ANTECEDENT FACTORS RELATED TO SEXUAL AND REPRODUCTIVE HEALTH EXPERIENCES OF PHYSICALLY CHALLENGED ADOLESCENTS IN IBADAN, NIGERIA

BY

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CERTIFICATION

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DEDICATION

This work is dedicated to God Almighty, the author and finisher of every good work and to my late mother, Mrs Cecilia Nkporbu.

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ABSTRACT

Effort in achieving the Millennium Development Goal in Nigeria can only be achieved if the Sexual and Reproductive Health (SRH) needs of Physically Challenged Adolescents are given the necessary attention. Though, studies have shown that SRH experiences are important to persons with disabilities just as they are to their able bodied counterparts, only few of these studies are documented; thus resulting to gap in knowledge. Hence, the need for investigating the antecedent factors related to the sexual and reproductive health experiences of physically challenged adolescents in Ibadan, Nigeria.

The study was a cross-sectional survey of 153 Physically Challenged Adolescents (PCA) in four Institutions in Ibadan. A validated interviewer questionnaire which contained a 14-point knowledge scale, 6-point perception scale, 8-point attitudinal scale and questions relating to sexual and reproductive health experiences of the physically challenged adolescents was used to collect data from the total population. Knowledge scores <6 and ≥6 were classified as poor and good respectively. Perception scores <3 and ≥3 were categorised as poor and good perception respectively. Attitude scores <3 and ≥3 were categorised as poor and good attitude respectively. The data were analysed using descriptive statistics and Chi-square test at p=0.05.

Age of the respondents was 15.7 ± 2.9 years and 50.3% of the respondents were females, while (49.9%) were males. On source of income, 53.6% did not receive upkeep from parents. Sources of income for those who receive upkeeps included; boyfriend (10%), girlfriend (3.3%) and donors (5.2%). Respondents' level of education included primary education (4.6%), junior secondary (42.5%) and tertiary (2.6%) indicating the influence of socio-economic antecedent factors. Majority (77.1%) had good knowledge of SRH; although, 94(61.4%) had knowledge deficit of when ovulation occurs. Majority (72.5%) of the respondents did not know what the first menstrual bleeding in a woman is called. Majority (77.1%) knew one can contract HIV through having unprotected sex. About half (54.9%) of the respondents knew only HIV as the major STI. The difference in the mean knowledge scores of the respondents by their age groups was found to be statistically insignificant. The attitude scores compared against the respondents' challenge of mobility as evident in the type of movement aids used by the respondents were found to have no significant association. Few (7.8%) of the respondents perceived HIV/AIDS does not exist. About few (7.2%) disagreed with transmission of HIV and other STIs through sex. Less than half of the respondents (7.2%) had poor attitudinal disposition towards watching of pornographic films. Few, (18.3%) had experienced sex and (1.3%)

had gone for abortion before. Majority, (68.6%) had gone for HIV screening before and 2.9% have never been screened of HIV/AIDS.

The respondents had good knowledge and show good perception and attitude towards sexual and reproductive health experiences overall, even if there were knowledge deficit, negative attitude and perception in some areas of sexual and reproductive health; thus inclusion of sexual and reproductive health education in school curriculum are recommended.

Keywords: Physically Challenged Adolescents, SRH, Knowledge, Perception, and Attitude. **Word count= 484**

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LIST OF ABBREVIATIONS

AAC - American Academy of Paediatrics

AIDS - Acquired Immune Deficiency Syndrome

AfrReprodHealth - African Reproductive Health

JONAPWD - Joint National Association of Persons with Disabilities in Nigeria

ARFH - Association for Reproductive and Family Health

ASRH - Adolescent Sexual and Reproductive Health

ASRHE - Adolescent Sexual and Reproductive Health Education

CDC - Centre for Disease Control and Prevention

CVS - Cervical Screening

FGD - Focused Group Discussion

HIV -Human Immuno Deficiency Virus

ICP - International Conference on Population

ICR -Institute of Cancer Research

ICPD -International Conference on Population and Development

ID -Intellectual Disability

ILO -International Labor Organization

ICT -Information and Communication Technology

IUD -Intra-Uterine Device

MDGs -Millennium Development Goals

NDHS ——Nigeria Demographic and Health Survey

NGOs -Non-Governmental Organizations

PAI -Population Action International

PCA - Physically Challenged Adolescent

PCPs -Physically Challenged Persons

RH -Reproductive Health

SAIND -South Africa Integrated National Disability

SPSS -Statistical Package for Social Sciences

SRH -Sexual and Reproductive Health

STDs -Sexually Transmitted Diseases

STIs -Sexually Transmitted Infections

UN -United Nation

UNAIDS -United States Agency for International Development

UNESCO -United Nations Educational, Scientific and Cultural Organization

UNFPA -United Nations Population Fund

UNICEF -United Nations Children's Fund

WHO -World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

A Physically Challenged Adolescent (PCA) is someone who has a problem with his or her body that makes it difficult for him or her to do things that other people can do easily (Longman Dictionary of Contemporary English, fifth Edition, 2009). According to Lawal-Solarin (2010), physically challenged is defined as an inability to perform some or all the tasks of daily life or a medically diagnosed condition that makes it difficult to engage in the activities of daily life. The physically disabled people are physically disadvantaged due to conditions that permanently prevent them from exercising normal body control and movement (Oladejo, 2001).

An antecedent factor is a thing or period that precedes others in time or order (Mosby's Medical Dictionary, 8th edition, 2009). Literature has identified four key sets of antecedent factors that have been associated with sexual and reproductive health: race and ethnicity; socioeconomic status; social influences; and attitudes toward contraception, condoms and pregnancy and safer-sex behavioural skills (Debra, 2003). As early as the middle 1800, industrialization and its attendant social problems led various European investigators to study the effects of these factors on health. Socio-economic factors have been the most widely studied: educational attainment, income level, employment status, events, social insurance status, housing status, psychological stress, life events, social networking, social mobility, occupational and environmental hazards etc, all of these effect health status. There is also some evidence that socio-cultural differences influence health behaviour (Yvonne, 1999). For the purposes of this study, antecedent factors have been limited to include socio-economic status, knowledge, perception, attitude and experiences; and their influences on sexual and reproductive health.

Globally, there are over 650 million persons with disabilities, and one third of these are youths (Sharma, 2010). Nearly 80% of adolescents with disabilities live in developing countries, and although the actual figures are uncertain, it is clear that adolescents with disabilities form a significant proportion of the youth population in every society.

Nearly 200 million persons experience considerable difficulties in functioning (WHO, 2011). In the years ahead, disability will be an even greater concern because its prevalence is on the rise. This is due to ageing populations and the higher risk of disability in older people as well as the global increase in chronic health conditions such as diabetes, cardiovascular disease, cancer and mental health disorders.

Across the world, people with disabilities have poorer health outcomes, lower education achievements, less economic participation and higher rates of poverty than people without disabilities. This is partly because people with disabilities experience barriers in accessing services that many people have long taken for granted, including health, education, employment, and transport as well as information. These difficulties are exacerbated in less advantaged communities (Sango, 2013). According to WHO (2011) to achieve the long-lasting, vastly better development prospects that lie at the heart of the 2015 Millennium Development Goals and beyond, we must empower people living with disabilities and remove the barriers which prevent them from participating in their communities; getting a quality education, finding decent work, and having their voices heard.

As a result, the World Health Organization and the World Bank Group have jointly produced this World Report on Disability (WHO, 2011) to provide the evidence for innovative policies and programmes that can improve the lives of people with disabilities, and facilitate implementation of the United Nations Convention on the Rights of Persons with Disabilities, which came into force in May 2008. This landmark international treaty reinforced our understanding of disability as a human rights and development priority. The World Report on Disability suggests steps for all stakeholders including governments, civil society organizations and disabled people's organizations to create enabling environments, develop rehabilitation and support services, ensure adequate social protection, create inclusive policies and programmes, and enforce new and existing standards and legislation, to the benefit of people with disabilities and the wider community. People with disabilities should be central to these endeavours (WHO, 2011).

Although charities and/or families take on the responsibility for the social support of a person with disability, these support systems are however limited or non-existent due to the stigma attached to disability within the society, as these individuals are often seen as a disgrace to their families, for example by neighbours and relatives (Bassuk, Berkman, & Amick, 2002). As a result, people with disability are subject to neglect and isolation. In extreme cases, for

example, these individuals are abandoned to become homeless/living on the streets; or family members keep them indoors away from public notice or institutionalise them, especially the wealthy families, in governmental institutions.

Adolescence is marked by progression from the appearance of secondary sexual characteristics to sexual and reproductive maturity (Adeokun, 2009). Curiosity about bodily changes is heightened. However, adolescents' perceived sexuality education needs have been poorly documented. A survey of 989 adolescents from 24 North-eastern Nigerian secondary schools yielded information on socio-demographic characteristics, reproductive health knowledge, sexual activities and sexuality education needs. Of the interviewed respondents, 72% of females had experienced menstruation. Overall, 9% were sexually active, 3.1% knew when ovulation occurs, 47% knew pregnancy could result from first coitus and 56% knew of contraception. 84% opined that adolescents should be given sexuality education but only 48.3% had received any. Sexuality education should be provided for in-school adolescents through their preferred and reliable sources of information.

Sexual and reproductive health (SRH) is an important aspect of normal adolescent growth and development that encompasses biological sex, gender roles and identity, sexual orientation, sexual behaviour, and reproduction (Burke, Coles, DiMeglio, Gibson, Handschin, et al, 2014). Achieving healthy adolescent sexual development involves managing the many physical, social, and emotional changes experienced during adolescence. According to WHO (2011), medically accurate and developmentally appropriate SRH education and barrier-free access to related clinical services contribute to successful navigation of this developmental task. In recognition of this important fact, the United Nations declared that comprehensive sexual health information and services constitute a basic right for adolescents as articulated in the United Nations Convention on the Rights of the Child (UN, 2013). To support the adolescent's right to the highest attainable standard of health, the convention specifically identifies "the right to control one's health and body, including sexual and reproductive freedom to make responsible choices," and this right is achieved through "access to a range of facilities, goods, services and conditions that provide equality of opportunity for every child." Socio cultural context, laws, policies, and economics, however, affect access to these basic rights.

Adolescent sexual and reproductive health is a critically important policy and programmatic area in Sub- Saharan Africa. An estimated 4.6% of women and 1.7% of men aged 15–24

years were living with HIV at the end of 2005 (Awusabo-Asare & Biddlecom, 2006). About one in 10 young women have had a premarital birth by age 20: 8% in West/Central Africa and 15% in South/East Africa. While adolescents constitute part of the "window of hope" with regard to the HIV/AIDS epidemic, about half of all new HIV infections are estimated to occur among this generation of 10–24 year olds. Given the urgency and scope of addressing the sexual and reproductive health needs of adolescents, it is important to assess their current levels of knowledge, attitudes and behaviours that put them at risk for HIV transmission or unwanted pregnancy; examine why some of them are at higher risk of HIV transmission and unwanted pregnancy than others; document the barriers to seeking sexual and reproductive health services and information; and provide new information about what very young adolescents know and do with respect to sexual and reproductive health.

1.2 Statement of Problem

Nigeria is estimated to have a population of 169 million (Sango, 2013). Based on the World Report on disability, approximately 25 million Nigerians have a disability, with 3.5 million of these having very significant difficulties in social and physical functioning (Precious, 2013). Globally, about 180 million young people between the ages of 10-24 years live with physical, sensory, intellectual or mental disability of which 80% lives in the developing world and they are amongst the poorest and most marginalized (UNFPA, 2010). This figure is significantly enough to make a difference in the society (Suris, 1995).

Adolescents with disability like other adolescents engage in sexual relationship to express their sexuality without adequate knowledge and skill to cope with the consequences of their actions. A cross sectional study conducted among 140 adolescents with physical disabilities in four handicapped schools in Osun state South West, Nigeria indicated a significant poor knowledge of sexuality issues such as: unprotected sex, teenage pregnancy, STIs/HIV/AIDS and contraceptive awareness (Taiwo, 2012). The study targeted adolescents with physical disability, The Joint National Association of Persons with Disabilities in Nigeria (JONAPWD) in 2010 put the population of people with disability at 11.2 million and segregation show that children constitute about 37.5% of this population. This translates to a little above 4 million children who are physically incapacitated and will become the adolescents requiring reproductive health services in the nearest future without sufficient preparation by the society to meet these needs.

A few exchange sex for gifts from strangers and have no access to HIV counselling and testing, hence treatment of HIV among this group is difficult and thus posing significant public health concern. Adolescents with disability have equal or even greater risk of engaging in risky and unsafe sexual behaviour and practices than other adolescents. The World Health Organisation estimated that 15% of any population is living with disability (WHO, 2008). Over half of this population are adolescents and young people with various forms of impairments; blind, deaf, crippled, and mentally retarded, resulting from mild to severe causes like accident, diseases and natural occurrences.

_Adolescents with disability are found most vulnerable and are extremely at high risk of sexual abuse and molestation and coercion with various outcomes such as teenage pregnancy, abortion, low self—confidence, sexually transmitted infections including HIV/AIDS. A common phenomenon among young people with disability is multiple sexual practices with increasing risk of contracting sexually transmitted infections, practically HIV/AIDS (Groce, 2003).

Compared with all other age groups, adolescents and young adults experience disproportionately high rates of preventable sexual behaviour morbidities including sexually transmitted infections (STIs), human immunodeficiency virus (HIV), and unintended pregnancy (Finer, Jerman, Kavanaugh, 2011). In addition, youth who do not conform to socio cultural norms of sexual and gender expression often do not have access to SRH services that are tailored to their needs (Grossman, 2006).

Across the world, people with disabilities have poorer health outcomes, lower education achievements, less economic participation and higher rates of poverty than people without disabilities (WHO, 2011). This is partly because people with disabilities experience barriers in accessing services that many of us have long taken for granted, including health, education, employment, and transport as well as information. These difficulties are exacerbated in less advantaged communities. To achieve the long-lasting, vastly better development prospects that lie at the heart of the 2015 Millennium Development Goals and beyond, people living with disabilities should be empowered and the barriers which prevent them participating in their communities should be removed; getting a quality education, finding decent work, and having their voices heard (WHO, 2011). People with disabilities are the world largest minority, yet they are routinely excluded from most educational, economic and social opportunities (Sandeep, 2000). He opined further by saying, persons with physical disabilities

have to face problems not only because of their handicap but also due to inability of addressing their social emotional needs. Despite being the world's largest minority, persons with disabilities are largely ignored (Sandeep, 2000).

A strong relationship exists between disability and poor health (Dixon-ibarra, 2012). This relationship could exist as a result of disabilities emerging from chronic conditions; conversely, people with disabilities may be at increased risk of developing chronic conditions. Studying health in relation to age of disability onset can illuminate the extent to which disability may be a risk factor for future poor health.

The purpose of this study was to explore the antecedent factors (economic, knowledge, perception and attitude) predisposing physically challenged adolescents to sexual and reproductive health challenges in order to improve reproductive health service delivery of the physically challenged adolescents in Ibadan.

1.3 Justification

There have been studies on the antecedent factors related to sexual and reproductive health issues of the generally disabled people. However, no much study has been carried out in the area of investigating the antecedent factors related to the sexual and reproductive health experiences of physically challenged adolescents. The seriousness of the situation therefore demands urgent intervention. A few non-governmental organisations such as Books2Africa. org in the United Kingdom and The Zamarr Institute in Nigeria are working to improve educational access through free educational materials such as free books and life skills training programmes for people with disabilities (Precious, 2013). However, there is need for more awareness programmes as to the real factors related to sexual and reproductive health status of adolescent with disabilities in Nigeria. For an effective intervention based on evidence, there has to be baseline information regarding the demographic and antecedent factors related to sexual and reproductive health status of the physically challenged adolescents. This study therefore aimed at bridging this information gap.

This study therefore contributes to:

(a) Recognition of the problem

(b) Form a basis upon which further researches on sexual and reproductive health of different categories with different vulnerable groups will be built.

1.4 Research Questions

The following were the research questions of the study:

- 1. What are the socio-economic factors relating to the sexual and reproductive health experiences of the physically challenged adolescents?
- 2. What is the knowledge of physically challenged adolescents as it relates to sexual and reproductive health?
- 3. What is the perception of the physically challenged adolescents towards sexual and reproductive health?
- 4. What is the attitude related to sexual and reproductive health of the physically challenged adolescents?
- 5. What are the sexual and reproductive health experiences of the physically challenged Adolescents?

1.5 Broad Objective

The broad objective of this study was to investigate the antecedent factors related to sexual and reproductive health experiences of the physically challenged adolescents in Ibadan.

1.6 Specific Objectives

The specific objectives were:

- 1. To assess the socio-economic factors influencing sexual and reproductive health of the physically challenged adolescents
- 2. To assess the knowledge of physically challenged adolescents as it relates to Sexual and Reproductive Health
- 3. To determine the perceptions of the physically challenged adolescents towards sexual and reproductive health
- 4. To determine the attitude related to sexual and reproductive health of the physically challenged adolescents

5. To describe the sexual and reproductive health experiences of the physically challenged adolescents

1.7 Hypotheses

The following hypotheses were tested by the study:

- 1. There is no significant relationship between the respondents' age and their knowledge of SRH
- 2. There is no significant difference between the respondents' knowledge about SRH and their use of mobility aids
- 3. There is no significant difference between the respondents' perception towards SRH and their educational status
- 4. There is no significant association between respondents' attitude towards SRH and their use of mobility aids
- 5. There is no association between respondents' knowledge about SRH and their attitude

CHAPTER TWO

LITERATURE REVIEW

A literature review of antecedent factors related to Sexual and Reproductive Health Experiences and some pertinent issues that relate to the subject matter are presented in this chapter. It consists of twelve sections which are as follows:

- 1. Concept of Sexual Health
- 2. Concept of Reproductive Health
- 3. Concept of Adolescence
- 4. Demographic profile
- 5. Disability in Nigeria
- 6. Physical Disability
- 7. Socio-Economic Antecedents factors of SRH
- 8. Knowledge about SRH
- 9. Perception towards SRH
- 10. Attitude towards SRH
- 11. Experiences towards SRH
- 12. Conceptual Frame Work

2.1 Concept of Sexual Health

According to the current working definition, "sexual health is defined as a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health 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. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled (WHO, 2006).

The conceptions of sexual health remain embedded in national and political contexts. Conceptions for sexual health appear to be the result of political compromises and take place in the public health culture and practice of each country. Depending on the context, these different initiatives focus either on individual responsibility or on an appropriate sexual health

services organization, and sexual health may be conceived as an ideal state of well-being or as the reduction of negative consequences of sexual activity (Giami, 2002).

There is a growing consensus that sexual health cannot be achieved and maintained without respect for, and protection of, certain human rights. The fulfilment of sexual health is tied to the extent to which human rights are respected, protected and fulfilled. Sexual rights embrace certain human rights that are already recognized in international and regional human rights documents and other consensus documents and in national laws (WHO, 2010).

2.2 Concept of Reproductive Health

The WHO defines reproductive health as a state of complete physical, mental and social wellbeing, and not merely the absence of reproductive disease or infirmity. (WHO, 2010) Reproductive health involves all of the reproductive processes, functions and systems at all stages of human life. This definition implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. Men and women have the right to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice that are not against the law. Furthermore, men and women should have access to appropriate health care services that will enable women to go safely through pregnancy and childbirth, as well as to provide couples with the best chance of having a healthy infant. Reproductive health is a universal concern, but is of special importance for women particularly during the reproductive years. However, men also demand specific reproductive health needs and have particular responsibilities in terms of women's reproductive health because of their decisionmaking powers in some reproductive health matters. Reproductive health is a fundamental component of an individual's overall health status and a central determinant of quality of life (WHO/World Bank, 2010).

2.3 Concept of Adolescence

WHO identifies adolescence as the period in human growth and development that occurs after childhood and before adulthood, from ages 10 to19 (WHO, 2014). It represents one of the critical transitions in the life span and is characterized by a tremendous pace in growth and change that is second only to that of infancy. Biological processes drive many aspects of this growth and development, with the onset of puberty marking the passage from childhood to

adolescence. The biological determinants of adolescence are fairly universal; however, the duration and defining characteristics of this period may vary across time, cultures, and socioeconomic situations. This period has seen many changes over the past century namely the earlier onset of puberty, later age of marriage, urbanization, global communication, and changing sexual attitudes and behaviors. In sub-Saharan Africa, 15- to 19-year-olds account for a large and growing segment of the population, in contrast to Western countries, where this age group accounts for only a small and shrinking proportion of the total population (Omotoso, 2007).

2.4 **Demographic Profile**

World-wide, estimates of the number of adolescents and young adults who live with a disability vary widely (Neufeldt, 1998). Estimating the number of disabled young people is complex, for two reasons. The first is that frequently, disabled young people are grouped together with children or adults, blocking attempts to estimate their numbers as a distinct group. The second is that definitions of disability vary widely. In some nations, only individuals with significant disabilities are identified; in others, even those with mild disabilities are included. Issues of accuracy and reliability of statistics have been raised for individuals with intellectual disabilities and individuals with mental health concerns, as well as those with physical and sensory disabilities. Indeed Suris and Blum (1995) note that the lack of homogeneity in definition, survey procedures and data collections "make international comparisons almost impossible." They report that disability rates are higher in wealthier countries. This seems to be because screening programmes are more available, allowing identification of more adolescents with moderate and mild disabilities. While high infant and child mortality rates in poorer countries may contribute to this discrepancy, under-reporting of disability also cannot be ignored. Suris and Blum analysing the United Nations International Statistics Database for 42 countries, report wide disparity of rates. In 10-14 year old group, rates range from 108 per 100,000 in Myanmar to 6726 per 100,000 in Canada. Among 15 to 19 year olds, rates range from 142.6 per 100,000 in Myanmar to 5099. 5 per 100,000 in Austria. There is sometimes a lack of consensus on what constitutes a disability even within countries.

In 2002, the United Nations established a new international consortium, the Washington City Group to more accurately determine national and international statistics on disability, including those for disabled adolescents and youth. However, its recommendations are still

several years away (United Nation, 2002). Here is what is currently known. By 2005, the UN estimates that there will be roughly 1 billion adolescents in the developing world (UN, 2004). If one uses the UNICEF (2004) and WHO estimates that one in every ten of these adolescents is disabled, then by 2005, the developing world will have 100 million 10-19 year olds. If a more conservative estimated rate of 5% is used, this still means 50 million disabled adolescents by 2005. To this number must be added the number of disabled youth between the ages of 19 and 24. Again, specific global figures must be extrapolated on the basis of general population estimates. It is estimated that there are 500 million youth between the ages of 19 and 24 living in the developing world. Assuming 10% of this population is disabled, there would be 50 million individuals between the ages of 19-24. Combining the statistics on adolescents and young adults from the developing world yields as many as 150 million young people who live with a significant disability. Using the lower calculation of only 5% still yields a global population of 75 million young people. To this number can be added an additional 30 million adolescents and young adults with disability representing the 20% of young people who live in developed nations, assuming a 10% prevalence rate. Using the lower estimate of 5% yields 15 million individuals in developed nations.

The overall total globally for this age range, assuming 10% prevalence, is 180 million, (assuming a 5% prevalence rate, the number still remains a very significant 90 million young people). Moreover, with half of the world's population below 15, the number of young people with disability can be expected to rise markedly over the next decade, particularly in the developing world. This will not simply reflect a rising birth rate. Better medical interventions, both in developing and developed countries, will allow growing numbers of disabled infants and children, who previously would not have survived childhood, to grow into adolescence. Young people are also at increased risk due to work-related injuries, risk-taking behaviour (including motor vehicle accidents, experimentation with drugs, and risk of violence). Many chronic disabling illnesses and mental health conditions appear only during adolescence.

The sensory, physical and mental health impairments associated with the HIV/AIDS virus will add millions of young people to the growing ranks of those who are disabled (UNICEF, 2002). Of equal concern, is the increased risk for young people with disability of becoming infected by the HIV/AIDS virus. Too often, it is incorrectly assumed that these young people are not or will not become sexually active, use intravenous drugs or be victims of abuse or

rape, and so they are not provided basic sex education and the resources to protect themselves (Groce, 2003).

Disabled young people are evenly distributed within the general population. Experts generally agree that disability disproportionately affects the poor. Moreover, those few national data sets that do exist suggest that throughout the developing world, disability affects more males than females, and is found more commonly in rural than in urban areas (UN, 2004). However, such data may also reflect survival rates, access to diagnostic services, census collection techniques and definitional differences of what disability constitutes a disability. These issues make conclusions about the distribution of disability within populations, especially for the very poor and for young women with disability, open to question.

Disability is both a cause and a consequence of poverty (Amusat, 2010). There is a strong relationship between disability and poverty. With cyclical tendency poverty makes people more vulnerable to disability and disability reinforces and deepens poverty. Disability is an important factor, along with gender, race and caste that interacts to impoverish people and keep them poor (Mji, 2009). People with disability are often excluded from the mainstream of society, and hence, may not contribute to the development of the society at all or optimally. It is increasingly being recognized that bringing people with disabilities into the development mainstream will have a significant effect in any plan to cut poverty in the developing world (Wolfensohn, 2002). This is especially true, given that disability affects not only the individual, but also the family and the larger society.

In Africa, previous efforts to put disability in the forefront of the development agenda have not yielded all the expected results. This was as a result of poor resources, blamed partly on the lack of commitment on the part of governments (Mji, 2009), having access to health and rehabilitation services is a precondition to equal opportunities, as outlined in the United Nations (UN) standard rules for equal opportunities (United Nations, 1993), and an essential component of being a valued and productive member of the society. As a result of the UN standard rules on the equalization of opportunities for people with disability, some countries have tried to develop strategies to address disability in the process of overall development strategies (South Africa Integrated National Disability (SAIND) White Paper, 1997). South Africa's key policy areas included notably, prevention, health care, rehabilitation and research. Policy objectives, strategies and mechanisms for each area were developed. The strategy identified the need for legislative scrutiny which may lead to new legislation or

amendments of existing ones. However, even where government commitment and the policy environment are favourable, majority of the people with disability may not experience significant changes in quality of life, access to equal rights and level of community integration. Disability, therefore, continues to be a concern, leading to many international initiatives like those by the United Nations Educational, Scientific and Cultural Organization (UNESCO), International Labour Organization (ILO) and the World Health Organization (WHO), (Mji, 2009). The success of the multiple international initiatives on disability will be influenced by many factors. Of particular importance is an evidence-based policy decision, followed by practical action by all stakeholders.

2.5 Disability in Nigeria

Disability is very common worldwide. The World Health Organization (WHO) estimated that about 500 million people live with disability worldwide, with about 75% living in the developing countries (Mickailakis, 1997; Lang and Upah, 2008). In Nigeria, WHO estimates put the number of people with disability at 19 million or approximately 20% of the country's population (Lang and Upah, 2008).

The Nigerian government supported the UN standard rules on the equalization of opportunities for people with disability. There was also a decree promulgated in 1993 to enhance the social and societal position of people with disability. Nigerians living with disability are no better off when compared with others living in other parts of the developing world, in terms of the challenges they face; they are poor, marginalized and excluded (The Guardian, April 12, 2009; Lang and Upah, 2008). Despite the declaration of full participation in the disability agenda of the United Nations by the Nigerian government, Nigerians with disabilities are still faced with these challenges (Mickailakis, 1997).

A recent review of disability issues in Nigeria identified many factors why the disability agenda continues to suffer. Notable among them were: the absence of disability discrimination laws, lack of social protection, poor understanding of disability issues by the public, and poor access to rehabilitation services. The report recommended, among others, the collection of robust and reliable data, and advocacy for the passage of the disability bill into law (Lang, 2008).

2.6 Physical Disability

A physical impairment might be defined as a disabling condition or other health impairment that requires adaptation. Persons with physical impairment disabilities often use assertive devices or mobility aids such as crutches, canes, wheelchairs and artificial limbs to obtain mobility. The physical disability the person experiences may be either congenital, or a result of injury, muscular dystrophy, cerebral palsy, amputation, multiple sclerosis, pulmonary disease, heart disease or other reasons. Some persons may experience non-visible disabilities that may include respiratory disorders, epilepsy, or other conditions (Wendy, 2011).

Types of physical disabilities

Broadly speaking, these disabilities fall under two categories - skeletal disabilities and neuromuscular disabilities. Disabilities and disorders of the skeletal system are those which affect our bones and either weaken them or cause gradual degeneration. Most of the time, skeletal disabilities may be due to birth or growth defects and these account for a large percentage of disabilities in children. Skeletal disorders like fracture, arthritis, incorrect posture and deformation of the skeletal structure are included under the purview of skeletal disabilities (Ishani, 2012). Neuromuscular disabilities are those which affect the muscular and nervous system, causing disturbances in the coordination of limbs, muscular weakness, loss of control over muscles, limited activity, etc. Loss of muscular function and muscular control may lead to spasms and involuntary fits of twitches and stiffening of the muscles. A common instance is epilepsy and epileptic attacks. Skeletal disabilities such as deformations and growth and birth defects prevent a person from being able to perform the activities of his/her daily life on their own. Let's look at a comprehensive physical disabilities list to understand the scope of this term. Disabilities can fall under any of the five categories - vision, hearing, mobility, chronic ailments, head trauma/ injury. Let us see what all disabilities are covered under each of these categories. Visual Disabilities: Blindness, Cataract, Colour Blindness, Blurred Vision, Night Blindness, Auditory Disabilities, Deafness or hearing loss (complete or partial), Tinnitus, Meniere's Disease. Movement Disabilities: Amputation, Spina bifida Osteoarthritis, Rheumatoid Arthritis , Muscular Dystrophy, Multiple Sclerosis Paralysis (complete or partial), Cerebral Palsy, Stroke, Parkinson's Disease.

2.7 Socio-Economic Antecedent Factors of Sexual and Reproductive Health

In previous literature review, three risky sexual behaviours were targeted—early onset of sexual activity, non-use of contraceptives and non-use of condoms—and one possible outcome of those behaviours, teenage pregnancy. Major literature reviews on these topics were published in 1987 and 1995 (Hofferth, S.L and Hayes, C.D, 1995); it was supplemented and updated by systematically examining the research published in peer-reviewed journals from 1994 to 2002.

The literature identifies four key sets of factors that have been associated with risky sexual behaviours and pregnancy: race and ethnicity; socioeconomic status; social influences; and attitudes toward contraception, condoms and pregnancy and safer-sex behavioural skills. Differences by race and ethnicity vary across risk behaviours. For example, black teenagers are more likely to have very early vaginal sex than Hispanics, who are more likely to do so than whites (Abma, 2010). Specifically, black males initiate vaginal sex more than two years earlier than Hispanic males, and three years earlier than white males. Hispanic adolescents are the least likely to have used a condom or another contraceptive method at last intercourse. The combined influences of earlier sexual debut among blacks and greater non-use of contraceptives among Hispanics yield higher teenage pregnancy rates among non-white than white teenagers (Abma, 1997).

These racial and ethnic differences in sexual risk-taking and pregnancy are partly attributable to differences in socioeconomic disadvantage. More broadly, socioeconomic status is related to each of the four outcomes studied. Among the socioeconomic indicators that significantly predict risky sexual behaviours and pregnancy are the adolescent's having a parent with low educational attainment and living in a single-parent family. A teenager's own level of academic achievement is positively related to age at sexual debut (Lynch, 2001).

Moreover, teenagers who perceive that their mother disapproves of their having sex or who talked with their mother about condom use before first intercourse are less likely than others to become sexually active or to fail to use condoms. Finally, teenagers who are more actively involved in religious activities and those who avoid general nonsexual high-risk behaviours tend to initiate sex later than other teenagers (Halpern, 1996). In all likelihood, the effects of religiosity and avoidance of risk operate through social influence mechanisms.

Sexual risk behaviours are also related to attitudes and behavioural skills. Adolescents' attitudes toward practicing contraception, using condoms and becoming pregnant predict the likelihood that each will occur (Moore, 1995). In addition, their specific attitudes toward pregnancy affect the likelihood that they will practice contraception and use condoms. Furthermore, teenagers who feel they have the requisite skills to use condoms (i.e., they can obtain them and successfully negotiate their use with a partner) are more likely than others to use condoms. Similarly, young people who have demonstrated to themselves that they can use contraceptives (i.e., they used them once) are more likely than others to use them again (Moore, 1995)

Not surprisingly, age and age at menarche strongly affect the likelihood of sexual initiation and teenage pregnancy (Halpern, 1996). Older female adolescents and those who reach menarche at younger ages, because of their longer intervals of exposure, are more likely than their younger peers to become sexually active and to get pregnant. Despite the positive correlation between age and pregnancy, older sexually active teenagers are, paradoxically, more likely than younger ones to have used a contraceptive method at last sex (Santelli, 2000).

2.8 Knowledge about Sexual and Reproductive Health

Sexuality and sexual function are important to persons with disabilities just as they are to their able bodied counterparts, but knowledge about sexual and reproductive health (SRH) among persons with disabilities is frequently inadequate (Hardoff, 2012). Adolescents and young adults with physical disabilities are less active socially, and have difficulties in developing intimate relationships. Thus, despite greater needs for SRH education and service delivery than persons without disabilities, dedicated services regarding sexuality and physical disabilities are scantly reported. Together with a literature survey on sexuality and disability in adolescents, a unique comprehensive SRH service for young people with physical disabilities is described in this review. Despite being interdisciplinary, the utilization of the service was limited due to difficulties in transportation to the clinic and in finding escort for aid in accessibility to public transportation. Health authorities should provide the resources for the development of accessible comprehensive multidisciplinary SRH services dedicated to young people with disabilities, and thus fulfil the United Nations General Assembly declaration on the rights of persons with disabilities.

Sexual development is a multidimensional process, intimately linked to the basic human needs of being liked and accepted, displaying and receiving affection, feeling valued and attractive, and sharing thoughts and feelings (Nancy, 2006). It not only involves anatomic and physiologic functioning, but it also relates to sexual knowledge, beliefs, attitudes, and values. Sexuality should be considered in a context that extends beyond genital sex to include gender role socialization, physical maturation and body image, social relationships, and future social aspirations (Blum, 1997). Like all adolescents, teens with disabilities may express desires and hopes for marriage, children, and normal adult sex lives. In fact, adolescents with physical disabilities are as sexually experienced as their peers without disabilities (Cheng, 2002). However, parents and health care professionals are often pessimistic regarding the potential of children with disabilities to enjoy intimacy and sexuality in their relationships (Berman, 1999). People with disabilities are often erroneously regarded as childlike, asexual, and in need of protection. Conversely, they may be viewed as inappropriately sexual or as having uncontrollable urges (Neufeld, 2002). People without disabilities are more willing to accept people with disabilities as fellow employees or casual friends and less willing to accept them as dating, sexual, or marriage partners (Deloach, 1999). Societal and psychosocial barriers may be more of a hindrance to an adolescent's sexual development than the limitations of the disability itself (Berman, 1999).

Puberty in US children typically has an onset between 8.5 and 13 years of age in females and between 9 and 14 years of age in males. Among children with cerebral palsy, puberty tends to begin earlier and end later than in typically developing children (Worley, 2002). The median age of menarche for white females with cerebral palsy is 14.0 years, contrasting with 12.8 years in the general population. In general, children with neurodevelopment disabilities are 20 times more likely to experience early pubertal changes. Although idiopathic precocious puberty occurs in approximately 1 in 1000 girls, the incidence approaches 20% among females with spinabifida (Elias, 1994). Although the reasons for this increased incidence are poorly understood, malformations of the central nervous system and nutritional influences on the hypothalamic pituitary axis are known to affect the timing of puberty (Owen, 1999). Precocious puberty can further challenge children with disabilities, who may be socially immature, by affecting an already altered body image and self-esteem, increasing the complexity of self-care and hygiene activities, and heightening the risk of sexual victimization. Gonadotropin-releasing hormone agonists can effectively manage true central precocious puberty in most females (Heger, 2005).

All females deserve appropriate gynaecologic care, including children and adolescents with developmental disabilities. During the first 2 years after menarche, anovulatory menstrual cycles are generally associated with abnormal uterine bleeding; however, thyroid disease, anticonvulsant therapy, and neuroleptic medications may also contribute to these symptoms (Sulpizi, 1996). If the adolescent is not sexually active, a pelvic examination is rarely indicated (Quint, 1999). When pelvic examinations are indicated, females with disabilities should be informed about the procedures and instruments to be used and approached with respect for their personal privacy. Adolescents should be given the option of having a trusted caregiver present during the examination. Positioning during the pelvic examination should be modified as needed to accommodate the needs of women with orthopaedic or neuromuscular disorders. Rather than stirrups, frog leg position, V position, or elevation of the legs without hip abduction may increase comfort and decrease anxiety when examinations are indicated. Recto abdominal examinations may offer an acceptable alternative to pelvic examinations and are best performed after the bowel has been evacuated by an enema (Quint, 1999).

Adolescents and young adults with disabilities must be well informed when making decisions regarding sexual and reproductive lifestyle. For example, some antiepileptic medications induce hepatic enzyme activity and decrease the effectiveness of oral and implanted contraceptives (Owen, 1999). The risk of thrombotic diseases in females with mobility impairments needs to be considered when prescribing oestrogen-progestin containing contraceptives such as pills, transdermal patches, and vaginal contraceptive rings (Lidigaard, 1998). Barrier devices, including condoms, cervical caps, and diaphragms, require motivation, cognitive understanding, and physical dexterity (Blum, 1997). In addition, these devices often contain latex, which are contraindicated in the presence of latex sensitivities. Polyurethane male and female condoms are available but provide less protection against pregnancy and transmission of sexually transmitted diseases (STDs) and are more likely to break during sexual intercourse when compared with latex condoms, (Steirner, 2003). However, nonlatex condoms still provide an acceptable alternative for those with latex sensitivity or allergy (Gallo, 2003). Although depot medroxyprogesterone acetate, an injectable contraceptive, can effectively minimize or eliminate menstrual flow, prolonged use has been linked recently to bone density loss in healthy adolescent females, which may not reverse completely after discontinuation of the medication (Lara, 2004). Adolescents who are already at risk of osteopenia from chronic medical conditions may be at even greater risk of bone mineral density loss from depot medroxyprogesterone acetate use. Historically, sterilization of minors with developmental disabilities was performed without appropriate regard for their decision-making capacities, abilities to care for children, feelings, or interests. Such decisions should be made only in the context of the individual's capacity to make decisions, the consequences of reproduction for the person and any children that might be born, and applicable local, state, and federal laws (American Academy of Paediatrics, 1999).

Most adolescents with myelomeningocele desire to marry and have children, but fewer than 20% have sought information regarding their sexual or reproductive function and only 16% of those who were sexually active have used contraception (Cromer, 1990). Adolescents with myelomeningocele and spinal cord injury have unique educational and medical needs that must be addressed to enjoy safe and satisfying sexual lives. When genital sensation is diminished or absent, alternative ways to appreciate sexual pleasure and satisfaction should be discussed. Fertility is generally preserved in females but reduced in males with spinabifida and spinal cord injury. Pre-pregnancy counselling should include informing women with spinabifida of the 5 in 100 risk of bearing children with neural tube defects, the protective effect of folate supplementation, and the potential complications associated with pregnancy. When 4 mg per day of folate is taken for at least 3 months before and during the first month of pregnancy, the recurrence risk is reduced by 50% to 75% (Green, 2002). Because unplanned pregnancies can occur, females of childbearing age with myelomeningocele may be offered the option of taking 4 mg per day of folate on an ongoing basis.

While there is growing body of literature on adolescent and young adult women, much less is known about male sexual and reproductive health and its potential connection to well being (Varga, 2001), and in particular the risk of contracting and spreading HIV/AIDS. The authors premise is that both societal and individual vulnerability to HIV/AIDS infection are heavily influenced by socio-cultural factors and societal norms, and that gender and sexuality are among the most powerful of these elements. In keeping with this perspective, potential gaps in the literature are identified using a modification of Dixon Mueller's framework, which illustrates how sexuality and gender influence reproductive health outcomes. The framework focuses on several interrelated elements of sexuality sexual partnerships, sexual acts, sexual meaning, sexual drives and enjoyment, and sexual knowledge and awareness (AfrReprodHealth, 2001). Along with the ever-increasing sophistication of how we understand the dynamics surrounding HIV/AIDS, it has come to recognition of the need to

more fully involve men in working to stop its spread. This is evident in the current time of the World AIDS Campaign, men make a difference in keeping with this thematic emphasis, this provides a broad over view of existing work on sexual and reproductive health issues among boys and young men in sub-Saharan Africa. Its purpose is to serve as a basis for the development of male youth focused messages relating to the campaign itself, as well as foster greater attention to boys and young men in regional research, programs and policies.

There are many compelling reasons to focus on men in HIV prevention efforts. First, while men's health issues are important, they are often over shadowed by an emphasis on female health concerns. Such neglect may stem partly from the fact that in many, if not most, society's men perceive the need for treatment or advice as a sign of weakness and thus delay seeking health care. Further, as discussed in greater detail below, both research and programming have traditionally been dominated by the assumption that sexual and reproductive health issues are primarily female concerns. This is certainly not the case. For example, studies in Tanzania, Kenya, Zimbabwe and Zambia have demonstrated that men take a keen interest in sexual and reproductive health services, articulate their sexual and reproductive health needs, and have very specific recommendations for improving male S/RH services (Weger, 1997).

In this respect, it is also important to recognise the importance of male sexual and reproductive health both in and of itself, as well as a means towards improving women's well being. For example, male involvement is a necessary component of HIV and other sexually transmitted disease (STD) prevention. It is well known that in order for STD infection to be effectively curtailed both partners must be treated. Moreover, none of the female contraceptive methods currently available safeguards against HIV infection; only male controlled or assisted means provide adequate protection. Thus, focus on men is absolutely vital in ensuring the sexual and reproductive health of both partners.

Another motivation for increased attention to men is the fact that they are equally or more likely than women to behave in ways that place both themselves and their partners at risk for sexual and reproductive health complications. By some estimates, one in four men worldwide engages in behaviours such as unsafe sexual practices and substance abuse, which increase the risk for HIV and STD infection. Moreover, there is growing evidence worldwide that many men engage in both (unprotected) homosexual and heterosexual intercourse; and that in developing countries adolescent homosexual experimentation and preference is more

common than previously believed.' In their book, 'Boy, Wives and Female Husbands', Murray and Roscoe (1996) went far to debunk the myth that homo sexuality does not exist in sub Saharan Africa. This sexual networking patter means that for such men both their male and female partners are at risk for HIV/STD infection. In the African context, for these and other reasons there is an undeniable need for a greater focus on boys and young men in the realm of sexual and reproductive health and HIV prevention. Across the continent over 10 million men are infected with HIV/AIDS, with a significant proportion of these individuals below 25 years of age. While the reasons behind HIV spread on the continent are complex, the tendency among African boys and young men toward risky sexual behaviour and poor knowledge and attitudes surrounding S/RH issues certainly contributes to the epidemic's footholds in the youth population. Research in the region suggests that in general, boys engage in riskier sexual practices than girls. Boys report initiating sex earlier than girls; they have more sexual partners and intercourse more often, and are more likely to report having had an STD infection (Meekers, 1999). Moreover, as in many parts of the world, because gender norms dictate that men (appear to) be more knowledgeable and sexually experienced than women.

2.9 Perception towards Sexual and Reproductive Health

Regardless of what the beliefs about sex and disability may be, there can be promotion of health and well being of patients with disabilities in several ways (Neufeld, Klingbeil, Bryen, Silverman, & Thomas, 2002). First and perhaps foremost, physical and programmatic barriers to accessing general health care including routine gynaecologic care must be dramatically reduced. The promise of Title III of the Americans with Disabilities Act must be aggressively extended to our health care system to ensure equal access to routine health care for all. Second, knowledge of community resources that can support the healthy development and exercise of responsible and satisfying sexuality is critical. For example, health care providers should know about adaptive and assistive technologies as well as the use of personal care assistants to support the healthy although sometimes no typical expression of one's sexuality. Centres for Independent Living are community resources that are often underutilized by the medical profession. These centres run by and for people with disabilities are likely resources and allies for providing education, role models, and peer mentoring around relationships, intimacy, sexuality, sexual expression, and parenting with a disability. Finally, sex education is a must and should include the following: Basic facts of life,

reproduction, and sexual intercourse; human growth and development, human reproduction and anatomy self-pleasuring/masturbation and the use of sexual aids, intimacy and privacy pregnancy and child birth, contraception and abortion family life and parenthood, sexual response and consensual sex, sexual orientation sexual abuse, HIV/AIDS and other sexually transmitted diseases. The question should not be whether sex education is provided to persons with disabilities, but rather how it is most effectively provided. Sex Education must include the development of effective communication skills, decision-making skills, assertiveness, and the ability to say "no." It must also include ways to create satisfying relationships.

Studies have shown that awareness about HIV, its transmission, prevention, nature of the disease and similar knowledge is existent in many of the studies especially those who covered urban areas (Dawud, 2003). However, correct knowledge of the virus and its modes of transmission were limited to 44% of the boys and 41% of the girls. More boys (82%) than girls (37%) know about sexually transmitted infection and 20% had first hand personal history of STI among the sexually active (Alene, 2004). Knowledge scores were compared between urban and rural areas from Gondar; Ethiopia, which revealed that more than 90% of the adolescents are aware of HIV/AIDS. In a nearby locality in rural Gondor, 74.2% confessed having heard about HIV but at the same time 89.9% did not know anything about condom (Ismael, 1995). Knowledge about prevention options was found to be misty by some studies. Serious misconceptions and mythical disadvantages on condom use were also reported. The level of accuracy of AIDS knowledge however did not predict the likelihood of recent condom use (Zellner, 2003). There is no consensus between accurate knowledge of sexuality and risky practice either. Some say that they are not associated while others say that more accurate knowledge is associated with safe sexual behaviour. Yet, others say that knowledge alone does not relate to behavioural change. Case in point is a study among junior college students in Gondar, Ethiopia; which concluded that there is no association between AIDS knowledge and condom use (Teka, 1997). A similar study done among out of school youth in Bahir Dar failed to show any significant association between knowledge scores with attitude and practice scores (Fantahun, 1996). Some researchers say that there is a mediating variable in the translation of knowledge to practice. An investigation into the knowledge, selfefficacy and behavioural intent towards AIDS prevention behaviours among culturally diverse secondary school pupils in South Africa asserted the existence of adequate level of knowledge about HIV, with considerable inaccuracy about its means of transmission. They felt most self-efficacious regarding how to protect themselves from being infected and least

self-efficacious on knowing where to go for information on HIV/AIDS. Culturally diverse knowledge, self-efficacy and behavioural intent towards AIDS prevention was found among white, black and Asian pupils (Peltzer, 2000). Perception of personal risk in most of the studies is amazingly low. People believe that HIV exists and that people of their age are at risk but they do not at the same time accept that they are personally at risk (Yordanos, 2004). A study that assessed risk perception disclosed that only 6% of the urban adolescents in North Gondor were aware of their engagement in high-risk sexual practices (Dawud, 2003). Another study among the rural Dembia, near Gondo revealed that 60% of the study subjects were wary/ afraid of HIV (Ismael, 1995). The Social Cognitive Learning Theory and the Health Belief Model propose the importance of perception about seriousness, perception about one's risk and perceived ability to reduce risk as key determinants of sexual behaviour. But controversial ideas exist on the relation between perceived vulnerability and sexual risk taking. Some say that there is a direct relation while others say that they are inversely related and yet another group claims that they have no association. It is also difficult to know the direction of association between the two variables. "Is it indulgence in high risk-behaviour that increases perception or is it people who are engaged in risky behaviour do so because they do not perceive risk?" (Eaton, 2003). A study which questioned whether the HIV epidemic has changed the sexual behaviour high-risk groups like prostitutes, long distance truck drivers, bar maids, and street children concluded that little if at all has changed in the way of the sexual behaviour of these groups in Uganda (Ntozi, 2003).

Appropriate knowledge and beliefs about sexuality and necessary life skills do not often precede sexual behaviours among young people (Negussie, 2003). This study outlines a profile of sexual risk factors and the underlying sexual and reproductive health perception and beliefs among youth (aged 15–24 years) in Addis Ababa, Ethiopia. Five hundred and sixty-one youth residing in two of the six zones of Addis Ababa filled a self-administered questionnaire. Three outcome variables: history of sexual activity in the past, use of condom during recent sexual intercourse and use of alcohol, were used to construct a pyramid of sexual risk categories. Being a female, age group of 20–24 years and out-of-school significantly increased the likelihood of belonging to the most vulnerable category. Although young people were heterogeneous in their sexual risk-taking, they were equally uninformed on reproductive health matters related to puberty and sexuality. Their respective beliefs also tended to be flexible and unstable to consistently predict their behaviour. Possible reasons for such heterogeneity and its practical implications in sex education strategies are discussed.

2.10 Attitude towards Sexual and Reproductive Health

Recent trends in adolescent sexual behaviour offer mixed message (Debra, Andrew, Alwyn, Danielle, & Carol,2003), It is very encouraging that teenagers' overall rates of sexual activity, pregnancy and childbearing are decreasing, and that their rates of contraceptive and condom use are increasing (Abma,1997). However, the proportion of young people who have had sex at an early age has increased. Moreover, while adolescent females' contraceptive use at first sex is rising, their use at most recent sex is falling.

There is general consensus that the proportion of teenagers who engage in behaviours that put them at risk of pregnancy, HIV and other sexually transmitted infections (STIs) remains too high. Each year, approximately one million young women aged 15-19 or one-fifth of all sexually active females in this age-group—become pregnant; the vast majority of these pregnancies are unplanned. In the United States, the risk of acquiring an STI is higher among teenagers than among adults (CDC, 2001). Moreover, rates of unprotected sexual activity, STIs, pregnancy and childbearing continue to be substantially higher among U.S. adolescents than among young people in comparable industrialized countries (Singh, 2000).

Research has also begun to highlight an alarmingly high rate of involuntary sex among young people. In the 1995 National Survey of Family Growth, 13% of 15-19-year-old females reported that they had been forced to have sex (Abma, 1997). When asked about their first sexual experience, 22% of 15-44 year old women for whom it occurred before age 15 reported that the act was involuntary, as did 16% of those who first had sex before age 16. Involuntary sexual activity is typically unprotected and thus puts its victims at very high risk of pregnancy and STIs.

Previous research and clinical observations suggest that a substantial proportion of teenagers, including those who report having never had vaginal sex, are engaging in oral sex (Schuster, 1996). This trend has negative implications for teenagers' sexual health because many seem unaware that STIs can be acquired through unprotected oral sex. Adolescent health professionals are faced with the dilemma of how to refine programmatic and research efforts to maintain the progress that has been made while reducing those risk behaviours that remain too prevalent. The solution may lie, in part, in bridging the gap between research and programs. For more than 30 years, researchers have studied the antecedents of teenagers' high-risk sexual behaviours, and service providers have designed programs to prevent those

behaviours. Their efforts have typically proceeded independently, however, and each professional community's work has not routinely informed that of the other. This lack of communication is understandable, given the differences in professional backgrounds and training, work settings and day-to-day activities. It is believed, however, that this lack of communication inevitably compromises the quality of both research and programs related to teenage sexual health and behaviours. The interdisciplinary group of public health researchers and service providers who were committed to bridging the chasm between research and programs suggested ways in which work to reduce levels of teenage pregnancy and risktaking can proceed in a more integrated and collaborative fashion. It is believed that research on prevention should be designed and conducted to inform the development of programs and policy. The issues that emerge as these programs and policies are implemented, in turn, will raise questions that promote further research, which ultimately will inform the next generation of programs and policies. The structure of this comment models this process. We begin on the research side and give a brief overview of findings on the antecedents of adolescent sexual risk behaviours and pregnancy, and discuss their implications for program and policy development. This effort is grounded in a comprehensive literature review that was conducted for the Centre for Disease Control and Prevention (CDC, 2001). It was then move to the program side. On the basis of our own clinical observations and discussions with other providers in a variety of settings, we identify a set of critical programmatic issues that hinder success in reducing adolescents' sexual risk-taking. Finally, the specific research questions raised by these service-related issues were outlined. The answers to these questions were believed to have potentially enhanced program efficacy.

Sub Saharan Africa has experienced very high rates of unemployment and poverty among young people aged 15 to 24 (United Nations, 2011). Poverty and reproductive health are intricately related. Poverty is associated with high risk behaviours, such as rape and unsafe sex in exchange for monetary incentives (Kalembo, 2013). These behaviours put young women at risk of unintended pregnancy and sexually transmitted infections such as HIV, which in turn affect their reproductive health (USAID, 2009). Poverty and inadequate healthcare systems compound the vulnerability of young women to sickness and early death. Young teen mothers are at high risk of experiencing serious complications during pregnancy and childbirth because their bodies often have not yet fully matured (Bernstein & Hansen, 2006). The proportion of births that take place during adolescence is about 2% in China, 18% in Latin America and the Caribbean and more than 50% in sub-Saharan Africa (WHO, 2011).

In sub-Saharan Africa, 3.2 million young people are living with HIV and three young women are infected for every young man (UNAIDS, 2008). Moreover 75 percent of all new cases of HIV in this region were found among young women and girls between ages 15-24 years (Global Health Council, 2007). Young people have special sexual and reproductive health needs because of their relatively higher risk of being exposed to inaccurate or incomplete information, which leads them to acquiring HIV and other sexually transmitted infections (STIs), and experiencing unintended pregnancies and maternal complications (Rani &Lule, 2004). At the 1994 International Conference on Population and Development (ICPD), the program of action signed by 179 countries called for the protection and promotion of the rights of adolescents to reproductive health education, information and care, and a reduction in sexually transmitted infections and pregnancy. The United Nation Population Fund (UNFPA) adopted Millennium Development Goals (MDGs) to complement the ICPD program of action in an effort to improve the reproductive health of young people. The MDGs are a framework for progress consisting of eight MDGs which were derived at the Millennium Summit in 2000 by leaders of 189 member states. The MDGs serve as a timebound, achievable blueprint for reducing poverty and improving lives (UNFPA, 2010).

The ICPD program of action is aligned with the MDGs' focus on education. Education is not only a goal in itself as stated by the millennium development goal number two (MDG2), but fundamental to eradicating poverty and hunger (MDG1). Education and health care for young people are essential to reducing child and infant mortality and HIV infection (MDG4, MDG5, and MDG6) as well as the promotion of gender equality and empowerment of women (MDG3). Young people should be provided with access to comprehensive and culturally appropriate sexual and reproductive health education in schools (UNFPA 2011). The purpose of this review therefore, was to explore and identify feasible, socially acceptable and effective ASRHE programs in sub-Saharan Africa. The review was conducted as a follow up on goals set forth at the 1994 ICPD to promote ASRH. It was aimed at measuring the progress made so far in sub-Saharan Africa in meeting the ICP goals.

Worldwide, societal shifts and behavioural patterns exacerbated by unique developmental vulnerabilities create a confluence of factors that place today's adolescents at heightened risks for poor health outcomes (Bearinger, 2007). Country-level data show that continued investment in effective prevention and treatment strategies is essential to protect adolescents' sexual and reproductive health. Whereas strategies must be tailored to the developmental

needs of this age group and their social contexts, effective approaches are multifaceted. All adolescents need access to quality youth-friendly services provided by clinicians trained to work with this population. Sex education programmes should offer accurate, comprehensive information while building skills for negotiating sexual behaviours. Girls and boys also need equal access to youth development programmes that will make them wear the right attitude towards sexual reproductive health.

Adolescent with disability are found most vulnerable and at extremely high risk of sexual abuse, molestation and coercion with various outcomes such as: teenage pregnancy, abortion, low self-confidence, sexually transmitted infections, particularly HIV/AIDS (Taiwo, 2012). It was speculated that this risky sexual practices has significant negative effects on the development of their sexual identity, self-regulation of impulses and desires. A Cross sectional study conducted among 140 adolescents with physical disabilities in four handicapped schools in Osun State South West, Nigeria indicated a significant poor knowledge of sexuality issues such as: unprotected sex, teenage pregnancy, STIs/HIV/AIDS and contraceptive awareness. The study targeted adolescents with physical disability, The Joint National Association of Persons with Disabilities in Nigeria (JONAPWD) in 2010 put the population of people with disability at 11.2 million and segregation show that children constitute about 37.5% of this population. This translates to a little above 4 million children who are physically incapacitated and will become the adolescents requiring reproductive health services in the nearest future without sufficient preparation by the society to meet these needs.

The few studies conducted in sub- Sahara Africa particularly in Nigeria to gain understanding of the perspective of persons with disability issues of sexuality and reproductive health collected data from all categories of young people with disability. The study did not also generated sufficient argument for promoting a healthy sexual behaviour and meeting sexual needs of adolescents with disability. Societal norms, the culture of silence on discussions around sexual issues and believe that adolescents with disability are sexual, informed the existing attitudes of negligence in providing sexuality education to these adolescents. Consequently, they are left to discover sexual related information on their own by relying on their equally uninformed peers and the media.

2.11 Experiences towards Sexual and Reproductive Health

Eliciting own views can yield powerful information about their health care experiences and preferences. While adolescents are not usually asked directly about their health conditions or problems, a large body of national survey research with high school students in New York has provided extensive data about their health risks and behaviours (Eaton, 2007). Additional survey and focus group studies on barriers and bridges to care (Ensign, 2002): voices of homeless female adolescent youth in Seattle, Washington, shed light on their health seeking behaviours, including their reliance on family and friends for certain types of health information and the importance they place on providers who are competent, assure confidentiality, show them respect, are nonjudgmental, give them ample time to discuss concerns, and understand their cultural background. Others have shown that adolescents use various sites for care, depending on the nature of their problem, but also that they often lack information about where to go for needed services (Clostermann, 2005). Still others have shown that adolescents frequently are unable to have the kind of provider patient relationship they want (Tilson, Sanchez, Ford, Smurzynski, Leone, et al, 2004).

Most research with only a few exceptions, is based on information from a single site, a small sample, or a particular adolescent subgroup, and it offers only limited insights into adolescent preferences about the design of health care services except that offices should be clean and comfortable, materials should be directed to adolescents, waiting times should be short, and there should be opportunities for discussion groups (Vo, Pate, Zhao, Siu, Ginsburg, 2007). This report presents findings from focus groups and supplemental questionnaires structured to learn about adolescents' perceptions of the health problems facing teens, their experiences receiving care, and their ideas about how best to structure care for the adolescent population (Ravenell, Whitaker, Johnson, 2008). The study documents the perspectives of 204 young people aged 14 to 20 from disadvantaged neighbourhoods in Los Angeles, Miami, Chicago, and Washington, DC. Twenty-six total focus groups organized by gender and age were held in these 4 cities, and nearly half of the participants were asked to fill out anonymous questionnaires after the group sessions. The groups were ethnically diverse and representative of the demographics of the respective cities low-income populations: almost two-thirds total were African American and one-third were Hispanic. After a lengthy discussion about health care problems and experiences, each focus group worked in teams of to design the "ideal" health care setting for teens and present their ideas to the group. The National Alliance to

Advance Adolescent Health worked with Philliber Research Associates and ICR to conduct the focus groups. Recognition of Health Problems Adolescents was astutely aware of the challenges they and their peers faced in their schools and neighbourhoods. When they were asked about the most important problems, various health issues topped the list. Sexually transmitted diseases were mentioned by all focus groups and drugs and alcohol by all but one. Teen pregnancy, violence, negative peer pressure, and mental health issues were frequently cited as well. Answers also varied by gender: females were more likely to mention abuse and obesity and males more likely to discuss poverty, homelessness, or the economy - all issues with direct or indirect health consequences. Also mentioned, especially among males, were concerns about dropping out of school and the costs of health care (Bachman, 2009). Several adolescents commented that family problems were of concern as well, "a lot of teens decide to have unprotected sex and then they think, "Oh, I don't need to go get tested or anything" HIV [or] AIDS is one of the biggest problems right now." Female (14-16) Miami Group. "There are some kids that get treated so bad that they think doing drugs is going to help them through it..." – Male (17-20) Los Angeles Group "A lot of teens –they're depressed." – Female (17-20) Chicago Group In response to a question about what "health care" means, nearly all focus groups cited health insurance and half mentioned cost or affordability as an issue. The topic re-emerged twice more during discussion: when teens were asked about their experiences with the health care system and when they were asked if they sometimes did not get health care when they needed it. Some adolescents in our fours groups received routine care from a variety of sources, including doctors' offices, community health clinics, and emergency rooms. A questionnaire at the end of each focus group session showed that slightly over a quarter reported using an emergency room when they were sick. Sometimes, when they did not have the time or money to seek care, teenagers mentioned "fighting" colds or going to CVS to treat the flu. They also mentioned sometimes using mental health clinics, substance abuse programs, and family planning clinics. "They go to clinics, most of my friends do... they know if they go to their doctors, then it will come up on the health insurance bill..." Female (14-16) Washington, DC Group "When I was younger... I went to the doctor because I was fighting, and... I busted my hand up... I was lucky to have it covered. Now when I got older... [They] weren't able to cover it anymore." Male (17-20) Washington, DC Group Many teens who received sick care from their doctors' office did not receive other forms of care there. According to information from the questionnaires administered after the focus group sessions, among adolescents who reported that people their age went to the doctor's office when they were sick, 83% did not report it as the usual site for

drug or alcohol abuse problems, 62% did not report this as the usual site for care for mental health problems, 60% did not report it as the usual site to receive health education, and 55% not did report it as the usual site for sexual health issues.

The lack of knowledge about where to go for services presented another obstacle (Harriette, 2010). Questionnaire results from a study, mental health services in primary health care setting for racial and ethnic minority population in U.S.A showed that roughly half knew to use mental health clinics for mental health care problems, but about a quarter did not know of a specific place or where to go for these services. Similarly, just over two-thirds recognized the need to find a substance abuse program for drug and alcohol problems, but one-fifth did not know where to go. Only 6% of teens, however, did not know of a place to go for sexual health services. What else is preventing these young people from seeking more treatment for their health problems? Not having health insurance was identified as a major impediment, especially among older adolescents, as well as high copayments for covered services. In addition, adolescents noted that there was a lack of teen-specific information and resources and that they often have inadequate knowledge about where to go for needed services. Younger adolescents, in particular, claimed that many of their peers were uninformed about health risks, felt uncomfortable talking about their problems, or were afraid to find out if something were really wrong with them. Experiences with health care when the focus groups were asked about their experiences with health care, their answers were overwhelmingly negative. Teens most often cited two factors that affected their experiences within the health care system: long wait times and providers being too busy. A majority of the focus groups mentioned long waits in doctor's offices and in emergency rooms. They also recounted excessive wait times and difficulties in scheduling appointments. Young people were most vociferous about inadequate female, Los Angeles Group attention and being rushed at the hands of busy health care providers. The wait to see the doctor was usually long, but the time spent with the doctor was short. They claimed that if the doctor spent more time with them, he or she could better assess what was wrong and provide better care. If the doctor just trusted the "symptoms" they mentioned without questioning and examining them, they said that it was possible to miss important information. Teens also reported that they sometimes forgot to bring up concerns because they felt hurried or the doctor did not have enough time to give a thorough explanation. Questionnaire results showed that only 14% of focus group participants felt that their health care provider spent enough time with them "all of the time." A roughly equal percentage (16%) felt that their health care provider "never" spent enough time with

them. Approximately a quarter (27%) of teens were satisfied with provider time "most of the time." The few positive experiences mentioned by focus groups involved the adolescents' closeness with doctors or counsellors. Some teens felt relaxed with their health care providers and trusted them. They mentioned that they felt comfortable going to their paediatricians' offices because they knew them well there.

2.12 The Conceptual Frame Framework

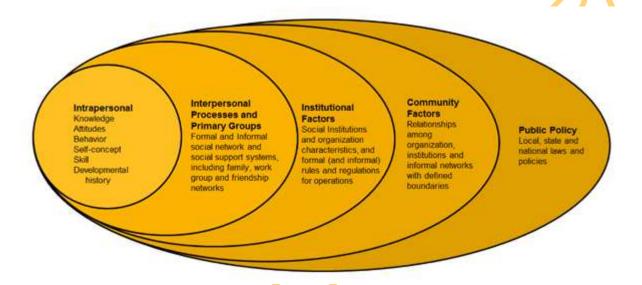


Figure 2.1 Ecological Models (McLeroy, 1988)

Antecedent factors relating to sexual and health experiences of physically challenged adolescents can be better understood using ecological approach. An ecological approach focuses on both population-level and individual-level determinants of health and interventions. It considers issues that are community-based and not just individually focused. Health is determined by influences at multiple levels (e.g., public policy, community, institutional, interpersonal, and intrapersonal factors) (McLeroy, 1988). In the ecological model health status and behaviour are the outcomes of interest (McLeroy, 1988) and viewed as being determined by the following:

Public policy — Local, state, national, and global laws and policies including polices that allocate resources to establish and maintain a coalition that serves a mediating structure connecting individuals including the physically challenged adolescents and the larger social environment to create a healthy sexual and reproductive lifestyle. Other policies include those that restrict behaviour such as tobacco use in public spaces and alcohol sales and

consumption and those that provide behavioural incentives, both positive and negative, such as increased taxes on cigarettes and alcohol. Additional policies relate to sexual violence, social injustice, and the economy.

Community — Relationships among organizations, institutions, and informational networks within defined boundaries that affect the SRH of the physically challenged adolescents includes location in the community, built environment, neighbourhood associations, community leaders, and youth friendly centres.

Institutional factors — Social institutions with organizational characteristics and formal (and informal) rules and regulations for operations includes special school climate (tolerance/intolerance), class schedules, financial policies, competitiveness, lighting, unclean environments, distance to classes and buildings, noise, availability of study and common.

Interpersonal processes and primary groups — Formal and informal social networks and social support systems, including family, work group, and friendship networks such as roommates, supervisors, resident advisors, rituals, customs, traditions, economic forces, athletics, intramural, sports and club.

Intrapersonal factors — Characteristics of the adolescents such as knowledge, attitudes, behaviour, perceptions and experiences. Others may include gender, religious identity, racial/ethnic identity, sexual orientation, economic status, financial resources, values, goals, expectations, age, genetics, resiliency, coping skills, time management skills, health literacy and accessing health care skills, stigma of accessing counselling service.

The study focused mainly on the intrapersonal factors of the ecological model; the characteristics of the physically challenged adolescents such as their knowledge of sexual and reproductive health, their attitudes and perceptions towards sexual and reproductive health. Other factors such as socio-economic, educations, age, gender, religious identity and sexual orientations are antecedents to their sexual and reproductive health experiences.

CHAPTER THREE

RESEARCH METHODOLOGY

The methods employed in this study are systematically presented in this chapter. It consists of thirteen sections which are as follows:

- 1. Study Design and Scope
- 2. Description of Study Areas
- 3. Study population
- 4. Inclusion Criteria
- 5. Exclusion Criteria
- 6. Determination of Sample Size
- 7. Method of Data Collection
- 8. Data Collection Instrument
- 9. Validity of the Study
- 10. Reliability of the Study
- 11. Data Management
- 12. Ethical Consideration
- 13. Study Limitation

3.1 Study Design and Scope

The study was descriptive cross sectional in design which looked into the antecedent factors related to sexual and reproductive health experiences of the physically challenged adolescents in Ibadan.

3.2 Description of Study Areas

Location of Ibadan in Nigeria

Ibadan is located in south-western Nigeria. It is the capital of Oyo State, and is reputed to be the largest indigenous city in Africa, south of the Sahara. Ibadan had been the centre of administration of the old Western Region, Nigeria since the days of the British colonial rule. It is situated 78 miles inland from Lagos, and is a prominent transit point between the coastal region and the areas to the north. Parts of the city's ancient protective walls still stand till

today, and its population is estimated to be about 3,800,000 according to 2006 estimates. The principal inhabitants of the city are the Yoruba.

The study took place in five institutions in Ibadan. These are Cheshire Home for the Handicapped, Ijokodo; Rehabilitation Centre for the Disabled, Moniya; Juvenile Correctional Institution, Ijokodo; Sekinat Olapeju Adekola Centre for Disabled, Ad-din International, Challenge, Ibadan; and W.O Lawal Centre for the Physically Challenged, Amubikaun Avenue, Ring-Road, Ibadan.

Oluyole Cheshire Home for the Handicapped: Oluyole Cheshire Home for the physically challenged is located along the Polytechnic Road, Ijokodo in Ibadan metropolis. It was established in Nigeria by those who bought into the vision of Captain Leonard. This home was opened in Ibadan by the late Justice Sir Adetokunbo Ademola in 1959. The establishment of this home named Oluyole Cheshire Home (for the handicapped) Ibadan marked the beginning of Cheshire services in Nigeria. The aim of Oluyole Cheshire is to help people with disability live a full complement of life and acquire education or vocational training as their God-given ability permits. There are different set of persons with different forms of disabilities found at the homes. The physically challenged persons at the home cut across all age groups including many adolescents. Inmates are engaged in different kinds of vocational activities such as Shoe Making, Fashion Designing, Information and Communication Technology (ICT), Bead Making, Animal Husbandry and others to enable them become productive members of the society. Health clinic services are made available for inmates including their teachers. The homes are mostly run through the help of the financial support of the government, NGOs, churches and some philanthropists.

Rehabilitation Centre for the Disabled: This Centre is located on the old Oyo Road, an outskirt of Moniya, headquarters of Akinyele Local Government area of Oyo State. There, the inmates are engaged in different kinds of vocational activities such as Shoe Making, Fashion Designing, Information and Communication Technology (ICT), Bead Making, Animal Husbandry and others to enable them become productive members of the society. Though, they are at the centre on the ticket of the state government, which caters for their training, accommodation, feeding, it was considered necessary by a socio-philanthropic group to identify with them at the country's 53rd independence anniversary. This, the organization, 'Summit '01' Gents International' said, was in recognition of the fact that government alone could not shoulder the responsibility of the Centre, given its other pressing demands. It was

also a way of identifying with the inmates and creating in them a sense of belonging. **Juvenile Correctional Institution Ijokodo:** this is located at Ijokodo, beside Polytechnic Eleyele, Ibadan in Ibadan North L.G.A. It is a reformatory institution for both the physically challenged who is mentally sound and inmates with other forms of disabilities. They are trained in different vocations as well. The inmates comprise of both Christians and Muslims **W.O.Lawal Centre for the physically challenged:** the centre is located in Amubikaun Avenue, Ring –Road, Ibadan. It is both academic and vocational training centre for the physically challenged persons.

Sekinat Olapeju Adekola Center for Disabled: is located at the Ad-din International School, Challenge, Ibadan. The centre comprises of all type of people with different forms of disabilities; the learning impaired, the vision impaired, and mobility impaired. Both children and adolescents are found in the centre.

3.3 Study Population

The study population constituted the physically challenged adolescents in Ibadan.

3.4 Inclusion criteria

The inclusion criteria included all physically challenged adolescents in Ibadan whose movements were impaired such as those using wheelchairs, cane, walker, medically prescribe shoes, crutches, scooter, brace, and artificial limb.

3.5 Exclusion criteria

This study excluded adolescents with other forms of disability who did not meet stated criteria. All those who originally met the inclusion criteria but were unable to communicate due to other forms of disabilities were also excluded.

3.6 Determination of sample size

The sample size (n) was determined by using Lwanga and Lemeshow (1991) sample size formula:

$$n = \underline{Z^2p(1-p)}$$
$$d^2$$

Where n=minimum sample size required

Z= confidence limit of survey at 95% (1.96)

P= Prevalence taken to be at 7% (Taiwo, 2012).

d=absolute deviation from true value (degree of accuracy) = 5%

$$n = \frac{1.96^2 \times 0.07 \times 0.93}{0.05^2} = 100.04 \text{ approximate} = 100$$

A non-response rate of 10% of
$$100 = 100 \times 10 = 10$$
 approximate = 10

10% (10) non-response rate were added to sample size calculated to make the sample size 110 in order to address any possible case of incomplete response.

3.7 Sampling technique

Total sampling was done for the study. All the physically challenged adolescents in all the five institutions who met the inclusion criteria and who volunteered to take part in the study were enrolled.

3.8 Method of data collection

The data were collected using quantitative methods of data collection. A semi structured standardized questionnaire was used to gather information from the respondents.

3.9 Instrument for Data Collection

The quantitative data was collected with the use of a semi-structured questionnaire that was administered by the researcher and assisted by two trained field assistants. The questionnaire had six sections; section A, the socio-demographic characteristics of the respondents, section B, socio-economic factors influencing sexual and reproductive health, section C, knowledge about sexual and reproductive health, section D, perception towards sexual and reproductive health, section E, attitude towards sexual and reproductive health, and section F, elicited the sexual and reproductive health experiences of the physically challenged adolescents.

3.10 Validity of the Research Instrument

Validity of the instrument was ensured through the development of a draft instrument by consulting relevant literatures, subjecting the draft to independent, peer and expert reviews, particularly experts in public health.

3.11 Reliability of the Research Instrument

The instrument was pre-tested, using 10% of the sample size calculated. The instrument was pre-tested in institution with similar characteristics to the study sites one. Responses were coded, entered, and analysed with the SPSS version 20 software. The reliability of the questionnaire was assessed using Cronbach Alpha statistics; 0.704 reliability result using correlation coefficient was obtained.

3.12 Data management

The investigator checked all copies of administered questionnaire one after the other for the purpose of completeness and accuracy. Serial numbers were assigned to each questionnaire and question for easy identification and for correct data entry and analysis. A coding guide was also developed to code and enter each question into the computer for analysis. Analysis was done with the use of Statistical Package for Social Science (SPSS) version 20. The data were entered into the computer and was subjected to descriptive (mean, median, mode) and inferential (Chi-Square) statistical analyses. Finally, information obtained was summarized and presented in tables and charts. One mark score was given for every correct response for

each variable. The knowledge scores were categorized into two groups; good for having scored 6-14 points and poor for having scored less than 6 points. The perception scores were categorized into two sub-groups; 3-6 points for good and less than 3 points for poor perceptions and the attitude scores were categorized into two groups; good for having scored 3-8 points and poor for having scored less than 3 points.

3.13 Ethical consideration

Prior to the commencement of the study, ethical approval was obtained from the Oyo State Ministry of Health, Ethical Review Committee, Ibadan. The committee helped to ensure that the research work conforms to the generally accepted scientific principles and international ethical guideline required in human subjects' research and to review the ethical components of the study.

The nature, purpose and processes involved in the study were well explained to the participants with emphasis on confidentiality, privacy and anonymity of information provided. In other to ensure anonymity of responses, code numbers was given to each participant and any form of identification was not included in the questionnaire. Information gathered from the respondents was stored in the computer package for analysis by the investigator and with no access to unauthorized persons while the questionnaires that were filled by the respondents were destroyed after the completion of the study.

3.14 Study Limitations

This study extends the current level of knowledge, attitudes and perceptions as well as experiences of SRH. However, since the study relied on validated administered questionnaire, information bias is likely to have occurred due to over or under reporting. Some of the adolescents who originally would have fallen under the interview group considered for the study were excluded as communications were difficult for them. Moreover, qualitative methods that focuses on the associations of various variables needs to be done. It should also be noted that the study population was limited to only adolescents within the physically challenged home in Ibadan and as such this could not be true representation of adolescents with mobility challenge in Nigeria since there are many in this category outside homes and institutions in Ibadan.

CHAPTER FOUR

RESULTS

The results from the survey of this study are presented systematically below in this chapter. It consists of nine sections as follows:

- 1. Socio-demographic characteristics of the respondents
- 2. Socio-Economic factors influencing SRH
- 3. Knowledge about SRH
- 4. Perceptions towards SRH
- 5. Attitude towards SRH
- 6. Sexual and Reproductive Health Experiences
- 7. Contraceptive methods used by respondents
- 8. Secondary characteristics of the respondents
- 9. Test of hypothesis

4.1 Socio- demographic characteristics of respondents

A total of 153 respondents participated in the study (table 4.1). 28(18.3%) respondents were between the ages, 10 to 12 years old, 42 (27.5%) were within age 13 – 15 years old and 83(54.2%) of the respondents were between ages 16 -19 years old. The mean age of the respondents was 15.7 ± 2.9 years. Most of the respondents, 77 (50.3%) were female and 49.9% were males. Majority, 135(88.2%) of the respondents were single and very few, 9 (5.9%) were married. In assessing the educational status, 33 (22.7%) of the respondents had primary education, 65(42.5%) had junior secondary education, 44 (28.8%) had senior secondary education and 4 (2.6%) had tertiary education. Most of the respondents, 130(85.0%) were schooling and 13(6.5%) were hawking. Others which include artisans had 8.5% of the total respondents. Majority of the respondents practiced Christianity (58.8%) while 3.7% were Muslims and a few others of 3.3% were traditionalists. Virtually all the respondents (96.1%) were Yoruba. In mobility aids, 51.6% of the respondents indicated using wheel chair as type of movement aids, 35.9% used walker, 7.8% used cane and other (4.6%) used crutches as type of movement aids. Furthermore, 50.3% of the respondents' parent had First school certificate as their highest level of education. Some, 21.6% of the respondents' parents had senior school certificates, a few, 2.6% had first degree and 1.3% respondents parents had higher degree as their highest level of education.

Table 4.1: Socio- demographic characteristics of respondents (N=153)

Age (grouped) in years, Mean=15.66, SD=2.88		
10 - 12	28	18.3
13 - 15	42	27.5
16 - 19	83	54.2
Sex		
Variables	Frequency	Percent (%)
Female	77	50.3
Male	76	49.7
Marital status		
Single	135	88.2
Married	9	5.9
Others *	9	5.9
Educational qualification		
Informal	7	4.6
Primary Education	33	22.7
Junior Secondary	65	42.5
Senior Secondary	44	28.8
Tertiary Education	4	2.6
Occupation/ Means of Livelihood		
Schooling	130	85.0
Hawking	10	6.5
Others **	13	8.5
Religion		
Christianity	90	58.8
Islam	58	37.9
Traditional	5	3.3
Ethnic groups		
Yoruba	147	96.1
Others***	2	1.4
Types of movement aids		
Wheel Chair	79	51.6
Cane	12	7.8
Walker	55	35.9
Others	7	4.6
Highest Level of Parents or sponsors' ac	ademic	
qualification		
No formal Education	37	24.2
First School leaving certificate	77	50.3
Senior Secondary school certificate	33	21.6
First Degree	4	2.6
Masters and above	2	1.3

^{*} Concubine and all those illegally living together

4.2 Socio-economic Factors Influencing Sexual and Reproductive Health

One hundred, (65.4%) respondents indicated that they eat three times a day, 4 (2.6%) ate just once a day and 9 (5.3) showed they ate twice daily followed by 16(10%) and 5(3.35%) who ate four and five times a day respectively. Of those who reported that they received upkeeps from parents, 46 (30.1%) received between N1000.00 –N2000.00 Naira monthly and 0.7% of the respondents received N6000.00 and above for upkeeps. Of those that did not receive upkeeps from parents, 51.6% indicated that they received money from donors. 10(6.5%) and 5(3.3%) received money from Boyfriends and Girlfriends respectively. A few of the respondents, 2(1.3%), received from other means, (See Table 4.2).

Table 4.2: Socio-economic factors influencing SRH of respondents (N=153)

Variables	Frequency	Percent (%)
Number of times food is eaten a day		
None	19	12.4
Once	4	2.6
Twice	9	5.9
Thrice	100	65.4
Four	16	10.5
Five	5	3.3
Parent giving upkeep		
Yes	62	40.5
No	82	53.6
Amount of upkeeps received monthly?		
1000-2000 Naira	46	30.1
3000-4000 Naira	12	7.8
4000-5000 Naira	3	1.9
6000 Naira and above	1	.7
Other sources of money		
Boyfriends	10	6.5
Girlfriend	5	3.3
Donors	8	5.2
Others *	2	1.3
No response	57	37.3

^{*} Teachers, Instructors and staff

4.3: Knowledge of Respondents about Sexual and Reproductive Health

The result (see Table 4.3a), showed that the majority of the respondents, 94(61.4%) had no knowledge of when ovulation occurs and 14.4% said ovulation occurs at the middle of menstrual cycle. Also, 72.5% of the respondents did not know what the first menstrual bleeding in a woman is called. A few, 9.8% said it is called menarche-got it correctly, 61.4% of the respondents (Table 4.3b) knew that a cease of menstrual bleeding if a woman had sex with her sex partner could indicate pregnancy while 9.2% did not know. 73.9% of the respondent knew that appearance of hair in the pubic region for both male and female is a feature of attainment of puberty while 4.6% did not know. Similarly, 80.4% knew that having sex with opposite partner without using protection even for the first time could lead to pregnancy while 5.2% did not know. Also, 77.1% knew one can contract HIV through having an unprotected sex while 7.8% disagreed. When the respondents were asked to list three STIs they know, 84(54.9%) mentioned only HIV, 11(7.2%) said HIV and Gonorrhoe specie and a few 7(4.6%) said HIV and Ebola. In asking the means of prevention, 62.7% of the respondents responded that HIV and other sexually transmitted infections can be prevented by the use of condom. Of those that agreed that there are other ways of preventing pregnancy, 17.0% of the respondent said abstinence or avoiding sex while 0.7% said it can be prevented through the use of Copper IUD. Furthermore, as high as 73.2% of the respondents did not know that aborting pregnancy could lead to infertility. In asking them what unsafe period means,72.5% of the respondents said it is the period for which a woman becomes pregnant if she had sex while 1.4% said it is a period for which a woman will not be pregnant if she has sex. Also, in asking if premarital sex can lead to infertility, 62 (40.5%) of the respondents indicated yes but the majority, (53.6%) indicated they did not know and 5.9% said no. Also 56.9% of the respondents had the knowledge that rape is a form of sexual violence while a greater number of them 61(69.8%) responded they don't know and 3.3% of the respondents disagreed.

Overall, 118(77.1%) scored 6 points and above out of total of 14 points (Table 4.4) indicating good knowledge about SRH and 35(22.9%) scored less than 6 points out of total of 14 points indicating poor knowledge about SRH.

Table4.3a: Sexual and Reproductive Health knowledge of respondents N=153				
Variables	Frequency	Percent (%)		
Ovulation Occurs				
At the end of menstrual cycle	37	24.2		
At the middle of menstrual cycle *	22	14.4		
I don 't know	94	61.4		
The first menstrual bleeding in a woman is called				
Menarche *	15	9.8		
Blood flow	27	17.6		
I don't Know	111	72.5		
List Three STIs you know				
HIV only	84	54.9		
HIV and Gonorrhoe spp	11	7.2		
HIV and Syphilis	5	3.3		
HIV, Gonorrhoe spp and Syphilis*	3	2.0		
HIV and Rashes	3	2.0		
HIV, and Ebola	7	4.6		
Bacteria, virus and Toilet Infections	6	3.9		
Don't Know	34	22.2		
Other ways of preventing pregnancy apart from the				
use of condom				
Abstinence or Avoiding sex*	100	65.3		
Inappropriate answers**	26	17.0		
Copper IUD*	9	5.9		
Aborting pregnancy can lead to				
Infertility*	40	26.1		
Has nothing to do with infertility	1	.7		
I don't know	206	73.2		
Unsafe period means				
Period for which a woman becomes pregnant if she has	111	72.5		
sex*				
A period for which a woman will not become pregnant if	2	1.3		
she has sex				
I don't know	40	26.1		

^{*} Correct answer ** Out of context

Table 4.3b: Knowledge of Respondents about Sexual and Reproductive Health N=153

Variables	Yes (%)	No (%)	I don't know
			(%)
A cease of menstrual bleeding when a woman has	94 (61.4)	14 (9.2)	45 (29.4)
sex with her sex partner could indicate pregnancy*			0
Appearance of hairs in the pubic region is a feature	113 (73.9)	7 (4.6)	33 (21)
of attainment of puberty*			
Having sex with opposite partner without using	123 (80)	8 (5.2)	22 (14.4)
protection even for the first time could lead to			
pregnancy*			
Can one contract HIV through having an	118 (77.1)	12 (7.8)	23 (15.1)
unprotected sex*			
HIV and other sexually transmitted infections can	96 (62.7)	4 (2.6)	53 (34)
be prevented by the use of condom *	()'		
Any other way of preventing pregnancy apart from	135(88.2)	10 (6.6)	5 (5.2)
the use of condom*			
Premarital sex can lead to infertility*	62 (40.5)	9 (5.9)	82 (53.6)
Rape is a form of sexual violence*	87 (56.9)	5 (3.3)	61 (69.)

^{*} Yes (correct answer) No (wrong answer)

Table 4.4: knowledge scores of the respondents about Sexual and Reproductive Health N=153

Knowledge	Frequency	Percent
score		
Poor	35	22.9
Good	118	77.1
Total	153	100.0

4.4: Perceptions of respondents towards sexual and reproductive health

Overall, 135 (87.6%) had the perception that HIV/AIDS exists and affects human being while 2 (1.3%) perceived it exists but does not affect human being. In the same vein, 79 (51.6%) of the respondents perceived HIV/AIDS and other STIs are majorly contracted through sex while 11(7.2%) reported the opposite. 60.8% reported (Table 4.5) that female circumcision reduces prostitution and has no biological harm and 10.5 % said no. The majority,111(72.5%) of the respondents perceived female genital mutilation has an increased source of infections. 7.2% said there is nothing wrong with it. 61.5% did not know if abortion has nothing to with infertility while 12.4% disagreed that abortion has nothing to with infertility. Almost all the respondents, 138(90.2%) perceived premarital sex is not a good practice and few of the respondents, 10(6.5%) saw it as good practice.

The result (see Table 4.6) indicated 78(51.0%) of the respondents scored 3 and above indicating good perception towards sexual and reproductive health and 75(49.0%) of the respondents scored less than 3 points indicating poor perception towards sexual and reproductive health.

Table 4.5: Perceptions of respondents towards Sexual and Reproductive Health N=153

It does not exist It exists but does not affect human being It exists and affects human being* It exists and affects human being* It exists and affects human being* No response 5 3.3 HIV/AIDS and other STIs are majorly contracted through sex Yes* 79 51.6 No 11 7.2 I don't know 63 41.1 Female circumcision reduces prostitution and has no biological harm Yes 93 60.8 No* I don't know 16 10.5 Female genital mutilation Increases sexual urge 19 12.4 Is a source of Infection* There is nothing wrong with it 11 7.2 Don't know 12 7.8 Abortion has nothing to do with infertility Yes 40 26.1 No* I don't know 94 61.5 Premarital sex Is a good practice Is a good practice 10 6.5 Is not a good practice* I 138 90.2	Variables	Frequency	Percent (%)
It exists but does not affect human being It exists and affects human being* It exists and affects h	The following is true about HIV/AIDS		
It exists and affects human being* 134 87.6 No response 5 3.3 HIV/AIDS and other STIs are majorly contracted through sex Yes* 79 51.6 No 11 7.2 I don't know 63 41.1 Female circumcision reduces prostitution and has no biological harm Yes 93 60.8 No* 44 28.8 I don't know 16 10.5 Female genital mutilation Increases sexual urge 19 12.4 Is a source of Infection* 111 7.2 There is nothing wrong with it 11 7.2 Don't know 12 7.8 Abortion has nothing to do with infertility Yes 40 26.1 No* 19 12.4 I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice 10 6.5 Is not a good practice 138 90.2 Pone 138 90.2 I don't know 138 90.2	It does not exist	12	7.8
No response 5 3.3 HIV/AIDS and other STIs are majorly contracted through sex Yes* 79 51.6 No 11 7.2 I don't know 63 41.1 Female circumcision reduces prostitution and has no biological harm Yes 93 60.8 No* 44 28.8 I don't know 16 10.5 Female genital mutilation Increases sexual urge 19 12.4 Is a source of Infection* 111 72.5 There is nothing wrong with it 11 7.2 Don't know 12 7.8 Abortion has nothing to do with infertility Yes 40 26.1 No* 19 12.4 I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice* 10 6.5 Is not a good practice* 138 90.2	It exists but does not affect human being	2	1.3
HIV/AIDS and other STIs are majorly contracted through sex Yes* 79 51.6 No 11 7.2 I don't know 63 41.1 Female circumcision reduces prostitution and has no biological harm Yes 93 60.8 No* 44 28.8 I don't know 16 10.5 Female genital mutilation Increases sexual urge 19 12.4 Is a source of Infection* 111 72.5 There is nothing wrong with it 11 7.2 Don't know 12 7.8 Abortion has nothing to do with infertility Yes 40 26.1 No* 19 12.4 I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice* 10 6.5 Is not a good practice* 138 90.2	It exists and affects human being*	134	87.6
through sex Yes* 79 51.6 No 11 7.2 I don't know 63 41.1 Female circumcision reduces prostitution and has no biological harm Yes 93 60.8 No* 44 28.8 I don't know 16 10.5 Female genital mutilation Increases sexual urge 19 12.4 Is a source of Infection* 111 72.5 There is nothing wrong with it 11 7.2 Don't know 12 7.8 Abortion has nothing to do with infertility Yes 40 26.1 No* 19 12.4 I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice* 10 6.5 Is not a good practice* 10 6.5 Is not a good practice* 138 90.2	No response	5	3.3
Yes* 79 51.6 No 11 7.2 I don't know 63 41.1 Female circumcision reduces prostitution and has no biological harm Yes 93 60.8 No* 44 28.8 I don't know 16 10.5 Female genital mutilation Increases sexual urge 19 12.4 Is a source of Infection* 111 7.2 There is nothing wrong with it 11 7.2 Don't know 12 7.8 Abortion has nothing to do with infertility 40 26.1 No* 19 12.4 I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice* 138 90.2	HIV/AIDS and other STIs are majorly contracted		
No 11 7.2 I don't know 63 41.1 Female circumcision reduces prostitution and has no biological harm Yes 93 60.8 No* 44 28.8 I don't know 16 10.5 Female genital mutilation Increases sexual urge 19 12.4 Is a source of Infection* 111 7.2 There is nothing wrong with it 11 7.2 Don't know 12 7.8 Abortion has nothing to do with infertility Yes 40 26.1 No* 19 12.4 I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice* 138 90.2	through sex		
I don't know 63 41.1 Female circumcision reduces prostitution and has no biological harm Yes 93 60.8 No* 44 28.8 I don't know 16 10.5 Female genital mutilation Increases sexual urge 19 12.4 Is a source of Infection* 111 72.5 There is nothing wrong with it 11 7.2 Don't know 12 7.8 Abortion has nothing to do with infertility Yes 40 26.1 No* 19 12.4 I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice* 138 90.2	Yes*	79	51.6
Female circumcision reduces prostitution and has no biological harm	No	11	7.2
Yes 93 60.8 No* 44 28.8 I don't know 16 10.5 Female genital mutilation Increases sexual urge 19 12.4 Is a source of Infection* 111 72.5 There is nothing wrong with it 11 7.2 Don't know 12 7.8 Abortion has nothing to do with infertility Yes 40 26.1 No* 19 12.4 I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice* 138 90.2	I don't know	63	41.1
Yes 93 60.8 No* 44 28.8 I don't know 16 10.5 Female genital mutilation Increases sexual urge 19 12.4 Is a source of Infection* 111 72.5 There is nothing wrong with it 11 7.2 Don't know 12 7.8 Abortion has nothing to do with infertility Yes 40 26.1 No* 19 12.4 I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice* 138 90.2	Female circumcision reduces prostitution and has		
No*	no biological harm	()	
I don't know 16 10.5 Female genital mutilation Increases sexual urge 19 12.4 Is a source of Infection* 111 72.5 There is nothing wrong with it 11 7.2 Don't know 12 7.8 Abortion has nothing to do with infertility Yes 40 26.1 No* 19 12.4 I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice* 138 90.2	Yes	93	60.8
Female genital mutilation 19	No*	44	28.8
Increases sexual urge Is a source of Infection* In 11	I don't know	16	10.5
Is a source of Infection* There is nothing wrong with it Don't know 12 7.8 Abortion has nothing to do with infertility Yes 40 26.1 No* 19 12.4 I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice* 138 90.2	Female genital mutilation		
There is nothing wrong with it Don't know 12 7.8 Abortion has nothing to do with infertility Yes 40 26.1 No* 19 12.4 I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice* 138 90.2	Increases sexual urge	19	12.4
Don't know 12 7.8 Abortion has nothing to do with infertility 40 26.1 No* 19 12.4 I don't know 94 61.5 Premarital sex 10 6.5 Is a good practice 10 6.5 Is not a good practice* 138 90.2	Is a source of Infection*	111	72.5
Abortion has nothing to do with infertility Yes 40 26.1 No* 19 12.4 I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice* 138 90.2	There is nothing wrong with it	11	7.2
Yes 40 26.1 No* 19 12.4 I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice* 138 90.2	Don't know	12	7.8
No* 19 12.4 I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice* 138 90.2	Abortion has nothing to do with infertility		
I don't know 94 61.5 Premarital sex Is a good practice 10 6.5 Is not a good practice* 138 90.2	Yes	40	26.1
Premarital sex Is a good practice 10 6.5 Is not a good practice* 138 90.2	No*	19	12.4
Is a good practice 10 6.5 Is not a good practice* 138 90.2	I don't know	94	61.5
Is not a good practice* 138 90.2	Premarital sex		
	Is a good practice	10	6.5
No response 5 3.3	Is not a good practice*	138	90.2
	No response	5	3.3

^{*} Positive perceptions, all those without asterisks are negative perceptions

Table 4.6: Perception scores of the respondents towards Sexual and Reproductive Health. N=153

Perception	Frequency	Percent
score		
Poor	75	49.0
Good	78	51.0
Total	153	100.0

4.5 Attitude of respondents related to sexual and reproductive health

In the table below (Table 4.7), the result shows that out of the total respondents, a greater percentage (72.5%) of the respondents strongly disagreed that watching pornographic films has no influences on SRH while 7.2% agreed and 4.6% were undecided. Most (66.7%) of the respondents strongly disagreed that screening of HIV is not meant for adolescents as against 2.0% who agreed. Also, 56.9% of the respondents disagreed strongly that there was nothing wrong with involving in premarital sex while 2.0% agreed strongly. Less than half of the respondents (37.3%) also disagreed very strongly that discussing sexual issues with their peers is a bad habit whereas 2.0% indicated strongly agreed. 65.4% of the respondents strongly disagreed that engaging in rape is not a bad habit. Very few, 0.7% strongly agreed. More than half of the respondents (66.7%) showed strong disagreement to having unprotected sex with opposite partner has no negative effect on SRH while 2.6% was undecided. At same vein, 66.0% of the total respondents disagreed very strongly to say that there is nothing wrong with a teenager having boyfriend(s) or girlfriend(s) while 1.3% remained undecided. Majority of the respondents, 95(62.1%) frowned at teenager having sex with a teacher while a few, 2.6% saw nothing wrong with it.

Overall, 149(97.4%) respondents scored 3points and above out of total of 8 points, indicating having good attitude towards SRH while 4(2.6%) respondents scored less than 3 indicating having poor attitude towards SRH (Table 4.8).

Table 4.7: Attitude of the respondents towards Sexual and Reproductive Health N=153

Variables	Strongly	Agree (%)	Undecided	Strongly	Total (%)
	Agree (%)		(%)	Disagree	
				(%)	0
Watching pornographic films	6 (3.9)	11 (7.2)	7 (4.6)	111 (72.5)	135 (88.2)
has no influences on SRH					21
Screening of HIV is not meant	3 (2.0)	3 (2.0)	102 (66.7)	45(29.4)	153 (100)
for Adolescents					
There is nothing wrong with	3 (2.0)	9 (5.9)	10 (6.5)	87 (56.9)	109 (71.3)
involving in premarital sex					
Discussing sexual issues with	3 (2.0)	40 (26.1)	10 (6.5)	57 (37.3)	110 (71.9)
your peers is a bad habit					
Engaging in rape is not a bad	1 (0.7)	7 (4.6)	3 (2.0)	100 (65.4)	11 (72.7)
habit					
Having unprotected sex with	6 (3.9)	4 (2.6)	102 (66.7)	41 (26.8)	153 (100)
opposite partner has no negative					
effect on SRH of the physically					
challenged adolescents					
There is nothing wrong with	6 (3.9)	19 (12.4)	2 (1.3)	101 (66.0)	128 (83.6)
teenager having boyfriend or					
girlfriend					
There is nothing wrong with a	4 (2.6)	20 (13.1)	1 (0.7)	95 (62.1)	120 (78.5)
teenager having with a teacher					

Table 4.8: Attitude scores of the respondents towards Sexual and Reproductive Health N=153

Attitude	Frequency	Percent
scores		
Poor	4	2.6
Good	149	97.4
Total	153	100.0

4.6: Sexual and reproductive health experiences of the respondents

The result presented below (Table 4.9) shows that a greater percentage (6 5.4%) had never had sex before. 18.3% indicated they have had sex while a few (16.3%) gave no response. In finding out for those who have had sex if they had ever gone for abortion before, 9 (5.9%) indicated never gone for abortion as against 7.8% who said yes, in asking how many times for those who have gone for abortion, 2.6% said they have gone once, 3.9% reported twice and 1.3% said three to five times. In asking what their experiences were at first sexual intercourse, 11(7.2%) said they enjoyed, 4.6% reported it was painful followed by 6.5% who said they regretted. A higher percentage (86.8%) did not offer any answer to the question, how did you feel when an opposite sex approached you of sex. Also, 4.6% indicated that they felt attracted and 4.6% of the respondents didn't have any sexual urge when they were approached of sex. 13.9 reported having been raped, and 2.5% of the respondents had not experienced any form of sexual violence before while 2.0% said they can't tell. Of those that had ever experienced sex, 4.6% said the experience was bitter and annoyed while 9.1% indicated they enjoyed it. The majority, 68.6% reported they had gone for HIV screening before and in asking when, many of them, 45.7% indicated they had gone for HIV screening few months ago while 2.0% reported being screened few weeks ago and 9.8% reported few years ago while 5.9% indicated no response.

4.7: Reported contraceptive methods used by the respondents

In response to the different methods of contraception the respondents had ever practiced, majority, 85.6% and 87.6% (Table 4.10) indicated no to use of calendar method for contraception and use of condom for contraception respectively. Similarly, 90.8% and 90.2% said no to use of withdrawal method for contraception and use of spermicides for contraception respectively. In the same vein, a greater percentage (90.2%) of the respondents indicated no to the use of spermicides, pills and use of copper intra-uterine device (IUD) for contraception respectively.

4.8: Reported secondary characteristics of the respondents

In assessing secondary sexual characteristics the respondents had experienced, the result (in Table 4.11) indicated a higher majority of 87.6% of the respondents had experienced appearance of hair on the pubic region while a few percentages (12.5 %) had never experienced appearance of hair on their pubic region. According to the result shown, averaged number of the respondents had experienced secondary characteristics such as enlargement of breast (47.7%), broading of shoulders in males (49.0%), appearance of pimples on the face (68.6%), and commencement of menstrual bleeding (45.1%), 51.6% of the male respondents reported that they had experienced deep voice.

Table 4.9: SRH experiences of the respondents N=153

Variables	Frequency	Percent (%)
Ever had sex		
Yes	28	18.3
No	100	65.4
No response	25	16.3
Ever had abortion		
Yes	12	7.8
No	9	5.9
No response	7	4.6
No of abortion times had N=12		·\\
Only once	4	2.6
Twice	6	3.9
Three to five times	2	1.3
Experience at first sexual intercourse N=28		
I enjoyed it	11	7.2
It was painful	7	4.6
I regretted	10	26.5
Reaction to sexual partner approach		
I felt attracted	7	4.6
I did not have any sexual urge	7	4.6
I am always annoyed	6	3.9
No response	133	86.9
Ever experienced any form of sexual violence *		
Yes	21	13.7
No	4	2.5
I can't tell	3	1.9
Descriptions of experience N=21	3	1.9
Bitter N=21	7	4.6
Annoying	7	4.6
Enjoyable	14	9.1
Enjoyable	14	7.1

^{*} Rape, or Sexual harassment

Table 4.10: Contraceptive methods reportedly used by respondents

N=153

Variables	Yes (%) N		No Response	Total	
			(%)	(%)	
Calendar method	13 (8.5)	131 (85.6)	9 (5.9)	153(100)	
Condom	9 (5.9)	134 (87.6)	10 (6.5)	153(100)	
Withdrawal method	5 (3.3)	139 (90.8)	9 (5.9)	153(100)	
Spermicides	6 (3.9)	138 (90.2)	9 (5.9)	153(100)	
Pills	6 (3.9)	138 (90.2)	9(5.9)	153(100)	
Copper UID	5 (3.3)	138 (90.2)	10 (6.5)	153(100)	

Table 4.11: Secondary sexual characteristics of the respondents N=153

Variables	Yes (%)	No (%)	No response
			(%)
Appearance of hair on the pubic region	134 (87.6)	19 (12.5)	0 (0.0)
Enlargement of breast in female	73 (47.7)	76 (49.7)	4 (2.6)
Broadening of shoulder in male	75 (49.0)	75 (49.0)	3 (2.0)
Appearance of pimples of the face	105 (68.6)	47 (30.7)	1(0.7)
Menstrual bleeding	69 (45.1)	81 (52.9)	3 (2.0)
Deep voice in male	79 (51.6)	68 (44.4)	6 (3.9)

4.9 Test of Hypothesis

Null Hypothesis one: There is no significant relationship between the respondents' ages and their knowledge of sexual and reproductive health.

The ages of the respondents were categorized as shown below (Table 4.12); the difference in the mean knowledge scores of the respondents by their age groups was then tested statistically using Chi-square. The difference was found to be statistically insignificant at 95% confidence interval (p=0.073). This means that there was no statistical association found between the respondents' ages and their knowledge of SRH. Thus the above stated null hypothesis was accepted.

Table 4.12: Association between respondents' ages and their knowledge of SRH

Age group in	knowledge score		X^2	P-value
years	Poor	Good		
10 - 12	11	17	5.232	.073
10 - 12	31.4%	14.4%		
12 15	8	34	ı	
13 - 15	22.9%	28.8%		
16 10	16	67		
16 - 19	45.7%	56.8%	•	

Null Hypothesis Two: There is no significant difference between the respondents' knowledge of SRH and their use of mobility aids

The knowledge score was categorized and compared against the respondents' challenge of mobility as evident in the type of movement aids used by the respondents (see Table 4.13) to see whether any statistical relationship exists using Chi-square. It was found that there was no significant statistical relationship at 95% confidence interval (p=0.412) between these variables. This simply tells us that the fact that the adolescents who are mobility challenged; thus using different movement aids had no significant influence on their knowledge of SRH. The hypothesis was therefore not rejected.

Table 4.13: Association between respondents' knowledge of Sexual and Reproductive Health and their use of mobility aids N=153

Mobility aids	knowledg	ge score	Total	X^2	P-value
	Poor	Good			
Wheelchai	17	62	79	2.871	0.412
Wilecichan	48.6%	52.5%	51.6%		
Cane	5	7	12		'
Calle	14.3%	5.9%	7.8%		
Walker	11	44	55		
w arker	31.4%	37.3%	35.9%		
Others	2	5	7		
Others	5.7%	4.2%	4.6%		
Total	35	118	153		
Total	100.0%	100.0%	100.0%		

Hypothesis Three: There is no significant difference between the Respondents' Perception towards SRH and their educational status

As shown below, (Table 4.14) the variables for perception were entered with a score of 1 mark for each correct response given. The perception scores were categorized into two groups; good for 3-6 points and poor for less than 3 points. Using Chi-square for hypothesis testing, it was found that there was no statistical significant relationship between perception of the respondents and their educational status (p=0.071) at 95% confidence interval, thus failed to reject the null hypothesis.

Table 4.14: Association between perception and respondents' educational status. N=153

Educatio	nal status	Perception score		X^2	P-value
		Poor	Good		
	Drimory	15	18	8.633	0.071
	Primary	20.0%	23.1%		
	Junior	29	36		
	Secondary	38.7%	46.2%		
	Senior	21	23		ŀ
	Secondary	28.0%	29.5%		ı
	T:	4	0		
	Tertiary	5.3%	0.0%		
	N	6	1		
	No response	8.0%	1.3%		
Total		75	78		
Total		100.0%	100.0%		

Hypothesis Four: There is no significant association between respondents' attitude towards SRH and their use of mobility aids

The attitude scores were categorized and compared against the respondents' challenged of mobility as evident in the type of movement aids used by the respondents (see Table 4.15). Using Chi-square, the result reflected no statistical relationship at 95% confidence interval (p=0.472) between these variables. This simply tells us that the attitude of the adolescents who are mobility challenged; thus using different movement aids had no significant influence on their attitude towards SRH .Hence, failed to reject hypothesis.

Table 4.15: Association between the respondents' attitude towards Sexual and Reproductive Health and their use of mobility aids. N=153

Mobility a	aids	attitude score		X^2	P-value
		Poor	Good		
	Wheelchai	1	78	2.519	.472
	r	25.0%	52.3%		
	Como	1	11		
	Cane	25.0%	7.4%		
	Wallran	2	53		
	Walker	50.0%	35.6%		
	Othors	0	7		
	Others	0.0%	4.7%		
Total		4	149		
10tai		100.0%	100.0%		

Hypothesis Five: There is no association between the respondents' knowledge and their attitude towards SRH

The attitude and knowledge of the respondent were categorized as shown below (see Table 4.16); the difference in the mean knowledge scores of the respondents against their attitude was then tested statistically using Chi-square. The result was found to be statistically significant at 95% confidence interval (p=0.012). This means that there was a strong statistical association found between the respondents' knowledge and their attitude towards SRH. Thus, failed to accept the above stated null hypothesis. Those who have good knowledge about SRH are expected to have shown positive attitude towards SRH issues.

Table 4.16: Association between knowledge and attitude of respondents towards Sexual and Reproduction Health. N=153

Attitude score	knowledge score		X^2	P-value
	Poor	Good		
Poor	3	1	6.325	0.012
F 001	8.6%	0.8%		
Cood	32	117		
Good	91.4%	99.2%		
Total	35	118		
Total	100.0%	100.0%		

CHAPTER FIVE

DISCUSSION, CONCLUSION, AND RECOMMENDATION

The major findings and their implications are discussed in this chapter. In addition with conclusion and recommendations.

5.1 Socio-demographic characteristics of respondents

The mean age of the respondents was 15.66 ± 2.88 years with the majority (54.2%) found between ages 16 -19- years -olds. This age group is in line with the WHO definition of adolescence (WHO, 2014). It is an important age bracket in the adoption of sexual and reproductive life style of every individual; whether physically challenged or not. This is because it is a critical transition in the life span and is characterized by a tremendous pace in growth and change that is second only to that of infancy (Omotoso, 2007). This underscores the important of effective programmes on SRHE for Physically Challenged Adolescents (PCAs).

Almost all of the respondents were single; just very few were married. This is true compared to the report by NDHS (2008) for median age at first marriage of Nigeria females which is 18.3 years and 21 years for residents of Southwest region -where this study was conducted. The above findings could probably be attributed to the disabling effect of the adolescents especially the female resulting to the existing gap between attainment of puberty and the age of marriage (Bandana, 2013). The fact that almost all the respondents were Yoruba reflects the predominance of this ethnic group in the study area.

5.2 Socio-economic Factors Influencing SRH

The majority of the respondents (53.6%) indicated they do not receive upkeeps from their parents and few reported having one square meal a day. The reason might be linked with the fact that some of the respondents' parents have low education level and as such could not be receiving reasonable amount of income since they may not have better chances of being employed. It is evident in the fact that majority of the respondents received money from management of their institutions/homes courtesy of Donors. These findings concur with previous literature that significantly predicts risky sexual behaviours and pregnancy as outcome for adolescents having parent with low educational attainment and living in a single-

parent family. A teenager's own level of academic achievement is positively related to age at sexual debut (Lynch, 2001). Some of the females resorted to having boyfriends who give them money, thus responsible for risky sexual behaviour and sexual debut (Lynch, 2001). Of course having low income, low education, less economic participation and higher rates of poverty especially for the physically challenged reflected in this study would have led to poor sexual health outcomes (WHO,2011) as many of the respondents had no experience of condom use and the likes. Lack of economic empowerment deprives the physically challenged woman of the ability to negotiate sex. This makes them more prone to abuse, especially those with intellectual disability (Olaleye et al, 2007). This indicates that power relations favours males than females like the able bodied persons in the area of economy and sexual abuse. There is therefore the need to provide more support services, safety information and reporting mechanism for people with disabilities, particularly the females. This might be true as strong relationship exists between disability and poor health (Dixon-ibarra, 2012)

5.3: Knowledge of Respondents about Sexual and Reproductive Health

The results indicated that on the overall, a lot of the respondents (77%) had knowledge about sexual and reproductive issues. There is no doubt about this as it is well known that the subject matter is receiving much attention from both international Donors and NGOs, especially the physically challenged at the homes where adequate attention is given. However the result also showed that many of the respondents were deficit in some aspects of SRH such as when ovulation occurs, what menarche means and other methods of preventing STIs apart from the use of condom? Majority also do not know that abortion could lead to infertility. Previous study carried out indicates that lack of knowledge about when ovulation occurs has led to unintended pregnancies in most females who had not attempted to avoid conception. These females were often primigravid, less educated, and less knowledgeable concerning when during the cycle pregnancy is most likely to occur (Gadow, 1999)

The reason for this knowledge deficit could be attributed partly to the fact that people with disabilities experience barriers in accessing services that many of us have long taken for granted, including health, education, employment, and transport as well as information (WHO, 2011). These difficulties are exacerbated in less advantaged communities like Nigeria. It means extra effort are needed in the sensitization of SRH related issues among this group of people, the physically challenged adolescents since their knowledge about

sexual and reproductive health (SRH) is frequently inadequate (Hardoff, 2012). Thus, reproductive health policies should be aimed at this target group.

The knowledge score tested against disability status in this study indicated that there was no significant association at 95% confidence interval (p=0.412) between these variables. This shows the fact that the adolescents are mobility challenged; thus using different movement aids does not influence their knowledge of SRH. The hypothesis was therefore rejected. Although, Persons with intellectual disability (ID) may lack information about sexuality and sexual health (Galea, 2004) and often lack both formal and informal opportunities for learning about sexuality. In one study, persons with ID were more likely than both adults with physical disabilities and the general population to state that they did not have all the sexual knowledge that they would like to have (McCabe, 1999). This goes to say that the physically challenged adolescents are like there able body counterparts (Hardoff, 2012) who have knowledge of SRH if being taught at their different homes. Additionally, adolescents who are physically challenged are more likely to get sexual information through the watching of pornographic films as indicated in the result of this study from questionable sources, such as television and to express misconceptions related to reproductive anatomy and physiology, sexuality and sexual health (Cuskelly, 2004). From the above findings, it is wrong to neglect this studied group under discussion and deprive them of the right to knowledge of SRH on the assumptions that they are disabling and as such mentally retarded.

There is a general lack of evidence regarding what constitutes effective sexuality education for adolescents with disabilities (Swango-Wilson, 2011). Education about basic reproductive physiology, communication about sexuality and intimacy, gender differences, and safer sex has been theorized to increase the ability of women to recognize and report abuses perpetrated against them It has been hypothesized that effective sex education for people with disability should include decision making skills, as adolescents who are physically challenged may have less opportunities to practice decision making than their peers without disabilities and should include practical and person-centred planning (Lumley, 2001).

Test of hypothesis between respondents' knowledge and their ages showed no relationship between the two variables as difference in the mean knowledge scores of the respondents by their age groups was tested statistically using Chi-square. The difference was found to be statistically insignificant at 95% confidence interval (p=0.073). Thus, the null was accepted. Although, this may seem to contradict the result of previous studies (Abajobir, 2014). After

adjusting for socio-demographic and economic variables, age, family arrangement and perceived family income showed statistically significant association with RH knowledge. As evident in previous study carried out in the past, the odd of RH knowledge was about 4 times higher among 15–19 years adolescents than 10–14 years (Abajobir, 2014). It should be however noted that this could not be constant as that there could be other confounders.

5.4 Perceptions of respondents towards sexual and reproductive health

Generally on the average, the findings from the study indicate good perceptions of the respondents towards sexual and reproductive health especially their perceptions towards the existence of HIV/AIDS which were found to be good. Overall, (87.6%) perceived HIV/AIDS exists and affect human beings. Of course one will definitely expect this because there has been a lot of awareness of HIV/AIDS (Groce, 2003).

Findings from the study also reflect poor perceptions of the respondents towards female circumcision. Slightly more than half of the study populations perceived female genital mutilation reduces prostitution and increases sexual urge (libido), though majority claimed the practice is a potent source of infections. A lot of researches have proven these perceptions to be myths and false beliefs as there are far outreached health consequences of these practices and traditions; thus predisposes an individual who is a victim of this to be at risk of HIV/AIDS and other STIs and infertility (WHO, 2008). Perhaps, neglecting this group of people under this study over the years would have been the most contributing factor. Previous studies over the past attest to this fact (Griffin, 2006). It is recognised that the MDGs will not be achieved without improving access to SRH rights (Population Action International, 2005). Effective health promotion measures should be directed at the various communities in Nigeria if this misconception must stop.

It is assumed that illiteracy and poor educational status of their parents are contributing factors to these erroneous beliefs since the socio-demographic results of their parents reflect that most of their parents' education backgrounds are poor. This agrees with the test of hypothesis in this study, there is no significant difference between the Respondents' Perception towards SRH and their educational status. Using Chi-square for hypothesis testing, it was found that there was no statistical significant relationship between perception of the respondents and their educational status (p=0.071) at 95% confidence interval, thus failed to reject the null hypothesis. This means educational level does not alone determine the

perception of the respondents (Adesoji, 2006). Although against the findings of Prata which revealed that educational status of an individual will determine to some extent their perceptions towards SRH experiences (Prata, 2006).

5.5 Attitude of respondents related to sexual and reproductive health

The findings indicate that most of the respondents (97.4%) had good attitude towards SRH. This should be expected since majority of them were shown to posses good knowledge of SRH the result above-an association shown to be positive by previous studies (Bakhoum, 2014).

Surprisingly, some of the respondents indicated wrong attitudes to watching of pornographic films by agreeing that watching pornographic films has no influences on SRH. According to a national survey conducted by Keller, (2002) of young people (10-17) years old who regularly used the Internet, one out of four affirmed that he or she had encountered unwanted pornography in the past year, and one out of five had been exposed to unwanted sexual solicitations or approaches. He found out that watching of pornographic film would have led to increased unprotected sex among the adolescents. This concurs to the findings of this study as some of them who expressed delight in watching pornography were also discovered to have had sex whether casual or protected. This may be correct as adolescents most times would want to try out what they have watched via the internet or television. Study carried out previously has revealed that video shows on pornography and sexual relationships were found to be among contributing factors leading youth to engage in risky sexual behaviors (Mbeba, 2012). This expression of negative attitude by the physically challenged adolescents here in the study may have posed them to serious thread of unprotected sex especially those who indicated having sex before and unwanted pregnancy for the females and may consequently lead to contracting HIV and other STIs.

Most (66.7%) of the respondents strongly disagreed that screening of HIV is not meant for adolescents- an attitude that may be described as poor in SRH. This simply means that a lot of the physically challenged adolescents would not want to be screened of HIV even if the services are available. This is confirmed by the high cases of no responses recorded when question like when last did you go for screening of HIV/AIDS were asked. The findings also revealed that very many of the respondents disagreed strongly that there is nothing wrong with involving in premarital sex. The respondents would have been exposed to high risk of

sexual debut as proven by previous findings; those who perceived that there was nothing wrong with premarital sex were more likely to be exposed to risky sexual debut than those who see it as bad attitude (Zaw, 2013). These findings suggest that something is wrong with the attitude of the physically challenged adolescents at their different homes within the study setting and as such will demand serious attention as regard their sexual and reproductive health education. Less than half of the respondents (37.3%) also disagreed very strongly that discussing sexual issues with their peers is a bad habit. Such an attitude could be a contributing factor to increasing the risky behaviours of sexual health. They share experience and learn from themselves when they discuss sexual matters. Research carried out over the years had attested to the fact that discussing sexual matters among peers has encouraged positive sexuality and boost adolescents' self-confidence (Kalmuss, 2003). Several of the respondents expressed wrong attitude towards engaging in rape In a study in Kenya and Cameroon (Umoren, 20012), it is shown that people with disability engage in sexual behaviors that are risky such as multiple partners, exposed to sexual violence (rape) and unprotected sex (without condom) as against the finding of this study where many of the respondents saw nothing wrong in involving in rape. This could be very detrimental to sexual and reproductive health as it has so many health consequences ranging from STIS to unintended pregnancy. More than half of the respondents (66.7%) showed strong disagreement to having unprotected sex with opposite partner has no negative effect on SRH. This was seemed to be good attitudinal disposition of the respondents. The reason for this result could be traced to the continued attentions they receive from their instructors and caregivers at their various homes. On the contrary, as high as 66.0% of the total respondents disagreed very strongly to say that there is nothing wrong with a teenager having boyfriend(s) or girlfriend(s) although, 95(62.1%) frowned at a teenager having sex with a teacher. Various writings on disability and HIV and AIDS account that there are factors that increase the persons with disability chances of contracting HIV. Some of the factors are the same with the ones mentioned above in this study such as wrong attitude of having unprotected sex with opposite sex, sexual violence, etc (Groce, 2004)

A test of hypothesis between the respondents' challenge of mobility as evident in the type of movement aids used by the respondents and their attitudes using Chi-square reflects that there is statistical relationship at 95% confidence interval (p=0.472) between these variables. This simply tells us that the attitude of the adolescents who are mobility challenged; thus using different movement aids had no significant influence on their attitude towards SRH. Hence,

accept the hypothesis. This concurs with a similar work whose hypothesis was confirmed for sexual risk behaviour and partially confirmed for sexual attitude among the non-challenged population (Umoren, 2012). This finding shows that both challenged and non-challenged people have the same feelings about their sexuality. This is in line with the study by McCabe, (1999) which found that people with disability have sexual needs and desires which would direct their sexual attitude. This further disapproves the myths and incorrect assumptions associated with disability and sexuality (Oklin, 1999).

5.6 Implications of the findings for SRH Promotion and Education

The findings of this study have several implications for planning, evaluations, and implementation of sexual and reproductive health education programmes and awareness in the physically challenged homes/institutions in Ibadan and in Nigeria. It is important to note that sexual and reproductive health is determined to a very large extent by antecedent factors *visa vis* socio- economic factors, knowledge, perceptions, attitude and practice (Debra, 2003). The objective of health promotion is to enable everyone whether challenged or not challenged increase control over, and to improve, their health (Ottawa Charter, 1986). People (especially the PCAs) should be empowered, through information and education, to acquire and maintain behaviour that promotes their own SRH.

Health promotion and education strategies should be employed among physically challenged to improve their health and increase their knowledge of sexual and reproductive life style, promote SRH policies and discourage discriminations and neglect of the physically challenged adolescents thereby building their self-esteem as it relates to SRH. Advocacy should be directed at the policies makers to influence policies that will enforce the total inclusion of SRH in school curriculum.

This study identified deficit in knowledge, poor socio-economic status, negative perceptions and attitudes in some aspects of SRH amongst the physically challenged adolescents irrespective of the fact that they have good knowledge and attitude on the average. Thus, adopting ecological model within the context of health promotion and education.

This study proposes an ecological model for health promotion which focuses attention on both adolescents with mobility challenged and social environmental factors as targets for health promotion interventions. It addresses the importance of interventions directed at changing interpersonal, organizational, community, and public policy, factors which support and maintain unhealthy behaviors. The model assumes that appropriate changes in the social environment will produce changes in the physically challenged adolescents, and that the support of individuals in the population is essential for implementing environmental changes. An ecological approach focuses on both population-level and individual-level determinants of health and interventions. It considers issues that are community-based and not just individually focused. Health is determined by influences at multiple levels (e.g., public policy, community, institutional, interpersonal, and intrapersonal factors) (McLeroy, 1988). Therefore in this model, appropriate health education and health empowerment are considered to be the interventions (treatment) for properly diagnosis of the problem and sustainability where necessary among the target population.

Health education contains an individual and a collective component, which ought not to be separated: the learning of health and lifestyle behaviors must be approached from both angles at the same time. To develop interventions relevant to health education, it is first necessary to understand the factors that cause and those that influence health behaviors, as well as the processes of health learning. We must therefore analyze the educational needs and reach an "educational and/or behavioural diagnosis".

Empowering people to achieve independence and make inform decisions implies developing clearer and more consistent coverage polices that appropriately address the unique needs of individuals with disabilities. Enabling persons with disabilities to live independently and participating in all aspect of life and ensure them access to transportation, information communication technologies and other public facilities and services and eliminating obstacles and barriers to accessibility. To empower their mental capacity, education is the main key to eradicate poverty; therefore the key is ensuring an inclusive education system at all levels and long learning. Empowering persons with disability to develop their talents, creativity, mental and physical abilities, in other word their fullest potential is important. Helping marginalized groups such as women, persons with disabilities, aboriginal people, elderly people, etc. to develop income-generation activities is probably a starting point, but efforts should go beyond economic considerations to explore sound mechanisms for increased and inclusive participation, including monitoring accountability of decision-makers.

5.8 CONCLUSION

This study has presented the physically challenged adolescents' view of antecedent factors related to sexual and reproductive health experiences as well as their general knowledge about SRH. Consequently it was revealed that there are negative attitudes and perceptions with deficiency of knowledge in some key areas of SRH irrespective of the fact that generally, there is good knowledge, positive attitude and perceptions of the respondents towards SRH.

It was also found that few of the physically challenged adolescents in the study population were under the threat of the effect of poor socio- economic status as they could not afford good three square meals a day. The aspect of knowledge about their ovulation, infertility and perception about HIV/AIDS and other STIs were investigated to be poor. Many of the adolescents in the study population had wrong attitude towards pornography and discussion of sexual matter amongst fellow peers. On the other hand the study findings revealed an overall good knowledge, positive attitude and perceptions towards SRH except in some specific areas where there were lapses.

Adolescents who are physically challenged represent a significant portion of the world's population and are part of every community. Attention to the SRH needs of this sensitive group is important such as organising SRH programme for them and training of the their instructors/teachers on the subject matter at their different institutions and implementation of SRH policies that will facilitate the inclusion of SRH as core content of school curriculum to ensure the protection and promotion of their sexual and reproductive rights. Like everyone else, adolescents with disabilities need information about SRH. In order to do so, they have the right to make reproductive decisions for themselves. They must have the same access as everyone else to programmes, services, and resources that support them in their decisions.

5.9 RECOMMENDATIONS

The following were recommended based on the findings of this study:

- 1. Advocacy and campaign for sexual and reproductive health rights of the physically challenged should be promoted at local and international level.
- 2. More awareness and increased accessibility should be raised within homes, institutions, organizations and the society at large about antecedent factors related to SRH experiences of Physically Challenged Adolescents (PCAS).
- 3. Sexual and reproductive health programmes that will build the physically challenged adolescents' self-esteem and educating them about SRH should be encouraged
- 4. PCAs should be economically empowered with training on vocations to enable them stand and take responsibilities on their own since they also form an integral part of the society
- 5. SRH policies should be thoughtfully developed and implemented with the needs of persons with disabilities in mind that will ensure improved well-being of adolescents with mobility challenged and the inclusions of SRH as core subject in all schools and physically challenged homes
- 6. Research on sexual and reproductive health of the physically challenged adolescents at local, national, and international levels should be promoted and encouraged as there is relatively little research worldwide about the SRH of the physically challenged.

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APPENDIX 1

QUESTIONNAIRE

ANTECEDENT FACTORS RELATED TO SEXUAL AND REPRODUCTIVE HEALTH EXPERIENCES OF PHYSICALLY CHALLENGED ADOLESCENTS IN IBADAN, NIGERIA

Dear Respondent,

My name is Nkporbu N, Paddy, a Master of Public Health student of the Department of Health Promotion & Education, Faculty of Public Health (Population & Reproductive), College of Medicine, University of Ibadan. I am carrying out a study on the Antecedent Factors Related to Sexual and Reproductive Health Experiences of Physically challenged Adolescents. The purpose of this study is purely for academic research, aimed at contributing to the body of knowledge in the area of sexual and reproductive health of the physically challenged Adolescents.

Participation is Voluntary but 1 can assure you that your identity, responses and opinions will be kept confidential, and no name is required in filling the questionnaire. You are encouraged to feel free to give your honest answers to the questions.

Please kindly show your participation in this study is voluntary by signing or thumb printing in the box below.

printing in the box below.	
Signature/Thumbprint T	hank you very much.
Direction: - Circle or tick ($\sqrt{}$) in	n the selected boxes. NB, Sexual and Reproductive
Health(SRH)	
SECTION A: SOCIO-DEMOGRAP	HIC DATA
1.Sex: 1.Female []2. Male [1
2.Age as at last birthday	

3.Marital Status: 1. Single/Never Married [] 2.Married [] 3Widowed []
4. Divorced [] 5. Others(please, Specify)
4.Occupation/Means of Livelihood: 1. Hawking [] 2.Begging [] 3.working with
Government [] 4. Family Support[] 5. Schooling [] 6. Others(please
specify)
5.Ethnicity: 1.Yoruba [] 2.Igbo[] 3.Hausa[] 4. Others (please, specify)
6.Religion: 1.Christianity [] 2.Islam [] 3.Tradition []
7.Education: 1.Primary [] 2.Junior Secondary [] 3. Senior Secondary [] 4.Tertiary [
8. Types of movement aides: 1. wheelchairs []2. Cane[] 3. Walker[] 3. Medically prescribe
shoes[]
4.Crutches[] 5.Scooter[] 6.Brace[] 7. Artificial limb[]
9. What is the highest academic qualification of your parents or sponsors? 1.First school certificate[]
2.Senior secondary certificate[] 3. First degree[] 4. Masters and above[]
Section B:Socio-economic Factors Influencing Sexual and Reproductive Health
Instruction: Please tick ($\sqrt{\ }$) as appropriate
10. How many times do you normally eat a day? 1.One []2.Two[] 3.Three [] 4.0thers(please,
specify)
11. Do your parents give you upkeep? 1.Yes[] 2.No[]
12. If yes, like how much do they give you monthly? 1. N10002000[] 2.N3000N4000[]
3. N4000N5000 [] 4. N6000 and above []
13. If no, where do you get money for your daily needs from? 1. Boyfriend [] 2.Girlfriend[

3 .Donors [] 4.Others(please, specify)
Section C: Knowledge of Sexual And Reproductive Health
Instruction: Please tick ($\sqrt{\ }$) as appropriate
14. Ovulation occurs 1. At the end of menstrual cycle [] 2. At the middle of menstrual
cycle [] 3. I don't know []
15. The first menstrual bleeding in a woman is called 1. Menarche [] 2. Blood flow []
3. I don't know []
16. A cease of menstrual bleeding when a woman has sex with her sex partner could indicate pregnancy
1. Yes [] 2. No [] 3. I don't know []
17. Appearance of hair in the pubic region for both male and female is a feature of attainment of puberty
1. Yes [] 2. No [] 3. I don't know []
18. Having sexual intercourse with a partner even for the first time without using protection could lead to
pregnancy 1. Yes [] 2. No [] 3. I don't know []
19. Can one contract HIV through having unprotected sex? 1. Yes [] 2. No [] 3. Don't know []
20. List three (3) sexually transmitted infections that you know 1
2 3
21. HIV and other sexually transmitted infections can be protected by the use of condom.?
1. Yes [] 2. No [] 3. I don't know []
22. Is there any other way of preventing pregnancy apart from the use of condom?
1. Yes [] 2. No [] 3. I don't know []
23. If yes to the above question, list them

24. Aborting pregnancy can lead to 1. Infertility [] 2. Has nothing to do with infertility
3. I don't know []
25. Unsafe period means 1. A period for which a woman will be pregnant if she has sex []
2. A period which a woman will not be pregnant if she has sex [] 3. I don't know []
26. Premarital sex can lead to infertility 1. Yes [] 2. No [] 3. I don't know []
27. Rape is a form of sexual violence 1. Yes [] 2. N o [] 3. I don't know []
Section D: Perception about Sexual and Reproductive Health
Instruction: Please tick ($\sqrt{\ }$) as appropriate
28. The following is true about HIV/AIDS: 1. It does not exist []
2. It exists but does not affect human being [] 3. It exists and affects human being []
29. HIV/AIDS and other STIs are majorly contracted through sex 1. Yes [] 2. No [] 3. I don't know []
30. Female circumcision reduces prostitution and has no biological harm 1. Yes [] 2. No []
31. Female Genital Mutilation 1. Increase sexual urge [] 2. Is a source of infection []
3. There is nothing wrong with it []
32. Abortion has nothing to do with infertility 1. Yes [] 2. No [] 3. I don't know []
33. Premarital sex 1.is a good practice [] 2. Is not a good practice []
Section E: Attitude towards sexual and Reproductive Health Instruction: Please tick (1/2) as appropriate Regging in mind that SA=Strongly agreed
Instructions riegge fick (V) as annronrigte. Rearing in mind that NA=Ntrongly agreed

Instruction: Please tick ($\sqrt{\ }$) as appropriate. Bearing in mind that SA=Strongly agreed, A=Agreed, U=Undecided, SD=Strongly disagree, D=Disagreed,

S/N		SA	A	U	SD	D
34	Watching of pornographic film has no influences on sexual					
	and reproductive health					
35	Screening of HIV/AIDS is not meant for the adolescents					
36	There is nothing wrong with involving in premarital sex					
	Discussing sexual issues with your peers is a bad habit					

37					
38	Engaging in rape is not a bad behaviour				
39	Having unprotected sex with opposite partner has no negative effect on SRH of the physically challenged adolescent		-	Ŝ	7
40	There is nothing wrong with teenagers having boy or girlfriend		2		
41	There is nothing wrong with having sex with a teacher				

SECTION F: EXPERIENCE TOWARDS SEXUAL AND REPRODUCTIVE HEALTH

Instruction: Please tick	(√)) as	appro	priate
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42. Have you eve	had sex before?	1.Yes [] 2.No[]
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44. If yes, how many times have you gone?	1. Only once	e [] 2.Twice [] 3 Three to five
times [] 4. More than five times []			

45.	How was	vour expe	erience lik	e at your	first sexual	intercourse?	1. I enjoyed it [1
		<i>J</i> • • • • • • • • • • • • • • • • • • •					1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	

2. It was painful [] 3. I regretted []

46. How did you feel when your sexual partner approached you for sex? 1. I felt attracted [

] 2. I didn't have any sexual urge [] 3.I am always annoyed []

47. Have you experienced any form of sexual violence before? 1. Yes [] 2. No []

3. I can't tell []

48. If yes what was your experience like? 1. Bitter [] 2. Annoying [] 3. Enjoyable []

Which of the following in questions **49--54** do you practice during sexual intercourse?

S/N	Methods of contraception	Yes	No
49.	Calendar method (counting of dates)		
50.	Use of condom		
51	Withdrawal method		
52	Use of spermicides		
53	Use of drugs		
54	Copper IUD		

Instruction: Please tick against the ones you have experienced

SN	SECONDARY SEXUAL CHARACTERISTICS	YES	NO
55	Appearance of hair on the pubic region		
56	Enlargement of breast		
57	Broadening of shoulders		
58	Appearance of pimples on the face		
59	Menstrual bleeding		
60	Deep voice		

- 61. Have you gone for HIV screening before? 1. Yes [] 2. No []
- 62. If yes, when was the last time you went for HIV screening? 1. Few days ago [] 2. Few weeks ago [] 3. Few months ago [] 4. Few years ago []

APPENDIX II

MINISTRY OF WOMEN AFFAIRS COMMUNITY DEVELOPMENT SOCIAL WELFARE AND POVERTY ALLEVIATION

ADM.565T/149

September, 2014.

Ď (SW),

PERMISSION TO CARRY OUT STUDY

I have instruction to refer to the above subject and inform you that the Ministry has graciously approved Mr. Nkporbu Paddy N. (Matric No. 176562) request to collect data that will be used to carry out research project for his M.Sc programme. He is a student of the Department of Health Promotion and Education, University of Ibadan.

- The topic of the project is "Antecedent factors related to sexual and reproductive health experiences of physically challenged adolescents in Ibadan". In view of this, you are requested to kindly give him the required information and attention.
- Thank you.

Mr. Adegoke R.A.

For: Honourable Commissioner

SA DEN Alaliy

APPENDIX III

ETHICAL APPROVAL

TELEGRAMS.....

TELEPHONE.....



MINISTRY OF HEALTH

DEPARTMENT OF PLANNING, RESEARCH & STATISTICS DIVISION

PRIVATE MAIL BAG NO. 5027, OYO STATE OF NIGERIA

the Honorable Commissioner quoting Our Ref. No. AD 13/ 479/ 699

November, 2014

The Principal Investigator,
Department of Health Promotion and Education,
Faculty of Public Health,
College of Medicine,
University of Ibadan,
Ibadan.

Attention: Nkporbu Paddy

Ethical Approval for the Implementation of your Research Proposal in Oyo State
In response of your letter requesting for Renewal of your Research Proposal tittled:
"Antecedent Factors Related to Sexual and Reproductive Health Experiences of Physically Challenged Adolescents in Ibadan, Nigeria."

- The committee has noted your compliance with all the ethical concerns raised in the initial review of the proposal. In the light of this, I am pleased to convey to you the approval of committee for the implementation of the Research Proposal in Oyo State, Nigeria.
- Please note that the committee will monitor closely and follow up the
 implementation of the research study. However, the Ministry of Health would like to
 have a copy of the results and conclusions of the findings as this will help in policy
 making in the health sector.

Wishing you all the best.

Director, Planting Research & Statistics

Secretary, Oyo State, Research Ethical Review Committee