

In the area of cardiovascular health, andropause shows up by increasing the abdominal fat, increasing risk of heart attack, increase in insulin/cholesterol/triglyceride levels, elevated blood pressure, diminishing coronary artery elasticity and weakening of the heart muscle. Also, the effects on mental health include moodiness, irritability, feeling of insecurity, inner unrest, lack of concentration, memory failures and reduction in intellect and critical thinking. However, while most of the above effects of andropause can be hidden, its effects on sexual activity become the point of identification of the disease. Prominent amongst its effect on sexual activity include but not limited to the following: decreased sex drive and arousal, reduced organ sensitivity or pleasure, lack or fewer orgasms and erectile dysfunction.

2.2.3 Sexually Transmitted Infections (STIs)

Sexually transmitted infections include infections that are transmitted through sexual intercourse. They usually result into sexual diseases (Martine *et al*, 1999; Warwick, 2006; WHO, 2007) They are described as those illnesses with significant probability of transmission between human beings or animals by means of sexual contact, including vaginal intercourse, oral sex, and anal sex (Ezeaku, 2008). Sexually transmitted infections produce sexually transmitted diseases (STDs) that are common causes of infertility in both sexes due to the damage it causes to the structure and cells of the reproductive system by the infections (Warwick, 2006). They are venereal diseases that are passed from one person to another by sexual contact. One partner transmits the disease-causing organism (STIs) to the other partner during oral sex, vaginal sex or anal sex.

The challenges of sexual reproductive transmitted diseases are not new in society. They are second most important cause of loss of healthy years in both women and men (World Bank Report, 1993) and are a major burden to health in most countries of the world. STIs are known as facilitators and enhancers of HIV transmission and are very inimical to living. The extent of STIs spread these days especially with a preponderance of sexually active young adult population in every nation makes these diseases a great concern. For example in Nigeria, like other nations, sexually

transmitted diseases have constituted great medical, social and economic problems (Ogunbanjo, 1989). Notwithstanding the various interventions from governments and other stakeholders, efforts in finding effective management of these diseases at home front and especially the strategies put in place by the wife or the couples together have not being brought to limelight.

The diagnosis of STIs is known to be more complex in women than in men because the symptoms are relatively low in female. According to Martine *et al* (1999), about 50 per cent of women with STIs will not have any symptoms, whereas, their infected male partners will usually experience pain and other signs of infection (Martine *et al*, 1999). This simply means that a man will manifest the symptoms of STIs more earlier than the woman if both are infected in the same day or time. Symptoms are therefore more specific in men than in women.

Sexual transmitted diseases (STDs) are so more common nowadays and the awareness of the disease is in most cases, unknown to the victims. It is regarded as common but hidden epidemic. It is therefore not uncommon for someone to be infected but have no STD symptoms. That is victims are always asymptomatic. Different enlightenment programmes, seminar and classroom knowledge have shown that, a lot of people could have been infected for many years without knowing and can easily, though, unknowingly pass it across to their sexual partners (Martine *et al*, 1999; Warwick, 2006).

STIs and STDs have multiplier effects. If one infected person has unprotected sex with a new partner and new partner has unprotected sex with another new partner, in a cycle of ten, the first person would have succeeded in passing the STDs to over 100 people. If each person therefore has sex with about two new partners a year, that number could go up to 10,000.

The diseases emanating from STIs are numerous. More than 25 diseases are believed to be transmitted through sexual activity. This study is however focusing only on those that pertains to men and examples of sexually transmitted diseases that specifically pertain to men include but not limited to gonorrhoea, antisperm antibodies, chlamydia, HIV/AIDS, trichomoniasis, syphilis, genital warts, urethritis and more. Those that also relate to women are chlamydia, also gonorrhoea, syphilis, genital

herpes, human papillomavirus, hepatitis B, trichomoniasis, and bacterial vaginosis. Approximately 19 million new infections occur each year in the United States and almost half of them among people ages 15 to 24. Sexually Transmitted Diseases (STDs) are also called Sexually Transmitted Infections (STIs). In Nigeria, categorical statement cannot be made because of dearth of data. This is one of the pursuits of this research.

2.2.4 Testicular Cancer

Another common reproductive health challenge of men is testicular cancer (EngenderHealth, 2008). It is known as cancer of the testes. It occurs when germ cells (the cells that become sperm) experience abnormal growth. Germ cells, like stem cells, have the potential to form any cell in the body. Normally, this ability is dormant until the sperm fertilizes an egg. When germ cells become cancerous, they multiply unchecked; forming a mass of cells called a tumor, and invades normal tissue (American Cancer Society, 2005; National Cancer Institute (NCI), 2005; Paul, 2006).

The Males Advocates for Responsible Reproductive Sexuality (MARS) asserted that testicular cancer is the number one cancer causing death among males of 13-35 years of age (American Cancer Society, 2005; National Cancer Institute (NCI), 2005; MARS, 2007). It is also believed to be the commonest kind of cancer among men aged 18-30 years. While it is curable in the vast majority of cases, the cure rate drops to around 50 percent if it is left too late without treatment (Paul, 2006). Globally, cases of testicular cancer have risen to 70 percent in the last 20 years (American Cancer Society, 2005). While it is the 14th most common type of cancer overall in the world, it is the major cause of death among men aged 20 to 34 years. Testicular cancer can appear any time after puberty and about one in every 500 men is affected with the disease in the world all over. But with increasing proportion in incidence of this disease (about 70 percent in the last 20 years) about 90 percent of them can be cured if treated very early (National Cancer Institute, 2005; American Cancer Society, 2005; MARS, 2007).

Despite the fact that the specific causes of this disease are not yet known, researchers have, suspected chemicals used in the manufacture of cosmetics and plastics/food cans. It is also believed that mimic, the female hormone oestrogen, could be a factor

(Paul, 2006). It is common among identical twins and can occur if the man is born with ‘undescended testicles’. Some other causes include wearing tight trousers (including tight underpants) that can raise the temperature because high temperature can encourage growth of cancerous cells. Family history of testicular cancer, congenital abnormalities and kidney problems are among other suspected causes (National Cancer Institute, 2005; American Cancer Society, 2005; Paul, 2006). Regular self-examination is considered the best way to check for signs of the disease for early intervention.

2.2.5 Acquired Immune Deficiency Syndrome (AIDS)

AIDS is an acronym for Acquired Immune Deficiency Syndrome, which is an infection caused by retrovirus known as the human immunodeficiency virus (HIV) that destroys the body’s defense mechanisms and allows severe infections and cancers to develop (Warwick, 2006). AIDS is spread by the transfer of blood and semen from one person to another. It is a ravaging disease and sub-Saharan Africa has been the hardest-hit by it. Its pattern in the region is acclaimed to be unique and the male-female dichotomy puts females at a disadvantage. Over 6000 young people are contracting HIV daily in sub-Saharan African region and 62 percent of the people living with HIV/AIDS are young women (Population Council and United Nations Population Fund (UNFPA), 2002; UNAIDS, 2002; National Population Commission (NPC) and Federal Ministry of Health (FMOH), 2004).

In addition, heterosexual intercourse is the most potent medium of its transmission in this region compared to other forms in other areas across the globe (Martine *et al*, 1999; Marc *et al*, 2003; Pemplenani, 2003; Murat *et al*, 2005). Notwithstanding that it was first discovered in Nigeria about 24 years ago, the prevalence rate which was 1.8 percent in 1991, increased to 3.8 percent in the 1993, 4.5 percent in 1995 and an average of 5.2 percent in the year 2007 (Federal Ministry of Health (FMOH), 2007). Currently the prevalence rate in Nigeria is 4.4% distributed as 4.6 percent and 3.9 percent in rural and urban areas respectively (FMOH, 2005 and 2007). Till date, there is general yearning for a decline in incidence of this terminal infection in all nooks and crannies of the nation. Considering the incidence of this deadly disease, it is amazing that since its first discovery in Nigeria in 1986 and until 1991, there was no intervention assessment by the Nigerian government. Several campaigns, initiatives

and other interventions have been on the increase but Hiv/aids is still with us today (Amoo, 2010).

2.2.6 Gonorrhoea

Gonorrhoea is regarded as one of the common sexually transmitted infections caused by the bacterium, *Neisseria gonorrhoeae* (called gonococcus). Gonococcus is usually abbreviated as GC in the clinicals. It is a venereal disease that cuts across gender. It is also being observed as second to Chlamydia among STDs bacteria. Among the dangerous effects of gonorrhoea is that it can infest all parts of the body and it is capable of affecting joints and even heart valves if left untreated for so long. Gonorrhoea is a 'pus-discharging' inflammation of the canal known as the *urethra*, which passes through the entire length of the organ that carries both the urine and the seminal fluid. It is caused by a venereal bacillus, the *gonococcus*. Gonorrhoea is a curable sexually transmitted disease. It is most common in young adults.

It is primarily a sexually transmitted disease and cannot be spread by sharing toilets and bathrooms. The infection is transmitted from one person to another through vaginal, oral and anal sexual relations. Bacterium *Neisseria gonorrhoea* develops within a month from the day of infection and the signs and the symptoms start manifesting within the first week of contact. About 30 percent and 60 percent of people infected with gonorrhoea are asymptomatic or have subclinical disease (Duynhoven, 1999).

The signs and symptoms of gonorrhoea vary and are gender related. Although the disease is a male and female disease, the concern here is on the specific effects on men's reproductive health. In males specifically, the most notable symptoms are often painful and frequent urination. However, the visible and undeniable symptom is often not known until a yellowish discharge is emitting from the penis. Notwithstanding, a few proportion of infected men have no symptoms. On one hand, extreme caution is required in case of the infected men because the infection can move into the prostate, seminal vesicles, and epididymis, which could cause pain and fever. In addition, untreated gonorrhoea infection can lead to sterility. Most men with the disease may often complain of pain on urinating and thick, copious, urethral pus discharge (popularly known as gleet). The medical examination may reflect reddened external

urethral meatus. On the other hand, ascending infection may involve the epididymis, testicles, or prostate gland, causing symptoms such as scrotal pain or swelling.

One of the serious implications of this disease is that fewer than half the women with gonorrhea hardly show any symptoms except in a more severe case where they notice discharge from the vagina or facing difficulty in urination (dysuria). Other effects in women are projectile urination, off-cycle menstrual bleeding and bleeding after sexual intercourse. It could also result into cervical inflammation with pus, discomfort in the lower abdomen, irritation of the genitals, pain or burning sensation when urinating and abnormal bleeding, pelvic inflammatory disease (PID), cramps and pain, vomiting, or fever.

It is estimated that men have about 20% risk of getting the gonorrhea infection from a single act of vaginal intercourse with a woman infected with the disease. Also, women have about 60-80% risk of getting the infection from a single act of vaginal intercourse with a man infected with gonorrhea (National Institute of Allergy and Infectious Diseases and National Institutes of Health, 2001). In the same vein, an infected mother could possibly transmit gonorrhea to her newborn during childbirth (ophthalmia neonatorum).

Causes and prevention of gonorrhea also vary. However, the potent way of being infected with gonorrhea is by having sex with someone who has it. This could be anal, oral, or vaginal contact. Also, if a woman infected with gonorrhea is pregnant, it can be easily transmissible to the baby. Gonorrhea stays in the body if it is not treated and it may increase the likelihood of getting HIV infection if someone indulges in unprotected sex with partner living with HIV.

Gonorrhea can be prevented though safe sex practices of condom usage with lubrication. Medication includes penicillin, amoxicillin, ampicillin, azithromycin, cefixime, cefotaxime, cefoxitin, cefpodoxime, ofloxacin, etc. *Neisseria gonorrhoeae* has been discovered to be very resistant to tetracycline. Tetracycline might, therefore, be completely ineffective in most parts of the world. Couples, prospective couples and other sexual partners are enjoined to always check for gonorrhea in order to prevent its spread.

In most countries of the world, there are no central or federal systems of sexual health clinics and thus, majority of infections are treated in family practices. In Nigeria, for example, it is the same hospital/clinic which treats other kinds of sicknesses and diseases that treats venereal diseases. This could possibly affect efficiency and inhibit comparative benefits both for the medical personnel and the patients. However, in the developed world, like United Kingdom, the disease of gonorrhoea is treated in dedicated sexual health clinics.

In Nigeria, for example, gonorrhoea has been found to be the most prevalent sexually transmitted disease (Ogunbanjo, 1989). WHO reported that Lagos inhabits the highest gonorrhoea infected population in the whole world (WHO, 1963) and great association has been discovered between gonorrhoea and male and female infertility. Gonorrhoea like other diseases would definitely have varied prevalence rates between male and female and amongst different regions. The fact that no current data exist on these rates makes this study timely and apposite. Many governments are currently in the vanguard of warning their citizens on the dangers of gonorrhoea and other sexually transmitted infections.

Prevention of this disease is also difficult because the infection is venereal in nature and very hidden unless the victim shows up. This is the more reason why it is dangerous and spreads widely amongst the sexual partners. In addition, in a part of the world where extra-marital affair is engaged-in with impunity and teenage sexual misdemeanour is commonplace, gonorrhoea infection should not be taken with levity. Whatever can damage the reproductive health system can damage sexual relationship between couples as well as impair development in the society. Concerted effort is therefore required to ascertain the prevalence of this disease in order to seek enduring solutions.

It is estimated that more than 700,000 people in the United States get new gonorrhoeal infections each year and only about half of these infections are reported to Center for Disease Control and Prevention (CDC). In 2004, 330,132 cases of gonorrhoea were reported to the CDC. After the implementation of a national gonorrhoea control

programme in the mid-1970s, the national gonorrhoea rate declined from 1975 to 1997. After a small increase in 1998, the gonorrhoea rate has decreased slightly since 1999. In 2004, the rate of reported gonorrhoeal infections was 113.5 per 100,000 persons (CDC Fact Sheet, 2008).

2.2.7 Male erectile dysfunction

Erectile dysfunction (ED) is the inability to achieve or to sustain an erection long enough to complete sexual intercourse. It occurs when a man has repeated problems sustaining an erection and without adequate treatment, ED can make sexual intercourse difficult. It is the clinical term for impotency in men. It is specifically related to inability to sustain or maintain erected penis for satisfactory sexual intercourse regardless of the capability of ejaculation (Healthcarenet, 2005; National Kidney and Urologic Diseases Information Clearinghouse (NKUDIC), 2005). It is an impairment that distorts the ability of a man to carry on his sex life to his own satisfaction.

Although, erectile dysfunction might have a physiological or psychological basis, it is not a disease but more of a signal that something else may be a problem. Erectile dysfunction is a common condition affecting over 50% of men to some degree. Half of men ages 40-70 have experienced this condition to some degree, yet only a small number seek help from their doctors (NKUDIC, 2005). It is an extreme common disorder affecting 10 percent of the male population. In the United States alone, there are about 30 million men affected with erectile dysfunction (Andromeda Andrology Center, 2010). The center also indicated that drugs and alcohols possess side effects that could impair sexual functioning. Thus, they could be responsible for erectile dysfunction in men. Also, some men may become impotent after having diabetes for a long time (NKUDIC, 2005; Andromeda Andrology Center, 2010). This could damage the nerves or blood vessels because of protracted diabetes.

Erectile dysfunction manifests in impotence, transient erectile problems and premature ejaculation. Any of these could deprive a woman of sexual pleasure and result in subtle personal and psychological distress. Impotence divides and distances couples and it can create conflict between them (Christian, 2006). Related to this is premature ejaculation that involves the inability of a man to exert voluntary control over

ejaculation and difficulty to resume intercourse for undetermined period of time. In America alone, impotence was believed to affect about 10 and 15 million men in the year 1985 in the presence of about 525,000 doctor-offices that were available and patronized for the disease (Healthcarenet, 2005). It is knitted to age and as an American for example increases in age, disorders such as erectile dysfunction are not inevitable (Healthcarenet, 2005).

The general causes of impotence are usually diseases, drug side effects and injury. It has been observed that any disorder that impairs blood flow in the penis has the potential to cause impotence in men (Christian, 2006; Warwick, 2006; Andromeda Andropology Center, 2010). The probability of experiencing impotency increases with increase in age. Studies have confirmed that while it is not an inevitable sickness that every man must experience, about 5 percent of men at the age of 40 are more likely to experience impotence and between 15 and 25 percent of men at the age of 65 could likely experience it (Healthcarenet, 2005; Christian, 2006; Warwick, 2006; Andromeda Andropology Center, 2010). However, impotence is treatable in all age groups and normal sexual activity could resume after successful treatments. Also, male sexual dysfunction can sometimes be caused by disorders such as high blood pressure, vascular disease, heart disease, nervous system disorders, depression as well as side effects from some medications (Healthcarenet, 2005; Christian, 2006; Warwick, 2006; Andromeda Andropology Center, 2010). Sexual health and function are important in determining a man's quality of life.

Other causes of erectile dysfunction include, but are not limited to, the following: stage fright (performance anxiety), the fear of failure that can induce stress, which makes a man unable to satisfactorily relax and simply enjoy making love. It also includes low self-esteem, communication difficulties, unresolved marital issues, long withdrawal, cardiovascular disease, medications (like some drugs used for treating hypertension, anxiety, depression), alcohol, low hormone levels, obesity and diabetes (Jack, 2001).

However, possible solutions to erectile dysfunction include but not limited to prompt treatment of an erectile problem because the longer it lasts the more difficult it is to resolve. Others include good communication between the partners (Andromeda

Andropology Center, 2010). Since impotence is not just a man's problem, successful treatment depends on cooperation and involvement of both partners. A successful treatment of erectile dysfunction could improve sexual intimacy, marital satisfaction, improve quality of sexual life and relieve symptoms of depression (NKUDIC, 2005).

In summary, the current preoccupation of the world today, as it relates to women's position and expected benefits from programmes such as women's liberation, women's emancipation, women's empowerment campaign, etc, could be jeopardized if family challenges imposed by men's deficiency (spouses' inability or inefficiency in their reproductive health obligations and areas specified above) are not tackled. Therefore, the several challenges prevailing within the family today, and especially between couples, should engender serious concern and necessitate a craving for better understanding of the types of conjugal intimacy within the family in the presence of challenged reproductive husbands.

2.3.0 THEORETICAL FRAMEWORK

There are no common theories of male reproductive health challenges, neither are there popular generalizations about its effects on conjugal relationship. While this is assumed to be a great oversight from researchers, the sensitive nature of the diseases involved could as well be the fundamental underlying factor. However, several related theories on conjugal relationship were reviewed. These include the "way of coping theory" as propounded by Susan and Lazarus (1990), theory of marriage, rational choice theory, theory of selection and the theory of reasoned action. However, since the issues concerned are sexual matters within marital union, the only adoptable theory is "the way of coping" which centers on the management of reproductive health crisis within conjugal relationships. The "way of coping theory" is explained herein under and further used in the analysis while other theories considered related are enumerated thereafter and are scarcely mentioned in the analysis.

2.3.1 The Way of Coping Theory

The study adopted the “way of coping” theory developed by Lazarus (1966) and Lazarus and Folkman (1984) where three distinct coping strategies were identified. The “way of coping” is a linear tripartite interwoven process of perception of a threat, the potential response to the threat and the execution of that response (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984; Folkman *et al*, 1986; Carver, Scheier & Weintraub, 1989; Folkman & Lazarus, 1990). The three are connected by the outcome of one process that may re-invoke a preceding process. The theory states that the presence of adequate coping system could make a threat less threatening. This implies that if the coping response is less effective than expected, then, the level of the threat or what constitutes coping response is reappraised (Folkman, Lazarus, Dunkel-Schetter, DeLongis & Gruen, 1986; Carver & Connor-Smith, 2010). Adapting this theory, the presence of husband’s sexual challenge represents a threat to conjugal and harmonious relationship between the couple. However, if there are alternatives or effective management of such diseases, which implies that there is a good potential response that can be properly extracted, challenge becomes a non-issue and not a threat again within the marriage.

Coping, specifically, is described as constantly changing in behavioural efforts to manage specific external and or internal demands that are taxing in nature (Susan & Lazarus, 1990). It is conjectured in this study that reproductive health challenges are tension enhancing problems especially within marriage (Zeidner & Endler, 1996; Snyder, 1999; Weiten & Lloyd, 2008) and its management would require conscious effort to solve the ensued disagreements or conflict by searching to master, minimize or tolerate the conflict (Zeidner & Endler, 1996; Snyder, 1999; Weiten & Lloyd, 2008). It is therefore reasonable to assume that the effectiveness of any coping strategies is contingent upon habitual traits of the party involved (i.e. the couple), their socio-economic status and their environment (which includes the community where they reside).

Several coping strategies have been identified. Relevant among them are problem-focused, emotion-focused, engagement, disengagement, cognitive and behavioural coping strategies. These are further subdivided into three broad categories namely the

Adaptive Cognitive (called Appraisal-focused), the Adaptive Behavioural (called Problem-focused) and the Emotion-focused Approach (Weiten & Lloyd, 2008).

The Problem-focused Coping Approach centers on problem solving or actual undertaking of something (steps) to alter the source of the threat. It specifically focuses on looking for the solution to the threat and it is commonly employed when people think that there is something constructive that can be done about the challenge. This approach as applied refers to the extent to which the spouse contends with the reproductive health challenges of her husband by health seeking actions. Any attempt towards seeking for plausible solutions simply implies the employment or adoption of problem-focused approach. This problem-focused approach could also include the decision of the wife to separate or divorce the husband. It could also include a change in sexual pattern by way of seeking for other sexual partners (i.e. extra-marital). In the problem-focused strategies, the cause of the problem is dealt with. The wife's health seeking behaviour in this regard is visible. Such wives could even go around finding information or solution to the problem and might acquire new skills to manage the problem. However, since the problem-focused coping strategy is aimed at changing the source of the stress, extra-marital affair cannot be completely ruled out.

Emotion-focused Coping Approach aims at reducing or managing the emotional distress associated with the threat. It is commonly applied when the only option available over the threat is to endure the situation (Folkman & Lazarus, 1980). The extent to which the wife accepts the status quo, enduring the challenges without doing anything connotes the adoption of emotion-focus-strategy. Six emotional strategies were identified. These include disclaiming, escape-avoidance, accepting responsibility or blame, exercising self-control, seeking social support and positive reappraisal (Folkamn & Lazarus, 1990). They are all tailored towards the management of hostile feelings by meditation or the use of lackadaisical attitude towards the stressor. Emotion-focused coping is oriented towards managing the emotions that accompany the perception of stress (Zeidner & Endler, 1996; Snyder, 1999; Weiten & Lloyd, 2008).

The Appraisal-focused strategy is closely related to emotional approach. It occurs when a person modifies the way they think by employing denial or distancing oneself

from the problem. In this regard, the wife is said to adopt an appraisal-focused approach if she completely ignores the situation or creates a distance between herself and the husband's challenge. The wife could also alter her way of thinking about the problem by engaging in other home or external activities.

Considering these approaches in relation to male reproductive health and conjugal relationship, it is obvious that every action under the situation falls under either problem-focused or emotional-focused approach. Thus, problem-focused and emotional-focused approaches would be emphasized in further analysis of this subject.

2.3.2 The Theory of Marriage

The theory of marriage is premised on the existence of marriage market where each person tries to satisfy him/herself as much as possible over the expected gains from such marriage and that any disappointment in this regard introduces strain into the marriage (Becker, 1973; Keeley, 1974; Keeley, 1979). The theory also positioned that the prospective marriage gains and costs are weighed before the marriage is consummated (Becker, 1973). On one hand, the theory indicated that in the marriage market, "sorting" is inevitable, whereby the singles evaluate prospective spouses on the basis of certain traits such as beauty, intelligence, income, education, family background, colour, age, etc. The theory, on the other hand, considers the expected gains from marriage to include, among others, children (in terms of quantity), love, recreation, quality meal, companionship, income and health status (including reproductive health). The interactions between these axes initiate or motivate marriages and serve as lubricants for sustenance of the marriage. The theory postulates that where the expected gains fall short of expectations, the marriage is opened to crisis. It could therefore be conjectured that the characteristics evaluated by prospective spouses connote motivators for marriage and at the same time represent incentives that could keep the marriage intact given that other factors are held constant. It could also be contemplated that deficiency in any of these incentives or motivators would hamper the spousal rapport (including spousal communication), marital satisfaction, management of disagreement and the duration of the marriage.

Also, since the theory predicts an increase in the propensity to marry with a rise in income, it is normal to hypothesize that a rise in income or economic status (especially the husbands') would possibly increase the likelihood for sustained marital relationship. Keeley (1974) confirmed that the probability of separation and divorce is negatively related to income. Thus, the study suspected socio-economic status of husband as fundamental correlates capable of dousing tension within the family, enhancing spousal communication, marital satisfaction and encourage enduring conjugal relationship notwithstanding the presence of the husbands' reproductive health dysfunction.

In addition, the theory recognizes the different marital patterns and posits that these patterns have major implications on the labour force participation, allocation of leisure and household resources. The patterns as identified vary by culture, religion and to some extent by the place of residence. While a bride pays a token in one culture, it is the tradition for the bride-groom to pay in another culture. In some, consensual arrangement is permitted where nothing is paid by either party. The theory assumes that marriage is practically voluntary either by the persons marrying or their parents hence the choice and preference are established. Thus, the economic analysis of marriage is considered fundamental to population growth and development (Keeley, 1974, 1979; Becker, 1973).

2.4.0 Other Related Theories

2.4.1 Rational Choice Theory

Another related theory is the theory of rational choice. This theory is premised on the idea that all actions are fundamentally rational in character and that people calculate the likely costs and benefits of any action before deciding what to do (Scott, 2000). The theory indicates that individuals are motivated by their needs or goals, which are expressed in the form of preferences and act within specific constraints based on the information they have about such conditions (Scott, 2000). The rational choice theory (RCT) holds that individual anticipates the outcomes of alternative courses of action and calculates what will be the best for them before choosing any alternative. In this regard, rational individuals choose the alternative that is likely to give them greatest satisfaction (Scott, 2000). Succinctly put, rational choice theory adopts individualist

position and explains that all social phenomena are subjected to rational calculations that are being propelled by self-interest. The motivators for actions are therefore the reward, benefit or profit domiciled (oriented) in the action and the envisaged or known costs of such action.

Also, rational choice theory is thought of as a conscious effort employed in an attempt to receive or repulse other actions, behaviour or objects. Individual's actions therefore shape the rewards or punishment emanating from that action. RCT explains all social phenomena in terms of how self-interested individuals make choices under the influence of their preferences. It treats social exchange as similar to economic exchange, where all parties try to maximize their advantage or gain, and minimize their disadvantage or loss. The theory assumes that human beings base their behaviour on rational calculations and choices aimed at optimization of their pleasure or profit.

Adapting this theory therefore, it is believed that respondents selected in this study are all rational, that they have alternatives in the management of their reproductive health challenges and any action taken by them has been weighed both socially and economically. Since the theory further posits that people make decisions about how they should act by comparing the costs and benefits of different courses of action (Becker, 1976; Scott, 2000; Hedström & Stern; 2008), it implies that the patterns of behaviour of an individual reflects the choice of beneficial action at the expense of other costly behaviour or actions. Thus, it is believed that the decision of the wife to stay with her husband who has reproductive health challenges has been considered advantageous to the wife. In the same vein, those wives who opted out of marriage have similarly weighed the consequences before deciding to do so.

2.4.2 Selection Theory

The Selection theory centers on living arrangement of the couple and marital instability. It explains why non-formalized marital relationship often leads to higher negative outcomes and eventual disintegration of the family (John & Sharon, 2006). The theory asserts that spouses whose marriages are not formalized (e.g. cohabitation) would demonstrate more negative problem solving and support behaviour compared to spouses who are legally married (Howard, Scott & Galena, 2006; Thomson, &

Colella, 1992; Cohan & Kleinbaum, 2002; James, 2002; Glenn, 2009). According to this theory, pre-marriage living together provides avenue for both parties to discover more individualistic attitudes and values, which could foster unhealthy marital attitudes and eventual separation with impunity from either party due to the fact that they have not been legally married (Howard *et al*, 2006; Glenn, 2009).

Adapting this theory therefore, it could be conjectured that if 'arranged living together' provides a good avenue for discovery of individualistic attitudes and values then, the married couple staying together would have better opportunities for appraisal of relationship between them. This therefore accounted for the choice of sampling wives' opinion on their husbands' reproductive activities and appraisal of the wives by the husbands as well. The theory also indicated that where the couple are not legally married, it may increase risk for relationship distress or divorce for some people beyond what is accounted for by selection (Howard *et al*, 2006). That couple shows more commitment in marriage and tend to make the relationship stable (Schenk, Pfrang & Rausche, 1983). This implies that impairment in the commitment within the marriage, which is not excluding sexual dissatisfaction, could cause instability in the relationship. Living together is a choice by persons involved but its experience is more important than the kind of person who chooses it. That is to say that, it is the characteristics exhibited by the couple that glue or divide the relationship or marriage. Thus, an exhibition of negative characteristics by either of the couple could disintegrate rather than cement the marriage together.

2.4.3 Theory of Reasoned Action

Another theory reviewed is the theory of Reasoned Action (TRA) as proposed by Ajzen and Fishbein in 1975 and 1980. The theory suggests that a person's behavioural intention depends on the person's attitude about the behaviour and subjective norms (Ajzen & Fishbein, 1975; Hale *et al*, 2003). It argues that if a person intends to exhibit a behaviour then it is likely that the person will do it. That is to say, if the husband is intending to have himself examined, abide by medical dictates/prescriptions on his reproductive health or seek further information on RH, the likelihood that he will do so will be very high compared to a situation where the man is not interested in the matter at all. Succinctly put, the probability of a

husband's exposure to medical examinations or tests is contingent upon the level of his interest in his marital relationship and other affairs relating to his reproduction.

The components of the theory of reasoned action (TRA) comprise of three general constructs namely, behavioural intention, denoted as BI, attitude represented by A, and subjective norm which is symbolized as SN. It is thus represented mathematically as $BI = A + SN$. Where BI, A and SN are as defined above (Azjen & Fishbein, 1975; Hale *et al*, 2003).

It could therefore be conjectured that the behaviour of a man in response to his reproductive health is contingent upon his personal attitude and the perception of those he respects around him toward the health defect(s) he is suffering from. The Family Health International (FHI) affirmed that the men's attitudes and behaviours with respect to women's health are more pronounced in the area of STDs prevention and treatment. It indicated that no prevention programme can be effective without adequate enlightenment of both partners and that a change in the high-risk sexual behaviour is considered a more potent weapon in this regard (FHI, 2009). Therefore, the assessment of contributions of male reproductive health challenges to high-risk sexual behaviour would be relevant in this age as a fundamental potent strategy of stemming the tide of sexually transmitted diseases especially among couples.

However, since the perception of those around him is also dependent upon the culture of the community they live in, the behaviour of the man was therefore assessed as it is being influenced by the culture of the community and specific disposition of the community toward such reproductive challenge(s). In a community where impotency constitutes a stigma or where prostate cancer is a taboo, the victim would prefer dying with it than exposing himself. In that regard, seeking a cure or medical advice would not only be difficult but the last thing to imagine.

The behavioural intention measures a person's relative strength of intention to perform a behaviour. Attitude consists of beliefs about the consequences of performing the behaviour multiplied by his or her valuation of these consequences. Subjective norm is therefore seen as a combination of perceived expectations from relevant individuals or groups along with intentions to comply with these expectations. A man's personal

predisposition is therefore a vital factor in assessment, adherence and treatment of disease he is experiencing. Overall, personal and community belief, attitude and customs relating to such diseases are some of the variables to be examined in this study. Thus, part of the hypotheses was to confirm whether these socio-cultural variables identified could affect the reproductive health management of the condition by the couple as well as the relative satisfaction within the marriage.

2.5.0 CONCEPTUAL FRAMEWORK

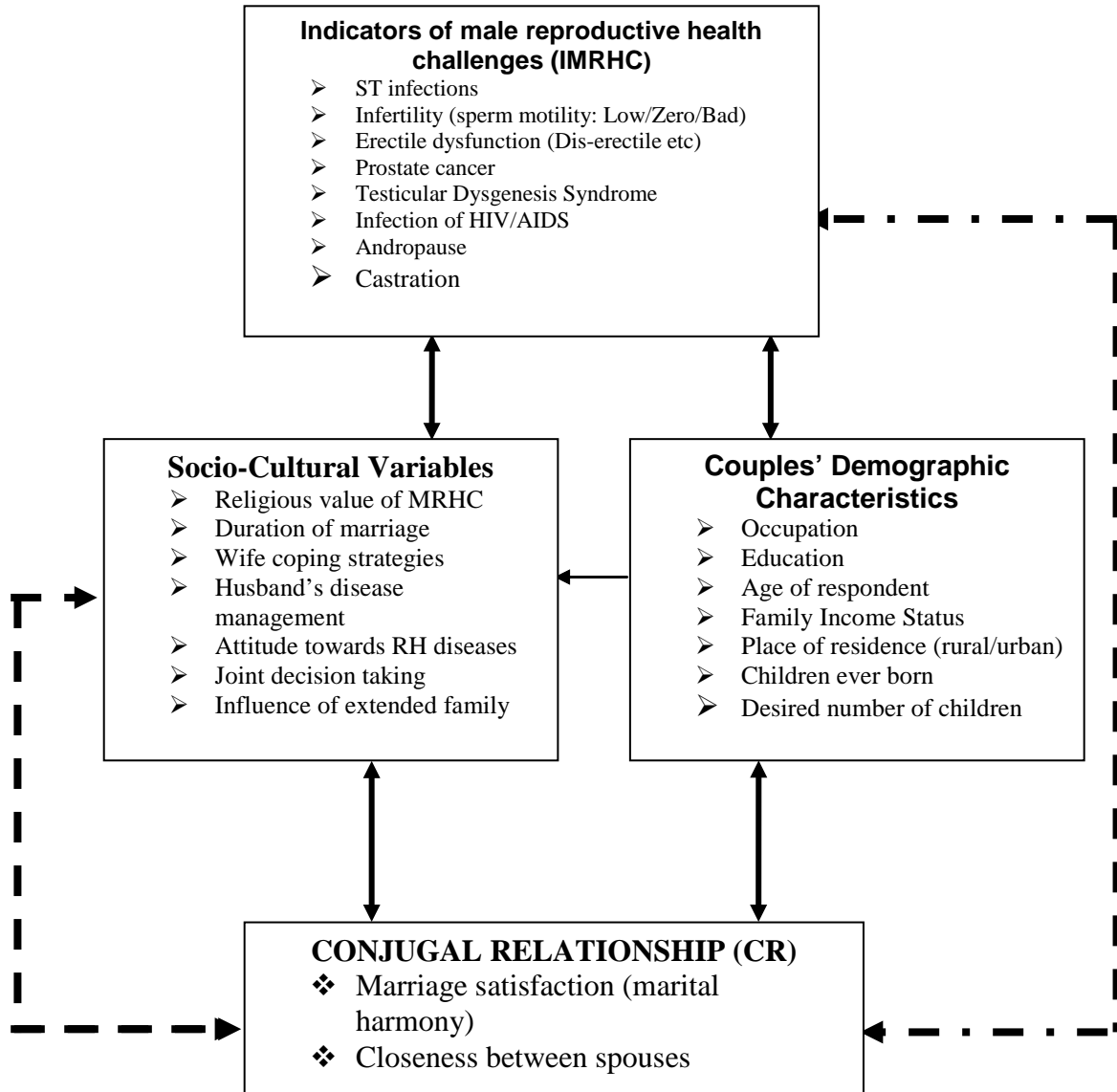
The conceptual framework is designed to outline the expected interrelationships between male reproductive health challenges and conjugal relationships. It is meant to provide a better insight into the various linkages between male productive health challenges and conjugal relationships as presented in figure 1.

Men's reproductive challenges are encapsulated in the indicators of men's reproductive health challenges (IMRHC) box while conjugal indicators are listed in the Conjugal Relationship (CR) box. The interplay between IMRHC and CR intermediated by the demographic and demographic/socio-cultural variables are illustrated using the arrow signs to point to the direction of interconnections amongst these variables. The interconnected functions therefore affect each other, while at the same time they influence (and are, in turn, influenced by) the overall conjugal relationship.

The selected demographic characteristics are those that could influence conjugal relationship given the reproductive health status of the husbands. They also include those that could work through other intervening variables to influence the level of relationship between the couple. The expected interconnections between these variables and conjugal relationship are enumerated below. However, these are a-priori expectations or observations from other literature, they stand to be confirmed and corrected by the outcome of research data analysis.

CONCEPTUAL FRAMEWORK

Fig 1: A Schematic diagram showing relationships between male reproductive health challenges and conjugal relationship



Source: Amoo E. O (2010). A Schematic diagram designed for the study

2.5.1 Age and Conjugal Relationships

Relationship between the couples is known to be affected by the ageing process especially by the men. The effect of aging on women is quickly visible at least in terms of menopause, childbirth, and men in terms of desire and frequency of intercourse, etc. It is no gain saying that communication and relationship change would occur as age advances. The advent or incursion of other issues of life, like the presence of children, community obligations and several commitment to be fulfilled (e.g., taxes, community development, etc), could become another preoccupation of either the husband or wife or both, and thereby have little or no time for intimate communication as hitherto happened during the youthful days.

It is also a fact that the negative effects of many diseases that might have been left untreated or not properly managed might become more harmful as age increases. In addition, the aged in this part of the world are not too economically comfortable. Majority of them belong to the poor segment of the population thus limiting their access to necessary healthcare services hereby leading to an increase in the level of morbidity. Therefore, the current age of the respondent, age at first marriage, as well as duration of the marriage were considered as vital variables, amongst others, for analysis in this study. This is envisaged to provide insight into impact of age on conjugal relationships in the presence or absence of husband's reproductive health challenges.

2.5.2 Desired number of children, Family Size and Conjugal Relationship

The indicator(s) of husband's reproductive health challenges can influence the level of relationship within the marriage positively or negatively depending on the situation at hand. Under normal circumstance, the economic theory of children indicates that the husband and the wife is a conjugal unit; that, the two are jointly responsible for weighing the costs and benefits of children (Becker, 1973; Omideyi, 1987) against other costs of competing goods and jointly arrive at desired family size that will reflect their (couples') interest and capabilities. This is considered the locus of couple's reproductive decision-making but poses a challenge in encouraging the family to have smaller number of children. However, the inability of the husband to

own up to reproductive health challenges negatively and directly affects such intimacy in decision-making. The nature of the cultural setting of households also determines the desired family size since the later can be influenced by the extended family structure.

In addition, satisfaction within the marriage and other aspects of marriage are considered very essential (Bradshaw & Fraser, 1989) and vital indicators of quality of life and quality of the marital relationship (Pimentel, 2000). Marital satisfaction is conceptualized as a product of continuous negative or positive perception of family members about the relationship within the marriage. Any disappointment in terms of marriage expectations as illustrated in marriage theory automatically propels a negative perception of the marriage. While a positive perception implies a high level of satisfaction at one end, a negative perception signifies high level of dissatisfaction at the other end (Glenn, 1998; Jianjun, Xiaohe & Rich, 2002; Jianjun & Norling, 2004; Pimentel, 2000; Ubesequera & Jiaojiang, 2008). Although the perception of marital satisfaction is a subjective matter, the forces of marital life experiences, which include family economy and couples' sexual behaviour (Bradshaw & Fraser, 1989; Nick, 2010), cannot be less important in the formation of opinion regarding marital satisfaction. Thus, these variables are included in the measurement of conjugal relationship as it is being influenced by male reproductive health challenges.

2.5.3 Education and Conjugal Relationship

Education exposes a man and the woman to modern ideas that could shape their conjugal relationship against traditions and their implications. In some instances, an educated husband/wife or the duo (couple) may snub certain taboos and harmful practices as a result of their enlightenment. Education is capable of revolutionizing ideas and behaviour. It is assumed that the couple could easily grasp the opportunity in sex education and information to solidify their marriage and they may likely go for counseling unlike the uneducated couple. The reverse is also not impossible. Divorce rate is found to be higher among the educated than uneducated but wife battering is less common among the educated than the uneducated (National Population Commission & ORC Macro, 2004). Due to occupational mobility associated with education and transfer or change in employment location, infidelity might not be a

strange practice among educated husbands and wives. While education can spur the husband to go for test or take appropriate action if challenges are discovered, the same education can make the man to be egocentric or chauvinistic enough to regard them as unnecessary. In addition, education possesses the ability to influence the cultural and religious values in reproductive health behaviour (including sexual act) and other marital relationships. It helps in reflecting the harmony between the husband and the wife and enhances the duration of marriage.

In the same vein, the women's access to education has been recognized as a fundamental right (Jejeobhoy, 1995). The benefits of education are manifold. Educating women result in improved productivity, income, and economic development. Education empowers women by providing them with increased autonomy in every sphere of their lives. The empowerment and the attendant autonomy can be profitably used or abused within the marriage. Moreover, education is important for all kinds of demographic behaviour, affecting mortality, reproductive health, fertility, and contraception. In almost every setting, regardless of religion, culture, and level of development, education results in fewer children. All these can make or mar conjugal relationship. Therefore, education variable was selected to form part of the basic factors considered in the conjugal relationship as it is being affected by husband's reproductive health challenges in the study areas. The directions of the influence are captured in the analysis.

2.5.4 Usual Place of Residence and Conjugal Relationship

The usual place of residence is also an important variable that can influence RH and the relationship between the couples. Research confirmed that the migrant group is more vulnerable to HIV/AIDS and other diseases that can impair the reproductive system (Delius, Kibombo & Neema, 2003). Besides, couple's relationship is culture related and well intertwined with place of residence. While traditional dictates control the affairs and husband-wife respect, communication in some quarters especially in rural areas, the tenacity of the game might have dissolved in cities or other urban centers (Isiugo-Abanihe, 2003). The husband domestic power or power within conjugal life is synonymous with masculinity in sub-Saharan Africa of which Nigeria is not an exemption. Manhood literarily and culturally connotes manliness and centers around concerns on the presence and absence of reproductive health problems.

In a society where a 'real man' is perceived as a man who does not have reproductive health problem, it could become a great challenge to solemnize husband and wife or remained in solemnized unionism when the husband is defective in reproductive activities. Therefore, this linkage between place of residence and marital situation should not be treated with levity.

2.5.5 Culture, Religion and Conjugal Relationship

Culture is a combination of set of beliefs, moral values, traditions, language, and laws (or rules or behaviour) held in common by a nation, a community or other defined group of people. Culture is specifically defined as that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of the society (Kroeber, 1952; Taylor, 1958; Kroeber & Parsons, 1958). The domains of culture include but not limited to spiritual, material, intellectual and emotional features of a society or group, their lifestyles, ways of living together, value systems, religious observances and customs including marriage (Diallo, 1992; Falola 2003). These definitions signal that culture is the totality of living. Culture is shared and cultural traits, mode of behaviour are learned through the process of socialization in a society and they are specifically learned within the family. Succinctly put, culture is life; it defines a people and represents a man's identity. It shapes the perception of a man and interaction between people and their environment. It explains habit and defines norms of behaviour boundaries among people. Thus, it is very important to avoid cultural mixture to befog issues in this regard, hence the selection of a single cultural orientation in this study.

While certain cultures put on romantic love as the basis for marriage and thereby make marriages vulnerable when sexual passion subsidy (Ferraro, 1991), some shape certain illnesses and disorders in a manner that reflect the social, political, and moral worlds of the patients. The cultural context can profoundly affect the transmission of disease such as the spread of HIV/AIDS, malaria, etc (Delius *et al*, 2003). In Africa generally, where economic necessity shapes choices that are often hazardous to health, the combination of limited education, community attitude, household living conditions that tolerate overcrowding, extended family (members of extended family and the couples staying under or in a room) can create a context by which communication is

distorted/impaired, and exaggerated, especially between a couple. Hindrance to free flow of communication between couples sends a lot signals to specific level of relationship between them. Improved and regular communication between a couple will not only foster understanding about various reproductive health needs of the partners and joint decision taking but also enhances implementation of such decision. It could also be expected that partners that communicate and understand each other would be 'help mates' to themselves in the provision of supportive services by helping a partner to receive reproductive health services as at when needed and wherever available. Each would be able to provide the resources needed to obtain these services.

However, in every society, religion wields a powerful influence in the lives of the people. It is a known fact that many of the rules and regulations that guide and determine the laws of the land and shape ideologies and life styles emanate from existing religious beliefs and practices. This is especially more visible in a country like Nigeria, where religion has become a dominant part of the people's social life. Religion provides indispensable ethical guidelines for living, for interpreting natural events including disasters and misfortunes, and for coping with life's milestones, from birth through illness to death. In this part of the world, religion constitutes a very strong and significant aspect of the society. Traditionally, Nigerians turn to their spiritual communities for solace and comfort in times of personal struggle, inner turmoil, or physical illness or impairment. Thus, sensitive and fundamental issue like male reproductive health challenges cannot be treated without considering religion and the cultural aspects. It is envisaged that religious beliefs and culture are central to the social construction of wellness and health risks, including reproductive health challenges, conjugal relationship and the utilization of health services. In addition, all religious affiliations of the study areas frown at divorce or polyandry. What then are the coping strategies of the wives should their husbands have reproductive health challenges?

Anthropologists and epidemiologists have identified many associations between culture, customs, and risks to health (John & Sharon, 2006). Vagaries of lifestyle factors are intertwined with differences in cultural orientation and so also are different related behaviour that are associated with religious beliefs and practices (John &

Sharon, 2006). Therefore, if life style and certain behaviour are related or determined by a set of cultural values and norms then male reproductive health and reproductive behaviour must not be different. Hence, socio-demographic variables such as age, religious beliefs, values, norms, attitude, etc were examined in connection with male reproductive health challenges and conjugal relationship.

In all ramifications, it is understood that lovemaking among the married couples is certainly an acceptable norm for a healthy part of full and satisfying relationship. Therefore, wherever and whenever this is impaired, especially if the problem is from the husband, the relationship could be heading for a colossal failure. Sex is a potent way of propagating and sustaining intimacy among couple and both men and women see it as part of the benefits and rights of marriage (Schenk, Pfrang & Rausche, 1983; Ramchandran, & Gardner, 2005; John & Sharon, 2006). It guarantees the wife security and sometimes delivers to her palm her demands from her partner. Besides, many cultural characteristics like religion, custom/rites, lifestyle, etc that are associated with education, occupation, income, and social status might have significant influence on the health status of the family. Hence the need to incorporate them in the analysis relating to male reproductive health challenges and conjugal relationship. These factors can also influence awareness of one's health condition and determine whether one will seek improvement or accept things as they are. The apriori expectation is that a well-educated employed man would be aware of the provisions and availability of medicare facilities more than those who lack basic education and might be less likely infected. He or she should be less exposed to productive health diseases. If infected therefore, they are likely to seek solution to their health needs and would be able to discuss reproductive health issues with their spouses compared to other categories who are not educated and employed.

2.5.6 Yoruba culture and conjugal relationship

It is apparent that no culture is static especially because of the influence of western ideas as well as Islamic religion. However, some cultures have not been conspicuously diluted by the incursion of these western practices and values. Yoruba tradition is one of those cultures. The Yoruba people live in the Southwestern

Nigeria and they have varieties of artistic forms including pottery, weaving, beadwork, metalwork, mask making and are known to honour vagaries of gods (The African Guide, 2011). They are popular among Africans all over the world (The African Guide, 2011) especially due to their historical linkage to the cradle of life and their culture and attitude are distinct from other African cultures. Economically, the Yoruba are enterprising, they engage in agriculture, hunting, trading as well as artistic works.

Among the traditions and values held sacrosanct in Yoruba land till-date are the institutions of marriage and family (that are centrally ruled by surviving eldest man). The family is revered and remains the most effective agent of socialization till date (Diallo, 1992; Isiugo-Abanihe, 1994; Falola, 2003; (Abekhale, 2010). The Yoruba culture adores marriage as the union between a man and a woman, and it is against its mores for those who have reached the age of marriage to remain single (Isiugo-Abanihe, 1994). Men get married even when they are sexually impotent in order to save the face of the immediate relatives or at least get somebody to look after their domestic establishment (The African Guide, 2011). However, it is the responsibility of the husband to satisfy the needs of his wife(ves) both materially and sexually. Excerpt from the African Guide (2011) indicated that: *àti gbéyàwó kò t'ejọ, àti f'owo ọbẹ s'ilẹ ló sòró* (meaning: it is easy to get married but living up to expectations within the marriage is very crucial). With regard to this, the inability of the husband to fulfill these obligations could culminate in marital tension, family violence or divorce.

Succinctly put, in the Yoruba context and like other ethnic groups in Africa, the family is the nexus of the society and male reproductive health represents a dominant catalyst within the family and for family sustenance. The atomizer of continuity of life is, and rests upon male reproductive health. Therefore, a research into the health challenges relating to reproductive health of men should receive overwhelming support from all stakeholders in the society and other lovers of humankind. Apart from those who have adopted western religions, Yoruba people favours polygyny. Marriage is celebrated, divorce is frowned at and childlessness is considered as a curse and meted with stigma among family members and the community as a whole (Isiugo-Abanihe, 1994). High fertility is encouraged and children are perceived as security

for old age and perpetuation of lineage. Thus, sexual challenge especially from the husband is considered a serious phenomenon.

2.5.7 Male's reproductive health, health facilities and community roles

Men's reproductive health is closely linked to the quality of their marital relationships. Ordinarily, the man is not expected to be reproductively deficient and where he is, the expected cordiality within the home and the conjugal union can be threatened (John & Sharon, 2006). The actual or potential impact of a man's reproductive health challenges reflects on his wife's satisfaction with and within their marital relationships. However, the presence or absence of extraneous variables (as indicated in figure 1) could exert pressure on incidence or prevalence of RH challenges by bringing a ray of hope and assurance to the spouse. For example, the confidence that the medical facilities available can cure husband's RH disease could make the wife not to jitter and remain the spouse. However, the absence of hope for curing such disease could make the wife to search for alternatives (e.g. re-marry, divorce or desert the husband).

In addition, closeness between spouses and oneness in their decision making process are among the crucial factors of enduring conjugal relationship (Omideyi, 1990). However, the degree of closeness between the couple cannot be unconnected with sexual act and the decision concerning fertility in a conjugal union. Thus, any unanticipated change especially in the reproductive health behaviour of conjugal partners, whether gradual or abrupt can be alarming to the spouse and can exert negative force upon such marriage as explained in the theory of marriage. Reproductive health problems eat away at the fabric of couples' relationships by robbing the victims of their unique personality or personhood (Linda, 1995).

Notwithstanding, the attitude of the community and/or the wife towards the kind of male RH diseases prevailing in that community could significantly influence the feeling, courage, and management of such RH problem. A society that stigmatizes people living with AIDS (PLWA), husbands with testicular cancer, etc, can render the affected family destabilized and both the husband and the wife might want to look for a hiding place via any available route. In such a situation, divorce, migration, separation and suicide cannot be ruled out.

2.5.8 Male Reproductive Health and Family Decision-making

The understanding of family relationship in Nigeria, like other West African countries, shows that socio-economic power resides in the man. This could be subjective when measured in multidimensional ways. Traditionally, it is conspicuous that the prevailing affairs with respect to who has the final say on regular management of issues in the family is the father who apparently is the head of the family. Issues like family's economic control, labour division and social communications, decision-making, children's expenditure (e.g. schooling), and so on, rest on the man. In that case, a defect or impairment in the man's reproductive potentials with concomitant demoralization could infect other aspects of his endeavours; hence the need for urgent attention and solution to his reproductive life. Besides, men's attitudes and behaviour as well as the inequality between men and women in both sexual and social relations, have been affirmed to be capable of affecting women's ability to exercise choices and attainment of good health (Maina-Ahlberg *et al*, 1998).

It is commonly known that men have distinct reproductive behaviour and needs. However, while most programmes of population control, family planning, etc excluded males and focused on women, the new paradigm in reproductive health has now given recognition to the fact that the men have an important influence on women's and children's health as a result of their domestic power (Sharma, 1990). In a patriarchal system, men have a stronghold over women's reproductive lives and goals. While the men are like social gatekeepers to women's access to reproductive health services, the women are economically and emotionally dependent on their male partners and find it difficult to raise issues such as safe sex (Gordon *et al*, 1992). The rising rates of STDs and HIV infections have also made it clear that male involvement is essential, and that marginalizing them would be harmful to women's health as well.

However, with the recent globalization and increasing level of civilization backed up with advanced technology, men are increasingly losing access to land, income, or economic likelihood (economic power) rather than gaining it. Although, this could be due to unemployment, poverty, economic meltdown, it is making the supposedly head/breadwinner of the family incapable of fulfilling most social expectations. Now, if the loss of economic power in the family is added to deficiency in reproductive health, the eventual frustration would be a double tragedy for the men and the resulting action that either of the partners could take can affect the family negatively.

2.5.9 Male reproductive health challenges, extended family and conjugal relationship

Although, extended families have existed in many cultures throughout the world for a long time but more entrenched in Africa especially in sub-Saharan region. Despite the diffusion of western culture and industrialization which has emphasize individualism over collectivism and have weakened extended family grouping in several regions, the bond of extended family is still strong in sub-Saharan Africa and in Nigeria especially (Barnes, 1970; Isiugo-Abanihe, 2004; The African Guide, 2011). In modern world, a conjugal family is considered as consisting of only the husband and wife, with or without children (Abekhale, 2010). It is expected that the adaptation of this kind of family structure would imply relationship among the adult partners and their children either by birth or adoption thereby making the spouses and their children are of prime importance. In African culture, this relationship is entwined principally to the extended relatives of both adult partners that have culminated into patrilineal traditional families (Mair, 1953; Goode, 1963; Barnes, 1970; Stephens, 1982; Adams, 1986). Nigeria, being a patriarchal society, the eldest man thus enjoys supremacy over decision-making on crucial issues such as childbearing, number and childbearing, mediation in quarrel or disagreement between spouses and intimate relationship between them (Babalola, 1991; Nukunya, 1992; Wusu & Isiugo-Abanihe, 2003; 2006). Thus, the influence of extended family on fertility or other reproductive issues becomes crucial in the analysis of male reproductive health challenges.

Besides, studies have confirmed that emotional support from extended family can positively or negatively influence relationship satisfaction for both married and cohabiting couples (Pimentel, 2000; Ubesekera & Jiaojiang, 2008). In Nigeria, like other region of sub-Saharan Africa, the benefits of extended families are overwhelming especially in terms of income, employment and other social-intergenerational transfers are crucial mechanisms for coping socially and financially by their children. They specifically play dominant roles in financial input, companionship, security in terms of their living arrangement (where many adults live together). They also render assistance in times of illness, stress and participate in domestic chores, looking after younger grand children while the parents work and provide love, comfort and stability to them. In returns, grandparents are appreciated

for their wisdom and advice due to their experiences. Thus, their views and opinion have become obligations for the children irrespective of their marital statuses. Besides, as it is the case in sub-Saharan African region, the family social structure is tempered with the consanguine kin group or bloodline, which is a line of descent traced through the male members of the family (Abekhale, 2010). This has paved way for patriarchy and the patrilineal system that traditionally imposed men with the most dominant social status and the supreme authority over the clan (Mair, 1953; Goode, 1963; Barnes, 1970; Stephens, 1982; Adams, 1986). The eldest in this chainlike-family structure controls the affairs of both his /her immediate family and that of the whole clan or kinship. In an attempt to perpetuate the lineage or get somebody to look after their domestic works, marriage and parenthood are therefore supported and reverend (The African Guide, 2011).

In another perspective, the general attitudes of Africans towards parenthood and childlessness presents parenthood as a fulfillment of life and that those that live without children emptier and considered less rewarded by nature. This therefore makes reproductive health a crucial issue of concern to both the immediate family and the extended families. Thus, childlessness or inability of any daughter-in-law to give birth to a living child is considered abnormal (Isiugo-Abanihe, 1994; Ombelet *et al*, 2008). In this regard, as a member of the same community, the wife becomes naturally uncomfortable if she experiences infertility either through her husband's or through her own reproductive health challenges. Reproductive health challenges reduce fertility or cause infertility and could as well impacts on child spacing and paternal mortality (Warwick, 2006, Siegel, 2012). The consequences of these challenges could pose a threat to the conjugal relationship. Thus, the need for critical appraisal of male reproductive health challenges within conjugal relationship.

CHAPTER THREE

METHODOLOGY

3.0 RESEARCH DESIGN

Both quantitative and qualitative research techniques were adopted in the data gathering. The study locations consist of eight wards that were randomly selected from two Local Government Areas (LGAs) chosen from Lagos and Osun States. In both approaches, the study made no attempt to control or manipulate the sample objects and variables studied. The survey was conducted using a structured face-to-face interview. All measures came in terms of demographic variables, constructs of the models/theories and behavioural outcomes relating to conjugal relationship and male reproductive ill-health experiences. Standard multiple regression analyses were employed in the examination of the prediction of assumptions in the outcome variable (family relationship). The study was carried out in Lagos and Osun States in southwestern part of Nigeria.

3.1 Study Settings

The Southwestern Nigeria comprises states within the south-west geopolitical zones of the Federal Republic of Nigeria namely, Lagos, Ogun, Oyo, Osun, Ekiti and Ondo states. The region is a monolithic ethnic geographical zone being the predominant home of the Yoruba (Ojo & Ighalo, 2008). The zone formerly housed the seat of the nation's capital (i.e. Lagos) until 1991. These states have seemingly homogenous cultural affiliates and are bounded by a common Yoruba language. Lagos and Osun States were therefore randomly selected for the study. The rationale behind the choice of these states is that their economic and social structures are representative of other states and the inhabitants of the region (Adeyemo, 1984). In addition, Osun state houses the historical Ile-Ife town believed to be the cradle of civilization of the Yoruba in general. However, within this culture, development has brought about urban-rural dichotomies, hence the choice of one urban LGA and one rural LGA. The two LGAs were selected from each of the two states (Lagos and Osun State respectively).

Specifically, Osun State is an inland state in southwestern Nigeria that was created in 1991 from part of the old Oyo State by the then Babangida administration. Its capital is Osogbo. The state is bounded in the north by Kwara State, in the east partly by Ekiti State and partly by Ondo State, in the south by Ogun State and in the west by Oyo State. The State is divided into three Federal senatorial districts, each of which is composed of two administrative zones. The state consists of 30 Local Government Areas (LGAs), which is the primary (third tier) unit of government in Nigeria. The total population in 2006 was 3,423,535 (NPC, 2009) and the state occupies a land mass of 9,251 square kilometers. It is predominantly inhabited by the Yoruba people and the major sub-ethnic groups include Ife, Ijesha, Oyo, Ibolu, Igbomina of the Yoruba ethnic group and other people from different parts of Nigeria. The official languages are Yoruba and English.

It is home to several of Nigeria's most famous landmarks, including the campus of Obafemi Awolowo University, Ile-Ife founded in 1961. It is one of Nigeria's pre-eminent institutions of higher learning. The ancient town of Ile-Ife stands as an important early center of political and religious development of Yoruba culture. The state's name is derived from the River Osun. The state's own university (i.e. Osun State University) was launched recently by the civilian administration of Governor Oyinlola with its six campuses that are strategically located across the state. Osun State has two government owned polytechnics (Federal and State's), two government Colleges of Education, numerous private institutions and other schools.

The state has a covering of tropical rain forest and her economy is based mainly on agriculture. The major occupation, therefore, is farming, both of export and food crops coupled communal land tenure system that has given way to individual tenure which considerably attracts migrant labour. The food crops include but not limited to: yams, cassava (manioc), corn (maize), cowpea, millet, plantain and kernels, rice, beans wood and citrus fruits like oranges (Legend Microfinance, 2008). Available cash crops are cocoa, rubber and palm oil.

Osun state is endowed with forestry reserves that enhance lumbering with innumerable sawmill in nooks and crannies of the state. While the state is not highly industrialized, it can boast of international breweries, a steel rolling mill and a

machine tools factory. The state also has cottage industries like food processing industries, native soap and plastics industries, foam and metal smelting factory, tie-and-dye industries, weaving, knitting, wood carvings and other agro-based cottage industries that are scattered around the state. The state's tourist attractions include the Mbari Arts Centre at Osogbo, the palaces of Yoruba rulers in Ilesha and Ile-Ife, and the Osun-Osogbo Sacred Grove, a forest that contains several shrines and artworks in honour of the Yoruba deity Osun (designated a UNESCO World Heritage site in 2005). The Obafemi Awolowo University (founded in 1961) is at Ile-Ife. Oshogbo is linked by road to Ogbomosho (Oyo state), Ilorin (Kwara State), Akure and Ondo (Ondo State) and to Ibadan in Oyo State.

Lagos State, on the other hand, is an administrative region of Nigeria, located in the southwestern part of the country. The smallest of Nigeria's states. It is the second most populous state after Kano State and arguably the most economically important state of the country, containing Lagos, the nation's largest urban area (NPC, 2009). Lagos could be described as the most heterogeneous city in the country with diverse social, economic, political and cultural characteristics and represents the most industrialized city in the country. However, its major ethnic group is the Yoruba and the state has remained the economic nerve centre of Nigeria since time immemorial (Adeyemi *et al*, 2009; Amoo *et al*, 2010)

Lagos State was created on May 27, 1967 by virtue of State (Creation and Transitional Provisions) Decree No. 14 of 1967, which restructured Nigeria's Federation into 12 states. Prior to this, Lagos Municipality had been administered by the Federal Government through the Federal Ministry of Lagos Affairs as the national capital, while the Lagos City Council (LCC) governed the City of Lagos. Also, the metropolitan areas (Colony Province) of Ikeja, Agege, Mushin, Ikorodu, Epe and Badagry were administered by the Western Region. The State took off as an administrative entity on April 11, 1968 with Lagos Island serving the dual role of being the State and Federal Capital. However, with the creation of the Federal Capital Territory of Abuja in 1976, Lagos ceased to be the capital of the State, which was moved to Ikeja. Equally, with the formal relocation of the seat of the Federal Government to Abuja on 12 December 1991, Lagos Island ceased to be Nigeria's political capital. Nevertheless, Lagos remains the center of commerce for the country.

Lagos State is divided into 20 LGAs and 37 administrative districts by the incumbent governor, Raji Fasola. The official languages have been English and Yoruba.

Lagos State is the smallest state in Nigeria, yet it is one of the populous states in Nigeria. It had a population of 5,725,116 out of a national total of 88,992,220 in 1996 and an estimated population of 17,552,942 inhabitants out of a national total of 148,000,000 in 2006 (NPC, 1991, 1996, and 2009). The rate of population growth is about 275,000 persons per annum with a population density of 2,594 persons per sq. kilometer. In the urban area of Metropolitan Lagos, the average density is 8,000 persons per square kilometer on average (up to 55,000 inch per kilometer square in the densest parts of the urban area). In a UN study of 1999, the city of Lagos was expected to hit the 24.5 million population mark by the year 2015 and thus be among the ten most populous cities in the world, but this projection must now be revised downward due to the results of the 2006 census. At nine percent annual growth rate, approximately 300,000 persons per annum or 25,000 per month or 34 person per hour are added to existing population (Noah, 2000).

While the State consists essentially of Yoruba-speaking people, it is a socio-cultural melting pot attracting both Nigerians and foreigners alike. Indigenous inhabitants include the Awori and Ogu in Ikeja and Badagry Divisions respectively, with the Ogu being found mainly in Badagry. There is also an admixture of other pioneer settlers collectively known as the Ekos. The indigenes of Ikorodu and Epe Divisions are mainly the Ijebu with pockets of Eko-Awori settlers along the coastland and riverine areas.

3.2 Determination of Sample Size

One of the methods used for the estimation of sample size was the sampling size determination technique designed by Israel Gleen in 1992 and re-adjusted in 2009. The method is denoted as:

$$n = \left(Z \frac{(d-c)}{(2e)} \right)^2$$

Where 'Z' is z-score for the confidence interval selected. The 'd' is the upper limit of the range of occurrence of the event and 'c' the lower limit of the range of occurrence of the event and n is the sample size (Gleen, 1992; Gleen, 2009). However, since the

prevalence rate and incidence of male reproductive health challenges was not known or available in Nigeria and especially in the study areas and the method adopted for the data collection measured male reproductive health challenges as either “present” or “not present”, which was captured dichotomously as 1 (one) or 0 (zero). Thus, ‘d’ in this regard represents the occurrence of male reproductive health challenge and ‘c’ as the lower limit of the occurrence. Thus $d = 1$ (implying that the challenge is present) and $c = 0$ (representing that the challenge is not there). This serves as the range for the estimation of the sample size for this study.

Also, in view of the demographic and health importance of this study, it is determined that the maximum margin of error will be 0.05 indicating a 95% level of significance. Thus the sample size for this study is:

$$\begin{aligned} n &= \left(Z \frac{(d-c)}{(2e)} \right)^2 \\ &= [1.96 (1-0)/(2*0.05)]^2 \\ &= [1.96 / 0.1]^2 = 384. \end{aligned}$$

However, while the assumption of respondents absence is greatly suppressed in this study, it is expedient to make provision for non-response factor hence a booster quota of 16 is added to the estimated sample size. Thus, a total of 400 respondents were selected.

Another method was also employed to confirm the adequacy of the above method though this is more relevant if the total population is known and believed to be accurate or devoid of controversy (Yamane, 1967).

$$n = \frac{N \left[Z \frac{(d-c)}{(2e)} \right]^2}{N - 1 + \left[Z \frac{(d-c)}{(2e)} \right]^2}$$

This implies $n = N[Z (d-c)/(2e)]^2 / [N - 1 + (Z (d-c)/(2e))^2]$

Where N is the population from where the sample is meant to be selected and other parameters are as defined in the above first method. The population of Osun State for example, is 3,423,535 distributed to 1,677,532 and 1,746,003, male and female respectively, according to National Population Commission (2006).

Therefore,

$$n = 1,677,532 [1.96 * (1 - 0)/(2 * 0.05)]^2 / [1,677,532 - 1 + (1.96(1 - 0)/(2 * 0.05))^2]$$

$$n = \frac{644,440,693.1}{1,677,915.16} = 384$$

In this case also, the estimated sample size was adjusted by the non-response factor to arrive at a total sample size of 400 per state. This sample size was, however, distributed by respondents' categories.

3.3 Sampling Techniques

In the actual sense, male reproductive health is meant for all men but targeting a specific audience among them was considered more rewarding and impactful, after all, all men are not homogeneous. Therefore, segregating studies and programmes for each sub-group of men identified can be more apposite and necessary coupled with the fact that most sicknesses and diseases of men can be dependent upon their demographic statuses. This study was therefore concentrated on married men alone and their relationship with their wives. It should, however, be noted that, the issue at hand does not follow any known sampling distribution or technique. Therefore, every statistical temptation to use any systematic approach to access the victims (respondents) was practically difficult and unrealistic. Thus, a three-level sampling methodology was designed and adopted for the study. These include the selection of key informant (i.e. medical and allied personnel), couples with reproductive health challenges and the community members who have families or members with or without reproductive health challenges.

3.4 Selection of Key Informants

Preliminary investigation was done with prior visits and discussions with medical personnel (including orthodox medicine) in various medical centers selected within the location areas in order to secure their consent to participate as key informants for the category of patients concerned in their medical centers. This initial approval guided and helped in the movement within the location. It also helped in saving considerable time and resources. Although, the plan was to work with only one key informant per each ward, several network contacts were also made. In each of the medical centers where the key informants work, specific arrangements were made for

meeting with those that were placed on appointment with the hospital during the interview months. This hospital-based interview was conducted for the ‘couple-patient’ but with each of them interviewed separately in the waiting area prior to being seen by the medical officer. Also, appropriate permission was sought from the local ministries of health (MOH) to ensure total cooperation from the medical personnel in various medical centers. This actually reduced the difficulty in securing respondents’ and key informants’ consent and also served as a legal protection for them, taking into cognizance that the issue at hand is a sensitive and personal one.

The first level was to access the respondents using medical personnel (modern and orthodox) as ‘primary key informants’. This was considered appropriate because of their positions as the custodian of health data about those that are suffering from reproductive health challenges. Their assistance was sought in this regard based on the assumption that several individuals in this category would have been soliciting their services or confiding in them in order to secure solution to their problems.

In addition to the above, a top intelligence study was organized, by recruiting ‘other ranks’ in the medical centers that were able to furnish appropriate information about the reproductive health challenged men that reside in their communities or neighbourhoods. This complemented all initial efforts by the primary key informants (PKI) in arriving at a desirable sample size. These secondary informants were delegated to compile the addresses of the few targeted respondents that live within their community. This opportunity was utilized because by the nature of their work, it is known that they are privy to certain vital records in hospital and could possibly help in directing the researcher and his team to residents of men that have reproductive health challenges. The addresses harvested from them were followed and quite a number of couples were interviewed through this approach. Overall, these two-edged approach yielded rewarding harvest taking into cognizance that some individuals preferred consulting with medical personnel outside official hours (“off duty” time) than to going to the government medical center. Several preferred visiting nurses/midwives outside official environment especially among the rural populace.

In addition to the survey, in-depth interviews were organized for a few of the medical personnel who were responsible for treating reproductive health diseases of men. The

in-depth interview shed light on the feeling, agonies, behaviour of the affected husbands. Other information was based on medical records, experience and possibly those shared issues by the spouses of the victims. Although in-depth interviews were proposed for about 120 medical personnel in all locations distributed into 50:50 ratios by rural and urban location respectively, only 55 were completed. This is due to the sensitive nature of the issues and in most cases, only the head of the health facilities or medical representatives were allowed to talk to our team on the matter.

The third level of the survey exercise involved general interviews for a sizeable proportion of members of the community in order to gather public opinions and perceptions about male reproductive health challenges. A systematic approach was employed in selecting the wards and towns/villages within each ward. Respondents in this category were selected using a simple random 'route-walk-procedure' along the purposively selected streets within the towns/villages in the wards selected for the study. The samples precisely consist of ever-married men with or without reproductive health challenges who have lived with their spouses or husbands for at least 6 months in the study area. The choice of the Southwest of Nigeria was purposive and in line with the topic. However, the 6-months' criteria (as contained in the questionnaire) was based on the assumption that it is a period long enough for both couple to have known the practical meaning of conjugal relationships. While these individuals (i.e. community members) were not the target population, their opinions and perceptions about the target population matters and is vital in evaluation of the challenges of reproductive health among couples in their domain.

Sample was selected following a multistage systematic approach. Each state has been divided into Local Government Areas (LGAs), the Local Government Area divided into constituencies and each constituency has been distributed into wards. The enumeration areas (EAs) within the wards were strictly followed in selecting qualified respondents for this level. One Local Government Area (LGA) was selected from each state. In the local government area selected, two constituencies were identified from where two wards were selected in each of the constituencies. The choice of enumeration areas was met with serious bottlenecks. On one hand, the list of enumeration areas was not available and on the other hand, enumeration areas were considered rather too small for a study like this. Overall, a total of eight wards was

selected from the two local government areas chosen for this study. Respondents in the study include 400 couples with husbands that have reproductive health challenges, 400 couples among general public with or without reproductive health challenges as control group and 120 medical personnel. However, street numbering, National Bureau of Statistics (NBS) and primary health care (PHC) numbers also guided in the random route-walk to avoid double selection of the streets, houses or respondent. Overall, only 847 respondents were interviewed on face-to-face approach across the two Local Government Areas. In addition to 55 in-depth interviewed conducted among the medical personnel.

3.5 Data Collection

Data were collected with the aid of carefully designed questionnaire in the quantitative segment. The research instrument covered all the segments of the study adequately. It was divided into 4 sections (A, B, C and D) with each devoted to relatively separate parts. The questionnaire was pre-coded and adapted the Golombok-Rust Inventory of Reproductive Health in assessing the quality of conjugal relationships between the husband and the wife. This inventory provided scores on sub-scales of key indices of conjugal relationship between the couples such as characteristics of reproductive health challenges like impotence, prostate cancer, length of time couple spent together, duration of marriage, joint decision-taking, frequencies of sexual intercourse, inter-spousal communication (communication between husband and the wife) and avoidance/blurring.

A pilot study was conducted between September and October 2009. This assisted in determining the necessary changes in terms of re-phrasing and logical sequence of the questions in the questionnaire. Necessary addition of vital questions or the removals of unnecessary ones were done as indicated by the result of the pilot survey. The report from the pilot survey was regarded as a preliminary report for this research.

In addition to the survey procedure, six (6) focus group discussions (FGDs) were conducted among males and females in two age groups (15-34 years) and (35-74 years) in two selected LGAs. The FGDs were guided by appropriate leading questions that benchmarked responses from the survey exercise. The idea behind this was to re-

affirm all submissions and findings that came out in the earlier procedure. Amongst others, it shed light on the community attitude toward those affected. The main fieldwork started in December 2009 and ended June 2010.

3.6 Fieldwork and Problems Encountered

Four experienced freelance fieldworkers were recruited in addition to the medical and allied workers that assisted as key informants. Apart from their minimum educational qualification of National Diploma, 70 percent of them were first degree holders in humanities and social sciences. Besides, they were all natives of the states studied and very conversant with their respective Local Government Areas. They also speak English and Yoruba languages very fluently. The choice of this category of people was of great importance to the whole exercise. It helped in minimizing the cost of training and the time spent during the interview processes. Notwithstanding, all the interviewers were exposed to the technicalities in the questionnaire and interview procedures in a one day training programme organized for them before the pilot, and a re-briefing session before the final survey. Mock tests were repeatedly carried out before and after the pilot exercise to test the suitability of the selected enumerators and adequacy of research instruments. The pilot exercise was completed in October 2009. In addition, enumerators were mandated to take note and submit the same in addition to the few pages of report on their field experience and other vital information that the space provided in the questionnaire could not capture or contain.

The general critical challenge faced in the field was the sensitive nature of the topic that made the respondents to be specific, targeted individuals. Also, there was tight bureaucracy in securing approval and the unpleasant attitude of prospective respondents to consent forms. Besides, the duration of fieldwork extended beyond original plan and gulped more than initial budget.

In addition, the lack of enumeration area maps that can be used in the sample determination posed a serious threat to the initial planning of the research. Related to this is unavailability of sampling frame for the target population i.e. husbands with reproductive health challenges. Map for enumeration areas as well as sampling frame are crucial to studies in most social sciences and more fundamental in a demographic

study like this. These challenges were, however, overcome by the use of wards and key informant approach in accessing the respondents.

Although, some documented cases of male reproductive health challenges were made available in the health facilities, it was extremely difficult to get copies from the medical personnel under the pretext that it was against their jobs' ethic. However, they were cooperative enough to invite for us or lead us to the 'victims' (respondents) as their time permitted. The researcher invariably worked at the key informant's time schedule throughout the survey period.

Logistics was a major challenge due to the fact that the exercise was done across all wards in each of the local government selected simultaneously. The researcher had to move swiftly to defile vehicular traffic around each street in the community whenever the couple concerned agreed to talk to us. In addition, travelling between Covenant University to and fro Osun and Lagos States rendered the whole exercise an herculean task. Besides, accessing the nooks and crannies of these communities in the face of bad road conditions posed a serious challenge during the data collection exercise.

Another fundamental problem encountered was the recruitment of field assistants for a sensitive interview like this. Among several enumerators contacted only about eight agreed to work for the researcher out of which only four were found suitable for the job. Organizing a focus group discussion among the wives or husbands was the greatest challenge in this study. The maximum in any of the FGD was eight participants. In addition, virtually all respondents indicated that the questionnaire was too lengthy.

In addition, the financial cost of this study was enormous. The cost of printing research instruments, fueling and transportation of interviewers including research materials to the field was much. Also, the cost of refreshment and in some cases transportation for participants in the FGDs and the field assistants and the key informant was equally borne by the researcher, besides other miscellaneous expenses incurred during data collection and data entry.

In virtually all cases, the initial resentment from the victims was pronounced. However, the subsequent emotional attitude, complaints and agitation for clue over their problems was too sensitive and thus aroused compassion. In most sessions, the researcher had to end the interview with intensive prayer with the victim or the family.

Despite all the above challenges, the exercise was an interesting exposure to the researcher and his team and worth whatever 'hustling and bustling' that were associated with it. The study recorded very high response rate.

3.7 Methods of Data Analysis

Data gathered from the field were analyzed using two approaches. The survey data were analyzed statistically using SPSS. Information from the focus group discussions and in-depth interviews were transcribed and analyzed using systematic content analysis technique that was moderated with content observation approach. Messages transcribed were categorized and inserted to complement quantitative observations or results. In addition, inferences were made upon the content of the communication. These procedures are in tandem with social sciences research and principles (Krippendori, 1980; Frankfort-Nachmias & Nachmias, 1992; Coeffey & Atkinson, 1996; Ritchie & Lewis, 2004).

For the survey data, the pre-test and pilot exercises completely made the administration of the questionnaire devoid of unmanageable errors. It also saved enormous time in data cleaning processes. Notwithstanding, returned copies of the questionnaires were all subjected to thorough screening for consistency. Those that were screened and considered to be error-free were entered into computer for statistical analysis. Also, the pre-coded nature of most of the questions facilitated easy data entry and made the analysis less tasking. However, all responses from the open-ended questions were then itemized and recoded accordingly for easy entry into the system.

Data analysis followed a combination of three statistical analytical techniques namely: univariate, bivariate and multivariate analysis. The univariate segment features descriptive statistics such as frequencies. This was used to assess the demographic and cultural characteristics of the respondents and the distribution of all other

important variables that are done separately by place of residence, gender, according to whether the husband has reproductive health challenges or not, to mention but few. In situations where variables were measured in interval scale, descriptive statistics such as mean, mode and standard variation were employed in describing the variables.

In the bivariate analysis, series of cross-tabulations were run in order to identify the patterns of relationship between selected background variables and conjugal relationship indices. Regression beta coefficients equivalent of Pearson product moment correlation coefficient (r) as produced by the logistic technique employed were used to ascertain relationships (positive, negative or zero association) and the direction of association between the variables of interest. The coefficient of determination (R^2) is also considered while attempting to know the strength of the relationships observed between the variables. Also, analysis of variance computed revealed the variations within the responses of husbands that have reproductive health challenges, spouses of husbands that have reproductive health challenges and the control group (i.e. the general public) who have never experienced reproductive health challenges. Variations between these two distinct categories of respondents are very vital to this study.

However, because of the need to know the significant contributions of each of the variables identified (i.e. predictors) to the problem of male reproductive health challenges, a logistic regression analysis (LRA) was considered necessary. Logistic regression analysis provides the opportunity to measure how much of conjugal relationship (e.g. marital harmony, peace at home, marital conflict, joint decision-making, closeness between spouses, spousal-communication; etc) are predicted by the presence or absence of husbands' reproductive health challenges given the various selected demographic and cultural characteristics of the husband and the wife and their community at large. For example, the LRA indicates how much of the level of husband-wife communication is influenced by the presence of husband's infertility condition (or husband's testicular cancer) given his position in the community they occupy.

Specifically, logistic regression is desirable because most of the variables involved in this study are more of categorical/polytomous variables than just interval variables.

Categorical variables are such that have two (sometimes more than two) categories and there is no intrinsic ordering to the categories. Polytomous variables take multiple values for which no order exists between them. For example, religion is measured in terms of Christianity, Islam and Traditional religion. In this case, distinct ordering cannot be assigned to the different kinds of religious groups encountered because no specific religion can be described as higher or smaller than the other. Also, in a situation where attempt was made to order the variable's categories (e.g. sex, male/female), there was no simple agreeable way of ordering them. Therefore, these variables were kept as categorical variables and treated as normal categories in the research.

Some other variables like educational attainment, awareness of reproductive health diseases, ever experienced/never experienced RH diseases, joint/no joint decision-making as a couple, duration of marriage and presence/absence of conflict, are regarded as categorical variables in the data analysis section. In the same vein, since a purely categorical variable is one that allows categories to be assigned (though without ordering), different categories were assigned to other specific variables for comprehensive measurement but without prejudice (or bias) in apportioning higher value to one and lower value to another. This provided avenue for treating all variables equally and enhance accurate judgment on the likelihood of occurrence of any of the variables given the presence or absence of a category among others in the tested variables.

In the context of the conceptual framework employed in this study, the dependent variable is captured using several indicators that are measured categorically. The schematic illustration (fig 1) shows some interrelationships between dependent (predicted) variables and several predictors (i.e. the independent variables). Besides, several indicators of conjugal relationships are identified as demonstrated also in the model specification. Thus, it becomes expedient to measure the influence of all predictor variables on these categories. Logistic regression analysis adequately captured the situation with realistic representation because the LRA is designed to make use of several predictor variables that may be either numerical or categorical (Richard, 1990; Nicola, Richard & Snelgar, 2003).

The choice of logistic regression analytical techniques is based on the appropriateness of the technique in analyzing data where the dependent variable is dichotomous in nature as it is the case in this research. (Richard, 1990; Nicola *et al*, 2003). It is also sequel to the design of the questionnaire that made other statistics inappropriate or of little relevance in determining the odds of conjugal relationship with respect to husband’s reproductive health challenges. Logistic regression analysis is capable of capturing several dependent and independent variables together. (Richard, 1990; Nicola *et al*, 2003). It helps in determining specifically, the probability of (indicators like) marital harmony, quality of time couple spent together, joint decision-making and couple’s closeness in conjugal relationships with the presence/absence of RH diseases within specific categories of educational attainment, religion, age, awareness of RH diseases, duration of marriage, age, family economic status and desired number of children.

Another benefit of the logistic regression in this data analysis is that it can take any value from negative infinity to positive infinity as input values but the output of the predicted variable will come in value of 0 and 1, the case that is not possible or difficult with other statistics. Besides, the various statistics from logistic are precise. It specifically evaluates the accuracy of the model used. The model summary in logistics give “Cox and Snell R Square” and “Nagelkerke R Square” that are alternative statistics to R^2 (R-square) in multiple regressions. These indices indicate the variation in predicted variable that are explained by the predictors.

3.8 Model Specifications

It is important to state here that the fundamental model underlying multiple regression analysis (MRA) posits that, a continuous outcome is a linear combination of a set of predictors and errors. In the case of an outcome variable of Y with a set of predictor variables ($X_1, X_2, .. X_n$), the multiple regression analysis model is of the form:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n \dots \dots \dots (i)$$

Where,

α (alpha) is the Y-intercept, i.e. the estimated value of Y when all Xs are set at zero (0).

β (Beta) is a multiple regression coefficient (i.e., the expected change in Y per unit change in X_1 assuming that all other Xs are held constant).

In the same way, the general model of logistic regression analysis adopted for this study also indicates, for example, that marital harmony or couple's closeness is a function of several factors that are peculiar to husbands with or without reproductive health challenges. However, because LRA assumes that the outcome variable Y is categorical/polytomous, it does not model this outcome directly like MRA. Rather, the LRA is based on probabilities associated with the values of Y. In this study, Y is presented as categorical/dichotomous/polytomous outcome, taking the value of 1 implying positive outcome or success and 0 indicating the negative outcome or failure. However, the population proportion of cases for which $Y = 1$ is defined as $\pi = P(Y=1)$ and the proportion for $Y = 0$ is defined as $\pi = P(Y=0)$. For theoretical and mathematical reasons, LRA is based on linear model for the natural logarithm of the odds (i.e. the log-odds) in favour of $Y = 1$. Logistic regression technique therefore models the log-odds of an outcome as being defined by the values of covariates in the model. It uses the covariance among the categories of independent factors (X_1 's, X_2 's, etc) as they influence the predicted variable (Y), i.e. conjugal relationship of the couples with husbands that have reproductive health challenges.

In the context of this logistic regression model, Y_i is the conditional probability of the form

$P\{Y = \frac{p}{1-p}\}$. That shows that the occurrence of any of conjugal relationship's indicator is more or less likely dependent on combinations of values of the predictor variables. Now, the multiple regression analysis described is almost identical with logistic regression analysis except that the log-odds in favour of $Y = 1$ replaces the expected value.

The general model therefore measures $Ln = \left\{ \frac{p}{(1-p)} \right\} = \beta X + e \dots \dots \dots (ii)$

- Where, e = The residual Value / Error Term
- β = The coefficient of X
- P = Probability of conjugal relationship with RH deficient husband

$(1-P)$ = The probability of no conjugal relationship with RH deficient husband

$Ln = \left\{ \frac{P}{(1-P)} \right\} =$ The Log-odds of conjugal relationship to log-odds of marital disharmony with husband that have RH challenges.

However, since the independent variable (X) is more than just one variable, each in various categories and if the dependent variable consists of four indicators, which are of different categories, each indicator of dependent variable will therefore be measured on some identified variables. Thus, y_1, y_2 and y_3 are measured independently against all independent variables. Thus, five (5) distinct models (Y_1, Y_2, Y_3, \dots and, Y_5) therefore emanated in this study putting into consideration the hypotheses already formulated. Y_1 represents the experience (i.e. presence) of male reproductive challenge, y_2 , represents marital harmony, y_3 , the closeness between the duo (i.e. husband and wife, y_4 , coping strategies.

Model I

Since $Y_1 = Ln \left\{ \frac{Y_1}{(1-Y_1)} \right\}$, Model I will be represented as follows:

$$Ln \left\{ \frac{Y}{(1-Y)} \right\} = \beta X + e \dots \dots \dots (iii)$$

Where,

e = The residual Value/Error Term

β = The coefficient of X

Y = Probability of experiencing male reproductive health challenges given certain socio-demographic characteristics

$(1-Y_1)$ = The probability of not experiencing male reproductive health challenges given certain socio-demographic characteristics

$Ln \left\{ \frac{Y_1}{(1-Y_1)} \right\} =$ Log-odds of experiencing male reproductive health challenges given certain socio-demographic characteristics

Since the independent variable (X) is more than just one variable and because each it is measured in various categories, the model will therefore be represented as:

$$Ln \left\{ \frac{Y_1}{(1-Y_1)} \right\} = \alpha_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \dots + \beta_n X_n + e \dots \dots \dots (iv)$$

Where, Y_1 represents the experience of any reproductive health challenge by the husband, 'i' ranges from 1 to n respondents, e is the residual term for the nth respondent, X_1, X_2, \dots, X_k are independent variables and $\beta_1, \beta_2, \dots, \beta_k$ represents coefficients of various independent variables. Since $\text{Ln}\left\{\frac{Y_1}{(1-Y_1)}\right\}$ is a monotonically increasing function, it therefore implies that a change in any of Xs will likely bring about a change in the dependent variable. Simply put, a positive change in any coefficient of Xs (X_1 for example) has likelihood of bringing a change in $\text{Ln}\left\{\frac{Y_1}{(1-Y_1)}\right\}$ given that other Xs are constant. Specifically, the parameters in model I are explained as:

α_0 = intercept

β_1 = change in log-odds of experiencing male reproductive health challenges given certain level of education

β_2 = change in log-odds of experiencing male reproductive health challenges with religious affiliation of the husband

β_3 = change in log-odds of experiencing male reproductive health challenges with occupational status

β_4 = change in log-odds of experiencing male reproductive health challenges with usual place of residence

β_5 = change in log-odds of experiencing male reproductive health challenges given the level of living condition.

Model II

Model II estimates the effects of male reproductive health challenges on conjugal/ marital satisfaction. In this model the dependent variable (y_2) represent marital satisfaction, measured in terms of whether the respondents are satisfied or not with their marriage. The independent variables cover selected socio-demographic characteristics of the respondents. The model is therefore represented as:

Since $Y_2 = \text{Ln}\left\{\frac{Y_2}{(1-Y_2)}\right\}$, Model I will be represented as follows:

$$\text{Ln}\left\{\frac{Y_2}{(1-Y_2)}\right\} = \beta X + e \dots\dots\dots (v)$$

Where,

e = The residual Value/Error Term
 β = The coefficient of X
P = Probability of enjoying marital satisfaction with reproductive health (RH) deficient husband

(1-Y) = The probability of not enjoying marital satisfaction with RH deficient husband.

$Ln\left\{\frac{Y_1}{(1-Y_1)}\right\}$ = Log-odds of marital satisfaction to log-odds of marital dissatisfaction with husband that has RH challenges.

Since the independent variable (X) is more than just one variable and because each is measured in various categories, the model will therefore be represented as:

$$Ln\left\{\frac{Y_2}{(1-Y_2)}\right\} = \alpha_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \dots + \beta_n X_n + e \dots \dots \dots (vi)$$

Where, Y_1 represents marital satisfaction between the couples, 'i' ranges from 1 to n respondents, e is the residual term for the nth respondent, X_1, X_2, \dots, X_k are independent variables and $\beta_1, \beta_2, \dots, \beta_k$ represent coefficients of various independent variables. Since $Ln\left\{\frac{Y_2}{(1-Y_2)}\right\}$ is a monotonically increasing function, it therefore implies that a change in any of Xs will likely bring about a change in the dependent variable. Simply put, a positive change in any coefficient of X's (X_1 for example) has the likelihood of bringing a change in $Ln\left\{\frac{Y_2}{(1-Y_2)}\right\}$ given that other Xs are constant.

Specifically, the parameters in Model I are explained as follows:

- α_0 = intercept
- β_1 = change in log-odds of marital satisfaction with educational attainment of husbands that are reproductively challenged
- β_2 = change in log-odds of marital satisfaction with religion of husbands that have reproductive health challenges
- β_3 = change in log-odds of marital satisfaction with occupational status of husbands that have reproductive health challenges
- β_4 = change in log-odds of marital satisfaction medical facility access among husbands that have reproductive health challenges
- β_5 = change in log-odds of marital satisfaction with community belief of husbands that have reproductive health challenges

Model III

The model explores the interrelationship between couple closeness and socio-demographic variables among couples where the husbands have reproductive health challenges. The specific predictors used in Model III are socio-demographic characteristics of wives of husbands with reproductive health problems and that of their husbands. These include on one hand, age of the respondent, religious affiliation, educational attainment, income level of husband and the wife, coping strategies of the wives and on the other hand, management of the disease by the husbands and duration of the marriage. The model takes similar pattern but with the Y_3 expressing the probability of couple’s closeness given certain socio-demographic status of husbands that are experiencing reproductive health challenges. The model can be denoted as following:

$$Ln \left\{ \frac{Y_3}{(1-Y_3)} \right\} = \alpha_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \dots + \beta_n X_n + e \dots \dots \dots (vii)$$

Where,

- α_0 = the intercept
- e = the Residual Value/Error Term
- β = the Coefficient of X
- Y = Probability of couple closeness
- (1-Y) = the probability of No couple closeness

$Ln \left\{ \frac{Y_3}{(1-Y_3)} \right\}$ = Log of the ratio of probability of couple closeness to the Log of probability of lack of couple closeness between the couple.

Where,

- α_0 = intercept
- β_1 = change in log-odds of couple closeness with educational attainment of husbands that have reproductive health challenges
- β_2 = change in log-odds of couple closeness with religion of husbands that have reproductive health challenges
- β_3 = change in log-odds of couple closeness with occupational status of husbands that have reproductive health challenges
- β_4 = change in log-odds of couple closeness with access to medical facility by the husband that have reproductive health challenges

β_5 = change in log-odds of couple closeness with community belief of husbands where the husbands have reproductive health challenges

Model IV

Model IV estimates the effects of coping strategies on conjugal relationship where the husband is experiencing male reproductive health challenges. The predictors in this case are the coping indices as identified in the field. These include resignation to fate, securing family's intervention, doctor involvement, detachment, confrontational, alternative sexual partners, planning separation and so on. The model is thus denoted

$$\text{Ln} \left\{ \frac{Y_4}{(1-Y_4)} \right\} = \alpha_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \dots + \beta_n X_n + e \dots \dots \text{(viii)}$$

Where,

α_0 = the intercept

e = the Residual Value/Error Term

β = the Coefficient of X

P = Probability of couple closeness

(1-P) = the probability of No couple closeness

$\text{Ln} \left\{ \frac{Y_4}{(1-Y_4)} \right\}$ = Log of the ratio of probability of couple closeness to the Log of probability of lack of couple closeness between the couple and,

The X's as various predictors indicated above.

Model V

This logistic model was employed to estimate the effects of selected socio-demographic variables on the odds of change in sexual patterns of wives where husbands have male reproductive health challenges. It basically examined the interrelationships between patterns of sexual behaviour of wives whose husbands have reproductive health challenges and their socio-demographic characteristics.

The model pattern is thus similar to all other models. However, change in sexual pattern of wives is used as the dependent variable while the independent variables are the socio-demographic characteristics of the wives. It is thus denoted as:

$$\ln\left\{\frac{Y_5}{(1-Y_5)}\right\} = \alpha_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \dots + \beta_n X_n + e \dots (ix)$$

Where,

α_0 = the intercept

e = the Residual Value/Error Term

β = the Coefficient of X

Y = Probability of change in sexual pattern of wives

(1-Y) = the probability of no change in sexual pattern

$\ln\left\{\frac{Y_5}{(1-Y_5)}\right\}$ = Log of the ratio of probability of change in sexual pattern of the wife to Log of probability of no change in sexual pattern where the husband is experiencing reproductive health challenge.

The X's are the socio-demographic characteristics of the wives whose husbands have reproductive health challenges.

However, while the results from the analysis could be sufficient in some cases, the outcome and interpretation were further compared with the evidences from the FGD and in-depth interviews to allow for reasonable and dependable submissions.

CHAPTER FOUR

UNIVARIATE ANALYSIS AND PRESENTATION OF SELECTED VARIABLES

4.1.0 Introduction

This chapter is devoted to analysis and presentation of data. The study specifically targeted husbands with reproductive health challenges and the relationships existing between them and their wives using the Yoruba ethnic group in the South West geopolitical zone of Nigeria. A three-level sampling methodological approach was adopted namely direct interview schedule, in-depth interview and focus group discussion. Quantitative data from the survey were analyzed using Statistical Package for Social Sciences (SPSS) and the results are presented at three levels viz: univariate, bivariate and multivariate analyses. The univariate features frequency distributions, the bivariate analysis focuses on series of cross-tabulations that were performed to identify the patterns of relationships between selected background variables and conjugal relationship indices. The hypotheses formulated were tested under the multivariate analysis where logistic regression analytical procedure was employed. Beta coefficients, coefficient of determination (R^2), Wald statistics and $\exp(B)$ were used to interpret various key output from the analysis. However, data obtained from qualitative segment through focus group discussions and in-depth interviews were analyzed using content analysis procedure that was considered as the best option for the segment (Ritchie & Lewis, 2004). Most of the relevant information on wives' coping strategies were elicited from a long exploratory conversation with wives especially where husbands are sexually deficient or suffer reproductive health diseases.

4.1.1 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

4.1.2 Background profile of the study areas

Some of the salient features of socio-demographic conditions of the respondents are revealed in the survey. The sample specifically consists of couples that sleep together every day or those that have their spouses returning home from time to time, at least within three months. Therefore, all respondents were married couples. They were

interviewed from regular households where they live together under the same roof, same building or in the same compound. A household is a prominent feature in terms of socio-demographic conditions and was considered as such. In this study, a household was classified according to National Population Commission as a person or group of persons living together usually under the same roof or in the same building or compound, who share the same source of food and recognize themselves as a social unit with a head of household (NPC, 2010).

The locations for the survey are Osun and Lagos States that were randomly selected out of the six states in the Southwest geopolitical zone of Nigeria. All the respondents were selected from both urban and rural areas of the two states. In line with the objectives of the research, only one ethnic group was enumerated and the dominant common language in the area is the Yoruba language. However, their religious affiliations and other socio-demographic variables differ. The outlooks of the environment are typical reminiscence of rural settings. However, all respondents were classified as rural or urban residents depending on their usual place of residence. In all, 37.4 percent of respondents are from rural areas while 62.6 percent are urban dwellers as indicated in table 1.

It was observed that most members of the family are the husband, wife, children and/or other persons that are related either to the wife or to the husband. These people are observed to be seemingly closely knitted together by tradition. As expected, most families are headed by male member though female-headed families were visibly noted in some households in the study locations. Although, equal number of male and female respondents was interviewed, the returned and processable copies of the questionnaire were only 867.

Two local government areas were selected, one from each of the states selected. Despite the fact that equal proportion was planned, the total respondents covered in Lagos state was 449 (representing 51.8 percent) while only 418 respondents were interviewed in Osun state amounting to 48.2 percent. Equal number of wards were sampled though the number of successfully completed copies of the questionnaire varied from one ward to another. This is due, in part, to the availability of the targeted respondents in the community selected, the rejection rates as well as logistic problems.

The interview was conducted in all the wards within the local government simultaneously.

Table 1: Background Profile of the study areas

Location Characteristics	Frequency	%
State		
Lagos State	449	51.8
Osun State	418	48.2
Total	867	100
Local Government Areas		
Kosofe	449	51.8
Odo-Otin	418	48.2
Wards (Lagos State)		
Alapere 1	102	11.8
Alapere 2	108	12.5
Mile 12	95	11.0
Demurin	144	16.6
Wards (Osun State)		
Okuku 1	133	15.3
Inisha 1	90	10.4
Iyeku/Ekosin	103	11.9
Oyan	92	10.6
Total	867	100
Ethnicity Group		
Yoruba	867	100.0
Marital Status		
Currently married	867	100.0
Couples		
Husband	432	49.8
Wives	435	50.2
Total	867	100.0
Usual place of residence		
Rural	324	37.4
Urban	543	62.6
Total	867	100.0

Source: Field survey 2010

4.1.3 Demographic Characteristics of Respondents

The classification of respondents by the variables of age, religious affiliation, working status, educational attainment and occupational status are grouped together as demographic characteristics as shown in table 2 below.

Christianity, as revealed by the data, is the dominant religion of the sample population. It accounted for 73.8 percent of the religious affiliation of the sampled population. Table 2 also revealed that 23.1 percent are Muslims while 3.1 percent claimed that they belong to traditional religious setting. Age constitutes a vital factor in health analyses especially when it relates to reproductive health issues. While some of the reproductive health challenges have been established to be age related, the severity becomes deepened as age increases (EngenderHealth, 2003) and both partners would require maturity to encourage talking to each other about these changes. The focus group discussion revealed, among others, that if a man or his spouse is unaware of the ways in which aging can affect sexual functioning in terms of sexual intercourse, misunderstandings about the underlying causes of a sexual challenge are inevitable. Across the locations and in all the focus groups, several respondents affirmed that “one begins to lose “taste” for sex (i.e. sexual urge) as one becomes older.

The age characteristics revealed the mean age of the population as 40 years. The husbands’ mean age is 42 while the women mean age is 38 years as shown in table 2. This implies that most of the respondents belong to the middle age group of 35-54 year. This falls within the prime age bracket of life where a man is fully matured, physically grown and full of power and vigor (Takashi & Jayne, 2002). About 46.6 percent of the respondents belong to this class (i.e. age group 35-54 years). Those in age range of 15 and 34 years are only 37.7 percent while only 15.7 percent are in older age group of 55-74 years. The proportions of respondents in the middle age group and that of the next older ages show that higher proportions of the population are tending towards the end of their prime ages. It is thus believed that they are matured enough to handle sexual issues and problems that might emanate within their marriages. In addition, the fact that this proportion of population in age 35-54 years is in the

economically active ages, implies that attention and investment on what could sustain them (in this case, reproductive health) is worthwhile.

Education represents a vital indicator for assessing the current and future level of marital and socio-economic development of individuals or society. Effort to achieve sustainable marital satisfaction and cordial marital relationship is a vision of development that is promoted by educational attainment among others. Thus, the current educational attainment of the respondents were evaluated. The apriori expectation was that education could help the couple to develop the favourable attitudes towards the reproductive health challenges of the husband and makes informed decisions for the benefit of themselves and others either now and/or in the future.

The education profile revealed that 9.2 percent had never attended school nor know how to read and write. However few of them could speak and understand the abridged version of English language called *pidgin language* in Nigeria during the course of fieldwork. They are however classified as non-literates. Among the proportion that are literates from the sampled population, 22.4 percent have attained only primary school education, 39.4 percent of them have had secondary school education and only 29 percent had post-secondary education as shown in table 2. Overall, 91.0 percent of the total population are literate individuals who could read and write in English language (table 2).

It is also revealed in table 2 that four-fifth (80.2 percent) of the respondents are working while the remaining one-fifth were either full time housewives, full time students or are currently unemployed. This is in consonance with the 19.8 percent unemployment rate indicated by the National Bureau of Statistics (NBS) and CIA in 2005 and 2010 respectively (NBS, 2009 and 2010; CIA 2010; National Population Commission (NPC), 2009; Onuba, 2010). The occupational distribution of the respondents shows that the majority of them belong to the artisans/skilled labourers, unskilled artisans/shop assistants and middle level managers in the establishments where they work. Occupation status occupies a major input in economic characteristics of the population as well as family income. Occupation status is correlated with income power and could play a major deterministic role in intimate

conjugal relationships. Also, there could possibly be different marital behaviour and characteristics between those that are working and the unemployed and respondents with high occupational status compared with other lower cadres. Thus, the variable is included as part of factors evaluated with intimate conjugal relationships.

As indicated in table 2, one out of every five respondents belongs to the artisans/skilled labour category of occupational distribution. 11.9 percent were identified as clerical assistants while 18.3 percent were middle managers as at the time of this survey. The group of respondents identified as executive officers, chief executives of organizations is only 8 percent (Table 2). The occupational distribution of Nigeria as revealed by 2006 Census result is not too different from this finding (NPC, 2010). The unskilled labourers as well as shop attendants constitute 21.1 percent of total respondents (Table 2). Overall, 18.2 percent were full-time housewives and unemployed. This proportion also includes all the married respondents that were full time students as at the time of survey. Further distribution shows that proportion of unemployed is higher in Osun State than that of lagos State. This could be due to conglomeration of industries that provide opportunities for employment compared to other towns.

Income was also included despite the known challenges and difficulties in eliciting valid information on the variable. In spite of inaccurate accounting procedure, irregular earnings and the predominance of subsistence economic activities in developing countries (Fadayomi, 1988) from which Nigeria cannot be exonerated; patience was exercised in eliciting the right information from the respondents. The findings shows that the average income lies within ~~₦20,000-₦29,999~~ income group. Almost half of the population (48.3 percent) earns below ~~₦40,000~~ per month. The proportion with no income is about 19.8 percent. This is closer to the proportions that were categorized as unemployed in occupational distribution as indicated in table 2. Those in the highest categories of income group are less than 1 percent. The revelation here is reminiscent of the nation's income distributions with only 1% of the population spending about 48 percent of Nigeria's income, where about 49 percent of the population shares just 45 percent and about 50 percent (i.e. half of the population) scramble for only 1 percent of the national income (The Guardian, Monday July 24, 2000). This reveals the disproportionate numbers who are affected by income

inequality and are living below poverty line.

Table 2: Demographic characteristics of respondents by Gender

Variables	Men		Women		Total	
	No	%	No	%	No	%
Lagos State	227	52.5	222	51.0	449	51.8
Osun State	205	47.5	213	49.0	418	48.2
Local Government Area						
Kosofe	227	52.5	222	51.0	449	51.8
Odo-Otin	205	47.5	213	49.0	418	48.2
Place of Residence						
Rural	166	38.4	158	36.3	324	37.4
Urban	266	61.6	277	63.7	543	62.6
Age Group						
15-34	146	33.8	181	41.6	327	37.7
35-54	190	44.0	214	49.2	404	46.6
55-74	96	22.2	40	9.2	136	15.7
Mean age =	42		38		40	
Religious Affiliations						
Christianity	249	57.6	229	52.6	478	55.1
Islam	151	35.0	170	39.1	321	37.0
Traditional	32	7.4	36	8.3	68	7.8
Working Status						
Yes	371	85.9	338	77.7	709	81.8
No	61	14.1	97	22.3	158	18.2
Occupational Status						
Snr Mgr/CEO/Snr Army Officer	36	8.3	33	7.6	69	8.0
Middle/Jnr Mgr/Officer	86	19.9	73	16.8	159	18.3
Clerical Staff/Other Officer	44	10.2	59	13.6	103	11.9
Artisan/Skilled labourer	122	28.2	73	16.8	195	22.5
Unskilled/Shop Asst	83	19.2	100	23.0	183	21.1
Ft-Housewife, Unemployed	61	14.1	97	22.3	158	18.2
Educational Attainment						
No Schooling	43	10.0	36	8.3	79	9.1
Up to Primary School	98	22.7	94	21.6	192	22.1
Up to 2ndary School	175	40.5	167	38.4	342	39.4
Up to University	116	26.9	138	31.7	254	29.3
Selected Wards						
Alapere 1	53	12.3	49	11.3	102	11.8
Alapere 2	54	12.5	54	12.4	108	12.5
Mile 12	47	10.9	48	11.0	95	11.0
Demurin	69	16.0	75	17.2	144	16.6
Okuku 1	69	16.0	64	14.7	133	15.3
Inisha 1	41	9.5	49	11.3	90	10.4
Iyeku/Ekosingin	54	12.5	49	11.3	103	11.9
Oyan	45	10.4	47	10.8	92	10.6
Total	432	100.0	435	100.0	867	100.0

Source: Field survey 2010

4.1.4 Level of social development in the study settings and access to health facility

Among the several parameters used to assess the level of development in the study locations is accommodation type. Housing amenities data is a prerequisite for any informed policy intervention and decision making in development planning. It is also a vital tool to government, other stakeholders or government agencies both national and international in enhancing the provision and equitable distribution of social amenities. Accommodation type refers to the type of residence occupied by the household at the time of the survey. It represents a vital index of measuring the basic housing unit characteristics that previews the quality of housing and living conditions of the respondents in the study areas. Data on the variable also provided important indicators for evaluation of the quality of housing available to a household that could guide policy direction on housing and health conditions. Five types of accommodation were distinguished and they include: (1) houses on separate stand or yard/ semi-detached and detached house; (2) flat (block of flats); (3) rooms/let in house or rooming houses (mostly room and parlour); (4) traditional/hut structures made of traditional materials like mud and grass and; (5) other informal or impoverished dwellings like wood and iron houses. The above classification followed the housing census pattern of 2006 by the National Population Commission (NPC, 2010).

Apart from air and water, the primary basic human needs are food, clothing and shelter. Several studies, including human experience have pointed this out (Todaro & Smith, 2009). Coupled with this is the constitution of Federal Republic of Nigeria that gave credence to it. Article 16(d) emphatically recognized this economic objective and the pursuit of suitable and adequate shelter for all Nigerians (Constitution of the Federal Republic of Nigeria, 1999). The result of the analysis on this variable shows that almost half of the respondents live in rooming houses e.g. room and parlour (47.4 percent), substantial numbers that constituted 38.3 percent were found in block of flats while only 10.6 percent occupied detached or semidetached houses. Notwithstanding that urban areas were included in the survey, personal observation during the survey shows that the types of houses occupied by the respondents even in this 'urban setting' are a mixture of urban and chronic rural dwellings, a pointer to poor urban living condition.

An evaluation of living condition in respect of housing unit might be incomplete without considering the amenities therein. Housing amenities are essential facilities in a household that contribute to the comfort and well-being of members of the household and even the community. The availability of these facilities in a household is an indicator of the living conditions of the household (NPC, 2010). Thus, questions were canvassed on sources of water supply, toilet facility and cooking fuel among others. These provided signals for monitoring some MDGs and the implementation of programmes targeted at improving the status of these amenities.

Another indicator used in assessing the condition of living of the respondents in the study area is the assessment of cooking facilities available in the household. This was employed to determine the respondent's ease of life, disposition to some modern amenities, general lifestyle, living standard of the households and the communities in general. It also provides new direction to existing welfare policies. The cooking facility can also suggest the hygienic preparation of food and give the picture of the cooking environment.

The study revealed that half of the total respondents (50.6 percent) use kerosene stove exclusively as their main cooking fuel, 5.1 percent used only charcoal and wood as fuel and 44.3 percent claimed they were using gas or electric cooker as their main cooking facilities (table 3). Generally, the overall result is amazing taking into consideration the overwhelming use kerosene as cooking fuel. This calls for concern given the availability of resources that we have in the country. It is an indication of extreme poverty among the residents in the study locations. One would have expected that the cooking fuel should be cooking gas or at least electric stove rather than the status quo. It is not surprising also to know that no respondent claimed to be using solar energy or animal dung nor saw dust as main source of fuel. The same observation goes for main source of power used for lighting at night by the couples. An overwhelming number claimed to depend on kerosene (lantern) and candle. Some of the claims on electricity are: "electricity is never reliable", "we only used it when we see it". However, while the task here is not to define standard cooking facilities, a cursory imagination of the adverse effects of these common cooking facilities in the study area would suggest caution because of pollution effect as well as the risk of fire outbreak.

Table 3. Respondents' Access to health facilities and level of social development

Accommodation type	Freq	%	Toilet Facility in House	Freq	%
Detached House	92	10.6	Water Closet	493	56.9
Flats	332	38.3	Pit Latrine/Bucket/Pan	222	25.6
Rooming house	411	47.4	Public Toilet	152	17.5
Wood/Iron house	32	3.7			
Total	867	100.0	Income Group		
			Less than N10,000	17	2
Cooking facilities			N10,000 - N19,999	103	11.9
Wood/Charcoal	44	5.1	N20,000 - N29,999	120	13.8
Stove/Kerosene	439	50.6	N30,000 - N39,999	179	20.6
Gas/Electric	384	44.3	N40,000 - N49,999	96	11.1
Cooker					
Total	867	100.0	N50,000 - N59,999	76	8.8
			N60,000 - N69,999	42	4.8
Sources of Water			N70,000 & Above	62	7.1
Pipe-borne inside	16	1.8	No Income	172	19.8
Pipe-borne outside	87	10.0	Total	867	100.0
Tanker /Vendors	367	42.3			
Borehole & Well	333	38.4	Means of Transportation		
Rain, river/ streams	64	7.4	Official/Private alone	130	15.0
Total	867	100	Public & Private	191	22.0
			Public alone	546	63.0
Language of communication at home			Commonly use health facility		
Yoruba	775	89.4	Self-Medication/Home	47	5.4
English	92	10.6	Hospital /Clinic	664	76.6
Total	867	100.0	Herbal/Spiritual Homes	76	8.8
			None	80	9.2
			Total	867	100.0

Source: Field survey 2010

Body waste (excretory products) disposal can be directly linked to human development both technologically and socially. Body waste that is not disposed of appropriately portends social, health and environmental burdens (i.e., negative consequences to the society) but when properly discarded, it could be harnessed for economic benefits. In urban areas, it is expected that the common types of body waste disposal should be flushed toilet in which water takes away the waste through sewers to soak-away (called septic tanks) where it is eventually evacuated from time to time. Thus, a question was asked on the type of toilet facility that the household used. Findings show that about one-quarter of the respondents use pit latrine, bucket or pan

in disposing body waste. Latrine is large hole dug with a small opening upon which individual can squat when excreting and are mostly outdoors and outside the homestead. About 25.6 percent of the respondents use this type of toilet and in most cases they are shared with neighbours. About 17.5 percent use public toilets that are in most cases flush but unkempt toilets and only 56.9 percent use water closet.

The various sources of water are from the agents such as tanker drivers or water vendors (42.3 percent). Despite the fact that the study location is an urban centre, about 7.4 percent of the respondents still obtain their drinking water from nearby rivers/streams and depend partially on rain in addition. The finding also shows that 38.4 percent get water from boreholes and deep wells within and outside the homestead (table 3). Only 11.8 percent have pipe-borne water inside or outside their compounds as indicated in table 3 below.

The result of the analysis also reveals that almost ten percent of the respondents do not have access to health facility including orthodox medicine. Three-quarter of the respondents indicated they have access to hospital or clinic, 8.8 percent claimed they exclusively use herbs or visit spiritual homes for medical issues. It also shows that 5.4 percent of the total respondents practice exclusively self-medication or personally attend to health challenges in their homes. Overall, 23.4 percent of the respondents do not patronize modern health facilities. This indirectly portrays the level of health consciousness of the study population and of course, it could have implications on their level of responsiveness to health challenge for themselves or family members.

4.1.5 Respondents' Access to media

Eight out of ten respondents have access to television and 44.8 percent claimed they always take cognizance of outdoor posters and signposts. However, the degree of watching and sighting outdoor vary. Also, 38.0 percent watch television and/or video everyday of the week and 26.7 percent watch the same less often as indicated in table 4b. Outdoor sighting is however not a regular habit for almost half of the respondents interviewed. Out of about 54.3 percent that have access to radio, only 38.9 percent listen to radio everyday of the week while 24.9 percent do so less often (Table 4b). Reading newspaper or magazine is not a regular habit of most respondents.

Table 4a. Percentage distribution of respondents by access to media

Access to media	Frequency	Percent
Watch Television		
Yes	720	83.0
No	147	17.0
Total	867	100.0
Listen to Radio		
Yes	463	53.4
No	404	46.6
Total	867	100.0
Read Newspaper Regularly		
Yes	251	29.0
No	616	71.0
Total	867	100.0
Read magazine regularly		
Yes	284	32.8
No	583	67.2
Total	867	100.0
Attending Cinema /Viewing Centre		
Yes	40	4.6
No	827	95.4
Total	867	100.0
Outdoor sighting		
Yes	381	43.9
No	486	56.1
Total	867	100.0

Source: Field survey 2010

Table 4b. Percentage distribution of respondents by frequency of access to media

Accessing media information	Everyday	4-5 Days/ week	2-3 Days / week	One Day/ week	Less Often	None	Can't say / Don't Know	Total
								867
Listening to Radio	331 (38.2%)	70 (8.1%)	30 (3.5%)	4 (0.5%)	220 (25.4%)	180 (20.8%)	32 (3.7%)	(100%)
Watching TV	324 (37.4%)	76 (8.8%)	39 (4.5%)	20 (2.3%)	236 (27.2%)	156 (18%)	16 (1.8%)	(100%)
Newspapers Reading	52 (6%)	87 (10%)	48 (5.5%)	28 (3.2%)	85 (9.8%)	503 (58%)	64 (7.4%)	(100%)
Magazine	-	103 (11.9%)	16 (1.8%)	29 (3.3%)	126 (14.5%)	529 (61%)	64 (7.4%)	(100%)
Outdoor audience	30 (3.5%)	17 (2%)	61 (7%)	7 (0.8%)	382 (44.1%)	306 (35.3%)	64 (7.4%)	(100%)

Source: field survey 2010

These indices are significant pointers to the level of development in the area of study. Not all respondents have access to newspaper or magazine and none of the respondents claimed to be attending cinema or viewing centers. In this regard, television and radio seem to be the common accessible media of communication to the people in the study location

4.1.6 Desired and Actual family size among the respondents

Fertility is important in conjugal relationships especially in sub-Saharan African region and Nigeria in particular. In the world all over, making babies is of special interest. Without babies, human experience fails to progress and it is not unlikely to die out (Warwick, 2006). In Yoruba society, the primary purpose of marriage is the sustenance of lineage through legitimate and responsible procreation (Alaba, 2004). Thus, inability to produce offspring is viewed as abnormal. While many couples achieve procreation without effort, several are finding it extremely difficult, if not impossible, for either known or unknown reasons. This challenge has remained a global concern because of its devastating psychosocial consequences on couples especially within the region where children are of high value. In sub-Saharan African region, the inability to contribute to the multiplication of population makes couples feel devalued (Orubuloye 1987; Kamuzora 1987; Okore 1987; Warwick, 2006). This study evaluates in addition to the main objective, the relative level of fertility of the couples as an intermediate factor in husbands' sexual challenges and conjugal intimacy in the study location.

The maximum number of years the couples have been married is 10 years and above and 5.0 percent belong to this group as indicated in table 5 below. However, the mean length of marriage is calculated to be five years. This is to assume that most of the couples interviewed are young couples. The above revelation is important to this study because it will help in identifying the effectiveness of coping strategies employed by the wives of husbands that have reproductive health challenges. Besides, the length of years of unbroken marriage or relationship should provide opportunity for the duo to understand each other's differences and learn how to manage such differences.

Among the socio-economic gradients of marital satisfaction is the presence of children (Torkild & Marika, 2010; Nick, 2010) and question was asked specifically on the number of children the female respondents ever had. This was to determine the “children ever born (CEB)” that is not subjected to the international standard which restricted children ever born to women in age group 15-44. Several reasons warranted this measurement in this study. Late marriages abound in Nigeria today; it is also not uncommon that women outside these ages are still bearing children in Nigeria (Acsadi *et al*, 1990; Bledsoe & Cohen, 1993; Faoye & Lana, 1998; Federal Ministry of Health, 2002; Amoo & Adeyemi, 2010). Besides, the effect of the issue at hand (i.e. male reproductive health challenges) on fertility might not be easily assessed if restricted to only age group 15-44 years. In addition, the estimation excluded all stillbirths but considered all children born to the woman whether before her present marriage, children that are currently living with her and those that are currently away from home.

Specifically, the derived children ever born (DCEB) followed the principles and recommendations of population and housing censuses of the United Nations year 1998 and 2008. The principle dictates that the number recorded for CEB should include all live-born children, whether born in or out of marriage, whether born in the present or prior marriage, or in a de-facto union, or whether living or dead at the time of the survey (United Nations, 1998; United Nations, 2008). It is of interest also to note that few of the mothers that had children outside wedlock (i.e. at their previous marriages) and those that had delivered babies before the onset of husband’s health challenges were noted and recorded separately. This provided a guide in the analysis of effect of reproductive health challenges on fertility.

The mean children ever born is two. About 26 percent of the women respondents have not had any child at the time of the survey. About 10.1 percent and 33.3 percent are in their first and second parity respectively as shown in table 5 above. Also, those who have attained third and fourth parity are 18.6 percent and 9.7 percent respectively while 2.3 percent have had up to five children and above. Generally, the result revealed that about two-third of the women respondents (69.4 percent) have attained less than three parity levels. Thus, in addition to 13 percent who are currently at zero

parity, 65.1 percent desired to have more children (Table 5). The above revelation is in consonance with the lower mean CEB observed in the study area. This could also be true if the perceived ideal family size of six as indicated in the result is anything to go by. The result specifically shows a gap between the ideal family size and CEB. However, this ideal family size of six is not so much at variance with the total fertility level estimated for the nation according to 2006 census figures (NPC, 2010).

Table 5: Desired family size and Actual family size among the wives

Selected indicators of fertility	Frequency	%
Duration of marriage		
Less than 1 year	55	12.6
1-3 years	130	29.9
4-6 years	127	29.2
7 - 9 years	91	20.9
10 years & above	32	7.4
Total	435	100.0
No of Children Ever Born (CEB)		
0 parity	113	26.0
1 parity	44	10.1
2 parity	145	33.3
3 parity	81	18.6
4 parity	42	9.7
5 parity	5	1.1
6 Parity	4	0.9
8 Parity	1	0.2
Total	435	100.0
Mean CEB = 2 children		
Desired more children		
Yes	283	65.1
No	144	33.1
No response/don't know	8	1.8
Total	435	100.0
Delay in getting pregnant		
Yes	179	41.1
No	208	47.8
Not Applicable	48	11.0
Total	435	100.0
Reasons for Delay		
STDs	40	9.2
Low sperm count	28	6.4
Spirituals	4	0.9
Family Decision (family Planning, etc)	8	1.8
Can't Say/Don't Know	355	81.6
Total	435	100.0

Source: Field survey 2010

4.1.7 Infertility Level Assessment

Further screening was made among those who have married for long who are on lower parity (i.e. less than three children) and desire more children. In situation where couples have married for many years and the number of children ever had was less than 2, questions were whether they are experiencing delay and what did they consider as the likely key causes of delay. Several causes of delay in pregnancy were mentioned, though probing on this was subjective with greater attention paid to problems related to husband's sexual health challenges. Notwithstanding, issues mentioned include STDs, low sperm count, erectile dysfunction and spiritual matters as indicated in table 6. Out of all these perceived causes, majority stressed spiritual reason as the major cause of their infertility and their inability to deliver more babies. The specific causes stated by wives are erectile dysfunction experienced by their husbands and sexually transmitted diseases like gonorrhoea, 'jedi-jedi' (pile), 'jejere-epon' (testicular cancer) and low sperm count.

In order to gain further insight into respondents' perception on their lower parity levels and/or pregnancy delay, they were asked whether they have ever practiced birth control or ever been involved in any kind of family planning or contraceptives usage. This is to determine whether their low parity is exclusively due to problems already identified or respondent's voluntary decision attenuated by birth control. While majority claimed they have never used any kind of birth control, others who have previously used indicated that they were not currently practicing any family planning or using any contraceptive at the time of interview. However, 12 percent of respondents have used contraceptives in the past as shown in table 6.

Among the couples interviewed were those who have never used contraception and are currently not using but have zero parity. Questions were however canvassed on the frequency of their mating to determine the incidence of impotency. Virtually all respondents that desired children indicated no form of limitation in having sexual intercourse with their partners. This serves as a check on the perception of respondents regarding the causes of delay in child bearing as being experienced by the couple. It is a vivid illustration of the couples' infertility and the reproductive challenges from husband could likely be the "culprit". The results indicated that about

16.5 percent and 29 percent of couples had sexual intercourse about 1-2 times and 3-4 times per month respectively (table 6). About 11.8 percent and 10.4 percent do so up to 5-6 times and 7 times and above within a month (table 6). Overall, only 15.1 percent out of the total respondents said they have been diagnosed and treated for infertility, 33.6 percent have never been diagnosed or treated for infertility while 1.5 percent of the respondents declined on the subject matter.

Table 6: Infertility Level Assessment (wives only)

Selected indicators of infertility	Frequency	Percent
Ever Practiced Birth Control		
Yes	16	3.7
No	251	57.7
Total	435	100.0
Freq of Intercourse with husband per month		
1-2 times	143	32.9
3-4 times	124	28.5
5-6 times	44	10.1
Seldom	100	23.0
None	24	5.5
Total	435	100.0
Ever had infertility treatments		
Yes	131	30.1
No	291	66.9
No response/don't know	13	3.0
Total	435	100.0
Ever/Never had a child		
Ever had a child	322	74.0
Never had a child	113	26.0
Total	435	100.0

Source: Field survey 2010

4.2.0 MALE REPRODUCTIVE CHALLENGES AND CONJUGAL RELATIONSHIP

4.2.1 Husband-Wife Interpersonal Relation

Couple' intimacy is a function of complex interaction among relationship factors. Married couples are said to be intimate with one another when their communication and sexual responses are enhanced regularly by willingness and sharing (Adam, 2000). Husband-wife intimacy is an embodiment of interpersonal, sexual

communication and communications affect (Adam, 2000). However, these are normally impaired by husband's sexual dysfunction (Christian, 2006). Intimate relationship as used in this study means the close interpersonal relationship exhibited and professed by both spouses on certain characteristics of behavioural interdependence, financial, housekeep attachment, repeated interactions and feeling of fulfillment by both couple (Adam, 2000; Warwick, 2006; Miller *et al*, 2007). The positive interactions among these variables within marriage play a central role in determining the satisfaction of the couple. It could also provide the couple with strong emotional attachments and enhance the fulfillment of their general needs.

Several of these variables were examined between each couple interviewed in a social behavioural context that is based on interview i.e. respondent form of inquiry. The result of the analysis shows that 82.9 percent of couples interviewed were living together under the same roof and only 17.1 percent were living apart as at the time of survey. This is not surprising because among the traits of Yoruba culture emphasizes deep interaction between husband and wife I the society. It is widely believed in the region of study that a 'male-only society' and a 'female-only society' is a misnomer in the context of Yoruba life. The popular adage is "*Karin kapo, yiye ni yeni*" (i.e. to go together in life befits humans as creatures). However, various reasons adduced for wife or husband living apart include the choice of the husband, traditional and for spiritual reasons. These are in addition to other reasons such as inadequate accommodation.

Table 7: Percentage distribution of respondents by household relationship variables

Household relationship variables	Freq	%
Staying with Spouse		
Yes	719	82.9
No	17.1	17.1
Total	867	100.0
Sharing room together		
Yes	666	76.8
No	201	23.2
Total	867	100.0
Why not sharing room together		
Choice of husband	48	5.5
Traditional	43	5.0
Choice of the wife	62	7.2
Other reasons	16	1.8
Not Applicable	698	80.5
Total	867	100.0
Size of the family		
1-2	210	24.2
3-4	378	43.6
5-6	175	20.2
7 & more	40	4.6
No response /Don't know/Not Applicable	64	7.4
Total	867	100.0
Spouse working place		
Within the house	230	26.5
Away from Home	569	65.6
Within & Away	36	4.2
Unemployed	32	3.7
Total	867	100.0
Frequency of returning home		
Daily	554	63.9
Occasionally	189	21.8
Week-end/Holidays only	48	5.5
No response /Don't know/Not Applicable	76	8.8
Total	867	100.0
Spending Time together		
Very often	170	19.6
Often	495	57.1
Not often	150	17.3
Not at all	52	6.0
Total	867	100.0

Source: field survey 2010

The working place of majority of respondents is distinct from their living houses while only a quarter works within the household. Close to two-third of the respondents that work the outside homestead returns daily while only eight percent regularly come either at weekend or during the holidays. Relatively 21.8 percent of

those that work outside their homesteads come home occasionally as “time and situation permit”. This information is very vital in determining the level of closeness of the spouses.

In terms of time spent together, about 5.9 percent of the respondents do not spend time together with their spouses. While among those that claimed they always spend time together with their spouse, only 17.3 percent rarely spend time together compared to more than half of the respondents (19.6 percent and 57.1 percent) that do so above average level. However, 6 percent of couple does not have time for each other. In the same vein, about 27.6 percent claimed that they always spend between 1-4 hours together with themselves. While 34.4 percent claimed that they share more than four hours but below 10 hours together, 12.2 percent of the total respondents submitted they spend up to 10 and more hours together with their spouse/husband per day. Additional questions canvassed on the intimate relationship revealed that 7.2 percent secure audience and make demand from their spouses only by sending their children ahead to their husband/spouse. While 77.8 percent observe no protocol before having access to their spouses, 5.4 percent will have to fill visitor’s note before gaining access especially at their working places. In addition, 9.5 percent must call ahead or book appointment before securing audience with their spouses.

4.2.2 Perception of respondents on intimate relationship

In the general terms, intimacy was considered by the respondents as “a feeling of being close” to each other in a union. Thus, the research is premised on the fact that such feelings could be intermediated by lapses from husband in terms of male reproductive health challenges.

The result of the analysis shows that only 140 individuals, representing about 16.1 percent, out of 867 respondents have ever gone on holiday with their spouses. The result in table 8 shows that the level of recreation amongst these couples is very low. Opportunity for fun and closeness is therefore limited by limited recreational facilities as obtained in the studied locations. Spending recreation time together with spouse provide opportunities for rejuvenation of love and sustenance of couple’ relationship (Robert, 2007). Recreation might not just be for enjoyment diversion but it also helps

to meet emotional needs of the couple. In addition, it is often regarded as something that "keeps lovers (couple) going" (Robert, 2007). Studies have confirmed that recreational companionship is particularly satisfying and that those people who share their favorite recreational activities with each other build massive love bank accounts (Meredith, 2005; Warwick, 2006; Robert, 2007).

Excerpts from the discussion across the locations show that there is relatively low level of recreational activities among the subject. According to the respondents:

“Most men here believe all these (recreations) are oyinbo (English man’s) style of life”,
“ they’ve not seen good reasons for this”,
“everybody is busy every time than going for any recreation”.
“But the children go out during festival” “recreation is meant for young folks and it is foreign to our culture”

This low level of recreation as observed in the study locations could portend negative influences on the relationship within the conjugal union especially if the relationship is already tensed up by male reproductive health challenges.

Table 8 revealed that 69.6 percent of the respondents expressed that they have close relationship with their spouses while one-third indicated that there is no intimacy within the union. Also, in another likert measurement, 35.8 percent considered their intimate relationship as very close and almost the same proportion described their intimacy as just close. It is also interesting to know that almost the same number (32.9 percent) claimed they do not have close relationship with spouse.

The result also revealed that joint decision on procurement of some selected household items is very low or relatively none existent (Table 8). This implies that such decisions are solely the responsibility of the husband who is regarded as the head and the custodian of the family’s resources. The data revealed that about 61.8 percent asserted that decisions at home front are always taken by the husband (Table 8). Notwithstanding however, 26.2 percent expressed that their wives participate in other decisions that related to home needs. In terms of finance and banking activities, the practice of joint account keeping is relatively low in the study locations. Almost eight out every ten respondents have never operated a joint account with spouses. The

group discussion also shows that the respondents might not likely open one in the nearest future. Excerpts from the discussion further indicated the following:

Excerpts from female forum

“We never thought along opening a joint account”.

“I am not sure joint purse is good for the family”,

“You cannot predict any man, it is dangerous, if he marries another wife what follows?”

Our culture gives headship to the husband and that means he can utilize the money without your consent”

Excerpts from male forum

“You want me to depend on my wife before I spend money?”

“It is not part of our culture”. “Our forefathers must not hear that”

Also, the data revealed that about 72.39 percent of the respondents perceived that they have good rapport with their spouse while only 27.7 percent categorically showed that they are not experiencing good rapport with their spouses currently. Overall, 69.6 percent of respondents interviewed believed they have close relationship with their spouses while 30.4 percent considered their relationship not as close as expected.

Table 8: Perception of respondents on their Intimate relationship

Selected Intimacy relationship indicator	Frequency	Percentage
Ever gone on holiday together		
Yes	140	16.1
No	727	83.9
Total	867	100.0
Procedure for meeting husband		
Somewhat easy	131	15.1
Easy	632	72.9
Not Easy	52	6.0
Never Tried	52	6.0
Total	867	100.0
Arrangement for meeting husband		
Call ahead	83	9.6
Send children/relation	64	7.4
Feel visitor's note	48	5.5
No arrangement	672	77.5
Total	867	100.0
Couple' Closeness		
Close	603	69.6
Not Close	264	30.4
Total	867	100.0
Closeness Perception		
Very Close	310	35.8
Just Close	285	32.9
Not too Close	16	1.8
Not Close at all	256	29.5
Total	867	100.0
Who decides what to buy		
Husband	536	61.8
Wife	227	26.2
Both	104	12.0
Total	867	100.0
Own Joint Account		
Yes	119	13.7
No	748	86.3
Total	867	100.0
Have good rapport with spouse/husband		
Yes	627	72.3
No	240	27.7
Total	867	100.0

Source: Field Survey 2010

4.2.3 Male Reproductive Health Challenges and Interspousal Communication

In this study, it was considered expedient to document the impact of husband's reproductive health deficiency on interspousal communication among the subjects. Interspousal communication is a fundamental practice that could influence the psychological import of RH diseases and could serve as tranquillizer to some negative

nasty experiences (like stigmatizations) outside the homesteads (Zulu, 1998; Dodoo, 2001; Nick, 2010). This is to say that the male reproductive health challenges could be an important factor in the husband-wife dyad. Thus, the patterns and level of interaction between husband and wife were assessed as an important factor in terms of reproductive matters.

This step is also in line with ongoing revival of interests on the relative roles played by men in reproductive decision within the family (Mott and Mott, 1985; Ezeh, 1993; Dodoo, 1993; Bankole, 1995; Biddlecom and Greene, 1997; Bankole and Singh, 1998; Feyisetan *et al*, 1998; Odusola, *et al*, 1998; Zulu, 1998; Dodoo, 2001; Nick, 2010). Besides, in a male dominated society like the Yoruba's, where women are not supposed to take independent decisions on reproductive issues, examining the effect of male reproductive health challenges (MRHC) on husbands' decision regarding family size, contraceptive and sexual behaviour is not a digression. Spousal communication on reproductive matters is directly related to how men and women communicate their preferences and it could influence the level of intimacy or disagreement between the couple. It is also observed that spousal disagreement may be more related to the lack of communication between spouses rather than being a meaningfully articulated opposition of one spouse to the other's desires (Biddlecom & Greece, 1997; Jejeebhoy, 2000). However, in Sub-Saharan African in general, husband-wife communication is often very low. Reports have confirmed that about three-quarters of men in West Africa reported they had never discussed family planning with their wives while in the Eastern zone, the figure was less than 40 percent while it was much lower in the North Africa (Becker, 1996; Ezeh *et al*, 1996; Biddlecom & Greece, 1997). This observed deficiency in sexual and reproductive communication could lead to inaction on commonly held preferences (van de Walle & Maiga, 1991).

In this regard, the finding, among others, in this study shows that the rate of discussing home needs is above average level. A four-scale rating of: (1) very often, (2) often, (3) not often and (4) not at all, was used in assessing the opinion of individual respondent on communication level between the husband and wife.

Table 9: Inter-spousal communication

Selected Indicators of inter-spousal Communication	Frequency	Percent
Rate of discussing home affairs		
Very often	264	30.4
Often	516	59.5
Not often	20	2.3
Not at all	67	7.7
Total	867	100.0
Rate of discussing sexual issues		
Very often	160	18.5
Often	313	36.1
Not often	202	23.3
Not at all	164	18.9
Not Applicable (Wives)	28	3.2
Total	867	100.0
Perception of Marriage		
Happy	551	63.6
Not Happy	240	27.7
Not Applicable	76	8.8
Total	867	100.0
Opinion on satisfaction in the marriage		
Very Unhappy	118	13.6
Unhappy	653	75.3
Happy	48	5.5
Very Happy	20	2.3
Not Applicable	28	3.2
Total	867	100.0
Feeling about Relationship		
Very Unpleasant	43	5.0
Slightly unpleasant	200	23.1
Neither Pleasant/Unpleasant	28	3.2
Slightly pleasant	278	32.1
Very Pleasant	270	31.1
Not Applicable	48	5.5
Total	867	100.0
Strong disappointment in love		
Yes	143	16.5
No	716	82.6
No response /Don't know	8	.9
Total	867	100.0

Source: Field survey 2010

The results as shown in table 9 indicate that about 89.9 percent discuss home affairs often. Only 2.3 percent are not in the practice of discussing home issues among themselves while 7.7 percent do so rarely (table 9). By using the same rating scale for the frequency of discussion on sexual issues, it was discovered that only 18.5 percent discuss sexual issues very often, 36.1 percent do so often and 23.3 rarely discuss sexual matters. The table (i.e. table 9) also shows that about two out of every ten respondents would not discuss sexual issues at all.

4.2.4 Issues of disagreement within the union

In an attempt to further ascertain the level of closeness, questions were canvassed for various kinds of disagreement between couple and the immediate mechanism that are usually employed to douse the tension generated by such dispute. In Nigeria and the southwestern states where this study was carried out, evidence abounds that matrimonial relationships are often marked with covert and overt declaration of goodwill, promise and unending love between spouses (Omorogbe *et al*, 2010). However, in a situation where sexual challenges are involved, it is not unlikely that the spouses would get embroiled in disagreement, agitations, quarrels, and in some cases, it could result in outright struggle or infliction of injuries on one another. Wherever such situations are not properly managed, it could degenerate to litigation, separation and sometimes annulment of the marriage bond (Nick, 2010).

In this segment, the focal concerns are disagreement over spending of time together, in-laws or relations interference, household tasks, disagreement over purchase decision, availability of household items, religious matter and disagreement over sexual intercourse. Amongst the issues of disagreement, interference of relations or in-laws, household tasks and clothing were not too pronounced as sources or causes of disagreement between the couple. Less than one-third of the total respondents often disagree with spouse on clothing, in-laws relations as well as household chores. Only about 26.9 percent, 23.7 percent and 26.1 percent often experience disagreement on issues of in-laws, household tasks and clothing respectively as indicated in table 9. Culturally in Yoruba society, the sexual division of labour between husband and wife tilted towards the wife performing most of the household chores both in preliterate and literate Yoruba society (Fadipe, 1970; Alaba, 2004). Thus, it would not be a surprise if most couples don't disagree over the issue. The data however indicated that more than half of the respondents disagree with husband or wife on the degree of time spent together. According to the table (Table 10), 30.3 percent and 42.8 percent do not have disagreement over in-laws and relations' interferences. About 74 percent considered clothing as a non-issue in their union. Specifically, about 62.5 percent of respondents often disagree over spending time together while 12.7 percent disagree less often on children's clothing, 18.5 percent do not disagree at all with spouse on children's clothing.

Table 10: Percentage Distribution of Respondents according to Disagreement on Selected issues

Issues of Disagreement	Husbands		Wives		Total	
	Number	%	Number	%	Number	%
Disagreement on spending time together						
Very often	34	7.9	39	9.0	73	8.4
Often	261	60.4	208	47.8	469	54.1
Not often	93	21.5	139	32.0	232	26.8
Not at all	44	10.2	49	11.3	93	10.7
Disagreement over in-laws / relations						
Very often	21	4.9	24	5.5	45	5.2
Often	81	18.8	107	24.6	188	21.7
Not often	128	29.6	135	31.0	263	30.3
Not at all	202	46.8	169	38.9	371	42.8
Disagreement on household tasks						
Very often	17	3.9	14	3.2	31	3.6
Often	94	21.8	80	18.4	174	20.1
Not often	172	39.8	179	41.1	351	40.5
Not at all	149	34.5	162	37.2	311	35.9
Disagreement over money						
Very often	72	16.7	82	18.9	154	17.8
Often	199	46.1	162	37.2	361	41.6
Not often	115	26.6	139	32.0	254	29.3
Not at all	46	10.6	52	12.0	98	11.3
Disagreement over clothing						
Very often	19	4.4	32	7.4	51	5.9
Often	95	22.0	80	18.4	175	20.2
Not often	269	62.3	264	60.7	533	61.5
Not at all	49	11.3	59	13.6	108	12.5
Disagreement over Children issues						
Very often	73	16.9	62	14.3	135	15.6
Often	259	60.0	203	46.7	462	53.3
Not often	32	7.4	78	17.9	110	12.7
Not at all	68	15.7	92	21.1	160	18.5
Disagreement over sex						
Very often	57	13.2	52	12.0	109	12.6
Often	170	39.4	126	29.0	296	34.1
Not often	176	40.7	220	50.6	396	45.7
Not at all	29	6.7	37	8.5	66	7.6
Disagreement over Sleeping together						
Very often	66	15.3	59	13.6	125	14.4
Often	101	23.4	57	13.1	158	18.2
Not often	193	44.7	223	51.3	416	48.0
Not at all	72	16.7	96	22.1	168	19.4
Disagreement over Religious matters						
Very often	42	9.7	26	6.0	68	7.8
Often	164	38.0	130	29.9	294	33.9
Not often	111	25.7	114	26.2	225	26.0
Not at all	115	26.6	165	37.9	280	32.3
Total	432	100.0	435	100.0	867	100.0

Source: Field Survey 2010

It is also indicated that 15.6 percent and 53.3 percent respectively disagree with spouse on children matter very often and often (Table 10). The result also shows that 46.7 percent (distributed into 12.6 percent and 34.1 percent) often disputes on sex very often and often. In the same vein, relatively one-third expressed dissatisfaction on separate sleeping arrangements with spouses. In terms of religious differences, 41.7 percent of the respondents often quarrel with spouses on religious matters as indicated in table 10 below. It is also important to mention here that majority of the respondents (about 88.8 percent) are used to quarrelling over money within the conjugal union.

4.2.5 Management of Disagreement between the Couple

This sub-section features immediate steps that individual respondents employed in tackling disagreement that ensue with their spouses. The questions were phrased basically to assess information on the coping strategies that the wives employed, especially when the husband has reproductive health challenges. The sub-section is meant to succinctly highlight how disagreements were resolved. The expectation, among others, is that in every marriage where the couple have close and happy relationship there will be more positive relation and reactions and continuation of the union rather than negative interactions or undue separation (Meredith, 2005; Nick, 2010). If there is close relationship between husband and wife, the likelihood exists for more times of cheerfully talking than the angry reactionaries. Literature provides a range of reasons to expect husband-wife relationship to be determinant of continuation of marital union and a consequence function of husband health condition (Meredith, 2005; Nick, 2010). Positive interactions and spending good times together help couple feel loved and respected while negative interactions and bad times could lead to feelings of hurt, anger, and sadness (Meredith, 2005). The research was designed to evaluate both the general perspective of conflict or disagreement management by both husband and wife and again extracted those mechanisms being employed by wives of husbands that have reproductive health challenges.

On the basis of strategies that every individual respondent employed in achieving conflict resolution, a nine-point scale conflict management measure was used consisting of the following: argue it out heatedly, shout at each other, violence,

incomunicado, complain to any available relation, reporting incidence of conflict at home to husband's employer, absconding from the marital home and going to court.

The study thus revealed, among other things, that one-third of wives who are currently experiencing disagreement with their husbands often "resign to fate". This category would not do anything but take the situation calmly as part of their destinies. About 10.9 percent would rather report to family relations and seek their intervention. Also, the data revealed that more than half of respondents in this category do so more often. The proportion of wives that would argue heatedly with their husbands on any issues of disagreement is 7.4 percent. In all the cases, almost all female respondents claimed they would never go to the extent of raising object against their husbands whenever any quarrel ensues i.e. physically attacking their husbands. All the respondents mentioned that they would not abscond from matrimonial home because of any disagreement with husband except the husband desires it. The most common management method often adopted by the wives in the study location is "keeping to one self" (i.e. refuse to talk to husbands for few days).

About 4.6 percent and 10.8 percent claimed they are used to shouting at each other whenever misunderstanding ensues. 82.7 percent of the respondents would never attempt shouting on their spouses over any matter. In addition, about 5.1 percent of respondents confirmed that they are used to "force for force" approach in all matters of disagreement within the union. This group agreed that violence is the "order of the day" in resolving conflict between each other. It is not surprising to note that, relatively one-third of the total respondents (31.6 percent) usually shun the company of their spouses. This was also confirmed in group discussion that couple can shun each other at least in the first period of the conflict, and resume when the tension has been doused.

Table 11: Individuals Ways of dealing with Disagreement

Individuals ways of dealing disagreement	Frequency	Percent
Argue heatedly		
Very often	64	7.4
Often	188	21.5
Not often	407	46.9
Not at all	190	21.9
Not Applicable	20	2.3
Shout at each other		
Very often	40	4.6
Often	94	10.8
Not often	379	43.7
Not at all	338	39.0
Not Applicable	8	0.9
Hitting/Violence		
Very often	36	4.2
Often	8	.9
Not often	114	13.1
Not at all	689	79.5
Not Applicable	20	2.3
Total	867	100.0
No Communication with each other		
Very often	64	7.38
Often	201	23.18
Not often	158	18.22
Not at all	373	43.02
Not Applicable	71	8.19
Complain to Relation		
Very often	32	3.7
Often	420	48.4
Not often	217	25.0
Not at all	190	21.9
Not Applicable	8	.9
Complain to his Boss/Employer		
Very often	8	.9
Often	132	15.2
Not often	374	43.1
Not at all	345	39.8
Not Applicable	8	.9
Leave the House		
Very often	12	1.4
Often	40	4.6
Not often	56	6.5
Not at all	751	86.6
Not Applicable	8	.9
Total	867	100.0
Go to court		
Very often	12	1.4
Often	4	.5
Not often	28	3.2
Not at all	823	94.9
Total	867	100.0

Source: Field survey 2010

Be that as it may, the result also shows that about half of the respondents complain to relations of the husband or wife that are around in the case of disagreement. The same proportion believed they have not been making any complaint to the relation. However, about 16.1 percent would prefer going to the employer of their husband and report to the boss. About 82.9 percent expressed they would never attempt such in settling any quarrel with their spouses (Table 11). It is amazing that some respondents believed that court injunction would immediately douse the tension that might have been generated by the dispute. This category of respondents confirmed that they have done so in the past and could employ the approach again.

4.2.6 Individual's opinion about their conjugal relationship

Respondents were also asked to describe their overall feeling about their marriages based on their experiences and relationships with their spouses. The responses were coded and evaluated on five scales rating of: very pleasant, slightly pleasant, neither pleasant/unpleasant, slightly unpleasant and very unpleasant. The outcome shows that about 5.0 percent perceived their marriage as very unpleasant while 31.1 percent considered their marriage as very pleasant (Table 12). About 23.1 percent of respondents indicated that his or her marriage is slightly unpleasant while 32.1 viewed their marriages experience have been slightly pleasant. Respondents in the indifference category constitute only 3.2 percent while 5.5 percent was recorded as “no response” as indicated in table 12.

The respondent's perception on satisfaction on their marital union was rated by very happy and happy and the responses varied. About 63.6 percent reported that they were happy and contented with the status quo while 27.2 percent reported unhappiness in their marital relationships. About 8.8 percent could not make up their mind on the issue. In addition, respondents evaluated the sustainability of their marital union in view of their past and present experiences with their spouses. The result also revealed that 3.2 percent stated that the likelihood of their separation is very high. This is supported by about 13.3 percent, which viewed the collapse of their union as high (Table 12). This implies that a total of 16.5 percent indicated that the likelihood of their separation is high. About a third of the total responses are of the opinion that

the chances of their separation is low and almost half of the respondents (48.9 percent) could not perceive any rationale for the collapse of their marital relationships. Those that are indifferent (or have no opinion) over this are only 1.8 percent.

Opinions of respondents were sought on whether their marital hopes have come true or likely to be achieved in their present marriage. This was measured on a five rating scale of agree strongly, agree, disagree and strongly disagree. Quite a lower number (3.7) strongly agreed that their marital hopes have come true. Table 12 shows that 43.6 percent agree to this assertion. However, half of the respondents disagree and 1.4 percent strongly disagreed as indicated in table 12. Only 0.9 percent have no response or don't know in this regard (Table 12).

Table 12: Individual opinion about their conjugal relationship

Individual's Opinion	Frequency	Percent
Feeling about Relationship		
Very Unpleasant	43	5.0
Slightly unpleasant	200	23.1
Neither Pleasant/Unpleasant	28	3.2
Slightly pleasant	278	32.1
Very Pleasant	270	31.1
No Response	48	5.5
Total	867	100.0
Perception about marriage		
Happy	551	63.6
Not Happy	240	27.7
No Response	76	8.8
Total	867	100.0
Chances of Separation		
Very High	28	3.2
High	115	13.3
About Even	22	2.5
Low	262	30.2
Very Low	424	48.9
No Response / Don't know	16	1.8
Total	867	100.0
Perceive marital hopes came true		
Strongly Agree	32	3.7
Agree	378	43.6
Disagree	437	50.4
Strongly Disagree	12	1.4
No Response / Don't know	8	.9
Total	867	100.0

Source: Field Survey 2010

4.3.0 MALE REPRODUCTIVE HEALTH CHALLENGES

4.3.1 Awareness of Male reproductive health challenges

The issue of male reproductive health challenges were evaluated both in spontaneous and prompted approaches. Questions were specifically canvassed on the awareness and experience of respondents about male reproductive health challenges without being aided (spontaneous) and further probe was carried out (prompted) to elicit information on male reproductive health challenges (MRHC). Several identified MRHC includes infertility, erectile dysfunction, gonorrhoea, prostate cancer and andropause. These were matched with those revealed by the literature such as low testosterone, testosterone misuse, hypospadias, HIV/AIDS and testicular dysgenesis syndrome (TDS), etc. Specifically, the questions for this segment were designed to appraise the awareness and the prevalence of these diseases in marriage but with focus on the husbands and how the wife is managing the situation with or without impairment on the conjugal intimacy.

4.3.2 Spontaneous Awareness of male reproductive health challenges among the respondents

All respondents male and female were exposed to the questions on awareness while experience is limited to only the male respondents. The idea is to assess the general awareness among the respondents in the study location and to evaluate the prevalence level using the experience of male respondents alone. Generally, most respondents could not distinguish one male reproductive health disease from the other. General perception was that all male sexual diseases have to do with erectile dysfunction.

Respondents were asked to name the types of male reproductive health challenges they are aware of. Respondents were not probed in the first instance and all responses were recorded and captioned as spontaneous responses. In the second segment, respondents were requested to confirm whether they are aware of certain male reproductive health challenges which were not mentioned freely in the previous question but which have been identified in the literature. Responses in this category were captioned prompted awareness. The spontaneous responses revealed that only 29.3 percent could mention testicular cancer without being aided while about two-third (70.7 percent) could not remember testicular cancer as a male reproductive

health concern. Spontaneous awareness about prostate cancer was 35.5 percent and andropause is closely related with 31.1 percent level of awareness among the respondents. It is popularly called ‘oda’ (dried), ‘obi tí gbẹ’ (sperm has dried up) Erectile dysfunction is very popular with 67.5 percent spontaneous awareness while gonorrhoea also enjoys popularity amongst other diseases with spontaneous awareness of up to 36.6 percent. It is regarded as the worst kind of reproductive health disease and the victims are regarded as “okobo” (somebody without sexual part) or “akura” (person that cannot perform). Gonorrhoea was popularly known as “arun gbajumo” (i.e. guy’s disease), “atosi” (i.e. gonorrhoea), “gono” (i.e. gonorrhoea) while the infected individuals are referred to as “o k’atosi”, “oti gbe jumbo” ‘olu gude’, “Ogbe jombo” , “Ogbe gono (i.e. ‘carry’ gonorrhoea), etc.

However, some diseases were less popular among the respondents as indicated in table 13 above. The proportion of the respondents that could mention them as part of male reproductive health challenges was very small. Amongst these are zero sperm count, castration, HIV and AIDS. AIDS is interpreted as ‘èèdii’ and known as “aisan k’ogbogun” (sickness that has no cure). Castration was not mentioned in both spontaneous and prompted awareness. The issue was not regarded as a reproductive health disease but regarded in the discussion forum as “a deliberate act either of punishment for the victim” or “self inflicted spiritual sacrifice“. The data also show that majority could not remember HIV as part of reproductive health challenges. In the same vein, the focus group discussion revealed that ‘No-sperm-count’ remains unfathomable among the respondents.

The excerpt from the discussion in both male and female segment pointed towards the same direction. Comments include:

*“We’ve never heard of that one before” everyman that can perform produces sperm”
“We don’t think that is prevalent among us the black (Africans)”.
“Anything can happen these days,
but erectile dysfunction could be what you called NO SPERM”.
“If you cannot perform, then no sperm can come”*

It is also amazing from the result that 81.2 percent of the respondents declined having knowledge of AIDS as part of challenges that men could face in reproductive related

matters. Only 160 respondents out of 867 could, on their own, freely mentioned HIV/AIDS as reproductive health challenge.

Table 13: Percentage distribution of responses on awareness of Male Reproductive Health Challenges

Male Reproductive Health Challenges	Spontaneous awareness		Prompted Awareness	
	Frequency	%	Frequency	%
Awareness of Testicular Cancer				
Yes	254	29.3	487	56.2
No	613	70.7	380	43.8
Total	867	100.0	867	100.0
Awareness of Prostate				
Yes	308	35.5	482	55.6
No	559	64.5	385	44.4
Total	867	100.0	867	100.0
Awareness of Andropause				
Yes	270	31.1	285	32.9
No	597	68.9	582	67.1
Total	867	100.0	867	100.0
Awareness of Castration				
No	867	100.0	867	100.0
Awareness of Erectile dysfunction				
Yes	585	67.5	510	58.8
No	282	32.5	357	41.2
Total	867	100.0	867	100.0
Awareness of Gonorrhea				
Yes	317	36.6	617	71.2
No	550	63.4	250	28.8
Total	867	100.0	867	100.0
Awareness of Low Sperm Count				
Yes	271	31.3	341	39.3
No	596	68.7	526	60.7
Total	867	100.0	867	100.0
Awareness of Zero Sperm count				
Yes	19	2.2	252	29.1
No	848	97.8	615	70.9
Total	867	100.0	867	100.0
Awareness of HIV/AIDS				
Yes	160	18.5	120	13.8
No	707	81.5	747	86.2
Total	867	100.0	867	100.0

Source: Field Survey 2010

4.3.3 Prompted awareness of male reproductive health challenges among the respondents

Further probing was conducted to ascertain that those respondents who could not freely mention certain diseases did not fall victim to recall lapses. Thus, they were assisted by prompting them on those diseases that were not mentioned in the earlier question (Q52 in Appendix I). This was used as “awakening strategies” to confirm the awareness of the challenges in the study area. The finding shows that almost half of the respondents considered testicular cancer as male challenge in reproduction. Erectile dysfunction still enjoys more popularity in the prompted section, covering over half of the respondents. About 55.8 percent supported the claim that prostate cancer is a male reproductive health challenge while only 32.9 percent agreed that andropause belongs to the same category of male reproductive health concerns. All respondents disagreed that castration is a health challenge in the study area. The result also revealed that 29.1 percent consented that zero sperm count is a male reproductive health challenge while low sperm count was mentioned about 39.3 percent of the respondents. Prompted awareness show a higher level of awareness compared to spontaneous awareness. About 71.2 percent respondents agreed that gonorrhoea is a male reproductive health disease while only 13.8 percent pinpointed HIV/AIDS as belonging to the general class reproductive health challenge that could happen to anyone irrespective of gender.

4.3.4 Prevalence of identified male reproductive health challenges

In accordance with the study’s specific aims, questions were asked on the experiences of male respondents on various reproductive health diseases identified in the study location. The questions and discussion in this segment were limited to male respondents alone in order to ascertain the level of incidence and prevalence of some of the identified male reproductive health challenges. In addition, the specific challenges identified are those confirmed by the medical personnel at both modern and orthodox medical centers (i.e. hospital/clinic or traditional herbal homes). The result however revealed that only 27 respondents out of 432 male respondents are currently experiencing testicular cancer (Table 14). This proportion represents 6.3 percent of the total male respondents interviewed. The number of men currently experiencing prostate cancer is 14 distributed equally between the two states covered

for the study. They represent 3.2 percent of male respondents and 1.6 percent of the total respondents. As indicated in table 16, about 5.1 percent of the male respondents are current victims of andropause, constituting only 2.5 percent of total respondents.

One out of every 10 men interviewed is suffering from erectile dysfunction. It is the second major disease identified as common among the male respondents in the locations of study. While this proportion represents 10.5 percent of the male respondents, it constitutes only 4.7 of all respondents interviewed (Table 14). The most popular and common male sexual ailment identified is gonorrhea and about 55 male respondents (12.7 percent) are currently infected with the disease. This however represents only 6.3 percent of the total respondents covered in this study (Table 14). Low sperm count came as the third most common male sexual challenge in the study area. Almost one in every ten men interviewed are victims of this challenge.

No HIV/AIDS victim was self identified in the field while castration and no sperm count also recorded zero experience among the male respondents. As a matter of fact, all respondents claimed they have never heard or experienced a situation where a male respondent is having zero sperm count. Castration is a strange word and stone-age phenomenon to the respondents. Other diseases discovered are discharge from the penis, blood in ejaculation and difficulties in urination and injury in the testes.

Taking into cognizance that the severities of the diseases or challenges are too medically technical and outside the scope of the study, most respondents evaded discussion on questions in this regard. Investigation was thus concentrated on the prevalence in terms of presence or absence of any of these diseases (with the husbands) and how the wives have been coping under such a situation. None of the respondent has ever had back surgery. Overall, 145 (33.6 percent) male respondents out of 432 are currently experiencing one form of reproductive health challenge or the other.

In addition, places of treating male reproductive health challenges were identified in the study location. On one hand, the medical center where the respondents were found was automatically regarded as the place where they are receiving treatment, however other respondents interviewed outside hospital or clinic were asked where they are

receiving or would like to receive treatment. The findings show that 17.6 percent out of 145 preferred herbal homes to other medical outfits in terms of seeking medical attention. About 11.6 husbands with reproductive health challenges have opted for hospital or clinic while eight men are currently undergoing self-medication. About 0.6 percent (5 men) has resigned to fate and would no longer seek further medical assistance in solving the problem currently experienced. Further investigation shows that the decision could be informed by abortive effort of the past or lack of confidence in existing facilities. The focus group discussion highlighted that those who have not experienced any of these diseases would likely visit hospital/clinic and herbal homes per peradventure they contact the disease.

Prevalence rate: Excerpts from the medical personnel

The response from the medical personnel selected in the ratio of 20:10 across Lagos and Osun States confirmed the prevalence of male reproductive health challenges in the study locations. The excerpt revealed the following:

“Male reproductive health challenges are real”. The frequency is enormous. At least, one out of every eight male patients reported for different kinds of sexual health problem. It cuts across all adult ages and nowadays it is more common among the adolescents especially at this “sexual open age”. Although, some are age related e.g. andropause, others defile ages”.

(Medical Doctors)

“Male reproductive health problems are real and common around here. The fact that the most of these diseases/infections do not disturb normal daily activity prevents people from knowing that the victims are suffering for it. Just like AIDS, “It does not show for face”.

(Trado-doctor)

“An issue like this is not openly discussed”. Most men would want it to be ‘one-on-one’ without their wives around”. Only few husbands (if guided by their religious instinct) normally allow their wives to be present. A man will always prefer a male medical officer to complain to than otherwise. This is natural anyway but they inform us too if it is becoming critical.

(Female medical personnel)

Common male reproductive health challenges

“As far as this town is concerned, gonorrhoea is rampant”. “It cuts across gender but more common among most “promiscuous men”. We have seen few of “jejeṛe epon” (i.e. testicular cancer). Erectile dysfunction is a serious one. “We don’t disclose this to third party but as far as this job (profession) is concerned about one out of every ten men has this”.

(All medical personnel)

Causes and effects as expressed by medical personnel

There are several causes of male sexual problems. They vary from primary to secondary. “There are some that might not disturb sexual activity but could hinder sexual satisfaction of the wife or the duo”. “We have premature ejaculation, delay ejaculation, lower libido, seminal retention, etc.”

“Testes detest heat”. “If a man adult wears tight pants all the time, it will keep the testicles 'bunched up' and can result into reduction in sperm count”. Problem with testes can aggravate to prostate cancer and thus, any man planning to father children should desist from such. “Other causes include diabetes, hypertension, pelvic surgery, aenial, etc”

(Medical Doctors)

Table 14: Percentage Distribution of Husbands experiencing Male Reproductive Health Challenges

Identified Male Reproductive Health Challenges	Total Population		Men	
	Frequency	Percent	Frequency	Percent
Testicular Cancer				
Yes	27	3.1	27	6.3
No	405	46.7	405	93.8
Not Applicable (Women)	435	50.2	-	-
Total	867	100.0	432	100.0
				-
Prostate Cancer				
Yes	14	1.6	14	3.2
No	418	48.2	418	96.8
Not Applicable (Women)	435	50.2	-	-
Total	867	100.0	432	100.0
				-
Andropause				
Yes	17	2.0	17	3.9
No	415	47.9	415	96.1
Not Applicable (Women)	435	50.2	-	-
Total	867	100.0	432	100.0
				-
Castration				
No	432	49.8	432	100.0
Not Applicable (Women)	435	50.2	-	-
Total	867	100.0	432	100.0
				-
Erectile Dysfunction				
Yes	41	4.7	41	9.5
No	391	45.1	391	90.5
Not Applicable (Women)	435	50.2	-	-
Total	867	100.0	432	100.0
				-
Gonorrhoea				
Yes	55	6.3	55	12.7
No	377	43.5	377	87.3
Not Applicable (Women)	435	50.2	-	-
Total	867	100.0	432	100.0
				-
Low Sperm Count				
Yes	36	4.2	36	8.3
No	396	45.7	396	91.7
Not Applicable (Women)	435	50.2	-	-
Total	867	100.0	432	100.0
				-
Zero Sperm Count				
No	432	49.8	432	100.0
Not Applicable (Women)	435	50.2	-	-
Total	867	100.0	432	100.0
				-
HIV/AIDS				
No	432	49.8	432	100.0
Not Applicable (Women)	435	50.2	-	-
Total	867	100.0	432	100.0

Source: Field Survey 2010

“Male sexual problem has serious effects on the victim, the spouse as well as the family. It is capable of causing ‘strain’ in husband-wife relationship. Many couples have separated because the wife was not enjoying satisfying sex. Others have separated just because they could not have children”.

“I have few couples that despite the ‘problem’ they are still living happily”. In some cases, the couple had to travelled abroad to safe themselves the trouble/pestering from the extended family.

(Medical Doctors)

“Sexual dysfunction or morbidity causes distress for both husband and wife”. “It is a sign of hopelessness for the man”. He (the man) feels emptied and several have committed suicide because of it, though I have not seen it physically but I have read and hear so much about it”. “It causes marital disharmony”.

(All medical personnel)

4.3.5 Coping strategies among the wives of husbands that have reproductive health challenges

The issues of marital and domestic conflict are universal notwithstanding that they differ and could manifest in different dimensions within regions and cultures (Imobighe, 2003; Omorogbe *et al*, 2010). However, every conflict is resolvable through effective management but the approach could also vary accordingly. While several cultures believe that disagreement among couples could be resolved amicably, it is envisaged that the involvement of sexual disability, debility or infertility could make disagreement and its management more sensitive and delicate for handling among couples.

In this section, the various mechanisms that the wives have adopted or are adopting to stem conflicts or prevent their escalation into divorce or separation despite the discovery of husband’s weakness in sexual activity are extracted from the female respondents whose husbands have reproductive health challenges. Extreme caution was however exercised on this issue. Through the help of health personnel used as key informants, who also doubled as interviewers, meaningful information was extracted from those respondents who were not wary nor felt irritated by our questions. The result of the analysis revealed that a popular mechanism among the wives is

“resignation to fate approach”, where the affected wife makes no further effort but considered the case as “the cross she has to bear”. Out of the total number of wives who have husband with one or more reproductive health challenges, about one-quarter (representing 25.5 percent) are used to ‘holding-on to fate’ in managing the disagreement whenever it ensued. The study revealed that 11.7 percent would rather invite members of extended family such as relation of the wife or husband to intervene on a mutual approach to resolve the crisis. In addition, the focus group discussion highlighted that the couples concerned too can be invited by the elders’ forum within the community. With this mechanism, the husband or the wife had the opportunity to express his/her grievances while the elders judged the case. Most often, fines are slammed on the erring party or aspersions are cast on the party that is guilty. It was also learnt that every decision reached by the elders must be strictly adhered to as long as the party remains within the community.

About 13.1 percent of the female respondents would rather report their husbands or any family crisis to their family doctor. This is however not strange in issues like this as confirmed by other research (Ramchandran, & Gardner, 2005). This is because of the level of confidence reposed on the family doctor. The general perception among the respondents is that that medical doctors as well other health personnel are “divine helpers” in all family matters. Excerpts show the following

“why would you hide from those than help you”.
“you can’t hide yourself from those who deliver you” “Doctors are held in high esteem in the society”.
“They are revered with respect and most people have confidence in them because they are trained to keep secrets (i.e. to be discreet)”.
“Doctors are the only people that can read the functioning of your body system”,
“whatever information you give them is to help you fulfill you ‘productive life ambition’, there is no reason to hide for them”.

The next variant of strategy for coping with disagreement between the couple is where the wife reports to certain community leaders such as Pastors, Imams or other head(s) of their religious organizations. About 7.6 percent of the affected wives have reported or solicited for intervention by their spiritual heads. The popularity of this strategy is profound. Majority of the female respondents preferred this option as the best and potent strategy due also in part to the fact that the tenets of their religious affiliation e.g. Bible or Koran are used in encouraging or correcting the erring party. In some

other cases, 6.2 percent of the wives take a silent posture over any disagreement between them and their husbands, at least allowing the tension to douse down. About 5.5 percent believe in confrontational strategy as mean of settling or managing whatever disagreement ensues between them and their husbands.

While the effectiveness of these mechanisms was not tested, the fact that the couple are still living together or have not separated confirms that the approaches could be potent. Information gathered however indicated that the extent to which any method employed succeeds in restoring smooth relationship between the parties in disagreement is largely contingent upon the nature of such conflict. For example, if the issues involved bother on misdemeanors, negligence or disobedience, the likelihood of success is high. However, if contentious issues such as adultery, concubinage or sexual incapability, it might be very difficult to settle.

The patterns and the types of strategies adopted in the areas of sexual incapacity or other reproductive health challenges differ from ordinary disagreement within the household and by individual wife concerned. This portion was an attempt to confirm the specific sexual behavioural steps or changes ever adopted by wives given the present sexual condition of their husbands. Thus, questions were carefully canvassed requesting the respondents to indicate the specific changes in their sexual behaviour that could be ascribed to the sexual inefficiency of their husbands. The basic idea is to solicit information that could help in securing intimate relationship with or without sexual intimacy (sexual intercourse) between the husband and the wife.

In the quantitative segment, the responses were very scanty and dry though some information gathered were also analyzed like other responses in the questionnaire. Information was readily obtained on this issue in the focus group discussion. The result of the analysis shows that out of 435 female respondents, where 33.3 percent have husbands with one reproductive health challenge, 88 wives representing about 20.2 percent indicated that they have adjusted their sexual life due to reproductive health deficiency of their husbands. 65.3 percent indicated a negative response while 14.5 percent decline in responding to this question. In analyzing further the various responses of this group, the result revealed the followings: that about 15.9 percent (representing only 5.3 percent of the female population) affirmed they have sought for

other partners, a form of ‘concubinage’ or extra-marital affairs. About 6.9 percent (i.e. 2.3 percent of total female respondents) indicated they have adopted abstinence as solution. The same proportion of respondents (6.9 percent) indicated they have opted for more spiritual (religious) commitment rather than sexual matters. In the same vein, 5.5 percent expressed that the situation at home has given them more opportunity of pursuing their businesses squarely. It is interesting to know that about 7.5 (distributed into 4.1 and 3.4 percent confirmed that they assist their husbands (once a while) to secure erection and creating fun with their husband while only 4.8 percent believed the situation has not warranted seeking for “external sexual partners” because “husband cannot perform”.

In the qualitative segment, information elicited is diverse and varied. Excerpt from focus group discussions include but not limited to the following:

*“It is a painful situation” “It has never been a subject of open discussion since ages”.
“Most men you see around have so much under their clothes (i.e. they hide so much
problem to themselves)”.*

FGD - Wives (35-54 years)

*“Almost every man experiences these dysfunctions”. “You don’t cry foul because
your husband is not ‘capable’, you only take action immediately”. “When things like
these happened, the next focus is how to get out of it (i.e. seek solution)”.*

FGD - Wives (55-74 years)

*“if you want to manage it you can stay”, “If you want an issue (‘child’) desperately,
you don’t need to wait or announce your departure from his house (divorce)”.*

FGD - Wives (15-34 years)

“It is not a strange thing”, “It can be resuscitated by traditional methods”.

FGD - Men (55-74 years)

Information gathered here suggested that among the couple where the disease has affected fertility response of the husband, the likelihood exist for the wife to separate. It is indicated further that wherever and whenever the defect is discovered, it cannot be reported or announced. The responses also further indicated that male reproductive health challenges are problems that can be summoned traditionally as expressed by the respondents.

However, other categories are averse to the school of thought that supports the wife staying with husband that is experiencing reproductive health challenges. Information harvested suggests that financial buoyancy of the husbands plays a vital role in keeping the marriage intact irrespective of his reproductive health status. In that regards, the decision to stay or remain in the marriage is a matter of possibility of survival. Wherever the wife can sustain herself financially or otherwise, she leaves with or without divorce. Excerpt from FGD indicates the followings:

“If your man (husband) is the only bread winner of the family, you would not want to divorce or leave him just because of that. “If kids have been there before the problem came, what do you do, would you leave your children? No, you just have to stay for the sake of your children”

FGD - Women (15-34 years)

Majority of the female respondents who held the opposite view indicated that it is a waste of time to remain married to a man that has reproductive health problems. This group believes that the fulfillment of marriage is contingent upon husband’s ability to secure and have intercourse with the wife. They affirmed that it is negligence on the part of husband that allows the problem to degenerate to unmanageable level and there might be no need to suffer (endure) for life for the negligence of one man.

*“You will always be feeling you are not a woman or not attractive again”.
“Definitely, the intimate relationship is lost without your husband being “active”.
“Now tell me, what is marriage without sex? Just to sleep together or be his cook”
“It is like a woman marrying to a woman or a man marrying to a man. You don’t need to be advised or warned before leaving”.*

FGD - Women (15-34 years)

Nevertheless, it was also discovered that there are other categories of respondents who believe marriage is sacrosanct the moment it is solemnized. This category is of the opinion that it is mandatory to endure with your husband irrespective of whatever challenge or problem he is passing through.

*“We are only missing sexual closeness; we are not physically distant”
My husband’s own is on and off”, “ It can be on for days / weeks”,
”At times they withdraw midway”. If there is deep loving affection between couple,
come rain and sun they stay together”*

FGD - Women (35-54 years)

It is also not surprising that few among them (6.4 percent) claimed they have been abstaining from sex. About 12.8 percent also indicated that they have remained concentrated on their businesses and on spiritual matters nowadays rather than the issue of intercourse “*after all, sex is not food*”. Others believed the situation has given them the privilege of focusing their energies on family, friends and careers.

The wives were further asked whether they ever talked to their husbands on the need for an improvement in the husband’s sexual activity in the recent time. Half of the concerned wives affirmed they have discussed with their spouses on various ways of improving their sexual activity level. Some of the various suggestions they have offered include but not limited to the following: to seek spiritual solution, to reduce consumption of certain food and drink (e.g. sugar and other carbohydrate and alcoholic substances). Notwithstanding the above situation, more than half of the wives agreed that their husbands are acceptable to them as their sexual partners.

Finally, other category of wives whose husband are not sexually deficient were asked to suggest what they would likely do if they finally discover that their husband cannot impregnate them. About 12.5 percent hope to stay and remain with their husbands until death parts them. The same proportion 12.5 percent would desire to look for alternatives while remaining married to the husband. One out of every five women indicated that they will opt out of the marriage, divorce legally or re-marry to another man. About 4.2 percent of the wives also indicated their intention to disengage from the marriage but stay alone forever. Excerpts from the focus group discussions are as follows:

“Coping with what! do you know how frustrating it is?”

That in spite of much caresses and expression, the man did not “move”

FGD - Women (15-34 years)

“You remain silent over it”,” it is not a subject of discussion with your neighbours”

“If the man hears you tell anyone, he might scrape off your head. “Those affected tend to desexualize their wives”. “Coping with an impotent man is dangerous, they are always nervous, worry, aggressive and ill-tempered”

FGD - Women (55-74 years)

Men’s forum

“You can’t tell your wife or your girl-friend that you are impotent”. “No man has that boldness, it is ridiculous. If she discovers it, fine, if not, life continues”.

You cannot confide in anyone about it.

FGD - Men (15-34 years)

“Ako atosi ko se dogbonisi” (meaning- chronic gonorrhoea cannot be managed), “Eni ti ko le ta’putu papa ko la tunse”(implying that - You can only manage it if it is not a chronic impotence”). “Chronic one cannot be hidden”.

FGD - Men (15-34 years)

“Some men commit suicide because of it, especially if the people around know he cannot perform”. “What do I do, life must continue”

I am lucky to have gotten an issue, what about others who don’t have any child.”

“But you don’t lose hope; it can come back one day” “with God all things are possible”. FGD - Men (55-74 years)

Table 15: Distribution of Wives that have husbands with reproductive challenges and their Coping Mechanisms

Variables	Freq	Percent
Have Husband with Reproductive Health Challenges		
Yes	145	33.6
No	287	66.4
Total Husbands	432	100.0
Coping Mechanisms		
Resign to Fate	37	25.5
Invite Relations/Neighbours	17	11.7
Report to our Doctor	19	13.1
Ignore him for sometimes	9	6.2
We fight seriously	8	5.5
Try other sexual partners	5	3.4
Complaint to pastors, etc	11	7.6
No Response / Not specific	15	10.3
Total (wives with RHC Husband)	145	100.0
Specific sexual behaviour changes		
Attempting to separate if persisted	18	12.4
Secured other partners	23	15.9
Help to secure erection	6	4.1
Abstain when necessary	10	6.9
Situation has not called for major change	7	4.8
Create fun with him	5	3.4
Face my business squarely	8	5.5
Seeks more spiritual things	10	6.9
No Response / Don't Know	58	40.0
Total	145	100.0
Ever had disagreement over sexual relationship		
Yes	38	26.2
No	71	49.0
No Response	36	24.8
Total	435	100.0
Overall feeling over relationship		
Very Unpleasant	44	30.3
Slightly unpleasant	37	25.5
Neither Pleasant/Unpleasant	20	13.8
Slightly pleasant	20	13.8
Very Pleasant	18	12.4
Total	145	100.0
Chances of Separation		
Very High	42	29.0
High	12	8.3
About Even	11	7.6
Low	48	33.1
Very Low	32	22.1
Total	145	100.0

Source: Survey fieldwork 2010

CHAPTER FIVE

BIVARIATE ANALYSES AND PRESENTATION OF SELECTED VARIABLES

5.1 Introduction

This chapter is devoted to bivariate analysis of variables of interest to show the cross-comparisons between and among responses given for two or more different questions at a time. The techniques and the results obtained represented the mainstay of this study as it provided elaborate insight into the interplay of relationships and correlational behaviour among identified variables. The responses are displayed across rows and columns in the pivot tables where the choice of which variable occupies the row or column position is matter of author's personal preference. The cross tabulation analysis employed is also called contingency table analysis providing few statistical parameters such as chi-square, contingency coefficient and lambda as initially planned.

In all, the missing values were treated as missing and not accounted for in the cross tabulations. This is to free the data from distortions and ensure accurate analysis of the interplay amongst the variables. Statistics for each table are therefore based on all the cases with valid data in the specified range(s) for all variables in each table.

5.2 Distribution of male respondents with Reproductive Health Disease by Selected Demographic Characteristics

Demographic characteristics cannot be overemphasized in the analysis of reproductive health especially as they account for variations among and between husbands and wives. Thus, they are considered as fundamental in this analysis. Among variables of interest is the usual place of residence. This measures the number of husbands with reproductive health challenges according to their place of residence. It shows that 27.6 percent of husbands with reproductive health challenges live in rural areas and that 72.4 percent reside in urban areas. The result revealed that out of the 298 urban residents sampled, 35.2 percent have experienced a reproductive health challenge. This revelation is almost similar to what obtains in the rural segment where about 29.9 percent of the 134 male respondents interviewed have experienced male reproductive

health challenges. This observation shows that, slightly more than one-third of male respondents have experienced reproductive health challenges while less than two-thirds have never experienced any of these challenges.

Table16: Percentage distribution of male respondents with Reproductive Health Disease by selected demographic characteristics

Gender	Ever Had Reproductive Health		Total
	Yes	No	
Husbands	145 (36.6%)	287 (66.4%)	432 (100.0%)
Usual place of Residence			Total
Rural	40 (29.9%)	94 (70.1%)	134
Urban	105 (35.2%)	193 (64.8%)	298
Total	145 (36.6%)	287 (66.4%)	432
State			
Lagos	99 (43.4%)	129 (56.6%)	228
Osun	46 (22.5%)	158 (77.5%)	204
Age of Respondents			
15-34 years	20 (13.7%)	126 (86.3%)	146
35-54 years	60 (31.6%)	130 (68.6%)	190
55-74 years	65 (67.7%)	31 (32.3%)	96
Religious affiliations			
Christianity	61 (24.5%)	188 (75.5%)	249
Islam	75 (49.7%)	76 (50.3%)	151
Traditional	9 (28.1%)	23 (71.9%)	32
Working Status			
Working	135 (37.9%)	221 (62.1%)	356
Not working	10 (13.2%)	66 (86.8%)	76
Occupational Distribution			
Senior Manager, CEO Army Officer	8 (22.2%)	28 (77.8%)	36
Middle Manager/Officer	24 (27.9%)	62 (72.1%)	86
Clerical Staff/Other Officer	28 (63.6%)	16 (36.4%)	44
Artisan, Skilled labourer	48 (39%)	75 (61%)	123
Unskilled, Shop Assistant	35 (42.2%)	48 (57.8%)	83
Unemployed	2 (3.3%)	58 (96.7%)	60
Educational Attainment			
No Schooling	18 (40.9%)	26 (59.1%)	44
Up to Primary School	56 (56.6%)	43 (43.4%)	175
Up to 2ndary School	58 (33.1%)	117 (66.9%)	178
Up to University	13 (11.4%)	101 (88.6%)	114

Source: Field survey 2010

According to analysis by state, Lagos state recorded 43.4 percent of husbands having male reproductive challenges while only 22.5 percent of their counterparts in Osun state have male reproductive health challenges.

The age of respondents shows that the incidence of reproductive health challenges occurs more among husbands who are in the late fifties and above. While only 13.7 and 31.6 percent of male population in age group 15-34 and 35-54 years have experienced the problems, 67.7 percent of male respondents in age group 55-74 years have had the disease. The table (table 16) revealed that out of all husbands who have experienced MRHC, 13.8 percent belong to the lower age group (i.e. 15-34 years) while 41.4 and 44.8 percent belong to the age group 35-54 and 54-74 respectively. On the other hand, while 66.3 percent of husbands in age group 15-34 years have never experienced reproductive health disease and 68.6 percent of those in age group 35-54 years have not, only 32.3 percent of those in highest age group of 55-74 years have never experienced the challenge. This result supports the earlier findings that most of the reproductive health challenges are age related. For example, the proportion of erectile dysfunction reported among Australian men are 9.2, 13.1, 33.5 and 51.5 percent among age groups 20-29 years, 40-49, 50-59 years and 60-69 years respectively (Burnett, 2006). The pattern shows that the incidence as well as the severity increases as age increases (EngenderHealth, 2003; Women's Health Connection, 2003; Burnett, 2006).

Although, higher numbers of Christians were interviewed compared to other religious affiliations, the proportions of Muslims who are victims of reproductive health challenges are more than other religious affiliations. About half of Muslims male respondents (49.7 percent) have experienced reproductive health challenges compared to about 25 percent of Christians. Also, nine percent of the few men that practice traditional religion has reproductive health challenges.

The bivariate relationship between the working status and reproductive health challenges shows that 37.9 percent of working male respondents have been victims of reproductive health diseases while only 13.2 percent of non-working respondents have experienced the diseases. A critical appraisal of the data shows that relatively, one-third of the working respondents have been victims of reproductive health diseases while about eight out of every ten non-working respondents have not experienced any reproductive health challenges.

In terms of occupational distribution, majority of male victims of reproductive health diseases are from clerical assistants, the unskilled labourers, shop assistants as well as the artisans and the skilled labourers. The study shows that lower proportion of respondents in higher occupational status such as senior manager, chief executive officer and senior army officers have experienced reproductive health challenges. The same is observed among the male unemployed where only 3.3 percent have been affected by the reproductive health problem.

It is important also to highlight the interplay between variable of education and reproductive health problems. The table (table 18) shows that higher proportions of husbands who have been affected by reproductive health problems have lower levels of education especially below secondary level. Out of 44 male respondents interviewed who have only primary education, 40.9 percent have been victims of reproductive health diseases. More than half of respondents with primary level of education have experienced reproductive health diseases while only 11.4 percent out of husbands with university education have experienced reproductive health defects. Overall, observation shows that higher proportion of husbands with reproductive health disease belong to lower levels of educational status. Thus, a further statistical correlations was carried out in the next chapter to verify the influence of education on male reproductive health challenges among other socio-demographic characteristics of the respondents.

5.3 Distribution of couples where husbands have reproductive health challenges by conjugal harmony

Marriage is considered as the foundation of life and that its objectives are better realized through wholesome sexual experience between the couple among other things (Christian, 2006; Alaba, 2004). Enduring marital life is also anchored on the existence of love and affection between the two beings as well as mutual responsibility in the nurturing of such affection to ensure harmonious relationship and satisfaction (Christian, 2006; Alaba, 2004). However, affection, love, harmonious relationship and satisfaction within the marriage are such variables that cannot be sufficiently directly observed unlike other behavioural variables that can be directly noted. Thus, a self-reported scale was used to indirectly measure the construct of

harmonious relationship and satisfaction within marriage among the target population. Such measures include the degree of time spent together, whether the couple shares a bed space, opening of joint account, rate of discussion of sexual issues, husband's perception and wife's perception of the relationship.

Table 17: Percentage Distribution couples where husbands have reproductive health challenges by conjugal harmony

Variables	Ever Had Reproductive Health Disease		Total
	Yes	No	
Spending Time together			
Very Often	26 (31.3%)	57 (68.7%)	83
Often	85 (31.1%)	188 (68.9%)	273
Not often	22 (42.3%)	30 (57.7%)	52
Not at all	12 (50%)	12 (50%)	24
Total	145 (33.6%)	287 (66.4%)	432
Perception on relationship			
Close Relationship	84 (29.2%)	204 (70.8%)	100.0%
Not Close	61 (42.4%)	83 (57.6%)	100.0%
Closeness perception			
Very Close	31 (23.3%)	102 (76.7%)	133
Just close	53 (36.1%)	94 (63.9%)	147
Not too close	0 (0.0%)	8 (100.0%)	8
Not close at all	61 (42.4%)	83 (57.6%)	144
Sharing Room			
Yes	116 (34.8%)	217 (65.2%)	333
No	29 (29.3%)	70 (70.7%)	99
Rate of discussing sexual issues			
Very often	8 (13.3%)	52 (86.7%)	60
Often	63 (40.1%)	94 (59.9%)	157
Not often	48 (37.8%)	79 (62.2%)	127
Not at all	18 (25.0%)	54 (75.0%)	72
Not applicable	8 (50.0%)	8 (50.0%)	16
N/A (wives)	8 (13.3%)	52 (86.7%)	60
Operating Joint Account			
Yes	14 (26.9%)	38 (73.1%)	52
No	131 (34.5%)	249 (65.5%)	380

Source: Field survey 2010

The bivariate distribution evaluated these measures vis-à-vis the presence of reproductive health challenges with the husband. The essence, among others, is to observe the inter-correlation between the selected indices and closeness of the couple with or without reproductive health challenges. The result however shows majority of the respondents (i.e. husband in this case) that spend time with their wives most often do not have reproductive health diseases. Only 31.1 percent of this group reported

they have reproductive health challenge. In addition, 50 percent of couples interviewed 'who do not spend time together at all' have husbands with reproductive health challenges as indicated in table 17. The information contained here signals repulsiveness between the couple, which could be due to sexual deficiency or defect in sexual health of their husbands. This buttresses the assertion that most indices that can spur spousal close relationship are often weakened whenever sexual gratification is impaired (Christian, 2006; Alaba, 2004). Thus, it is not surprising recording lower level of closer relationship between those couples with sexually challenged husbands.

Further results obtained from the analysis also corroborate the above observations. The results show that 42.4 percent of those that claimed they do not have close relationship with husbands belong to the category of those whose husbands have reproductive health challenges (Table 17). About 70.8 percent of those who confirmed they have close relationship with husband have husbands without reproductive health diseases. Similar result was obtained when assessing the perceptions of wives on their closeness with their spouses. It was revealed that 42.4 percent of those without close relationship have husband with reproductive health challenges. Using another indicator of couple' closeness, evidences from table 17 shows that about four out of every 10 men without close relationship with their spouse are experiencing reproductive health problem(s). The data also shows that six out of every 10 men without RHC shares the same bed with their wives while three out of every ten that share room are without RHC.

In the same vein, one-third of those who have reproductive health challenges do not share room with their spouse as indicated in table 17. Only about 13.3 percent of those that have reproductive health challenges discuss sexual issues with their spouses. Overall result indicates that majority of respondents that have no reproductive health challenges discuss sexual issues with their spouses as also revealed in table 17. Also, the result indicates that about one-third of those who operate no joint account with their spouse are with reproductive health challenge. Be that as it may, it could be assumed that distance is created between the spouses as a result of the sexual health challenge that the husband is experiencing. The presence or absence of a spouse contributes to person satisfaction with marriage and life in

particular (Nick, 2010). Thus the need to further analyze the variable in the next chapter.

5.4 Distribution of couples where husbands have reproductive health challenges and selected issues of disagreement between them

Disagreement between the couple was evaluated using selected but fundamental actions noted and expected from a couple and as guided by the literature, two of the theories adopted (i.e. the way of coping theory, theory of marriage.) and as illustrated in the conceptual framework. These selected variables were measured using a four-point scale of: (1) very often, (2) often, (3) not often and (4) not at all. The wives were interviewed separately knowing fully well that responses from the husbands could be biased because they are the “culprits” in this regard. Husband’s responses too could exert authority over the wife’s opinion, hence each was interviewed separately. Specific actions rated are disagreement over spending time together, over in-law/relations, disagreement on household tasks, disagreement over sexual intercourse, disagreement over money, disagreement over sleeping arrangements, conflict on children issues and disagreement over religious matter.

The results in table 18 revealed that out of about 7.9 percent of couples that quarrels over spending time together very often, 26.5 percent have husbands with reproductive health challenges. In a related observation, out of 60.4 percent of couples that quarrel over this often, 35.6 percent have husbands with reproductive health challenges. However, out of about 61.3 percent couples who quarrel over being together and 84.1 percent of those who do not at all, about 38.7 percent and 15.9 percent respectively have husbands with reproductive health defects. A cursory observation from these findings indicates that the disagreement over spending time together is more prominent among those wives with husbands who have reproductive health challenges. While causal evidence is not suggested here, the prevalence of quarrel among couples with reproductive health challenged husbands is a signal to further analysis, which is picked up at the next chapter.

Couples in this part of the country where the research was carried out could not be exclusively separated from extended family influence in most cases, hence the choice

of verifying the degree of disagreement of issues related to the in-laws around them. The findings shows that out of most couples that most often quarrel over in-laws or relations 28.6 percent have husbands with reproductive health diseases. It also reveals that 34.6 percent of those with husbands with reproductive health disease often quarrel over this matter. In addition, 34.2 percent of wives with reproductive health challenged husbands scarcely quarrel while about 33.8 percent indicated they do not quarrel over in-laws issues.

The issue of sex is a major consideration in this context and opinions of the wives were obtained to ascertain the level of agreement and disagreement over the matter between each couple. From all indications, reproductive health challenges are suspected to be fundamental in the issue of quarreling and other disagreement between couple and as far as couple close relationship is concern. Specifically, it is highlighted from the result that 49.1 percent of couples that quarrel over sex have husbands with reproductive health challenges (Table 18). It also shows that out of 170 couples that often quarrel over sex, 21.2 percent have husbands with reproductive health problems. The same information could be understood from disagreement over husband and wife sleeping together as indicated in table 20 below. Out of 66 couples that quarrel over sleeping together, 40.9 percent have husbands with reproductive health challenges while 18.8 percent of those that often disagree in a matter of sharing bed space together have husbands with reproductive health diseases.

It also revealed that 38.9 percent and 33.3 percent of those with reproductive health challenged husbands do rarely have quarrel over sharing of bed as indicated in table 20 above. In terms of religious issues, the result established that 34.1 percent and 26.2 percent of couples that experience quarrel over religious matter have spouses that have reproductive health challenges. Notwithstanding however, about a third and 38.9 percent of wives with husbands who have reproductive health challenges rarely quarrel about sleeping together (Table 20). In brief, the general perception from the result implies that disagreement among the couple is synonymous with reproductive health challenges.

Table 18: Distribution of couples where husbands have reproductive health challenges and selected issues of disagreement

Disagreement on time spending together	Ever Had Reproductive Health Disease		TOTAL
	Yes	No	
Very often	9 (26.5%)	25 (73.5%)	34 (7.9%)
Often	93 (35.6%)	168 (64.4%)	261 (60.4%)
Not often	36 (38.7%)	57 (61.3%)	93 (21.5%)
Not at all	7 (15.9%)	37 (84.1%)	44 (10.2%)
Total	145	287	432 (100)
Disagreement over in-laws / relations			
Very often	6 (28.6%)	15 (71.4%)	21 (4.9%)
Often	28 (34.6%)	53 (65.4%)	81 (18.8%)
Not often	42 (32.8%)	86 (67.2%)	128 (29.6%)
Not at all	69 (34.2%)	133 (65.8%)	202 (46.8%)
Disagreement on household tasks			
Very often	7 (41.2%)	10 (58.8%)	17 (3.9%)
Often	32 (34%)	62 (66%)	94 (21.8%)
Not often	60 (34.9%)	112 (65.1%)	172 (39.8%)
Not at all	46 (30.9%)	103 (69.1%)	149 (34.5%)
Disagreement over money			
Very often	31 (43.1%)	41 (56.9%)	72 (16.7%)
Often	61 (30.7%)	138 (69.3%)	199 (46.1%)
Not often	47 (40.9%)	68 (59.1%)	115 (26.6%)
Not at all	6 (13%)	40 (87%)	46 (10.6%)
Disagreement over sex			
Very often	28 (49.1%)	29 (50.9%)	57 (13.2%)
Often	36 (21.2%)	134 (78.8%)	170 (39.4%)
Not often	77 (43.8%)	99 (56.3%)	176 (40.7%)
Not at all	4 (13.8%)	25 (86.2%)	29 (6.7%)
Disagreement over sleeping together			
Very often	27 (40.9%)	39 (59.1%)	66 (15.3%)
Often	19 (18.8%)	82 (81.2%)	101 (23.4%)
Not often	75 (38.9%)	118 (61.1%)	193 (44.7%)
Not at all	24 (33.3%)	48 (66.7%)	72 (16.7%)
Disagreement over children issues			
Very often	35 (47.9%)	38 (52.1%)	73 (16.9%)
Often	88 (34%)	171 (66%)	259 (60%)
Not often	11 (34.4%)	21 (65.6%)	32 (7.4%)
Not at all	11 (16.2%)	21 (83.8%)	68 (15.7%)
Disagreement over Religion matters			
Very often	11 (26.2%)	31 (73.8%)	42 (9.7%)
Often	56 (34.1%)	108 (65.9%)	164 (38%)
Not often	39 (35.1%)	72 (64.9%)	111 (25.7%)
Not at all	39 (33.9%)	76 (66.1%)	115 (26.6%)
Total	145	287	432

Source: Field survey 2010

5.5 Fertility behaviour and husband's experience of reproductive health challenges

Efforts were made to evaluate the relationship between the fertility levels of the couples interviewed vis-à-vis the presence or absence of male reproductive health diseases. The variables used here include current family size, children ever born (CEB) and desire family size that are parts of the regular standard variables commonly employ in fertility behaviour assessment (Omideyi, 1990; Statistics Canada, 2006; Omobude-Idiado & Konwea, 2009; Dudley & Leon, 2010). The questions on children ever born as well as current family size were specifically targeted at women (i.e. the wives). Although, all respondents were made to answer question on desire family size, the responses from husbands were treated as missing (i.e. ignored) in analyzing fertility behaviour. This is done to have uniform base for comparison among the variables selected here. The data was specifically split by gender and cross tabulation run between these variables and the experience of reproductive health challenges by the husbands.

The current family size indicated that 43.4 percent of respondents who have no children (zero parity) have husbands with reproductive health challenges while only 9.4 percent in the same category have husbands who are not experiencing reproductive health challenges. The result, among other things, indicated that higher proportion of those with lower parity have husbands with reproductive health challenges. Specifically, out of 213 wives who have between one to four children, more than half (51.9 percent) have husbands who are not experiencing reproductive health problems while 44.2 percent had husbands with reproductive health challenges. No respondents recorded higher fertility rate above 6 children among those whose husbands have reproductive health challenge while 5.9 percent of respondents whose husbands have no reproductive health challenges have more than 6 children.

The pattern of result obtained above is similar to what was obtained in cross tabulating children ever born and male reproductive health challenge. A total of 63 wives were found to belong to zero parity categories. Out of this proportion, 43.4 percent have husbands with reproductive health challenges while only 9.4 percent belong to the group of husbands without reproductive health challenge (Table 19). The result also

indicated that about 11.7 percent, 17.9 percent and 9.7 percent of wives whose husbands have reproductive health challenges have recorded CEB of one, two and three children respectively compared to 7.3, 11.5 and 20.2 percent of wives in the same category but have husbands who have no reproductive health challenges (Table 19). Similarly, 4.8, 6.9 and 2.8 percent have four, five and six children among those whose husbands have reproductive health challenges compared with 18.8, 6.6 and 12.2 percent among those whose husbands have not reproductive health challenge (Table 19). Overall, the result shows that virtually all wives with zero and lower parity levels have husbands with reproductive health challenges. Although, the above information could be regarded as insufficient to indicate a causal relationship between male reproductive health challenges and lower or zero parity, it is evident that virtually all respondents with higher parity level of more than three and four children have husbands who are not experiencing reproductive health problem as shown in table 19.

The frequency of intercourse between the couple was also compared with the challenges of male reproductive health. Although, the essence is also not to determine causality, it is specifically meant to provide insight into the influence of male reproductive challenges on sexual behaviour as well as the fertility level recorded between the two categories of respondents. The result as indicated in table 19 shows that, more than one-third of wives whose husbands have reproductive health challenges have lower rate of sexual intercourse with their spouses. On the average, the proportions that have higher rate of intercourse are found to be among those wives whose husbands have no reproductive health challenge. Specifically, 40.8 percent of wives whose husbands have no reproductive health challenges recorded higher frequency rate of more than two times compared to 35.1 percent recorded among those whose husbands have reproductive health challenges. In the same vein, 24.1 percent of wives whose husbands have reproductive health challenges rarely experience sexual relationship with their spouses compared to a much more lower percentage of 22.9 recorded among those wives whose husbands have no reproductive health challenges (Table 19). Further investigation from the focus group discussions indicated that, in the general sense, male with reproductive health challenges (in some cases) might not be able to have successful sexual intercourse. Also, the excerpts from the medical personnel confirmed that men with chronic reproductive health

disease might be unable to have sex or find it difficult to experience successful ejaculation. This is also supported by literature (Stan, 1996; Rust *et al*, 1988; Lamb & Siegel, 2004; Warwick, 2006; Siegel, 2012). In addition, the understanding from the various FGD sections also shows that majority of the wives who always complaint of unsatisfactory sexual relationship with their spouses belong to the category of wives whose husbands have one reproductive health problems or the other. While no casual relationship between the two variables could be established here as earlier pointed out, this analysis has provided an overview of direction of sexual relationship between couples where husbands have reproductive health problems and where such challenges do not exist. Finally, it is not surprising that 5.4 percent (i.e. 22 wives out of 432) refused to answer question on the frequency of sexual relationship between them and their husbands. This could be due to the sensitive and personal nature of the question.

Overall, virtually all respondents with the exception of 7.4 percent (32 out of 432) wives refused to indicate their desire number of children. About 41.5 percent desired at least one child, 60.3 percent preferred between 1-2 children while up to 32.5 percent desired to have between 2 and 4 children. On the average, 74 percent of the wives interviewed desire to have up to four children as against 26.1 who desired to have five children and above. Although, the current family size as well as the general fertility level prevailing in developing nations especially in sub-Saharan Africa is on the high side, the finding indicated that the desired family size observed is below the current fertility level of 5.2 children recorded for Nigeria as well as other nations of sub-Saharan Africa. This status as obtained from this survey could possibly translate to demographic dividend if these lower levels could be achieved in the future. The estimated fertility level for Nigeria stands at 5.2 (NPC, 2010) and the figure is relatively the same in most developing nations (Acsadi *et al*, 1990).

At the in-depth and focus group interview levels, it is widely acceptable that “whatever level of infertility any man or woman is experiencing, it is only temporal and not definite until death strikes”. General impression as indicated across all ages shows that “with God all things are possible”. However, at the medical level, few of the options available for ‘dousing’ infertility are insemination, child adoption and surgical operation. However, no medical personnel ruled out God’s intervention.

Table 19: Distribution of wives by fertility behaviour and husbands' experience of reproductive health challenges

Fertility Behaviour	Husband with reproductive health challenge		Husband without reproductive health challenge		Total	%
	No	%	No	%		
Current Family size						
Zero parity	63	43.4	27	9.4	90	20.7
1-2 children	21	14.5	48	16.7	69	15.9
3-4 children	43	29.7	101	35.2	144	33.1
5-6 children	14	9.7	56	19.5	70	16.1
7 & more	0	0.0	17	5.9	17	3.9
No Response/DK	4	2.8	38	13.2	42	10.3
Total	145	100.0	287	100.0	432	100.0
Children Ever Born (CEB)						
Zero Parity	63	43.4	27	9.4	90	20.8
One Child	17	11.7	21	7.3	38	8.8
Two children	26	17.9	32	11.1	58	13.4
Three Children	14	9.7	58	20.2	72	16.7
Four children	7	4.8	54	18.8	61	14.1
Five children	10	6.9	19	6.6	29	6.7
6 & above	4	2.8	35	12.2	39	9.0
No Response/DK	4	2.8	41	14.3	45	10.4
Total	145	100.0	287	100.0	432	100.0
Desired Family size						
1	73	50.3	93	32.4	166	41.5
2	24	16.6	51	17.8	75	18.8
3	3	2.1	3	1.0	6	1.5
4	13	9.0	36	12.5	49	12.3
5	7	4.8	18	6.3	25	6.3
6	23	15.9	56	19.5	79	19.8
No Response/DK	2	1.4	30	10.5	32	7.4
Total	145	100.0	287	100.0	432	100.0
Frequency of Intercourse						
1-2 times	47	32.4	85	32.4	132	32.4
3-4 times	36	24.8	76	29.0	112	27.5
5-6 times	15	10.3	31	11.8	46	11.3
Seldom	35	24.1	60	22.9	95	23.3
No Response	12	8.3	10	3.8	22	5.4
Total	145	100.0	262	100.0	407	100.0
Ever had infertility treatment						
Yes	46	31.7	85	32.4	131	32.2
No	98	67.6	167	63.7	265	65.1
No Response/DK	1	0.7	10	3.8	11	2.7
Total	145	100.0	262	100.0	407	100.0

Source: Field survey 2010

5.6 Relationship between selected independent variables and conjugal relationship among the couples with and those without husband that have reproductive health

Although, the attempt to have the understanding of the impacts of selected independent variables on the dependent variable necessitated the testing of hypotheses, an analysis of variance was firstly computed to evaluate the impact of individual independent variables on conjugal relationship. This also provided opportunity to ascertain these impacts. However, since the principle of Anova dictates that the independent variable must have more than one category and that the dependent variable must be a continuous variable, only relevant variables that met these criteria were selected. It should be noted also that the basic idea in this study is to have understanding of interactions among the variables of interest. Thus, the relationship between the dependent variable and each of the independent variables were evaluated using a “One-way Analysis of Variance (ANOVA) whereby several two-variable models were captured. However, for the purpose of simplicity, the results were combined together to give a single tabular arrangement as depicts in table 20. In this regards, only relevant statistics such as F-ratio and significant value are therefore presented.

The statistical tool of ANOVA partitioned the observed variances in the means into components attributable to different sources of variation (variation between the groups and within the variable) and tests whether the means of several groups are all equal or not. The ‘variation between groups’ represents the variation of the group means around the overall mean, while ‘variation within’ shows the variation of the individual scores around their respective group means

The F-ratio is calculated by dividing variance due to independent variables by the error variance. Thus, F-ratio will be greater than 1 if the error variance (denominator) is small compared to the variance due to the independent variable. The converse holds if the error variance is larger than the independent variance. The interpretation also vary and dependent upon the value of F-ratio and ‘Sig value’. In this analysis, if the F-ratio is less than 1, it implies that the effect of independent variable is definitely not significant. If the F-ratio is greater than 1, then it implies that the effect of independent variable is significant on the dependent variable. Also, the significance

level (indicated as “Sig”) ascertains the degree of confidence on the observed relationship between the dependent and independent variable. A value from 0.05 (and below) shows that the means of the two groups differs. This could be interpreted as implying the existence of a significant relationship between the dependent and independent variables, while a value above 0.05 means the relationship is not significant.

Specifically, in this study a One-way Anova test was run to confirm differences in means among the selected socio-demographic variables of respondents and their significance contributions to conjugal relationship. The variable ever experienced male reproductive challenge that was captured by Yes (1), No (2) and Not applicable (3) (coded for female respondents) was recorded to include only Yes (1) and Others (2). Data were then split by the presence or absence of male reproductive health challenges in order to evaluate the significant predictors to conjugal relationship between those group/couples with male reproductive challenges and those that do not have the challenge. The result as highlighted in table 20 shows certain factors that significantly influence conjugal relationship among couples where the husband is having or not having male reproductive health challenges.

Among the couples where the husbands have reproductive health challenges, spousal rapport, couple discussion on sexual issues, husband-wife living arrangement as well as the health seeking behaviour are significantly related to harmonious conjugal relationship in a situation where the husbands have male reproductive health challenges. However, these factors have no significant influence in harmonious relationship between the couples where there is no male reproductive health challenges. The result also confirms that current family size is a potent factor in enduring conjugal relationship given a p-value of 0.000. This could be true because the presence of children in the family is a good indicator that the husband has no disease or has no serious male reproductive health challenges. Children are considered as the ultimate aim of marriage in sub-Saharan Africa of which the locations of study are not exempted.

Table 20. One-way ANOVA comparing relationship between selected independent variables and conjugal relationship among the couples with or without husband that have reproductive health challenges

Selected socio-demographic variables	Couples with MRHC		Couples without MRHC	
	F-ratio	Sig	F-ratio	Sig
Spousal Rapport (communication)	11.177	0.001	3.193	0.074
Discussion of sexual issues	2.773	0.044	1.988	0.114
Treatment	3.002	0.013	0.177	0.674
Staying together	6.992	0.009	0.018	0.892
Usual Place of Residence	0.009	0.923	1.988	0.159
Current family size	1.333	0.267	13.034	0.000
Age	2.643	0.075	41.171	0.000
Religious affiliations	0.343	0.710	1.302	0.273
Income	0.501	0.872	2.237	0.011
Working Status	0.051	0.821	0.191	0.663
Educational Attainment	12.265	0.000	22.503	0.000
Spending time together	3.937	0.010	38.318	0.000
Place of treatment	11.008	0.000	7.192	0.000
Frequency of Intercourse	3.335	0.012	5.430	0.000

Source: Field Survey 2010

Income and age of the respondents play nominal role in conjugal relationship where the husband is having reproductive health problem. However, they are major determinants of conjugal non-RH challenged husbands. In addition, the result revealed that educational attainment, couple's spending time together, Income, Place of treatment and frequency of Intercourse are determinant factors of harmonious conjugal relationship in both scenarios where the husbands are having male reproductive challenged and where they are not.

Although this technique provides inter-connection between key selected variables and conjugal relationship, it does not provide the contribution of each category of each of the selected independent variables. It therefore prevents any statistical prediction of the socio-correlates of conjugal bliss. The information derived from this analysis do not satisfied most of the requirements in the objectives as well as the hypotheses, thus creating the necessity of adopting logistic regression in order to identify the specific contribution of each categories in any selected independent variable on conjugal relationship given the presence or absence of male reproductive health challenges.

CHAPTER SIX

MULTIVARIATE ANALYSIS

6.0 Introduction

The nature of this study demanded that research questions and hypotheses are employed. The involvement of hypotheses therefore necessitated the use of inferential multivariate statistical tests in order to allow precise predictions in the area of male reproductive health challenges and conjugal relationships among the subjects. However, these tests were conducted following the modeling patterns already stipulated in the methodology in chapter three.

Specifically, the multivariate analyses were meant to appraise the relationship between socio-demographic characteristics, couple's level of closeness, income status of husband and male reproductive health diseases. It also meant to assess the patterns of reproductive health behaviour as it relates to socio-demographic characteristics of the respondents given the presence or absence of husband's experience of reproductive health challenges. The idea is to show the effects of selected background variables on the relationship between husband and wife where the husband is experiencing reproductive health challenge and vice versa. The adopted multivariate technique therefore is logistic regression, as earlier indicated in the methodology. This is employed to assess the association between the background variables like age of respondents, place of residence, educational attainment, income status, etc and male reproductive health challenges on one hand and conjugal rapport or closeness between husband and wife on the other.

Model I

6.1 Logistic Regression estimating the interrelationships between some selected socio-demographic characteristics on odds of experiencing male reproductive health diseases

In this model (Model I), interrelationship between some selected socio demographic variables and male reproductive health challenges were computed to identify socio-demographic correlates of experiencing male reproductive health challenges. In terms of measurement, the dependent variable in model I (Male reproductive health challenges) was captured as a binary dichotomous variable represented by 1 and 2,

where 1 denotes the presence of male reproductive health challenges and 2 implies the absence. This makes the dependent variable satisfy a fundamental condition of logistic regression. The 'Yes' and 'No' were encoded in the system as 0 and 1 as indicated in table 21 indicating how the two outcomes of male reproductive health challenge have been classified. The classification results as inserted in table 21 shows the accuracy of the simple prediction of the male reproductive health challenge with respect to socio-demographic variables used. The overall percentage of up to 81.9% provided an overview that the outcome result is in accurate prediction for 81.9 percent of the cases (Nicola *et al*, 2003). The case processing summary also indicated that 100% of the 867 cases were processed.

In the same vein, the model summary gives useful statistics that are equivalent to R^2 (R-square) in multiple regressions and since it is not possible to compute an exact R^2 in logistic regression, the "Cox and Snell R Square" and "Nagelkerke R Square" provide alternate statistics (Table 21). The two indices indicate the variation in predicted variable that are explained by the predictors. In this regard, the "Cox and Snell R Square" of 0.38 implies that 38% of the variation are being explained by the independent variables while the "Nagelkerke R Square" shows that 53% of the variation could be explained by the predictors. This revelation provides confidence and gives credence to the fact that model I is not a spurious model for this analysis. Overall, the statistic supported that the model correctly predicts the outcome variable by 81.9% while also showing that 53% of the variations in the predicted variable are due to the influences of independent variables.

In Model I, the predictors are age of respondents, educational attainment, religious affiliation, mode of transportation, place of residence, toilet facility, employment status as well as occupational distribution. The coefficients for these predictors (i.e. the independent variables) show how the probability (the odds) of the dependent variable is increasing or decreasing with a unit change (increasing or decreasing) in the predictor variable. The Wald statistic indicates how useful each predictor variable is. The basic interpretation of Wald statistic is that any variable with lower "Sig value" less than 5% but with bigger "Wald value" is a very useful variable in predicting the value of the dependent variable. The converse holds for a lower Wald value. On the other hand, the Exp(B) column gives an indication of the change in the

predicted odds of the dependent variable for each unit change in the predictor variable. A value less than 1 indicates that an increase in the value of the predictor variable is associated with a decrease in the odds of the event.

Therefore, as revealed in table 21, age, religious affiliations, occupation, educational attainment are significantly related to male reproductive health challenges. The result shows that those husbands in ages 15-34 years and 35-54 years are 27.7 and 5.5 times more likely to experience male reproductive health diseases in the study area than those in age group 55-74 (i.e. the reference category). This finding implies that those in younger age group 15-34 are more likely to experience reproductive health disease than those in older age groups. It also conforms to the popular belief that most of the newly infected people with STIs are those in the younger age group especially the under-25s (Bledsoe & Cohen, 1993; Orubuloye *et al*, 2000; NPC, 2004; Burnett, 2006; Makinwa-Adebusoye & Tiemoko, 2007; Muchugu, 2007). This finding is considered to conform to apriori expectation that as the age increases, there is the possibility that many male respondents would not want to be involved in indiscriminate sexual intercourse. This may result in lower incidence of reproductive health disease or STI in general. The observation here conform to real life phenomenon because as individuals aspire to become fathers or grandfathers coupled with the fact that sexual urge could likely decrease with increase in age, the tendency to have multiple sexual partners reduces and likewise the possibility of contacting STIs.

Overall, age groups 15-34 years and 35-54 years are positively related to male reproductive health challenges indicating increase in the likelihood of experiencing male reproductive health challenges as age increases, however the proportion of the unit change in male reproductive health challenges are explained by the Exp(B) values of 27.733 and 5.467. In addition, the Wald statistics shows that the variable is a strong indicator of male reproductive health challenges and conjugal relationship.

While Christian and Islamic religion are positively related with the presence of male reproductive health challenges, the specific results indicated that Christians are 19.6 times more likely to have male reproductive health challenges than the traditional religion while Muslims are 8.6 times more likely to have the challenges compared to

the reference category (traditional religion). However, the Wald values show weaker points of 10.7 and 5.6 respectively. This means that religious affiliation is a weak variable in describing the odds (probability) of experiencing male reproductive health challenge. This observation could be true because several male reproductive health problems mentioned or identified in this study could occur naturally or through other means and not necessarily sexually transmitted. For examples, erectile dysfunction could be a biological dysfunctionality. Testicular cancer could be hereditary while andropause could be age related (Healthcarenet, 2005; Christian, 2006; Warwick, 2006; Andromeda Andropology Center, 2010). Thus, many of them transcend what religion practice can exert influence. The influence of religion practice could be more pungent upon sexually transmitted infections by addressing respondents' sexual comportment. Sexually transmitted infection could be prevented by the control of sexual comportment, however, biological and natural phenomena are not scientifically related with religious practice. The result however shows that Christians have statistical likelihood of having MRHC than those in traditional religion sect. The relationship is statistically significant at p-value = 0.001 and 0.018 respectively. This result suggests that religious affiliation might not be relied upon as a potent weapon to control MRHC nor STIs though it may seem unavoidable. However, the finding here supported other findings where Christians population are discovered to be more vulnerable to sexual transmitted diseases than Muslim population (Institute for Global Engagement, 2008; Federal Ministry of Health, 2005).

The specific results with occupational categories show that the senior manager like the CEO (i.e. Chief Executive Officers) or senior army officers will be 0.003 times less likely to experience male reproductive health challenge compared to the unemployed (the reference category). Also, the middle managers, clerical staff, artisans and unskilled labour will be 0.12, 0.006, 0.011 and 0.025 times (respectively) less likely to have reproductive health challenge than the unemployed. All categories of occupation show p-values of 0.000s. However, when considering the Wald figures, only the senior managers, clerical officers and the artisans are useful variables in predicting the odds of male reproductive health challenge among the occupation groups.

Model 1

Table 21: Logistic Regression estimates of the effects of socio-demographic characteristics on experience of male reproductive health challenges

Selected Variables	B	S.E.	Wald	df	Sig.	Exp(B)
Usual place of residence						
Urban Residence	RC					
Rural Residence	.095	.330	.083	1	.773	1.100
Age group						
55-74 years	RC		51.945	2	.000	
15-34 years	3.323	.461	51.908	1	.000	27.733
35-54 years	1.699	.392	18.799	1	.000	5.467
Religious affiliation						
Traditional	RC					
Christianity	2.974	.906	10.783	1	.001	19.567
Islam	2.153	.909	5.616	1	.018	8.611
Occupation						
Housewife/unemployed	RC					
Senior Executive Officer	-5.762	1.234	21.802	1	.000	.003
Middle/Manager/Officer	-4.392	1.230	12.752	1	.000	.012
Clerical Staff/Other Officer	-5.100	1.109	21.147	1	.000	.006
Artisan/Skilled labourer	-4.468	1.056	17.908	1	.000	.011
Unskilled/Shop Asst	-3.674	1.054	12.144	1	.000	.025
Education						
No Schooling	RC					
Up to Primary School	-1.561	0.423	13.650	1	.000	0.210
Up to secondary school	-2.274	0.351	42.061	1	.000	0.103
Up to University	-1.284	0.327	15.409	1	.000	0.277
Mode of Transportation						
Public alone	RC					
Official and Private	-.675	.668	1.024	1	.312	.509
Public and Private	.688	.482	2.039	1	.153	1.990
Body waste disposal						
Public Toilet	RC					
Water Closet	-2.043	.480	18.136	1	.000	.130
Pit Latrine/Bucket/Pan	-2.065	.489	17.874	1	.000	.127
Constant	4.652	1.130	16.956	1	.000	104.772
-2 Log likelihood = 344.911			Cox & Snell R Square = 0.380			
Nagelkerke R Square = 0.527			Overall Percentage = 81.9			

Source: Field survey 2010

RC = Reference Category

The same observation goes for educational attainment where all categories show negative association with the predicted variable. This implies that the higher the level of education, the less likely the incidence of male reproductive health diseases. All educational categories demonstrated a high level of significance given p-values of 0.000 (Table 21). However, the Wald values for secondary and university education are stronger than the primary school level indicating that educational attainment above primary level is very vital in reproductive health issues. While respondents with primary level are 0.210 less likely to experience MRHC, those with university education are 0.277 less likely to experience it (Table 21). The implication of this

finding is that since less incidence of MRHC is expected among the highly educated couples, it is assumed that where couples are highly educated, they likely to enjoy harmonious relationship and might keep their marriages longer than other couples with lower educational attainment. This assumption is in agreement with Dribe and Stanfors (2010) that confirmed that educated individuals have the tendency to keep their marriages than the less educated fellows. In addition, the general observation shows that the contributions of various categories of education to the incidence of male reproductive health disease are very marginal when comparing it with other selected variables e.g. age. However, the Wald values demonstrated that the variables are useful in predicting male reproductive challenge.

The condition of the body waste (excretory product) disposal was also considered in this segment. The data revealed that those that are using water closet are 0.130 less likely to experience male reproductive health disease compared to those that are using public toilet. The p-value is 0.000 while the Wald value shows a strong usefulness of 18.1 (Table 21).

Model II

6.2 Logistic Regression estimating the effects of male reproductive health challenges on conjugal relationship

Two specific models were used in estimating the interrelationship between conjugal relationship and male reproductive health challenges. In the first segment, conjugal relationship was evaluated by marital satisfaction between the couple and the independent variables consist of all male reproductive health challenges identified in the field. The logistic regression therefore estimated the effects of each of the identified male reproductive health challenges on the odds of enjoying marital happiness. This is illustrated in table 22. In the second segment, the background variables (predictors) are those socio-demographic factors peculiar to husbands and wives of targeted couples where the husbands have reproductive health challenges. This analysis is illustrated in Model III and presented as table 23.

Table 22 thus presents the computed interrelationship between some identifiable male reproductive health challenges and conjugal relationship. The dependent variable is represented by marriage satisfaction (satisfied and not satisfied) with the marriage.

This was also captured as a binary dichotomous variable represented by 1 (Yes) and 2 (No), where 1 denotes satisfaction with the relationship and 2 implies the opposite. This makes the dependent variable satisfy the fundamental condition of logistic regression. The Yes and No were re-coded as 1 and 0 in the computer. In this model, the classification summary shows the model accurately predicted the outcome up to 76.3 percent. However, the Cox and Snell and Nagelkerke R squares indicated the about 9 percent and 12 percent of the variations in predicted variable are explained by the predictors.

Table 22: Logistic regression estimating the effects of male reproductive health challenges on odds of enjoying marital happiness

Independent Variables	B	S.E.	Wald	Df	Sig.	Exp(B)
Never have Testicular Cancer	RC					
Experienced Testicular Cancer	0.364	0.579	0.395	1	0.530	1.439
Never have Prostate Cancer	RC					
Experienced Prostate Cancer	-0.107	1.353	0.006	1	0.937	0.898
Never have Andropause	RC					
Experienced Andropause	0.446	0.697	0.409	1	0.522	1.562
Never have Erectile dysfunction	RC					
Experienced Erectile dysfunction	-2.747	1.038	7.004	1	0.008	0.064
Never have Gonorrhea	RC					
Experienced Gonorrhea	-0.540	0.461	1.374	1	0.241	0.583
Never have Low Sperm count	RC					
Low Sperm count	1.106	0.577	3.676	1	0.053	3.023
Never have STIs, Ejaculation problem	RC					
Other STIs, Ejaculation problem	0.645	0.684	0.889	1	0.346	1.905
Constant	-1.138	0.140	65.885	1	0.000	0.321
Overall Percentage = 76.3%						
-2 Log likelihood = 385.82			RC = Reference category			
Cox & Snell R Square = 0.078			Nagelkerke R Square = 0.116			

Source: Field Survey 2010

Specific results show, among others, that prostate cancer, erectile dysfunction and gonorrhea are negatively related to marital satisfaction. However, only erectile dysfunction and low sperm count are significantly associated with conjugal happiness at p-values of 0.005 and 0.053 respectively (Table 22). Where the husband experiences erectile dysfunction, couple are 0.064 less likely to enjoy marital happiness. This revelation could be true because these problems (prostate cancer, low sperm count and gonorrhea) could be directly related to sexual activity and fertility (Warwick, 2006). Low sperm count could contribute directly to wife's inability to

conceive. Therefore, in a culture where infertility is decorated with stigma and viewed as a curse (Gavin & Jenny, 2002; Isiugo-Abanihe, 2003; Warwick, 2006), it is logical that the couple especially the wife would not be comfortable with the situation. The import of erectile dysfunction as revealed here has also been corroborated in the discussion section (EngenderHealth, 2003; Burnett, 2006). Sexual intercourse is considered as the cement that binds conjugal relationship together and that failure of the husband in this regards introduces strain, worries and frustrations into the marriage (Bayer Healthcare, 2008; Amidu, *et al*, 2011) and as explained in the theory of marriage. Sex strengthens conjugal relationships and makes couple attractive to each other. Thus, sexual dysfunction or problem in sexual health of the husband portends great danger to their relationships (Toppari *et al*, 1996; Bayer Healthcare, 2008). Sexual relation in conjugal union is regarded as crucial and represents the cement that binds husband and wife together for enduring and loving marital relationships. Reproductive health challenges from the men could therefore inhibit eventful romance life and could make some wives frustrated (Bayer Healthcare, 2008).

In the same vein, the result also shows that where the husband has prostate cancer and gonorrhoea, the couples are 0.898 and 0.583 times (respectively) less likely to enjoy marital satisfaction (Table 22). Although, prostate cancer is described as non-contagious disease, its presence however generally inhibits sexual activity (Purva, 2007) and thus it could be a serious impediment to marital satisfaction. This finding supports the claim that male reproductive health problem disturbs couple from enjoying satisfying and safe sex life (United Nations, 1994; United Nations, 1995; Stan, 1996; Lamb & Siegel, 2004; WHO, 2004; WHO, 2010; Siegel, 2012).

However, the result from andropause shows that it has a positive relationship with marital satisfaction. This could be true because andropause is age related and most often only peculiar to men who are in their 60s and above (Women's Health Connection, 2003). In that regard, the effect on conjugal relation would have been mediated (suppressed) by either fulfillment in child bearing or other aspects of life if the couple has enjoyed long years of marriage with children. At this level, the problem could be allowed to remain only within the family. Stigma is therefore minimized or completely absence because the problem is not revealed. This explains its positive association with conjugal satisfaction and its Exp(B) of 1.562 as indicated

in table 22. Similar result is obtained from testicular cancer and the variable is 1.439 times more likely to experience satisfaction in conjugal relationship. These results with andropause and testicular cancer are however not statistically significant.

According to the marriage theory, various expectations from marriage which includes include but not limited to conception or children and sexual relationships are motivators for marriage and incentives for enduring conjugal relationship (Becker, 1973; Warwick, 2006). A fall in any of these expectations could therefore jeopardize the relationship between husband and wife (Becker, 1973; Davidson & Castle, 1998; Laumann *et al*, 2005; Warwick, 2006; CDC, 2011). Husband's deficiency in reproductive health is thus considered crucial to conjugal relationship and satisfaction within that marriage. However, where the husband is not experiencing reproductive health problem the likelihood exist for the couple to keep their marriage and manage the ensuing conflict peacefully.

Model III

6.3 Logistic Regression showing interrelationship between couple closeness and socio-demographic variables among couples where the husbands have reproductive health challenges

In this model, data related to the targeted population where the husbands have reproductive health challenges were extracted from the main data by splitting the data set by male reproductive health challenge variable. This was then split by gender and comparison made on group basis. In addition, the responses from wives and husbands responses were analyzed separately. This provided opportunity to understand the variation between wives' and husbands' manageability of the diseases as well as their marital relationships. The classification output (as included in table 23) shows the accuracy of the prediction of couple's closeness in respect to the prevalence of husband's sexual health limitations. The overall percentage for the prediction of the outcome variable indicates 87.6 percent level of accuracy for the wives and 92 percent for the husbands (Table 23).

Table 23. Logistic Regression estimating the effects of socio-demographic variables on couple closeness in families with male reproductive health challenges (MRHC)

Variables in the Equation							
Socio-Demographics Characteristics	Conjugal Closeness among the wives with husbands that have MRHC			Socio-Demographics Characteristics	Conjugal Closeness among the husbands with RHC		
	B	Sig.	Exp(B)		B	Sig.	Exp(B)
Age Group	RC			Age group	RC		
19-34				19-34			
35-54	-5.181	0.007	0.006	35-54	0.113	0.931	1.12
55-74	33.155	0.998	2..506	55-74	0.440	0.756	1.552
Religious Affiliations	RC			Religious affiliations	RC		
Christianity				Christianity			
Islam	-7.735	0.003	0.000	Islam	3.761	0.024	42.982
Traditional	-1.214	0.416	0.297	Traditional	3.846	0.107	46.814
Q11Working(1)	3.367	0.168	28.977	Q11Working(1)	0.848	0.755	2.334
Educational Attainment	RC			Educational Attainment	RC		
No Schooling				No Schooling			
Up to Primary School	3.555	0.109	35.004	Up to Primary School	2.524	0.192	12.483
Up to 2ndary School	-5.566	0.010	0.004	Up to 2ndary School	-8.504	0.000	0.000
Up to University	-11.189	0.002	0.000	Up to University	-23.143	0.998	0.000
Income	RC			Income Group	RC		
Less than N10,000				N20,000 - N29,999			
N10,000 - N19,999	-1.153	0.548	0.316	N30,000 - N39,999	0.790	0.463	2.204
N20,000 - N29,999	-2.87	0.202	0.057	N40,000 - N49,999	1.506	0.258	4.509
N30,000 - N39,999	-2.358	0.26	0.095	N50,000 - N59,999	0.078	0.966	1.081
N40,000 - N49,999	-4.322	0.133	0.013	N60,000 - N69,999	1.781	0.347	5.938
N50,000 - N59,999	2.639	0.364	13.996	N70,000 & Above	-0.690	0.100	0.502
N60,000 - N69,999	8.103	0.764	33.058	No Income	1.806	0.448	6.083
N70,000 - N79,999	5.458	0.111	23.461	Q36joinAC(1)	-2.687	0.138	0.068
N80,000 - N89,999	-12.377	0.999	0.000				
No Income (Unemployed)	-13.367	1.000	0.000	Coping Strategies (by husbands)			
Joint Account	RC			Resign to Fate			
No joint Account				Inform Relations'	-2.302	0.144	0.100
Joint Account	6.746	0.004	850.969	Report to our Doctor	-0.62	0.68	0.538
Coping Strategies (Wives)	RC			Forget sex for awhile	-1.702	0.21	0.182
Resign to Fate				Cut/Stop allowance	-1.130	0.493	0.323
Relations/Neighbours	-0.256	0.909	0.774	No response	-0.540	0.738	0.583
Report to our Doctor	8.549	0.001	51.604	Complaint to pastors	0.393	0.836	1.482
Ignore him for sometimes	0.413	0.816	1.511	Not Applicable	-0.617	0.866	0.54
We fight seriously	-14.527	0.999	0.000				
Try other sexual partners	-0.42	0.833	0.657	Duration of Marriage			
Force him	1.505	0.324	4.504	Less than 1 yr			
Complaint to pastors, etc	-15.318	0.999	0.000	1-3 yrs	-4.643	0.092	0.010
No response	0.609	0.666	1.839	4-6 yrs	-6.222	0.024	0.002
Not Applicable (Men)	-17.207	0.100	0.000	7 - 9 yrs	-11.901	0.003	0.000
Never had children	RC			10 yrs & above	-26.481	0.999	0.000
Ever had Children	5.655	0.005	285.651				
Constant	-4.678	0.139	0.009	Constant	-4.219	0.194	0.015
Overall Percentage = 87.6				Overall Percentage = 92.0			
-2 Log likelihood = 101.984(a)				-2 Log likelihood = 66.177, Cox & Snell R Square =			
Cox & Snell R Square =0. 453, Nagelkerke R Square = 0.612				0.579, Nagelkerke R Square = 0.782			

Source: Field Survey 2010

The specific predictors used in Model III are socio-demographic characteristics of wives of husbands with reproductive health problems and that of their husbands. These include on one hand, age of the respondent, religious affiliation, educational attainment, income level of husband and the wife, coping strategies of the wives and on the other hand, management of the disease by the husbands and duration of the marriage. The coefficients for these predictors (i.e. the independent variables) show the direction of correlation between each of the independent variable and the dependent variable. The Wald statistic indicates the same usefulness of each predictor variable and is simply interpreted as such. Exp(B) column gives an indication of the change in the predicted odds of the dependent variable for each unit change in the predictor variable. Thus, it indicates that the probability (i.e. the odds) of the dependent variable increases or decreases with a unit change (increase or decrease) in the predictor variables. A value less than 1 indicates that an increase in the value of the predictor variable is associated with a decrease in the odds of the event.

The model summary for the wives shows that 45.3 percent and 61.2 percent level of variations in the predicted variable are explained by the independent variables (i.e. socio-demographic variables of wives where the husbands have reproductive health challenges and their wives). These are indicated by the “Cox and Snell R Square” (0.453) and “Nagelkerke R Square” (0.612) as presented in table 24. These statistics also provide confidence that model III is relevant in demonstrating the effect of husband’s reproductive health challenges on the level of husband and wife closeness given the presence of male reproductive health challenges.

In the model, the age of the wife, income of the wife, higher level of education are significantly associated with husband-wife closeness despite the husband’s reproductive health defects. While lower ages are negatively related, wives in age 55-74 would be 2.506 times more likely to be closed to their husband compared to the wives in the younger age groups. Those in age group 35-54 years would be less than one time experience closer relationship with husbands that have reproductive health challenges as indicated by Exp(B) of 0.006 (Table 23). Among the interesting aspect of the analysis is the influence of income factors in husband-wife closeness. The result of the analysis indicated that lower level of income are negatively related to

close relationship between husband and wife while higher level of income especially from ₦50,000 and above are positively related.

The above revelation could imply that most wives would stay with their husbands notwithstanding his sexual health condition if they earn higher level of income at least from ₦50,000 and above as revealed in this study. Also, as indicated in the table (table 24), lack of income is negatively related to having closer relationship with husband. The above could be true because of the position husbands occupy in the locations where the study was carried out and the position they occupy in sub-Saharan Africa in general. They are the major breadwinners, the decision takers as well as the 'financiers' in the family (Isiugo-Abanihe, 2003; Rodrigues, 2004).

This finding supports the apriori expectation that socio-economic status of husband is a fundamental correlate of husband-wife relationship. Keeley (1974) as well as Kreider and Renee (2011) confirmed the probability of separation and divorce to be negatively related to income (Keeley, 1974; Becker, 1973; Kreider & Renee, 2011). This therefore implies that income could enhance conjugal rapport, stimulates marital satisfaction and could enhancing enduring conjugal relationship notwithstanding the presence of the husbands' reproductive health dysfunctional.

Table 23 also indicated that wives with higher education might not likely have close relationship with husbands that have reproductive health challenges compared to illiterates. The result of the analysis shows that there is a negative significant association between wife's educational attainment (from secondary and above) and couple closeness. The analysis on various strategies employed by wives of husbands with reproductive health challenges shows that, violence (i.e. violent behaviour by the wife) as well as complaining to religious leaders have significant effect (at p-value of 0.000 and 0.000 respectively) in engendering close relationship in conjugal union with husband that have reproductive health challenges (Table 23).

Some of the results from the men's data are at variance with the experience from the wives. While all religious affiliations are negatively related to husband-wife's closeness where husband have reproductive health challenges, husband religious affiliations of husband in the same category are positively related to their closeness

with the wives. Husbands with reproductive health challenges who practice Islamic religion and their traditional religion counterparts would be 43 times and 47 times more likely to be closer to their wives compared to the Christians as indicated in table 23. This represents a unique finding and could be further subjected to further investigation. However, they are not statistically significant.

Husbands' educational attainment shows similar result with that of the wives. The husband's level of education varies negatively with 'close- husband-wife' relationship. This implies that the higher the level of education, at least above primary school, the less closer the relationship between the couple. All income groups of the husbands that have reproductive health challenges show positive relationship with husband-wife closeness (Table 23). This is similar to the results obtained from the women's angle though only at higher income level. Similar reasons could be adduced for this interrelationship. Income remains a common factor of measuring wealth in Nigeria and the world all over and it is linked to all spheres of life including marriage.

Although, the strategies each affect husband has been using were evaluated, the analysis did not yield any statistical significant result on any of the methods. Most strategies employed shows negative relationship with husband-wife closeness. It could therefore be inferred from this result that husband strategies to manage or cover up might not work in solidifying the union together in the presence of sexual defects. This also points to the gravity of sexual effectiveness of the husband in sustenance of marital relationship.

The model summary for the husband is 57.9 percent and 78.2 percent level of variations in the predicted variable are explained by the independent variables (i.e. the socio-demographic variables of husbands that have reproductive health challenges). This is indicated by the "Cox and Snell R square" (0.579) and "Nagelkerke R square" (0.6782) as indicated in table 23. This also provides confidence that socio-demographic characteristics of husbands that have reproductive health challenges are crucial variables to be considered when evaluating conjugal relationship involving husbands with reproductive health challenges.

Model IV

6.3 Logistic Regression estimating the effect of coping strategies on the odds of conjugal relationship where the husband is experiencing male reproductive health challenges

One of the fundamental objectives of this research is to identify the coping strategies of wives who have husbands that are experiencing or ever had reproductive health challenges. Attention were thus placed on the specific subjects while information from other category of women were not completely disregarded but captured separately as addendum to this piece. Notwithstanding, information was also specifically solicited through the group discussions (FGDs) organized among this category of respondents.

Generally, responses from the respondents tend towards certain directions, which were categorized into wives distancing themselves from the issue of husband's sexual problem, wife's self-consolation and control, the search for friendly support and / or clandestine search for family loyalty, confrontational attitude, escaping avoidance, search for alternative sexual partners and total separation.

Table 24 shows the contributions of various strategies already taken by affected wives in coping with husband's challenges in sexual activities. On one hand, the result of the analysis revealed that virtually all steps employed by the wives are negatively associated with conjugal closeness except "reporting to the doctor or pastors". This simply means that the degree to which wives report husband's sexual deficiency to the family doctors increases the chance of being closer to her spouse. This could be true because the family doctor is mostly adjudged a confidant in family matters especially when it is concerns with fertility/infertility, sexual issues, sicknesses and diseases (Hahn *et al*, 1988; Yahi, 2004). Also, the family spiritual head(s) are always held sacrosanct as divine ordained head(s) for the family and no member of the family hesitates to inform, call or discuss top secret, sensitive family and personal matters with them (Hahn *et al*, 1988; Yahi, 2004). Thus, steps taken to report the incidence to the spiritual heads might solidify the marriage more because of the intervention of the clergy or doctor whose counsel the couple strictly hold fast. The Exp(B) of 16.742 shows that reporting to family doctor will 16.742 times more likely increase couple closeness as indicated in table 24. It also shows that the variable (report to doctor/pastor) is significantly positively related to couple closeness at p-value = 0.000

while the Wald value is 13.560 indicating that this variable is a useful predictor of couple closeness.

In the reality and according to the theory of way of coping adopted, husband's reproductive health problems constitute a tension enhancer within the marriage (Zeidner & Endler, 1996; Snyder, 1999; Weiten & Lloyd, 2008). However, the presence of alternative way(s) of coping renders this threat to be less challenging in a way that it may not disrupt the couple's close relationship (Folkman & Lazarus, 1990). Divulgence of this information to spiritual heads or doctors therefore represents a coping strategy due to the confidence and trust that the couple repose on them. Thus, the relationship might not be severed and perhaps might increase the existing cordial relationship by the counseling interventions from these confidants. This procedure of soliciting for doctor's and spiritual head's intervention could be regarded as problem-focused-coping strategy and it is by this revelation seem to be effective.

Further analysis also indicated that those who invite relations, neighbour or seek social support are 0.384 less likely to have closer relationship compared to those that employ self-blame or self-pity on the circumstances. This variable shows a negative relationship ($\beta = -0.957$) but no significant association with couple closeness at p -value = 0.112. Those that resigned to fate will be 0.942 less likely to have closer relationship with their spouses compared to individuals that engage in self-pity or blame (the reference category).

Efforts were also made to assess the frequency of employing such strategy and what impact it has on conjugal closeness. It is apparent that since the effect of male sexual diseases might not be permanent, it is expedient to evaluate what the affected spouse do to safeguard the closeness during the period the husband was experiencing the challenge. Thus, few of the strategies identified were rated on a four likert-scale of: (1) very often, (2) often, (3) not often and (4) not at all.

Those that employ "distancing strategy" more often are 0.266 less likely to have closer conjugal relationship while wives that employ this strategy 'often and less often' are 42.1 and 4.753 times more likely to enjoy conjugal closeness compared to

those that don't use the tactics (Table 24). The above finding could be true because persistent avoidance of husband (or each other) might be tending towards separation hence the predicted reduction in closeness with those that employ the tactic more often. It is indicated that the usage of this procedure more often is not significant and the Wald figure is very low (2.065).

Table 24: Logistic Regression estimating the effects of coping strategies on the odds of conjugal relationship where the husband is experiencing male reproductive health challenges

Coping strategies variables selected	B	S.E.	Wald	df	Sig.	Exp(B)
Coping Indices used						
Self blame	RC					
Resigned to fate / Self-controlling	-.060	.545	.012	1	.913	.942
Invite Relations/Seek support	-.957	.602	2.527	1	.112	.384
Complain to Doctor/ Pastor, etc	2.818	.765	13.560	1	.000	16.742
Distancing / Ignore him for sometimes/Detachment	-.765	.708	1.166	1	.280	.465
Fight seriously / Confrontational	-19.520	11401.335	.000	1	.999	.000
Try other sexual partners	-.154	.719	.046	1	.830	.857
Try to forget the whole thing/Wishful thinking/Daydream/expect miracle	1.075	.727	2.189	1	.139	2.930
Keep it to myself/Distancing						
Not at all	RC					
Very Often	-1.323	.921	2.065	1	.151	.266
Often	3.739	.900	17.255	1	.000	42.069
Not often	1.559	.812	3.683	1	.055	4.753
Argue/criticize/ Confrontational						
Not at all	RC					
Very Often	.316	1.624	.038	1	.846	1.371
Often	-.685	.678	1.021	1	.312	.504
Not often	2.110	.686	9.476	1	.002	8.251
Shout (Confrontational)						
Not at all	RC					
Very Often	.180	1.640	.012	1	.912	1.198
Often	-2.875	.901	10.188	1	.001	.056
Not often	-1.581	.608	6.752	1	.009	.206
Planning separation -Not at all						
Not at all	RC					
Very Often	-.519	1.244	.174	1	.677	.595
Often	-13.929	15191.515	.000	1	.999	.000
Not often	1.676	.684	5.998	1	.014	5.344
Marital life style						
Spouse Infidelity	-3.868	.885	19.101	1	.000	.021
Constant	-5.774	1.856	9.683	1	.002	.003
-2 Log likelihood = 336.492			Overall Percentage = 80.3			
Cox & Snell R Square = 0.325			Nagelkerke R Square = 0.456			

Source: Field Survey 2010

Those that use “confrontative approach” such as the wife refusing to yield ground, remaining adamant, expressing anger over husband sexual deficiency very often are 1.371 more likely to secure husband’s closeness than those that assume self-pity (the reference category). However, among those that have planned separation, especially those that threaten to leave more often are 0.595 less likely to secure husband’s closeness while those that do so less often are 5.344 more likely to secure husband’s closeness (Table 24). The procedure shows a positive relationship with couple closeness though with relatively low Wald value (5.998). This finding may be true because if the wife’s attempt to separate or abscond from her matrimonial home is discovered by the husband, it will not only aggravate the already tensed environment created by husband’s reproductive deficiency but enhances speedy separation or divorce. It is also indicated that infidelity of the wife enhances a lower rate of couple closeness at $\text{Exp}(B) = 0.021$. The Beta value of -3.868 connotes a negative relationship between this variable and couple’s closeness. The importance of this variable is reflected in the Wald value of 19.101 indicating it is a useful predictor in analyzing couple’s relationship.

Overall, the model is useful in analyzing the issue of husband-wife closeness while the husband is experiencing sexual challenges. The classification result indicated in table 24 shows the accuracy of the model in predicting the influence of coping strategies employed by the wives and the level of couple closeness. The model shows an accuracy level of 80.3 percent in the prediction of the outcome variable (i.e. couple closeness). The model summary shows 33 % and 46 percent level of variations in the predicted variable (i.e. couple closeness) that are explained by the independent variables (coping indices) as given by Cox and Snell R square (0.325) and Nagelkerke R square (0.456) (see table 24). This also provides confidence that the model is relevant in demonstrating the effect of coping strategies on level of couple closeness. Finally, the statistic supported that the model correctly predicts the outcome variable by 80.3 percent (Table 24).

Model V

6.4 Logistic Regression estimating the effects of selected socio-demographic variables on the odds of change in sexual patterns of wives where husband has MRHC

This section features the interrelationships between patterns of sexual behaviour of wives whose husbands have reproductive health challenges and their socio-demographic characteristics. This is modeled to reveal the odds of change in sexual patterns with respect to change in certain socio-demographic characteristics. This is necessary in order to provide insight to what category of women that changed their sexual pattern when they found themselves to be living with sexually deficient husbands. Specifically, the estimate considered relationships between sexual behavioural patterns of wives whose husbands have reproductive health challenges in relation to their socio demographic characteristics. The idea again is to illustrate the degree of influence of characteristics such as education, age, income, religious affiliation, etc on the strategy that the wives have employed in the presence of husband's sexual deficiency.

The result as indicated in table 25 shows that wives in rural area are 0.847 less likely to change their sexual patterns irrespective of sexual health challenges experience by their husbands compared to those that reside in the urban areas. Change in sexual patterns is negatively associated with rural place of residence as indicated by the regression coefficient of -0.166 (Table 25). The Wald value for this variable is abysmally low 0.302. Besides, it is also not significant as indicated by p-value of 0.579 as shown in table 25. Lower age groups are positively related to change in sexual pattern. The result indicates that those who are less than 35 years and age group 35-54 years are 5.934 and 7.128 times more likely to change to change their sexual patterns compared to the wives who are 55 years and above. It simply means that the higher the age of wife the less likely she will change her sexual pattern irrespective of the condition of here husband's reproductive health. Lower age categories (less than 35 years and 35-54 years) recorded Beta values of 1.781 and 1.964 respectively. The two age groups are statistically significant in this analysis at p-values of 0.0230 and 0.0190 respectively as indicated in table 25. The Wald values of 5.1650 and 5.527 for the two age categories are also relatively high pointing to the

usefulness of the variable of age in predicting whether the wife will change or not change here sexual behaviour in the case her husband's experience reproductive health challenge.

In evaluating the influence of religious practice on the odd of changing sexual pattern, Christianity shows a negative correlation with change in sexual pattern while Islam indicates a positive correlation with change in sexual pattern (Table 25). This result implies that wives that practice Christian faith might not change their sexual pattern if their husbands have reproductive health challenge while their Moslem counterparts would do. Specifically, the result indicated that the wives that practice Christian faith will be 0.654 times less likely to change their sexual pattern compared to the traditionalist while the Moslems will be 1.616 times more likely change sexual patterns. The result also indicated working is negatively correlated with change in sexual patterns ($\beta = -0.516$) as indicated in table 25. This is to imply that working class wives would be negatively disposed to change in sexual pattern as a result of husband's reproductive health challenge.

Also, the result of the analysis shows that education is crucial in the analysis of change in sexual behaviour or pattern. As indicated in table 25, there is negative correlation between primary and secondary education and change in sexual pattern. Respondents with no education will be 7.747 times more likely to change sexual pattern compared to those with higher level of education (i.e. the reference category). No education is statistical significant at p-value of 0.007. Respondents with primary and secondary education are 0.772 and 0.463 times less likely to change their sexual pattern because of husbands' reproductive health challenges vis-à-vis their counterparts with higher educational statuses.

However, it is surprising that all higher categories of income demonstrated positive relationships with the change in sexual behaviour. The output shows that the higher the income, the higher the probability of changing sexual patterns as indicated in table 25. While respondents earning income levels below ₦20,000 per month are 0.630 times less likely to change their sexual behaviour, those that are earning ₦20,000- ₦39,999 and ₦40,000- ₦69,999 are 1.306 and 1.723 times more likely to change their sexual behaviour compared to those how earn no income. This revelation

suggests that higher income can influence a change in sexual pattern and lower income might reduce the likelihood of changing sexual partners. However, the result is not statistically significant as a key factor that could determine a change in sexual behaviour. All the p-values of income levels are greater than 5 percent (Table 25).

Effect of communication on sexual matters among the couple seems pungent in the estimation of odds of change in sexual pattern. Those that are rarely discussed sexual matters are positively correlated to change in sexual pattern and they are 3.450 times more likely to change their sexual patterns compared to where they discuss sexual matter very often (the reference category). The result also shows in a marital relationship where the couple don't discuss sexual matters, the wives will be 3.159 times more likely to change their sexual pattern in the case the husbands are having sexual challenges compared to marital relationship where discussion on sexual matter is not restricted.

The presence of at least a child is also a crucial factor to be considered in the analysis of change in wife's sexual pattern where the husband is experiencing reproductive health challenge. In a marital relationship where the couple never had a child there is likelihood that the wife will change her sexual pattern if the husband has reproductive health challenge compared to marital relationship where children are already involved. There is a positive correlation between never had a child and change in sexual pattern ($\beta=1.150$). Wives who have not had are 3.159 times more likely to change their sexual pattern compared with wives who have had at least a child in the marital relationship. The above revelation confirmed the marriage theory where it is indicated that children are parts of the expected gains in marriage and that inability of the couple to realize this objective becomes a disappointment that could disintegrate the marriage or the family. The Wald value is relatively high (7.134) and the variable is statistically significant at p-value of 0.000.

It is also very important to indicate here that the result of the analysis also show that those who are not staying with their spouses are 1.576 times more likely to change their sexual behaviour than those who stay with their spouses. In reality, the absence of the husband or the fact that the wife stays alone has already provided opportunity for freedom for changing, seeking or embracing other sexual partner(s) where both or

one of the spouse is not sexually disciplined.

Overall, the model is considered useful model in analyzing the issue of changing sexual behaviour and socio-demographic conditions. The classification value as indicated in table 25 shows the accuracy of Model V in predicting the influence of socio-demographic variables (e.g. age, religion, education, occupation and income) on the change in sexual behaviour where the husband has reproductive health challenges. The model shows an accuracy level of 76 percent. This is to say that the model correctly predicts the outcome variable by 76 percent as shown in table 25. The model also shows that 17.8 and 26.8 percent level of variations in the predicted variable (i.e. whether the wife has made any change in her sexual behaviour because of husband's sexual diseases) are explained by the selected socio-demographic variables. These are indicated by Cox and Snell R square (0.178) and Nagelkerke R square (0.268) (see table 25). This gives credence to the relevance of logistic regression technique as a relevant analytical tool for sensitive issues like conjugal relationship and male reproductive health challenges.

The effect of living arrangement of the couple and sexual behaviour of the wives is also tested among other variables in this model. The result indicated a negative association between staying together of couple and change in the sexual behaviour of the wife. The result of the analysis also shows that those who are living together with their spouses are 0.271 times less likely to change their sexual behaviour than the couple who living separately. In reality, the absence of the husband or the fact that the wife stays alone has already provided opportunity for freedom for changing, seeking or embracing other sexual partner(s) where both or one of the spouse is not sexually disciplined. Thus, the import of living arrangement as indicator in wives sexual behaviour is crucial as demonstrated by this model. The variable is statistically significant at p-value of 0.000.

Table 25. Logistic Regression estimating the effects of selected socio-demographic variables on the odds of change in sexual patterns of wives where husband has MRHC

Selected Variables	B	S.E.	Wald	df	Sig.	Exp(B)
Usual Place of Residence						
Urban Area	RC					
Rural Area	-.166	.298	.308	1	.579	.847
Age Group						
55 years and above	RC					
Less than 35 years	1.781	.784	5.165	1	.023	5.934
35-55 years	1.964	.835	5.527	1	.019	7.128
Religious affiliation						
Traditional	RC					
Christian	-.424	.588	.520	1	.471	.654
Islam	.480	.568	.713	1	.399	1.616
Employment Status						
Not working	RC					
Working	-.516	.670	.593	1	.441	.597
Occupation						
Unemployed	RC					
Senior Officer	-1.547	.451	11.750	1	.001	.050
Middle Officer	-.878	.434	4.100	1	.043	.216
Clerical Staff/Other Officer	-1.239	.398	9.689	1	.002	.367
Artisan/Skilled labourer	1.041	.393	7.024	1	.008	2.833
Unskilled/Shop Asst	1.049	1.238	.718	1	.397	2.854
Educational Attainment						
Tertiary Education	RC					
No Education	2.047	.757	7.321	1	.007	7.747
Primary Education	-.258	.648	.159	1	.690	.772
Secondary Education	-.770	.500	2.375	1	.123	.463
Marital Relationship						
No close relationship	RC					
Close Relationship	.141	.384	.136	1	.713	1.152
Income group						
₦ 70,000 & above	RC					
Less than ₦20,000	-.463	.508	.831	1	.362	.630
₦20,000 – ₦39,999	.267	.608	.193	1	.661	1.306
₦40,000 – ₦69,999	.544	.732	.553	1	.457	1.723
Discuss sexual matters						
Very often	RC					
Rarely discuss sex	1.238	.546	5.152	1	.023	3.450
Never discussed sex	1.150	.431	7.134	1	.008	3.159
Fertility						
Never had a child	RC					
Have at least a child	1.814	.444	16.688	1	.000	6.135
Living Arrangement						
Not staying together	RC					
Staying together	-1.305	.305	18.311	1	.000	.271
Constant	-4.415	2.400	3.385	1	.066	.012
-2 Log likelihood = 333.981 Cox & Snell R Square = 0.178 Nagelkerke R Square = 0.268						
Overall Percentage = 76.0						

Source: Field survey 2010

CHAPTER SEVEN

SUMMARY, CONCLUSION AND RECOMMENDATIONS

7.1 Overview of the research procedure

The study considered male reproductive health challenges and conjugal relationship among the Yoruba in Lagos and Osun States of South West geopolitical zone of Nigeria. It was an exploratory study designed to generate knowledge about the effects of dynamics of male reproductive health challenges on social (family) development in the area of husband and wife relationship within the context of conjugal union in Nigeria. The research methods followed both quantitative and qualitative techniques in the data gathering as initially planned. Although, equal number of husbands and wives were planned to be interviewed in the quantitative segment, however, three questionnaires from the male respondents were not completed and as such, they could not be processed. Thus, the available data consist of 432 husbands and 435 wives. Out of 432 husbands interviewed, 145 (33.6 percent) are currently experiencing reproductive health challenges while 287 (66.4 percent) have no reproductive health challenge. The husbands and wives proportion is 49.8 and 50.2 percent respectively. Overall, a total number of 867 questionnaires were successfully completed and processed.

Six focus group discussions were held in the two locations of study among the three age groups of (15-34), (35-54) and (55-74) years. This complemented the 30 ethnographic in-depth interviews conducted that feature extensive conversations among the respondents on various issues on sexuality and reproductive health challenges within the marriage and coping strategies. The information elicited was used to benchmark the results from the survey exercise. The study specifically targeted husbands with reproductive health challenges among the Yoruba in the South West zone of the six geopolitical zones in Nigeria as well their spouses. Random selection among the generality of men was not as much rewarding taking into cognizance that all men are not homogeneous and that the issue at hand does not follow any known sampling distribution. Thus, a systematic random approach in accessing the victims (respondents) was jettisoned and a “three-level sampling methodological approach” was adopted. Respondents were couples who have resided

in the locations of study for over six years. They were selected through “key-informant-leading approach” from randomly selected four wards in Kosofe Local Governments of Lagos State and four wards in Odo-Otin local government areas (LGA) of Osun State. The two states are prominent states within the South-West geopolitical zone of Nigeria (the main location of study). The two states are characterized by common ethnicity that is reflective of the monolithic ethnic nature of the entire zone. The zone is the predominant home of the Yoruba ethnic group. The states also possess homogenous cultural affiliates and the economic and social structures that are typical of the whole region (Ojo & Ighado, 2008; Adeyemo, 1984; Adeyemi, *et al*, 2009). The questionnaires were designed to adequately cover all the necessary segments of the study and were mostly pre-coded.

Although a sample size of 920 was proposed as calculated through a statistical guide from Yamane Taro’s sampling size determination approach (Yamane Taro, 1967; Israel 1992 and 2009), only 867 questionnaires were good for analysis. This is apparently due to the sensitive nature of the topic coupled with financial constraint.

A combination of three statistical techniques was employed and they included univariate, bivariate and multivariate analyses using Statistical Package for Social Sciences (SPSS). The univariate segment featured descriptive statistics such as frequencies detailing the socio-demographic characteristics of the respondents. This also includes all other important variables that were analyzed and presented separately by usual place of residence, gender and according to whether the husband has reproductive health challenges or not, etc. In situations where variables are measured in interval scale, various statistics measures including advanced statistical tests were performed. In the nominal and ordinal scales, frequency distributions and cross tabulations were employed to present the result of the analysis. Generally, descriptive statistic of mean was also employed to describe some of the variables as a generalization to the population.

In the bivariate analysis, series of cross-tabulations were performed in order to identify the patterns of relationships between selected background variables and intimate conjugal relationship indices. In some instances, Pearson product moment correlation coefficient (r) was incorporated to ascertain such relationships and the

direction of association between the variables of interest. In all the analyses, the “Cox and Snell R square” and “Nagelkerke R square” values were considered thoroughly in various attempts to evaluate the strength of the relationships observed between the variables of interest. Where the variables were found to be significantly related, the observed probability (p-value) is displayed in the tables.

The procedure for analyzing report from the focus group differs. Content analysis was considered as the best option to analysis information gathered through focus group discussion (Ritchie & Lewis, 2004). Relevant information gathered on the wives’ coping strategies from the quantitative segment were complemented with those elicited from a long exploratory conversation with wives especially where husbands are sexually deficient or suffer reproductive health diseases. Logistic regression analysis (LRA) was employed to test all the hypotheses and the results were discussed thereafter.

7.2 Summary of study findings

This segment represents a fact sheet update on key findings in interrelationships between male reproductive health challenges and conjugal relationship among the Yoruba in the South West geo-political zone of Nigeria. The findings are in no doubt reflecting the current perspectives on the issues that are vital for decision-taking, policy formulation and relevant among social workers and marriage counselors. These findings are derivatives of issues raised in the preceding chapters and observations within the scope of this study.

In estimating the interrelationship between some identifiable male reproductive health challenges and conjugal relationship, the result shows that prostate cancer, erectile dysfunction and gonorrhoea are negatively related to marital satisfaction. It specifically indicated that erectile dysfunction and low sperm count are significantly associated with conjugal happiness at p-values of 0.005 and 0.053 respectively. It also revealed on one hand, that where the husband experiences erectile dysfunction, couple are 0.064 less likely to enjoy marital happiness and on the other hand, in a conjugal relationship, where the husband has prostate cancer and gonorrhoea, the couples are 0.898 and 0.583 times (respectively) less likely to enjoy marital satisfaction.

However, andropause and testicular cancer have positive relationships with marital satisfaction with 1.562 and 1.439 odds of enjoying conjugal happiness compared to reference category where such is absent.

Among other profound findings of the study is that age and educational attainment are negatively significantly related to male reproductive health challenges. It indicates that husbands in older ages are less likely prone to reproductive health challenges compared to those in younger age groups. This is considered to support the literature that most of the newly infected people with STIs are those in the younger age group especially the under-25s (Caroline *et al*, 1993; Orubuloye *et al*, 2000; NPC, 2004; Burnett, 2006; Makinwa-Adebusoye & Tiemoko, 2007; Muchugu, 2007). The religious influence on male reproductive health challenges cannot be overemphasized. The findings show that more Christians are likely to experience the disease than male in other religious affiliations. This finding is also closely related to the assertion from the Institute for Global Engagement in 2008 that HIV rates among Christian population have remained significantly higher over the years than among the Muslim population (Institute for Global Engagement, 2008). In that study, the prevalence rate among the Christians is indicated to be 6% while the prevalence rate among the Muslims ranges from 2% to 4% (Institute for Global Engagement, 2008). It has also been documented that the highest prevalence rates of HIV/AIDS are found in Christian areas more than the Muslims dominated communities. This research observed that male Christians are 19.6 times more likely to have reproductive health challenges than their counterparts are in traditional religion group while Muslims are 8.6 times more likely to have the challenges compared to the reference category (traditional religion). The above finding is statistically significant at p-values of 0.001 and 0.018 respectively. Evidence from other studies confirmed that sexual transmitted infections are not uncommon in the locations of study. For example, the HIV prevalence rate in the geo-political zone studied is 2.6% out of which the states selected occupies the first and fourth positions with average rate of 3.6 percent and 2.0 percent respectively (FMOH, 2005).

All categories of educational attainment demonstrated negative associations with the predicted variable (i.e. incidence of reproductive health challenges) among the male respondents. This suggests that as respondent's educational level increases, the less

likely it is for the respondents to have reproductive health challenge. This is statistically significant at p-values of 0.000 but with marginal contribution to absence or presence of MRHC as indicated in table 21. Therefore, since less incidence of MRHC is expected among the highly educated couples, it would not be statistically incorrect to expect better cordial relationship among couple with higher educational levels as demonstrated in the study.

It is interesting to know also that the presence of husband's experience of reproductive health challenges is statistically associated with the spouse's absence from home. This is believed to be true because the presence of husband around the wife especially at home can increase the wife happiness at home and could possibly contribute to marital harmony and stability (Katherine, 2010). The study revealed crucial impact of 'couple dyad communication' in predicting conjugal relationship among the ethnic studied. Where the husband is without reproductive health diseases, couples are more likely to have higher rate of discussing household and sexual matters compared to those couples with reproductive health challenged husbands. Marital satisfaction is synonymous with absence of reproductive health challenges within the family. Those that claimed they were happy about their marriages do not have husbands experiencing any of the identified diseases.

Another important finding of the study is the relationship between coping strategies employed by the wives of men with reproductive health challenges and the level of their relationship. The coping strategies identified range from distancing one's self from husband's sexual problem, self-consolation and self-control, searching for friendly/family support and loyalty, confiding in family doctors, confrontational attitude, escaping avoidance, engaging other sexual partners, to total separation. The significant variable in this regard, includes 'confiding in family doctors and spiritual heads'. The degree to which wives report husband's sexual deficiency to the family doctors or spiritual heads increases closer relationship between the couple. Family doctors and spiritual heads are discreet and are most often "feared as divined agents" that manage people affairs especially on issues relating to husband and wife relationship. Those wives that resigned to fate are likely to be more distant to their husbands and might planning divorce or separation. Self-pity as well as looking for other family member support creates a distant between husband and wife.

In the evaluation of the relationship between patterns of sexual behaviour of wives whose husbands have reproductive health challenges and their socio-demographic characteristics, usual place of residence and age are important determinants that could influence a change in sexual behaviour of the wife if the husband has reproductive health problems. The result in table 26 shows that wives in rural areas are 0.984 less likely to change their sexual patterns irrespective of sexual health challenges experience by their husbands compared to the wives in the urban areas. Categorically stated, a change in sexual pattern is negatively associated with rural place of residence as indicated by Beta coefficient (β) of -0.016 in table 26. The Wald value for this variable is however abysmally low (0.002) and it is also not significant as indicated by p-value of 0.966 (Table 25). All higher age categories show negative association between the change in sexual behaviour of the wife and husband's experience of reproductive health disease. The result indicates that those who are in 35-54 and 55-74 years of age are 0.056 and 0.024 less likely to change their sexual behaviour compared to the reference category. It simply means that the higher the age of the wife, the less likely she will change her sexual pattern even if her husband has reproductive health disease. Age group 35-54 and 55-74 years are statistically significance in this analysis at p-value of 0.001 and 0.000 respectively. The Wald values (11.587 and 18.409) are also relatively high pointing to good usefulness of the variable of age in predicting the whether the wife will make a change or not in her sexual pattern should the husband is sexually deficient.

Although, several occupational classifications show negative relationships with wives changing their sexual patterns, they are however not statistically significant. Those wives in higher occupational statuses such as CEO, Senior Manager or Senior Military Officer are 0.050, 0.0216 and 0.367 (respectively) less likely to change their sexual behaviour compared to the unemployed which is the reference category. The result also indicated that the artisan, shop assistant, skilled and unskilled labourers are more likely to change their sexual patterns compared to the unemployed. This revelation is very vital since most of the women in these categories are relatively non-career women characterized by lower occupational and educational standards. These culminate in lower economic status and could make them vulnerable to multiple sexual partnerships. Besides, their lower economic status could also make them lack

necessary empowerment and knowledge to manage the issue confronting their husbands.

However, education is found to be negatively associated with wife's changing her sexual behaviour. Those wives who have attained up to primary, secondary and university education are about 0.002, 0.107 and 0.578 (respectively) less likely to change their sexual pattern when compared with their illiterate counterparts. Out of all the educational categories used, only primary education and secondary school education are significantly negatively related to wife changing her sexual behaviour. The Wald values (17.960 and 6.199) also indicated that the education is valuable in predicting the outcome variable. The implications of the finding are that while education is not a major determinant of sexual behavioural change, it constitutes a vital factor to be considered especially among those with primary education and the proportion that have never attended school. It sends a signal that the index of education can be used for controlling sexual behavioural change among the married couples.

It is very important to indicate also that the result of the analysis also show that those who are not staying with their spouses are 1.576 times more likely to change their sexual behaviour compared to those who stay with their spouses. In reality, the absence of the husband or the fact that the wife stays alone has already provided opportunity for freedom for a change in sexual behaviour. It could be regarded as a license for seeking or embracing other sexual partner(s) where both or one of the spouses is not sexually disciplined. However, it is surprising that all categories of income demonstrated positive relationships with the change in sexual behaviour. The output shows that the higher the income, the higher the probability of changing sexual behaviour as indicated in table 26. However, While respondents in income levels that is less than ₦50,000 per month are between 1.920 times and 7.094 times more likely to change their sexual behaviour compared to unemployed, those in higher income group above ₦50,000 are over 10.178 times more likely to change their sexual pattern than wives without income or the unemployed. This revelation suggests that higher income can influence a change in sexual pattern and lower income might reduce the likelihood of changing sexual partners. It is also observed that the income is not a significant factor in determination of change in sexual behaviour.

In addition, the model used in predicting the relationship between changing sexual behaviour and socio-demographic conditions where the husband has reproductive health challenge is a good tool as indicated in the classification result as shown in table 26. The model shows an accuracy level of 80.3 percent. This is to say that the model correctly predicts the outcome variable by 85 percent as already shown in table 26. The model summary also shows 33 percent and 49 percent level of variations in the predicted variable (i.e. whether the wife has made any change in her sexual behaviour because of husband's sexual diseases). These are indicated by Cox and Snell R square (0.328) and Nagelkerke R square (0.494) (see table 25). This gives credence to the confidence repose on logistic as relevant analysis for sensitive issues like conjugal relationship and male reproductive health challenges.

A distinct statistical analytical technique was used in confirming the interrelationships between sexual behavioural changes and socio-demographic characters of the respondents. This is also necessary because the dependent variables here (changes in sexual behaviour) is not a dichotomous variable as indicated in the questionnaire (see Appendix II). Out of all these factors used, religious affiliation, husband average income, rate of discussing sexual issue with spouses and number of children ever born (i.e. CEB) were discovered to be negatively associated with change in sexual behaviour at p-values of -0.007, -0.002, -0.036 and -0.045 respectively.. The data also confirmed that the higher the income the higher the probability of wife changing sexual behaviour. It also indicated that the more couple discusses sexual issues between themselves the less likely the wife changes her sexual pattern. Among other things, those who have ever had children are less likely to change sexual behaviour. It also implies that religious involvement might reduce the tendency to change sexual behaviour. The above could be true because no religion teaches separation of marriage irrespectively of the circumstances.

7.3 Conclusion

The study provided current, timely and credible data capable of filling the dearth of information on interconnections between male-reproductive-health-challenges and marital relationships. The findings specifically revealed that lower education is a positive enhancer of marital harmony vis-à-vis higher education. Those couples with

primary education and below are more likely to remain in marriage irrespective of husband's sexual deficient conditions than those with higher level of education. This point is also buttressed by higher occupational status which is at variance with intimate marital relationship. While illiteracy is not to be encouraged, "harmonious marital relationship enlightenment" is highly required among the educated couples. All stakeholders could endeavour to work on enlightenment campaign that focuses on adoption of temporary or permanent non-sexual relationships among the couples if their circumstances demand such. Divorce, separation and other conflicts should not be seen as the ultimate solutions.

Male reproductive health challenges are many and the nature and effects varied. More than half of the respondents were ignorant of the diseases they carried until its physical manifestation through either infertility or sexual dysfunctions. Many of sexual concerns, disorders and dysfunctions are rooted in a lack of information about sexuality. Watchful eyes should be tentatively placed on provision of information on 'sexual functioning of the reproductive system' which could be included as an integral component of the comprehensive sexuality education and made available to all people especially in the study location.

It is revealed that income status of the husband is very important in managing crisis at home front. Equitable employment for all men who have reproductive health challenges could intermediate the intensity of marital disharmony. Among the interesting aspect of the analysis is the influence of income factors in husband-wife closeness. Since the study has revealed that lower level of income is negatively related to close relationship between husband and wife, occupation should not be treated as fringe socio-economic matter. This is also true because of the dominant position of husbands in this part of the world.

The study observed variations in husband and wife management of male reproductive health challenges. Most of the problem-focused-approach adopted by the wives or the husbands is negatively related to their close relationship. Efforts of the couple to invite neighbours, relations or inform their spiritual leaders are negatively related to close relationship. Although, one of the aims of this study is to remove the traditional silence over male reproductive health challenges, the research evidence support

‘extra-ordinary caution’ in disclosing information on husband reproductive health problems to ‘outsiders’. While husband’s complaint to spiritual heads could douse the tension at home and increase harmonious relationship between the couple, any step by the wife to do so results into negative relationship between the duo.

7.4 Recommendations for policy

In the light of the observations in this study and conclusions, the study recommends tolerance and understanding especially among the educated wives in order to enhance sustenance of husband-wife closeness where the husband is having reproductive health challenges. Massive public awareness on male reproductive health diseases should therefore occupy the attention of the governments and other stakeholders in order to promote happiness in conjugal relationship. This will also break the historical silence on male reproductive health dysfunctional at least in sub-Saharan Africa region. It is also paramount for the marriage counselors, social workers and other health official to focus on erectile dysfunction as well as low sperm count as major determinants of sustainable marriage and marital happiness in this regard. The study provide healthcare and social workers with information that may be used for initiating, providing and expanding men’s reproductive health services in the study locations. The author therefore suggests the establishment of robust specialized male reproductive healthcare services that can spread to all the nooks and crannies of Nigeria for effective servicing of the health needs of men who might be experiencing any of the sexual problems.

However, since lower income and occupational status is synonymous with marriage discontentment and the propensity for extra-marital affairs, it is recommended that women empowerment be given a face-lift in the locations of study. Where the wives are involved in menial occupations or low-paid employment, occupational rehabilitation would be necessary as a tool of enhancing spousal closeness. Also, since male reproductive health challenges are diseases that are inadvertently occur to men, that no man wishes to experience it and principally because it is associated with life and masculinity of a man in the place of study, the public should be restraint from discriminating against those living with such diseases. This is hoped to reduce the stigmatization that encapsulate the diseases. Taking into cognizance that the prevalence of these diseases is real in the location of study and that every victim seeks

solution to it, a window of opportunity therefore exists for therapists in finding cure for these challenges. Also, increased preventive interventions is required taking into consideration the age structure of the victims and their corresponding wives. The economic potential of these viable men could be jeopardized by the health challenges they face if their health needs are not met.

Finally, the author recommends the provision ‘free male-reproductive-health-screening-services’ that will include free sperm, andropause and gonorrhoea tests by the government in the same manner the free HIV/AIDS test is organized across sub-Saharan Africa. This will enhance early discovery of the diseases and engender quick intervention. This can also save the cost of treatment and possible transit into enduring intimacy relationship between the couple. The provision of this service would undoubtedly enhance rapid achievement of health-for-all (Vision 2020) and the success of MDGs notwithstanding the lifeline of years 2015 and 2020 respectively.

In addition, introduction of a specialized curriculum in the area of male reproductive health in schools and colleges should be considered as return-benefit health investment. Taking into cognizance the patriarchal and dominant role of men in African society, underinvestment in them especially in terms of their reproductive health would have negative multiplier effects upon both their families as well as the continent in general. It is believed that a viable sustainable growth could be guaranteed if the society invests in male reproductive health services and development.

7.5.0 Contributions to the Body of Knowledge

The contributions of this study could be grouped under three specific segments namely: contributions to the body of literature, theory construct and research designs.

7.5.1 Contributions to Literature

1. The research work is another contribution to scholarship and existing literature. It has charted a new insight into male reproductive health

challenges in the study locations and in Nigeria in general.

2. The study brought into fore those socio-cultural correlates of male reproductive health challenges and proffer strategies for enduring conjugal relationship in a manner that cannot disturb the growth of family irrespective of the existence of husband's reproductive health morbidity or deformity.
3. The study has constituted one of the novel studies in the virgin area of male reproductive health challenges. It has thus filled some gaps in the dearth of information on interconnections between male reproductive health challenges and conjugal relationships especially in the study location, Nigeria and sub-Saharan Africa in general. It could be regarded as an innovative effort to provide current, timely and credible data on male reproductive health challenges and shed light on indicators for monitoring and evaluating enduring conjugal relationships.
4. Specifically, the study revealed the socio-economic correlates of male reproductive health challenges as it affects marital harmony in the study locations. It has covered the types, nature, incidence and prevalence of male reproductive health challenges in southwestern geo-political zone of Nigeria. Among others, the study revealed those hidden difficulties that men are experiencing in accessing reproductive healthcare services.
5. The study offered an insight into benefits inherent in equity (gender-balanced) reproductive healthcares services. It has illustrated that the reproductive health needs of every gender needs to be adequately met in order to promote gender equality in all spheres of life, including family and community life.
6. The study has also helped in expanding understanding of the management of male reproductive health challenges, at least within the household. It has also removed the traditional silence over male reproductive health problems in the traditional society of southwestern geo-political zone of Nigeria.
7. The study has provided data on male reproductive health challenges in the

study location and in Nigeria as a whole that could be used for programme interventions.

8. Finally, the impact of medical personnel as well as community members in curbing the incidence of male reproductive health challenges have been brought to limelight. Quick equitable medical service intervention is extremely required for the victims. With the gamut of adverse effects of MRHC, the challenges require community members' care for the victims rather than stigmatization.

7.5.2 Theory Construct

In terms of theory development, the adoption of the 'way of coping theory' including other related theories such as selection theory, theory of marriage, rational choice theory and theory of 'reasoned action' was considered an innovation in the study of reproductive health.

1. The 'way of coping theory' served as the main theory that provided insight into the strategies for managing and securing enduring marital harmony notwithstanding the presence of husband's reproductive health challenges.
2. The theory of marriage positioned socio-economic status as crucial correlates of conjugal relationship in a situation where the husband is having reproductive health challenges.
3. The theory of selection hypothesizes that couple's closeness and depth knowledge of each other are contingent upon their living arrangement. This prompted the use of couples knitted together by living in the same home as respondents for this study.
4. Rational choice theory supported the fact that respondents selected in this study are rational and have weighed the consequences of their actions before adopting any form of coping strategies.
5. The adoption of the theory of reasoned action enhanced the proposition that the behaviour of a man in response to his reproductive health behaviour is contingent upon his personal attitude and the perception of the community toward his health challenges.

7.5.3 Research designs

The triangulation of various research approaches seems to be another novel way in a social investigation like this. Structured interview aided by “key-informant leading approach”, in-depth interviews and focus group discussions were used to explore relevant findings. This provided opportunity for cross-examination of responses, validation of data, helped to overcome biases and other problems that come from single-observer or single theory studies.

7.6 Research implications and Directions

The research is both a quantitative and qualitative study of male reproductive health challenges and conjugal relationship among the Yoruba from demographic point of view. It is a novel step towards developing holistic model that can identifies, explains and predicts conjugal relationship in the face of husband’s reproductive health challenges. Now is the need for radical change in the historical silence that pervades male reproductive health diseases. This is however to be pursued vigorously by government, non-governmental organizations, social workers, marriage counselors and other all stakeholders.

7.7 Suggestions for further studies

The study of male reproductive health challenges and conjugal relationship has brought out some interesting findings and observations among the Yoruba in southwestern Nigeria. It has in no doubt added to the dearth of data on this sensitive issue in Nigeria. However, further study could be conducted among other ethnics and culture taking into cognizance that that culture plays a dominant role in marital and sexual issues especially in sub-Saharan Africa. Besides, a comparative analysis of conjugal relationship among couples who have husbands with reproductive health challenges would be academically interesting and scientifically demanding. Also, study on coping strategy can be amplified to cover all Nigerian ethnic groups.

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APPENDIX I
QUESTIONNAIRE

PROJECT – CUGP07/177/2009

INTRODUCTION

Good morning / afternoon / evening. My name is My other colleagues and myself are in this town / village..... at the instance of a student that carries out social research. At the moment, a social health survey is going on and I would be grateful if you could participate by answering some questions for us. Every information supplied would be treated with utmost confidentiality and has no legal implications.

You are to proceed if he / she has shown the willingness to participate.

Location Identity

Street Name House /Health Centre
Address.....

SECTION A (DEMOGRAPHIC INDICES)

Q1. State	Q2. LGA	Q3. Ward	Q4 Town	Q5 Marital Status
Lagos 1 Osun 2	Kosofe 1 Odo-Otin 2	1 2.....	1 2.....	Married 1
Q6. Sex	Q7 Place of Residence	Q8. Age Group	Q9 Tribe	Q10. Religious affiliation
Husband 1 Wife 2	Rural 1 Urban 2	15-34 1 35-54 2 55-74 3	Yoruba 1	Christianity 1 Islam 2 Traditional 3

Q11. Are you currently working? (1) Yes (2) No

Q12. If Yes to **Q11ASK**, What is your occupational status? By this, I mean what is your position in your place of work.

Snr Mgt/CEO/Snr Army Officer, etc	1	Middle/Jnr Mgt Officer	2
Clerical Staff & Other officer	3	Skilled Labourer/Other Artisan	4
Unskilled Labour / shop Assistant	5		
Unemployed/full-time housewife/Student	6		

Q13. Could you please tell me the highest level of education that you have attained?

No schooling	1	Up to Primary Level	2	Up to Secondary Level	3
Other Higher School	4	Up to University	5		

Q14. Could you please tell me the type of accommodation you are occupying?

Detached /Semi-Detached House	1	Flats	2	Rooms/Let in house	3
Wood / Iron House	4	Mud / Grass hut	5		

Q15. What type of cooking facility do you use most often in your household?

Wood/Charcoal	1	Stove (Kerosene)	3	Gas / Electric Cooker	4
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Q16. What is your source of water supply?

Pipe-borne inside house	1	Pipe-borne outside house	2
Rain/River /Stream/Spring	5	Tanker Supply/Water Vendor	3
Borehole / Deep well	4		

Q19. What is the main language you speak most often at home?

Yoruba	1	English	2	Others	3
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Q20. How many people are living in your house / family now? (**Size of the family**)

(1) 1-2	(2) 3-4	(3) 5-6	(4) 7 & above
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- Q21 What is your means of transportation?
 (1) Official / Private alone (2) Public / private (3) Public alone (4) Others
- Q22. What kind of toilet facility does your household use?
 1. Water Closet (Flush Toilet) 2 Pit Latrine/ Bucket /Pan 3 Public toilet
 4. Toilet in another dwelling 5. Bush/filed 6. Other (specify)

SECTION B – HUSBAND / WIFE CLOSENESS

- Q23. Are you living together with your Spouse / husband? (1) Yes (2) No
- Q24. Tell me, do you share the same room with your spouse/husband (1) Yes (2) No
- Q25. **If No, why**.....

Why not sharing room with spouse / husband

- Q26. Is your spouse/husband working place
 (1) Within the house, (2) away from the house or (3) Both
- Q27. **If Option 1 in Q26 Skip Q27.** How often does your spouse / husband comes home from work
 (1) Daily (2) Occasionally (3) Only on holiday/weekends
- Q28. How often did you and your spouse spend time alone together?
 (1) Very Often (2) Often (3) Not often (4) Not at all
- Q29. Like how many hours in a day do you spent with your husband/spouse
 (1) < 1hr (2) 1-4 hrs (3) 5-9 hrs (4) 10 hrs +
- Q30. Have you gone on holiday with your husband/spouse outside this area in the last 9 months
 (1) Yes (2) No
- Q31. How easier, would you say it is, to meet with your husband/spouse as at when you desire. Would you say....
 (1) Somewhat easy (2) Easy (3) Not easy at all (4) Never tried
- Q32. Please tell me, what formal / informal arrangements you always make before seeing your spouse/husband whenever you desire to see or discuss with her/him
 (1) Book appointment (2) Call ahead (3) Send the children/relation, etc
 (4) Feel visitor’s note (5) No arrangement at all
- Q33. Overall, how would you describe your closeness with your spouse/husband?
 (1) Close (2) Not Close
- Q34a. In addition, specifically, how would you describe the closeness / relationship
 (1) Very Close (2) Just close (3) Not too close (4) Not close at all
- Q34b. Kindly specify your average income per month -----

Income Group	Code	Income Group	Code
Less than N10,000	1	N50,000 - N59,999	6
N10,000 - N19,999	2	N60,000 - N69,999	7
N20,000 - N29,999	3	N70,000 - N79,999	8
N30,000 - N39,999	4	N80,000 - N89,999	9
N40,000 - N49,999	5	N100,000 & above	10
		No Income	11

JOINT DECISION-TAKING

Q35. Who decide what to buy in your family?
 (1) Husband (2) Wife (3) Both (4) Relations/Friends (5) Other

Q36. Do you operate a joint account with your spouse/husband? (1) Yes (2) No

Q37. Do you have good rapport with your spouse / husband (1) Yes (2) No

Q38. If YES to Q37 (ASK), How often do you discuss your home affairs (e.g. children's school fees, foodstuff, etc) with your husband / spouse?

(1) Very Often (2) Often (3) Not often (4) Not at all

Q39. Specifically, how often did you and your spouse discuss sexuality (sexual issues)?

(1) Very Often (2) Often (3) Not often (4) Not at all

Q40a. Taking all things together, how would you describe your marriage? (1) Happy (2) Not happy

Q40b. Considering your experience with your husband relationship with you, how would you describe your satisfaction with this marriage? (1) Satisfied (2) Not Satisfied

Q41. And specifically, how would you describe the happiness

(1) Very unhappy (2) Happy (3) Unhappy (4) Very unhappy

Q42. In most time, kindly specify who decide to buy the following items in your household?

Code	Household items	Husband	Wife	Both	Relations	Others
001	Household food stuff (staple food e.g. garri, rice, etc)	1	2	3	4	5
002	Beverages (tea, milk, drink, etc)	1	2	3	4	5
003	Drugs / Medicine	1	2	3	4	5
004	Household utensils (plate, spoon, pot, etc)	1	2	3	4	5
005	Fixtures & fittings (chairs, table, carpet, fixtures, etc)	1	2	3	4	5
006	Society/club's clothing (Aso-Ebi)	1	2	3	4	5
007	1	2	3	4	5
	Personal Items					
009	Cigarettes, tobacco, etc	1	2	3	4	5
010	Beer, wine, spirits, etc	1	2	3	4	5
011	Soap, Shampoo, facial items, etc	1	2	3	4	5
012	Newspaper, stationeries,	1	2	3	4	5
013	Telephone	1	2	3	4	5
014	Shoes for adults and children	1	2	3	4	5
015	Clothes for children	1	2	3	4	5
016	Clothes for adults	1	2	3	4	5
017	Jewellery, watches, other luxury goods	1	2	3	4	5
018	1	2	3	4	5

COPING STRATEGIES

Q43. How often, in the last 9 months, have you had disagreements about each of the following with your spouse/husband?

S/N	Open Disagreement on....	Very Often	Often	Not often	Not at all
A	Quantity of time spend together	1	2	3	4
B	In-Laws or relations	1	2	3	4
C	Household tasks	1	2	3	4
D	Money (personal/ for housekeep)	1	2	3	4
E	Clothing	1	2	3	4
F	Children issues (e.g. fees, etc)	1	2	3	4
G	Sex	1	2	3	4
H	Sleeping together	1	2	3	4
I	Religious matter	1	2	3	4
J	Other (specify)				

Q44. Specifically, how do you cope with disagreement over sexual relations in the past 9 months?

Coping with disagreement

Q45. There are various ways through which couples deal with serious disagreement. When you have a serious disagreement with your spouse, how often do you take any/some of the following step(s)?

S/N	Open Disagreement	Very Often	Often	Not often	Not at all
A	Just keep your opinions to yourself	1	2	3	4
B	Argue heatedly	1	2	3	4
C	Shout at each other	1	2	3	4
D	End up hitting / throwing things at each other	1	2	3	4
E	Refusing to talk to each other	1	2	3	4
F	Complaint to relations	1	2	3	4
G	Complaint to his/her boss/religious / comm. Leader	1	2	3	4
H	Leave the house for a while	1	2	3	4
I	Go to court	1	2	3	4

Q46. Which of the phrase best describe your overall feeling about your relationship with your spouse/husband?

- (1) Very unpleasant (2) Slightly unpleasant (3) Neither pleasant/unpleasant
 (4) Slightly pleasant (5) very pleasant

Q47. It is always difficult to predict what will happen in a relationship, but realistically, what do you think the chances are that you and your spouse will eventually separate?

- (1) Very high (2) High (3) About even (4) Low (5) Very low

Q48. Kindly indicate whether you are currently experiencing the following in your relationship (see table).

Code	Problems of Intimacy (indicators)	Yes	No
Q48a	Serious lack of communication, difficulty explaining feelings and emotions	1	2
Q48b	Important difficulties to do with the personality of the other & his/her pace	1	2
Q48c	Strong disappointment in love, falling out of love	1	2
Q48d	Disagreement/problems in sexual relationships	1	2
Q48e	Problem with infidelity by your spouse	1	2
Q48f	Coarseness / duress in sexual relations	1	2
Q48g	Physical violence against you	1	2

Q49. Kindly indicate your Perception on your marriage expectations

	Marital Life Scale	Strongly Agree	Agree	Disagree	Strongly Disagree
Q49a	Most of my marital expectation came true	1	2	3	4
Q49b	I think we cannot surmount obstacles in our marriage	1	2	3	4
Q49c	Our marriage is a very meaningful one	1	2	3	4
Q49d	Gradual decreasing excitement in our marriage bothers me	1	2	3	4
Q49e	Our marriage sometimes becomes a burden to me	1	2	3	4
Q49f	I have a peaceful home life	1	2	3	4
Q49g	Our marriage has gone better every single day	1	2	3	4

SECTION C – AWARENESS OF MALE REPRODUCTIVE HEALTH CHALLENGES

Q50. Which of the following is your regular habit?

A	Watching TV	Yes	1	No	2
B	Listening to Radio	Yes	1	No	2
C	Reading Newspapers	Yes	1	No	2
D	Reading Magazine	Yes	1	No	2
E	Attending Cinema	Yes	1	No	2
F	Outdoor Sighting	Yes	1	No	2

Q51. How often do you listen to / read / watch Radio / Magazine / Newspaper/ sighting posters

	Radio	Tel/Video	N/Paper	Mag.	Outdoor
6-7 times per week	1	1	1	1	1
4-5 times per week	2	2	2	2	2
2-3 times per week	3	3	3	3	3
Once a week	4	4	4	4	4
Less often	5	5	5	5	5
None	6	6	6	6	6

Q52. What are the sexual diseases of men that you know (**Spontaneous awareness**). **Please allow respondent to mention as many as s/he knows and Record in the Grid overleaf**

Q53. Specifically, are you aware of any of the following diseases/infections? (**Prompted awareness**)

Q54. Which of these diseases / infections have you (the man) / your husband ever contacted / currently experiencing?

Record Q52-Q54 in Grid below

Q52-Q54	Male reproductive health diseases	Q52 Spontaneous		Q53 Prompted		Q54 Ever Experienced	
		No	Yes	No	Yes	Yes	No
A	Testicular cancer (Ipa /Jejere Epon)	1	2	1	2	1	2
B	Prostate Cancer (Jeran-Jegun/apato)	1	2	1	2	1	2
C	Andropause (Oda)	1	2	1	2	1	2
D	Castration (Te l'oda)	1	2	1	2	1	2
E	Erectile dysfunction (Okobo/Akura)	1	2	1	2	1	2
F	Gonorrhoea (Atosi)	1	2	1	2	1	2
G	No sperm count (Kos'ato)	1	2	1	2	1	2
H	Low sperm count (Ato ti ko pe'ye)	1	2	1	2	1	2
I	HIV / AIDS (Aisan eedii)	1	2	1	2	1	2
J	Others	1	2	1	2	1	2
K	None	1	2	1	2	1	2

Interviewer to Code Q54B accordingly

Q54B. If ever experienced or currently experiencing MRHC record **YES** (1), Otherwise tick **NO** (2)

Q55. You said you / your husband wife have contacted / experienced _____ (in Q54), where was/is it treated / treating it?

Self-medication / Home	1	Hospital / Clinic	2	Herbal / Spiritual Homes	3
Resign to fate/do nothing	4	Others	5		

Q56. (**Ask husband / wife whose husband has not experienced any of the above diseases / sicknesses**).

Assuming you (male) / your husband contact any of these diseases (mentioned in Q54), where would you go for treatment?

Self-medication / Home	1	Hospital/Clinic	2	Herbal/Spiritual Homes	3
Resign to fate/do nothing	4	Others	6		

Q57. You said you are aware of (As mentioned in Q.../Q../., what is the source of your information? (**Multiple responses allowed**))

- (1) Radio (2) TV/Video (3) Newspaper/Magazine (4) Teacher/School
 (5) Religious House (6) Friend/Relation (7) Parents (8) Billboards
 (9) Husband/wife (10) Others

SECTION D
MALE REPRODUCTIVE HEALTH CHALLENGES & FERTILITY EFFECT

Q58. How many years have you being married
 (1) 1-3 years (2) 4-6 years (3) 7-9 years (4) 10 years +

Q59. (**ASK WIFE ONLY**) How many children have you had till date?

Q59b. (If **NONE** in Q59a), indicate if she never had a child. (1) Ever had (2) Never had a child

Q60. How old is the first and the last-born 1st born Last born

Q61. Do you still desire to have more children? (1) Yes (2) No (**If NO Skip Q62**)

Q62. How many children did you desire to have in your lifetime?

Q63. Looking at the time your wife delivered; has she been experiencing some delay? (1) Yes (2) No

Q64. If Yes to Q63, **ASK**, what would you say is responsible for this delay

Causes of delay

Q65. If **NO** to Q63, **ASK**, when are you expecting the next baby

Q66. Have you or your spouse used any/some method(s) of birth control in the past 2 years?
 (1) Yes (2) No

Q67. How often do you have intercourse per week /month? Record below

How many times	Per week	Per month
No of time		

Q68. Have you had prior infertility treatments? (1) Yes (2) No

MEDICAL HISTORY

Q69	Have you ever been told (or know) that you have any of the following?	Yes	No
Q69A	Surgical complication in the testicles	1	2
Q69B	Mumps (during adolescent) with pains in your scrotum or testes?	1	2
Q69C	Diabetes mellitus	1	2
Q69D	Cancer	1	2
Q69E	Infection of the urine	1	2
Q69F	Infection of the prostate (prostatitis)	1	2
Q69G	Infection of the epididymis (epididymitis)	1	2
Q69H	Green / yellow/blood discharge from the penis	1	2
Q69I	Blood in your ejaculate	1	2
Q69J	Problems with urination	1	2
Q69K	Injury to the testicles that needed hospitalization	1	2
Q69L	Heat sensation in scrotum / testes	1	2
Q69M	Pelvic or back surgery (any bladder or penis operation as a child?)	1	2
Q69O	Others	1	2

EXPOSURE HISTORY

- Q70. Have you ever smoked cigarettes (or cigars or pipes)? (1) Yes (2) No
- Q71. And are you currently smoking cigarettes (or cigars or pipes)? (1) Yes (2) No
- Q72. If **YES** to **Q70 / Q71, ASK**, how long did you smoke? (1) 1-2yrs (2) 3-4yrs (3) 5 yrs +
- Q73. When you smoke(d), how many cigs/cigars do you smoke per day? (1) 1-2 cigar (2) 3-4 cigar (3) 5 cigar +
- Q74. If you quit smoking, how long has it been (1) 1-2yrs (2) 3-4yrs (3) 5 yrs +
- Q75. Do you use any of the following and how often? (**Circle one response**)
- | | | | | |
|-----------|----------|----------------|--------------|---|
| Alcohol | (1) None | (2) Infrequent | (3) Frequent | 4 |
| Coffee | (1) one | (2) Infrequent | (3) Frequent | 4 |
| Marijuana | (1) one | (2) Infrequent | (3) Frequent | 4 |

BEHAVIOURAL CHANGE (FOR WIVES ONLY)

	Behavioural change	Yes	No
Q76	Have you personally made any change in your sexual behaviour because of some inefficiency you discover with your partner?	1	2
Q77	Do you think you need such a change	1	2
Q78	What changes do you make		
Q79	When did you start making these changes		
Q80	Have you ever talk to your husband on the way to improve his sexual behaviour	1	2
Q81	Would you say your husband is enough for you as the only sexual partner throughout your life	1	2
Q82	Do you or your partner drink alcohol	1	2
Q83	Do you or your partner smoke	1	2

- Q84. What will you do if you discover your husband cannot impregnate you or satisfy you sexually again
- (1) Stay with him and resort to fate (2) Stay with him but attempt another partner
- (3) Leave him and attempt another partner (4) Leave him and stay alone

Thank you

APPENDIX II

FOCUS GROUP DISCUSSION GUIDE

1. Preambles

a. Salutation

I welcome you to this discussion forum on behalf of my colleagues herewith me and myself. We appreciate your coming and we believe that the outcome of today's discussions will be harnessed and serve as your valuable contributions to the development of human kinds

b. Introduction of Team Member

Moderator to introduce himself and his team members to the participants. He is afterward to request the participants to introduce themselves one after the other. Each participant should be allowed to introduce himself / herself and mention his/her occupation

c. Golden Rules

The two rules that we have guiding this discussion are: (1) That everyone should be free to express his/her mind on this topic and, (2) that there is No Right answer, No Wrong Answer. All your impression that is voiced out is very importance for us.

2. Moderator to introduce the topic of discussion

We have gathered at this morning / afternoon / evening to discuss a very important issue that relates to male reproductive challenges and how it affect relationship between husband and wife in our society.

- Let me start by asking you what you understand by male reproductive health challenges? What are the various male reproductive health challenges you know / ever heard?
- **PROBE** on the definition / understanding of various reproductive health challenges mentioned by saying... When you say, what do you mean by it? Can you describe it...? How does it (the problems mention) affect the life of the career, I mean the man carrying it

- Now, can you tell us those male reproductive health diseases you have seen affecting people in your neighborhood. Have you personally experienced or met / know men who have experienced / are experiencing such diseases?
- Now specifically, how rampant is this disease in this community. Which one would you say is the most common one in this town? Do you think these sicknesses are peculiar to a specific age? What is the age group of those that normally have these challenges? Which one is related to Younger age group 19 – 34 years? What about those that are related to age group 35-54 years and which one would you is common among people in age group 55-74 years
- What are the common beliefs about male reproductive health problems in this village town? What are the cultural rites (I mean what the infected persons must do and must not do) in this village / town? PROBE on each of the cultural rites / obligations that was mentioned
- Why do you think are the consequences of flouting this cultural rules / regulations? Has any man violated any of these rules in this village or town? What specifically happened to him or the family?
- What are the worries that spouses may have if their husbands should have any of these health challenges? What are the worries that the man (husband) may have if he has any of these challenges?
- What will you do if you have any of these health challenges? Can you marry a man with reproductive health deficiencies? Alternatively, what will be your reactions if your husband has any of these diseases?
- For those that have seen married men having / have experienced / are experiencing any of these sickness, **ASK**. Can you please explain how the affected couples relate inside house and in the community? Probe very well. In addition, **ASK**, how do you think they would have been relating if thediseases are not there. What exactly do you perceive they are doing to sustain themselves? Alternatively, what do you do to manage the situation?
- Assuming you have husband that has any of these diseases, what would you do (as his wife). How long can you endure such? How would you be feeling if your neighbour or the whole community should know about it. Would you consider him as sufficient for your sexual partner throughout your life?

- Do you know of a place where they treat such diseases? Are the infected people encouraged to seek medical assistance?
- Do you have suggestion for wife / husband that have reproductive health challenges? What can you suggest the government can do concerning this challenges.

3. Appreciation and Closing

APPENDIX III

IN-DEPTH INTERVIEW (PROJECT – CUGP07/177/2009)

Introduction

Good morning / afternoon / evening. My name is My other colleagues are..... We currently conducting a social health survey on Male reproductive health challenges and conjugal relationship and we would be grateful if you could participate by have a chat with us. Every information supplied would be treated with utmost confidentiality and has no legal implications.

You are to proceed if he / she has shown the willingness to participate.

Location Identity: Hospital /Clinic **Status**

1. What are the sexual diseases of men that you know (Spontaneous awareness).
2. Specifically, are you aware of any of the following diseases/infections?
(Prompted awareness)
3. Which of these diseases / infections mentioned would you say is common in this town/village and which is commonly reported in this hospital/clinic
4. How often do you attend to such issue in a week/month/annually?
5. How would describe the demographic characteristics of the affected men in terms of their education / age or other status. I mean does it occur to only the rich/young or illiterate etc
6. Most couples confide in medical personnel on several issues, including problem relating to husband's reproductive health problems (e.g. sexual dysfunctionals), what advice/steps have you been given / recommending for them.
7. As a professional, what do you consider as the immediate and long term effect of a man's sexual deficiency
8. Apart from infertility which everybody knows, what are the other effects of male reproductive health problems?
9. And precisely which of these diseases cannot prevent the wife from getting pregnant
10. What are the likely causes of male reproductive health problems
11. What are the likely solution to them
12. What would you recommend for wife and husband when the husband has reproductive4 health challenges?

Closing and appreciation

APPENDIX IV

Student Research – CUGP07/177-2009

Demography and Social Statistics, Economics & Development Studies Dept,
College of Business and Social Sciences, Covenant University,
Canaanland, Ota, Ogun State

Consent to Participate in a Research Study

Theme of Discussion: Male Reproductive Health challenges and Conjugal Relationship
Principal Investigator: Amoo Emmanuel O.
Contact Phone No: +234 8035520849, emman_amoo2007@yahoo.com

General Information about the study

You are cordially invited to participate in a research study. Your participation in the discussion is voluntary. You may refuse to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research discussion. However, your contributions will help in a great deal in enhancement of development of human kinds both now and in the future. The study is designed to benefit society by gaining new knowledge. You are hereby presented with some hints about the research focus so that you can make an informed choice about being in this research study. You are free to contact the above contact person should need some clarification at any time.

What is the purpose of this study?

The purpose of the study is to investigate interactions between male reproductive health challenges and conjugal relationships. It is aimed at shedding light on some of the worrisome diseases in the world today and helps to avert disintegration of families, which could be due to any of these challenges.

Expected Number of Participants

By honouring this invitation, you will be one of approximately 920 people in this research study, which is being conducted across the nation. All participants were chosen randomly.

Duration: Your participation in this study will last approximately one hour.

Proceedings

The study is in two parts: one is a direct interview; the other is a group discussion where no question will be directed to you individually but instead posed to the group. You may choose to respond or not respond at any point during the interview or the discussion. The focus group discussion will be audiotape so we can capture comments in a transcript for our analysis.

Privacy Protection

We do not anticipate any risks or discomfort to you from being in this study. Information supplied would be treated with utmost confidentiality and has no legal implications. Therefore, we encourage you to be as honest and open as you can. You will not be identified in any report or publication of this study or its results.

Participant's Agreement:

I have read the information provided above and I voluntarily agree to participate in this research study.

Name of Participant

Signature of Participant

Date

Schedule Time

_____/_____
Direct Interview/Group

Name of Research Team Member

APPENDIX V

ABBREVIATIONS

ACS- American Cancer Society
AIDS - Acquired Immune deficiency syndrome
CDC - Center for Disease Control and Prevention
CEO- Chief Executive Officer
DHHS - Department of Health and Human Services
EA- Enumeration Area
ED - Erectile dysfunction
FGD - Focus Group Discussion
FHI - Family Health International
FMOH - Federal Ministry of Health
HIFU - High Intensity Focused Ultrasound
HIV - Human immunodeficiency Virus
ICPD- International Conference on Population and Development
IGWG- Interagency Gender Working Group
IPPF - International Planned Parenthood Federation
KII – Key Informant Interview
LGA- Local Government Area
MARS- Advocates for Responsible Reproductive Sexuality
MDGS- Millennium Development Goals
MRHC - Male Reproductive Health Challenges
NCI -National Cancer Institute
NDHS – Nigerian Demographic Health Survey
NIAID- National Institute of Allergy and Infectious Diseases
NIH- National Institutes of Health
NKUDIC - National Kidney and Urologic Diseases Information Clearinghouse
NPC - National Population Commission
PoA- Programme of Action
PSA- Prostate Specific Antigen
RH - Reproductive Health
SPSS- Statistical Package for Social Sciences

SRH - Sexual Reproductive Health

SSA: Sub-Saharan Africa

STD- Sexual transmitted diseases

TDS - Testicular Dysgenesis Syndrome

TRA - Theory of Reasoned Action

UN- United Nations

UNAIDS- The Joint United Nations Programme on HIV/AIDS

UNDP- United National Development Project

UNFPA- UNFPA - United Nations Population Fund

UNICEF: United Nations International Children's Emergency Fund

USAID - United States Agency for International Development

WHO - World Health Organization