KNOWLEDGE AND PERCEPTION OF VESICLE VAGINA FISTULA AMONG ADOLESCENT STUDENTS IN SELECTED SENIOR SECONDARY SCHOOLS IN BENIN CITY, EDO STATE

BY

EDOBOR BLESSING IZEHI

BMS1601887

DEPARTMENT OF NURSING SCIENCE
SCHOOL OF BASIC MEDICAL SCIENCES
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A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF NURSING SCIENCE, SCHOOL OF BASIC MEDICAL SCIENCES, COLLEGE OF MEDICAL SCIENCES, UNIVERSITY OF BENIN, BENIN CITY, EDO STATE.

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CERTIFICATION

This is to certify that this project work was carried out by **EDOBOR BLESSING IZEHI** and all corrections effected with Matriculation number **BMS1601887** in the Department of Nursing Science, School of Basic Medical Sciences, University of Benin, under the supervision of **MRS. M. A. INIOMOR.**

EDOBOR BLESSING IZEHI
(Student) SIGN/DATE: _____

MRS. M. A. INIOMOR
(Project Supervisor) SIGN/DATE: _____

DR. (MRS.) J. N. OKO-OSE
(Head of Department) SIGN/DATE: _____

_____
EXTERNAL EXAMINER SIGN/DATE: _____

DEDICATION

I dedicate this research project to Almighty God who has been my strength through the period of this research.

ACKNOWLEDGMENT

My profound gratitude goes to God Almighty for His strength, wisdom and guidance all through my period of study and for making this work a success.

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TABLE OF CONTENTS

ABSTRACT

Vesico-vaginal fistula (VVF) is an abnormal opening between the balder and the vagina in which urine leaks into the vagina. Sometimes this type develops as a result of obstructed labour in childbirth. This abnormality is rampant among adolescents and as such many young adolescent students still do not have good knowledge about the causes and implication on health. On this note, this study was designed to investigate perception of vesico-vagina fistula among adolescent students in selected secondary school in Ovia North-east Local Government, Edo State. A sample size of 230 adolescents was selected through random sampling technique. A well-structured questionnaire was used as instrument of data collection based on the research objectives. Data collected was analysed using descriptive (Frequency, percentage and mean) and inferential statistics. The level of significance was set at $p < 0.05$. *The data analysis was carried out using IBM Statistical package for Social Science (SPSS) version 21.0 for windows. The result shows that the Adolescents have good knowledge about vesico-vagina fistula and have high (positive) perception towards VVF and the prevention mechanism*.

Keywords: Vesico-vagina fistula, Adolescents, Perception, Labour

CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

Vesico vagina fistula is a common problem in developing countries.

Vesico-vaginal fistula (VVF) is a direct pathological communication between the urinary bladder and the vagina, culminating in uncontrolled movement of urine from the bladder into the vagina (Perveen & Shah, 2018). Several factors which encompass social, biological and environmental factors have been linked to the incidence and prevalence of VVF, thus it is perceived as a major gynecological problem worldwide. VVF is an abnormal condition characterized by opening from the bladder to the vagina, in which urine escapes into the vagina. Urinary or fecal incontinence among women is a devastating medical morbidity that is mostly caused by prolonged obstructed labour (Lufumpa et al, 2018). Historical understanding of VVF has shown that the condition is not a new phenomenon, as this condition has been a common scourge throughout the globe (Hilton, 2013). Due to improved and advanced obstetric care in areas such as Europe and North America, the scourge is relatively unknown in these geographical regions of the world (Hilton & Cromwell, 2013). In Nigeria, there is a VVF rate of 350 cases per 100,000 deliveries at the teaching hospitals (Federal Ministry of Health, 2015). The ministry stated that the country accounts for 40% of the global burden of VVF. For each maternal death that occurs, 15 to 20 other women suffer either short- or long-term maternal morbidities and prominent among these morbidities are obstetric fistula among which the major one is the VVF. Consequently, the nature of VVF and its accompanying complication leaves the victims with dribbling of urine into the vagina, leading to repulsive smell and distress that may result to severe social and psychological burdens on the victims. Apart from continuous leakage of urine, VVF also often leaves its

victims with foetal demise, cervical and pelvic damages, and neurological conditions such as foot-drop, urogenital infections, ammonia dermatitis, genital lacerations, kidney infections and amenorrhea (Hilton 2014).

The United Nations (2015) defined an adolescent as persons between the ages of 10 and 19, in essence, individuals who are in the second decade of their life. Adolescence has long been viewed as a period of heightened risk-taking requiring special attention and protection by adults (Bala, 2014). However, many adolescent girls in developing countries are exposed to practices that predispose them to VVF and are most times left with no option than to live with the burden of the menace. It is a statement of fact that female adolescents are more likely to have prolong and obstructed labours due to their smaller size and immature pelvic structure. This not only increases their risk of death, but also their risk of developing VVF. After such traumatic experience, their lives are thus characterized by suffering and personal embarrassment because of the physical and psychosocial burden of VVF. According to Tunçalp, Landry and Stanton (2014), annually, approximately 7.3 million births occur among girls under the age of 18 years and over 2 million develop childbirth complications such as VVF, which is one of the most prominent maternal morbidities affecting girls in low resourced countries which are majorly the poor, vulnerable, illiterate and rural dwellers.

Several reports have highlighted that Nigeria is one of the countries in Africa with a very high burden of VVF (Akporiaye, Oguike & Evbuomwan, 2017; Ezegwui & Nwogu-Ikojo, 2015; Hassan & Ekele, 2014). Cultural practices of early marriage and early deliveries represent a significant risk factor for the incidence of VVF as a result of obstructed labour. Every society and culture has some basic norms and beliefs that guide the people. In Nigeria for instance, some cultures, especially among the rural dwellers permits early marriage of the girl-child. Research

studies have revealed that the underlying factors contributing to the scourge include illiteracy, non-utilization of antenatal and intra-partum medical facilities, poverty, unwanted pregnancy, parental pressure, peer pressure, developmental stage, ignorance, home-delivery and the habit of performing traditional episiotomy (such as the Gishiri cut in the North) by untrained traditional birth attendants, husband dominance and severe deprivation and neglect (Bala, 2014; Gharoro & Agholor, 2009; Hassan & Ekele, 2014; Kabir, Illiyasu, Abubakar & Umar, 2013,).

More so, it has negative trend on the girl-child which includes emotional and mental distress, intolerance, school drop-out, early widowhood, frustration and hatred for the man. In addition, VVF patients face high levels of stigma from their families and communities, resulting in social and economic exclusions, which in turn lead to high risks of depression and suicide. These has prompted the researcher to elicit the perception of adolescents towards the scourge of VVF.

1.1 Statement of the Problem

The prevalence of VVF is often underreported, probably because knowledge of the number of victims is linked to those who seek medical attention at hospitals (Hassan & Ekele, 2014). Report on VVF has been hospital-based and very few studies on perception has been conducted on adolescents in Benin City. Although the exact global estimates of urinary (vesico-vaginal fistula) and or faecal (recto-vaginal fistula) incontinence burden is unknown, estimates by the WHO showed that more than 2 million women are currently living with the disorder and between 80 000 and 100 000 new cases are detected every year, largely in sub-Saharan Africa (SSA) and South East Asia (Tuncalp, Tripathi, Landry et al, 2015). Nigeria and Ethiopia have the highest burden of obstetric fistula in SSA (Tuncalp, Tripathi, Landry et al, 2015). According to the 2008 Nigerian Demographic Health Survey (NDHS), the prevalence of urinary incontinence was 0.4%, with highest prevalence in the Northern regions compared with the

Southern regions. Evidence abound that the risk of vaginal fistula is common in settings with lack or inadequate qualitative emergency obstetric care, healthcare manpower challenges and poor investment in maternity services (Lufumpa et al, 2018; Tuncalp, Tripathi, Landry et al, 2015). Beyond the medical factors, sociocultural issues such as early marriage, harmful cultural practices like female genital mutilation and unsupervised childbirth at home; poor policy implementation of girl child education and misconceptions about childbirth practices are other drivers responsible for the huge burden of obstetric fistula in SSA and Southeast Asia (Lufumpa et al, 2018; Tuncalp, Tripathi, Landry et al, 2015).

Despite the huge burden of obstetric fistula in SSA, studies addressing the awareness of obstetric fistula among women are limited, particularly in Nigeria(Basheer & Pumpaibool, 2018). This study therefore seeks to assess the perception of vesico-vagina fistula among adolescent students in some selected secondary schools in Egor Local Government Area, Edo state.

1.2. Objective of the Study

1.2.1 General Objective

To assess the perception of Vesico-vagina fistula among adolescent students in some selected senior secondary schools in Egor Local Government Area, Edo State.

1.2.2 Specific Objectives

The objectives of this study are to;

1. assess the level of knowledge of Vesico vaginal fistula among the adolescent students in the senior secondary schools in Egor.
2. elicit the perception of adolescent students in secondary schools in Egor towards Vesico-vagina fistula (VVF).

3. determine the factors influencing the perception of adolescent students in secondary schools in Egor towards Vesico-vagina fistula (VVF)

1.3 Research Questions

The following research questions are raised to guide the study:

1. What is the level of knowledge of Vesico-vaginal fistula among the adolescent students in the selected senior secondary schools in Egor ?
2. What is the perception of adolescent students in secondary schools in Egor towards VVF?
3. What are the factors influencing the perception adolescent students in the selected secondary schools in Egor towards VVF?
4. What are the strategies to prevent the occurrence of VVF?

1.4. Significance of the Study

This study would provide information on the knowledge and perception of VVF among adolescents in Egor Local Government Area of Edo state. It will serve as a database for any researcher who is interested in similar studies. The result will help nurses and health professionals emphasize more and improve their knowledge and skill toward VVF treatment care. Also, the findings of this study will enhance the adolescents to enlighten their wards or families or community about VVF, It will also help the appropriate authority to take legal step in making policy that will protect female adolescent against harmful cultural practices and traditional practice. Furthermore, findings from this analysis will assist policy-makers and public health programmers to understand the level of awareness of vaginal fistula and the contributory factors.

1.5. Hypothesis

Ho: There is no significant difference between the perception of vesico-vaginal fistula among adolescent students in secondary schools in Egor LGA and their age.

H0: There is no significant difference between the knowledge and perception of vesico-vaginal fistula among adolescent students in secondary schools in Egor LGA

1.6. Scope of Study

This study is delimited to adolescent students attending Uselu senior secondary school and Iyoba Senior Secondary schools in Egor Local Government Area of Edo state.

1.7 Operational Definition of Terms

VVF: It is an abnormal passage from the bladder to the vagina, in which urine leaks into the vagina that may affect adolescent.

ADOLESCENT: These are individuals that fall under the age range 10- l9 years and are prone to developing Vesico-vagina fistula.

KNOWLEDGE: It is the level of awareness and understanding about a particular situation, issue or subject. In this study, it refers to an understanding regarding the nature, prevalence, incidences and facts about Vesico-vaginal fistula (VVF) among adolescent

PERCEPTION: It explains the beliefs the adolescents' respondents hold about the nature, complications and statement of facts about Vesico-vaginal fistula.

CHAPTER 2

LITERATURE REVIEW

The concept - Vesico-vaginal Fistula (VVF)

Vesico-vagina fistula (VVF) is an abnormal opening between the vagina and urinary bladder or between the bladder and rectum usually due to the constriction or occlusion of blood vessels supplying the vagina tissues. This Constriction or occlusion usually occurs during prolonged labour, spontaneous abortion or female genital mutilation leading to necrosis of the affected part creating a hole between the bladder and vagina uncontrolled passage of urine which results to manifestation of physiological anomalies like continuous loss of urine through the vagina, urogenital infections, dermatitis ammonia (inflammation of the skin) amongst others (World Health Organization, WHO, 2017).

Villey, (2016) opined that VVF is an opening between the bladder and vagina which leads to involuntary deposition of urine in the vagina vault. It also occurs in young adolescents due to improper development of their pelvic organs resulting to laceration of the walls of the vagina during delivery. However, adolescent girls are at the risk of maternal death and morbidities such as fistula (Bangner, 2017). Prevalence of health problems during pregnancy and childbirth are more amongst girls whose birth canal are still developing (Hilton & Ward, 2018).

WHO (2013), highlighted that approximately 7.3 million births occur amongst girl below the 18 years in most developing countries. However, 2 million occur amongst girls below 15 years of age.

The development and occurrence of VVF has been linked to several factors like low socio-economic status of the of the adolescent child's family which affect their ability to access emergency care is key factor leading to the development of VVF. Some other factor impedes the

girl child's ability to seek basic education, encourages poverty and forcing her into early marriage. In contrast, biological and medical factors have been indicated in association with VVF. They include but not limited to age, short stature, large fetus, malnutrition, malpresentation as well as maternal medical disease. (Benjamin 2013).

In many countries within the developing sub-Saharan regions of Africa and Asia, their culture permits the marriage of young girls below 18 years. It is however estimated that about 100 million young girls will be married under the age of 15 within a decade (Santhaya et. al, 2014).

In the words of Umoyoho and Inyang (2016), he stated that obstructed labour is a major cause of fistula. However Ojua (2015) discovered that men and women are not well informed about this development thus the need for systematic and comprehensive health enlightenment to educate people cause and treatment of VVF. Some of the probable ways of eradicating and bringing to the barest minimum the incidence of VVF is promoting education for girls which plays a key role in preventing fistula in the long term. Former fistula patients often act as community fistula advocates or ambassadors of hope, (UNFPA 2015).

Nowadays, there is no generally accepted method for classifying fistula because their forms and extent of injury varies from each other. However, every author usually adopts his own classification based on the anatomical structures of the injury or the size of the fistula, or based on the classification that is most convenient for him to use (Wall et. al. (2015).

Moir (2017) asserted that classification of fistulas can also be based on the aetiology. Kees (2015) argued that fistula takes a specific name based on the specific organs it affects. He listed the following amongst others as the types of fistulas: Vesico vaginal fistula (VVF), Recto Vaginal Fistula (RUF), Urethra vesico-vaginal fistula (UVVF), Juxta-Cervical fistula (J.C.F), Vesico Cervical Vaginal Fistula (UCVF), Uretho- Vesico-vaginal fistula (U.V.V), Urethra cervical

fistula (U.C.F), Genitor urinary fistula (G.R.F), Genitor-Rectal fistula (G.F), Genitor urinary rectal fistula (G.V.R.F.), Urine fistula (U.F.), Stool fistula (S.F), Obstetric fistula (O.F) and Surgically-produced fistula (S.P.F.)

Oluwasomidoyin et. al, (2020) highlighted that prolonged obstructed labour is usually the chief cause of obstetric fistula. Prolonged labour occurs when the pressure of the baby´s head restricts blood flow and damages tissues between the vagina and the bladder or rectum. This condition is entrenched in poverty, predominantly affecting marginalized women who lack access to quality Emergency obstetric care (EmOC), typically of lower socio-economic status, perform harmful traditional practices, with no or lower levels of education, dwelling in rural areas with preference for home delivery and avoidance of caesarean section, without prenatal care and married at younger age.

Waaldjil (2015), opined that in developing countries, obnoxious cultural beliefs present myths and misconceptions about the origin of fistula. This misrepresentation sometimes attributes the cause of fistula to include; adultery, spiritual attack, curse, bewitchment, offense committed against the spirits, punishment from the gods amongst others. VVF is an abnormal communication between the bladder and the vagina and represents the most frequent type of fistula in the urinary tract. This is disheartening.

Epidemiology of Vesico Vagina Fistula (VVF)

According to Oluwasomidoyin et. al, (2020), lack of reliable data for prevalence and incidence has hampered efforts to formulate an appropriate and coordinated response to of considering the challenges in the collection of accurate and comprehensive maternal morbidity data particularly for of in low-income countries. Approximately 2 million women were estimated to be living with

unrepaired vesico-vaginal fistula (VVF) and about half of the total from developing countries were from Nigeria. However, Safiatu et al (2015), Vesico Vagina Fistula (VVF) is popular in adolescents from developing countries. In addition, WHO (2013) estimated that about 1.3 billion adolescents worldwide suffer from VVF majority of this number coming from developing countries. UNFPA (2015) estimates that 2 million women are suffering from VVF with about 50 to 100, 000 new cases occurring yearly However, there is a clear distinction between the cause of VVF in developing and developed countries. In sub–Saharan Africa, VVF may occur from prolonged or obstructed labour whereas it is rarely witnessed in developed and industrialized countries (WHO, 2013). Biological, social and environmental factors might contribute to the high incidence of VVF for example, poor women develop fistula due to their inability to access obstetric services when due. In addition, it is reported to be more prevalent in most sub-Saharan countries with an estimated two million women in sub-Saharan Africa and South Asia living with VVF.

Occurrence of VVF is under reported in many communities because of the stigma associate with it but Tahzib (2015) discovered that it is the common reason for hospitalization of women in many remote parts of Africa. Past literatures reveal that the cause of VVF varies and is dependent on one's level of education and social status. Without much ado, ladies from poor background and low educational status are mostly the worst victims.

Abubakar et al (2017) reported the following to be likely causes of VVF: prolonged or obstructed labour, trauma during operative delivery, infections and irradiation necrosis from treatment of cervical carcinoma. Villey (2016), enumerates the factors that contribute to the development of VVF in developing countries. They include cultures which promote marriage and conception at a young age, often before full pelvic growth has been reached. Thus, an early

child-bearing stage, poor physical growth and health of the mother coupled with poor medical facilities are all contributing to the prevalence of obstructed labour, hence VVF condition among women in low socio-economic status.

Research reveals that over 2 million suffer from VVF with Nigeria accounting for about 1 million cases (UNFPA, 2015). About 33,000 new cases occur yearly in Africa and Nigeria records 20,000 of this number however 3 of every 1000 births in Nigeria leaves women with Vesico vaginal fistula (Umoiyoho et. Al, 2012).

Tahzib (2015) reported an incidence of 1 to 3 cases of vesico-vaginal fistula per 1000 deliveries.

In addition, Northern Nigeria has a high prevalence of VVF. This is because areas with high maternal mortality also tend to have high fistula rates. Some harmful cultural practices have been identified to expose women to the risk of VVF which results to physical discomfort they bear and these women are often ostracized by their communities and may be left struggling to survive, abandoned by their husbands and families. Most will remain childless, and childlessness is found to be an important factor in marital breakdown (Hassan 2015).

Psychological Impact of VVF on Adolescents

Agwu et. al, (2017), opined that the untold psychological torture, societal and family hardship including marital separation, stigmatization and discrimination faced by victims of VVF have been aptly captured and documented by several studies cutting across the entire developing world. They further explained that these culminate into personal conflicts for the victims with loss of self-esteem, dignity and drive for living that some have thought of committing suicide. They also pointed out that the management of such victims therefore goes beyond repair of the defect to include proper rehabilitation and re-integration into the society, empowerment and regeneration of self-worth and dignity. Adolescents, attempt to manage the condition by using

rags for protection or carrying a bowl between their legs (Extended Hands Foundation, 2017). People and community members regard the symptoms as a sign of infidelity, sexually transmitted disease or having been bewitched. They strive to conceal their situation, making it impossible to partake in normal life or function within the community. If the fistula is not repaired, the girl remains incontinent and childless and is most likely to be abandoned by her people, on whom she is economically dependent. She lives a life of rejection, depression, isolation, mental frustration and in most cases; she will die from complications of the condition. Most, unfortunately live-in rural areas where corrective surgery is beyond their reach and some are restricted to travel by their husbands. The physical toll on the victims is innumerable, prominent among which are the principal symptoms of continuous and uncontrolled urine leakage per vagina with ensuing ammoniacal smell and dermatitis and gait impairment from obstetric palsy (Umeora et al. 2015).

Also, most of the vesico-vaginal fistula patients suffer from unnecessary and avoidable psychosocial complications such as loss of self-esteem, and depression. Most adolescent cannot work or attend social gathering because of smell of urine. At times, their families desert them, because the urine odour makes them socially repulsive. It is believed they have brought shame and dishonor to their families and are shunned by the society and eventually become social outcast (Kabir, Iliyasu & Abubakar 2015)

Prevention of VVF

Programmess to prevent vesico-vagina fistulas will need to incorporate both immediate and long-term strategies for fistula prevention. The long-term components of fistula prevention include:

- Advocacy for programs to improve the health and nutrition of girls and adolescents so that they enter their childbearing years as healthy as possible;

- Campaigns to increase the educational level attained by girls, thereby raising the age at which first pregnancy occurs (thereby avoiding adolescent pregnancy) and
- Developing more knowledgeable mothers; campaigns to end harmful traditional practices such as female genital cutting and the additional risk factors for fistula formation that results.
- Accessible and effective family planning programs

Since these factors are behavioural, communication intervention will be more appropriate in influencing exposure to health issues (Odoemelam & Ekwueme, 2013). Advertisers and healthcare practitioners need to find better ways of improving advertising messages so as improve the prevention and treatment of Vesicovaginal fistula. This is due to the finding of the study which showed that the highest format of exposure to vesicovaginal fistula message was song-related campaigns. There is high need to explore the medium of newer technologies (mobile phone and the internet) in the dissemination of obstetric messages across the country (Odoemelam & Ebenezer, 2015). Furthermore, there should be urgent need to reinforce preexisting facilities of health system and appropriate training of health professionals involved in pelvic surgeries, if the risk of Iatrogenic injuries and VVF formation is to be reduced (Amna, Sinchand & Nadeem, 2015). In adding to the discourse, Presler and Jones (2013) reported that keeping adolescent girls in school and teaching them basic biology is clearly an important step in preventing adolescent pregnancy.

EMPIRICAL REVIEW

This section attempts a cursory review of related researches with empirical bases. It will strive to review scholarly work available in literature, which will serve as a contribution to the subject of this research work.

KNOWLEDGE OF VESICOVAGINA FISTULA

According to study carried out by Hassan and Ekele (2014) on the cause of VVF discovered that majority of the respondents with VVF 97.2% have low knowledge about vesico vaginal fistula which indicates that the respondents have poor knowledge when it comes to obstetric care during labour. The proportion is lower with the findings by Perveen and shah (2016) that 70% of women with fistula on admission have knowledge of causes of their fistula, knowledge level regarding to the risk factors, majority of the respondents (77.9%) knew about staying long period during labour and delay for seeking care can cause delivery complications. Most of the respondents (72.9%) had fair knowledge level regarding to signs and symptoms of VVF compared with the risk factors.

Barbara, Engelbert and Eleonore (2017) carried out studies on 130 patients in which 121 (93%) had no formal education. Teenagers constituted 37%, while 57% were primipara. Thirty-five (27%) patients were divorced or separated because of the VVF. There were seven cases of recurrence after a previous successful repair. Prolonged obstructed labor was the cause of the VVF in 110 (85%) patients and 77 (70%) correctly attributed their problem to the prolonged labor. The 33 patients who could not identify the prolonged obstructed labor as the cause either attributed their condition to God/destiny or to the operation that was done to relief the obstruction and therefore would not have hospital delivery in their subsequent pregnancies.

In a study by Ezeonu (2017) to ascertain the level of knowledge about VVF among adolescent, he observed that 118 (57.8%) respondents had good knowledge about vesicovaginal fistula while

86 (42.2%) have fair knowledge about the disease. Only 51 (25%) knew that pregnant adolescents were at risk of vesicovaginal fistula. The factors identified by the respondents were prolonged labour, instrumental vaginal delivery and caesarean section.

Also, Gimba (2014), examined the maternal health implications of early marriage on young mothers in Gombe, using data obtained from 200 respondents aged 15-24 years. The study revealed that more than 60% had only primary education, 50% had been married for between 5-9 years and more than 70% had experienced complications before or after childbirth. Age at first marriage, current age, level of education and household decision-making influenced maternal health risks in the study area.

Khartoum (2008) in his study showed that, more than two third of patients (80.8%) being of low-socioeconomic status this may explains why girls are married early, why illiteracy is high, and why there was no ability to attend regular antenatal follow-up. The majority of cases (7%) were illiterate, with the rest of the cases being distributed in a descending manner through the educational levels his finding is consistent with a study done in Nigeria in which (41%) were illiterates the results were higher than the findings of another study done in Kenya in which (61%) of the cases were illiterates, this justifies the link between the level of education and the health problems a woman might face.

Kabir, Iliyasu, and Umar (2017) investigated medico-social problems of patients with vesico-vaginal fistula in Murtala Muhammed Specialist Hospital, Kano, Nigeria. One hundred and twenty (120) patients with VVF admitted at the centre were investigated. A structured questionnaire was used to assess their responses pertaining to the medical and social problems they face due to their condition. More so, addition information on clinical characteristics of the respondents was obtained from their case notes. The result showed that the majority of the

patients (72.5%) were between age range of 10-20 years. Also, it was observed that 81.6% of the respondents had their first marriage between the ages of 10-15 years. Medically, it was revealed that respondents suffered from vulva dermatis, foot drop, amenorrhoea, recurrent urinary tract infection and dysmenorrhea. It was discovered that the condition had adverse effect on their social life as they are considered to have brought shame and dishonor to themselves and their families and when they manage to avoid divorce by their husbands, they most often lose support from their husbands. Also, the condition had economic impact on their lives has they cannot work because they are shunned by the society. The study among other things recommended counseling and enlightenment programs on the menace of VVF, the need to enforce training on traditional birth attendants and also improve access to obstetric services

In adding to the discussion, Imoukhede, Adeyemo and Egbochuku (2015) examined conceptual knowledge of vesico-viginal fistula among parents, teachers and counselors of senior secondary school students in Warri South Local Government Area of Delta State, Nigeria. Six hundred respondents (600) including parents, teachers and counselors were randomly selected as sample for the study. A structured questionnaire was used as instrument for data collection and a return rate of 85.2% was recorded. The result of the study revealed that there is significantly low level of conceptual knowledge of VVF among the respondents. It was also observed that there is no difference in knowledge of VVF among respondents based on educational status and location. The study recommended a need for public enlightenment among parents, teachers and counselors about the menace of VVF. This becomes necessary due to the fact that these three categories of people are regarded as “gatekeepers” to adolescents who are the probable victim of the scourge.

PERCEPTION OF ADOLESCENT ABOUT VVF

Ingwu, Nwosu, and Egbichi (2018) carried out a study on knowledge of risk factors and perceived effects of Vesicovaginal Fistula among Primigravida attending antenatal care in Mater Misericordiae Hospital Afikpo North of Ebonyi State, Nigeria. A descriptive survey design was adopted for the study, where one hundred and thirty-eight (138) pregnant women served as the sample. A structured questionnaire was used to elicit information from the respondents. The result of the study revealed that 40.8% of the respondents have low level of knowledge about the risk factors of VVF. On the perceived psycho-social effect(s), 96% believed that VVF victims face social avoidance, while 92% believe victims may have feelings of shame and rejection. The research therefore recommended that adequate enlightenment should be put in place in order to educate the public on the nature, risk factors and problems associated with VVF.

Also Hassan, Ahmad and Raji (2018) investigated knowledge, effect of VVF and satisfaction with VVF Repair-related services in a fistula repair facility in North-western Nigeria. The population of the study consists of VVF patients attending the VVF specialist hospital. The study adopted a descriptive cross-sectional survey. Ninety-nine patients served as respondents for the study. A structured questionnaire was administered in Hausa language to the respondents. Results obtained revealed that 55.6% of the respondents belief that VVF is caused by evil spirit, 33.3% believed it is a punishment from the gods. On the effect(s) of the condition, 83.8% reported that the condition made them to have a feeling of shame, 26.3% said it led to people avoiding them, while 36.4% reported that it resulted to divorce with their spouses. On the management of the condition by the centre, 91.9% of the respondents were satisfied with ease of access to care, 96% reported to be satisfied with the hospital treatment facilities. Based on the data collected, the study concluded that the respondents, though have some misrepresentations of

the cause of VVF but however they were aware of the prevalence of VVF. Also, most of them submitted to being faced with psycho-social problems due to their condition.

FACTORS INFLUENCING VVF AMONGST ADOLESCENT

Many factors have identified to the cause of VVF most especially in developing countries. Most popular are in those regions where culture encourages teenage marriage and conception, often before full pelvic growth has been achieved. These factors are as follows;

Socio-economic factors

Socioeconomic characteristics of women have an impact on the risk of fistula and constitute major barriers to seeking care. This extremely affects the underprivileged women, whose voices are scarcely heard. Studies have shown that it predominately occurs among women with low economic status compared to their wealthy peers moreover, those living in rural areas put women more at risk of obstetric fistula, because not only are they marginalized in terms of health infrastructures, but they often live in remote areas, too far from health centres where they can receive timely EmOC (Ouwasomidoyin et. al 2020).

Psychosocial damage

Ouwasomidoyin et. al (2020) states that aside enduring the ordeal of obstructed labour, women face significant psychosocial challenges. Low self-esteem, feelings of rejection, stress, anxiety, mental health dysfunctions and post-traumatic stress disorders, loss of dignity and self-worth, loss of sexual pleasure, depression and suicidal thoughts are some psychosocial consequences that can accompany this morbidity. Incontinence often results in women experiencing extensive social stigma and related mental health issues, with these women either marginalized by households and communities, or marginalizing themselves. Such isolation and stigma acts to

decrease their chances of seeking treatment. Women often feel unfit to live with the rest of their family members and isolate themselves or are isolated by their families and communities.

Nutrition

Zacharin (2018), opined that two thirds of fistulae is caused by difficult labour were due to contracted pelvis of the flat type which resulted from poor nutrition, with frequent childhood and adolescent infections. Due to poverty, it is difficult for people especially in the rural areas to afford good nutrition; most times they live on nutritional diets that do not make them achieve full body growth. Many victims of VVF are malnourished resulting in abnormal growth of the pelvic bones. Also in some evolving cultures, pregnant women are prevented from eating certain food which could enhance their body development and prepare them for the child-delivery process. In addition, the belief is that a large quantity of food will add to the weight of the baby, thus big baby would pose a complication for the mother at delivery. To this end, small food rations are encouraged for pregnant women. According to Amiru (2014), malnourished body lacks the essential elements required to be strong and improve nutritional status. Poor nutrition has been identified as one of the major causes of vesico vaginal fistula. Imelda and Kanu (2015) asserted that malnourished individual may experience stunted growth which can result to the mothers pelvis being small in relation to the baby head.

Rape

Rape is not just unwanted sex but is usually experienced as life-threatening and as an extreme personal violation (Crombrinck & Skepu 2013). Rape is defined as intentional unlawful sexual intercourse with a woman without her consent, Rape victims appear to experience different symptoms such as shock and disbelief, confusion, fear, depression and anger, resolution, coping

and long time-term adjustment (Crombrinck & Skepu, 2013). Several cases have been reported in which adolescents were raped by soldiers, who would then insert assault weapons into their vaginas. How these girls survive with such severe trauma is unimaginable (Muhammad, 2013). In many cases, young girls between the ages of seven and twelve are raped by older men and end up having VVF due to injury inflicted while being raped.

Early Marriage/Child bearing

According to Lettenmare (2016), research has shown that 8% of fistula occurs due to marriage among girls of between 10 to 14 years but that it is not to say that early marriage itself causes the fistula. It is expected that they have small pelvic bones which naturally limits the size of the birth canal. They are yet to understand the task of motherhood and they lack the maturity to understand human anatomy and how it functions. It is the accumulation of these factors that weigh heavily against the early marriage.

According to Amiru (2015), in Nigeria, 30% of vesico vaginal fistula patients were girls who got married between the ages of 12 and 13 years. As a result of poverty, some parents in Nigeria find it difficult to send their children to school. Some are even withdrawn from school so as to be given out in marriage to attract high bride prices, especially if they are still virgins (Balogun, 2015: 29). When the girls become pregnant, they are usually sent home to deliver at their parents' house and should there arise any complications, the cost of procuring immediate and good obstetric care might be too exorbitant for the parents. If and when VVF arise, victims equally find it impossible to afford medical services for repairs (2015:30). The cost of transporting VVF victims to the hospital, usually in major cities is also unaffordable by the family.

Malignancy (Cervical)

One major consequence of poor economic status is lack of access to basic medical care such as screening for cervical cancer; the world's largest cancer killer of women. Although precancerous changes are easily diagnosed and treated, most women in the Third World have no access at all to any form of screening for cervical cancer. As cervical cancer grows, it may spread to the vagina and bladder, producing VVF. VVF of this kind are not generally treatable (Foundation for Womens Health, Research and Development, 2016).

Harmful Traditional Practices

The practice is founded in traditional beliefs and societal pressure to conform. FGM is practiced in many African countries as well as in a few scattered in other parts of the world. It is one of the most serious forms of violence against girls and is practiced in many parts of Nigeria for a number of reasons. FGM is seen as an initiation ritual for girls and as a required rite-of-passage before entering into marriage (Warner et al, 2013)

- **Sociological:** for identification with the cultural heritage, initiation of girls into womanhood, social integration and maintenance of social cohesion and social acceptance.
- **Religious**: female genital mutilation is practiced in a number of communities, under the mistaken belief that it is demanded by certain religions.
- **Other reasons:** to enhance fertility and promote child survival, better marriage prospects and to help with giving birth. However, these dangerous traditional practices of female genital mutilation (FGM) the surgical removal of the clitoris and or labia to restrict pleasure and temptation increases the risk of VVF (Muhammad, 2013). Complications associated with FMG are mostly evident during childbirth because of reduced elasticity of the vagina caused by scar tissue formed as a result of the FGM procedure (Kabril et al., 2016). Elasticity of the vagina allows more room

for foetal passage during labour. To compensate for the reduced vaginal orifices elasticity during childbirth, minute tears develop around the vagina. These, however, are too small to be repaired and thus provoke the formation of VVF (Kabril *et al*., 2016).

Education and Literacy

Myke (2017) revealed that ignorance is the major causes of many ailments in the society as ignorant people lack the basic knowledge on how to prevent themselves from being afflicted with some kind of diseases including vesico vaginal Fistula (VVF). Research by Wall (1998) showed that majority of the people in developing countries, using northern part of Nigeria as a case study were rather backward educationally. He observed that in this part of Nigeria, women are not expected to be seen and heard, they are supposed to remain confined within the compounds of their husbands and even not to be seen uncovered by male visitors to that compound. As a result of this, little or no value is placed on the education of the girl-child. He also lamented that in spite of the introduction of Universal Primary Education in Nigeria; its impact on the girl-child in the northern part is insignificant. This has made the girl-child a potential victim of early marriage and thus predisposing them to VVF.

Poverty

Poverty is the state whereby people cannot afford the basic necessities of life such as food, clothing, good shelter, formal education, healthcare etc., (UNFP, 2015). Poverty often plays a critical role in predisposing women to the problem of VVF. Poverty is linked to illiteracy, malnourishment, living condition, accessibility to good obstetric care and so on. WHO (2018) reports that women suffering from fistulae come exclusively from poor families with subsistence

farming background. It is a statement of fact that poverty and gender discrimination within the family lead to undernourishment and poor physical development. In countries where early marriage is the norm many girls become pregnant in their early teens before the pelvic has fully developed. These girls have high risk of obstructed labour, leading to VVF or maternal death. Poverty is likely to affect the ability to reach a health facility during the obstructed labour, that can eventually lead to V.V.F. Often people living in rural areas are far from healthcare centre, where such people must travel several kilometers or there about to reach a medical health facility.

Many other factors have been associated with the development of VVF. In many cultures, an adolescent cannot take decision to go to health facility if her husband is not at home. There is a strong belief that women's movement must be under strict male control and permission from the husband or a suitable male surrogate must be obtained before money can be spent on health care. This is the most common cause of delay in seeking care in obstructed labour in vesico-vaginal fistula patient.

- Delay in transporting patients to the health facility is the next common cause of delay, which could be due to long distance, non-availability of vehicle, or bad road. Health facilities are not available in some communities and the available ones are very far. Other contributory factors include

- Delay in receiving prompt treatment. Unfriendly attitude of healthcare providers to patients discourages patients from seeking care at the health facilities. Many health facilities that provide basic and comprehensive emergency obstetric care are understaffed, without partograph for monitoring labour or proper referral backup. In many health facilities drugs are out of stock, patients are given list of drugs and materials for

caesarean section to procure outside the health facility and incessant power outage that delays sterilization of instruments and surgery, which may delay time of relieving obstruction and worsening complications.

2.7 Theoretical Framework

For the purpose of this study, the theoretical framework used is the Health Belief Model developed by Rosenstock, Stretcher and Becker in the year 1988.

2.7.1 Health Belief Model (HBM)

Health belief model which was developed in the 1950s by social psychologist Rosenstock (1950) who asserted that health behavior is guided by an individuals perception (belief) about behaviour and the ability of the individual to effect change. People can and will, change behavior depending upon their knowledge and attitude. This model is the theoretical framework which seeks to explain behaviours. It postulates that a person's willingness to engage in health seeking behaviour is influenced by benefit, perceived barriers perceived susceptibility and perceived seriousness of the condition.

Health Belief Model (HBM) is an interpersonal (within individual knowledge and beliefs) theory used in health promotion to design intervention and prevention programs. It was designed in 1950s and continues to be one of the most popular and widely used theories in 1950s intervention science. The focus of the HBM is to assess health, attitude someone may have towards a particular thing, disease or negative outcomes of certain actions.

The HBM assumes that behaviour changes occur with the existence of three ideas at the same time.

- **Perceived susceptibility and severity:** An individual recognizes that there is enough reason to make health concern relevant
- **Perceived threat:** The individual understands he or she may be vulnerable to a complication or negative health outcomes.
- **Perceived benefit and barriers:** The individual must realize that behaviour change can be beneficial and the benefit of the change will outweigh any cost of doing so

2.8 Application of HBM on Individual Perception

These talks about the knowledge and belief that a person has about his perception and the outcomes they could have. This section includes two main sections: perceived susceptibility and perceive severity.

Perceived Susceptibility

A child that is married off at early age has a high risk of developing VVF. If it is believed that early marriage is not at risk of developing VVF, they may have no reason in mind to have a change of behavior.

Perceived Severity

Most people are familiar with the word “severity” of how serious a situation or action can be. In the HBM, perceived severity address how serious the disease that a person is susceptible to can be. Adolescents or society without adequate knowledge of the complications and burden of VVF

on adolescent may not have the intention to change to a better cultural practice. They also may not know the psychosocial implications it has on her.

Modifying Factor

While individual perceptions were internalized, aside the internalized individual perception in the HBM, modifying factors step outside the body to examine and use outside influences to affect how threatened a person feels by the outcome of continuing the same behaviour that exposed him to the risk factors.

Perceived Threat

Susceptibility as stated before displayed how someone acknowledges that their behaviour could head to a particular complication. Threats like the idea one step further by examining just how likely it is that the condition could be developed. For example, threats like rape, malignancy tends to pose the individual.

Cues to Action

Cues to action are reason why an individual realize he could be threatened by the complication of an action or the quality of life after been affected and the mortality rate. These cues could be due to death of someone close by complications of an action or also the presence of complications like fistula, weakness, premature labour, etc. or after medical counseling by a healthcare provider. Cue to action are anything that triggers a decision to change behaviour. After becoming aware of

the potential for developing a condition if behaviour does not chant it's important to weigh out the benefits and the barriers to taking action and determine if it is worth it.

Application of the Theory to Nursing Practice

The HBM may be applied in VVF perception and prevention which will help in determining and understanding how the influence of health communication interventions on the adolescent knowledge, practice on vesico-vagina fistula prevention and treatment, how it is understood by adolescent, their behaviours towards risk factors, and their willingness to help others to seeking remedy in cases where there is an incidence. Odoemelam & Ekwueme (2013) in their study, Integrated Development Communication Interventions in Vesico-Vaginal Fistula Prevention and Treatment in Ebonyi State of Nigeria applied the Health Belief Model as a theoretical standpoint to provide insight on how intervention communication may foster health development aspirations by making those at risk to have understanding of how their risk perspectives may culminate in positive behaviour change**.**

CHAPTER THREE

METHODOLOGY

3.1 Research Design

This study adopted a non-experimental descriptive cross-sectional design. This method is scientific and objective because it employs more control and drawing of inferences from results obtained. It was considered appropriate for the study because it allowed the researcher to collect information from the subjects being investigated and thus allowed for direct assessment of the population and subject being investigated

3.2 Study Setting

The study was carried out among Senior Secondary students in Uselu Secondary School and Iyoba Secondary School both in Egor Local Government Area, Edo State.

3.3 Target Population

The target population for this research comprised of public senior secondary school students from Uselu Secondary School and Iyoba Secondary School in Egor Local Government Area, Edo State.

3.4. INCLUSION CRITERIA

- Adolescents who fall between age range 11yrs-20years
- Female Students that belong to SS1-SS3 class

3.4 Sample Size and Sampling Techniques

The sample size comprised of respondents who were randomly drawn from the population. The simple random sampling technique was employed in selecting the sample. The sampling technique involved selecting a particular student and skipping others to select the 4^{th} and so on.

This method was deemed appropriate in order to ensure equal representation of the population characteristics and thus eliminating bias. The sample size was gotten from the total population using Taro Yamane, (1967) formula as shown below.

$$n = \frac{N}{1 + N(\mathrm{d})^2}$$ Where n = sample size

N = population size

D = level of precision (confidence interval)

N = 545

D = 0.05

Thus n = $545/1+545(0.05)^2$

n = $545/1+545\times0.0025$

n = 545/1+1.3625

n = 545/2.3625

n = 230

3.5 Instrument for Data Collection

A structured questionnaire was used as an instrument of data collection for the study. The instrument was divided into sections. Demographic characteristics of the respondents and information on the subject researched were asked in the remaining sections of the questionnaire.

3.6 Validity of the Instrument

Validity of the instrument was determined by subjecting it to face and content validity by the supervisor. This was to ensure that the instrument measures what it was supposed to. Corrections and suggestions made were used to update the instrument before administering it to the respondents.

3.7 Reliability of the Instrument

A pilot test was conducted among 20 secondary school students at Russel International Secondary School, BDPA, Benin City, Edo State who were not part of the study sample. Cronbach Alpha reliability technique was employed in ascertaining the reliability of the research instrument. A Cronbach alpha value of 0.81 was gotten which showed that the instrument was reliable.

3.8 Method of Data Collection

The data was obtained through the administration of questionnaires to the respondents. In order to ensure objective responses, efforts were made to clarify some items that may prove difficult for the respondents to understand. After completion of the instrument, the researcher made effort to retrieve them in order to minimize the incidence of loss of instrument, which could have impacted on the outcome of the study. The data was obtained within two (2) weeks; from Monday through Friday between the hours of 9am to 2pm. The questions were left with the students from various schools for few minutes and thereafter collected. Research assistants who were taught by the researcher were utilized to distribute and retrieve the questionnaires.

3.9 Method of Data Analysis

Data was analysed with the use of descriptive statistical method which includes frequency distribution table, percentage and pie chart. Chi-square analysis was used to test the hypotheses.

3.10 Ethical Consideration

The principle of voluntary participation, maintenance of anonymity and confidentiality were maintained throughout the study. The respondents were not forced to participate in the study and their views and interests were handled with utmost confidentiality. A written permission was

obtained from the Ethics and Research Committee of College of the Ministry of Education, Edo state. A copy of the written Permission to Conduct Research was attached in the appendix.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF RESULTS

4.0 Introduction

This chapter presents the analysis of data collected for the study. It states the procedures employed in processing the data. The chapter presents a systematic analysis and organization of responses.

Out of a total of two hundred and twenty-two (232) questionnaires distributed to the respondents, two hundred and seven (230) questionnaires were duly filled and returned, this is about 99.2% response rate. The remaining 0.8% that was not used in this research was as a result of incorrectly filled and multiple response in certain items in the questionnaire.

4.1 Demographic variables

The demographic variables which this study assessed are gender, age range level of education, religion and ethnicity. Table 4.1 contains the demographic distribution of the respondents with respect to the aforementioned demographic variables.

Table 4.1: Demographic Characteristics of Respondents

Socio-demographic Variable	Frequency	Percentage (%)

Gender		
Male	113	46.8
Female	117	53.2
Age Range		
13-15 yrs.	46	20.9
16-17 yrs.	83	33.2
18 and 19 yrs.	101	45.9
Level of Education		
SS I	42	19.1
SS II	85	38.6
SS III	103	42.3
Religion		
Christianity	177	80.5
Islam	48	17.3
Traditional	5	2.3
Others	-	-
Ethnicity		
Hausa/Fulani	3	1.4
Igbo	43	19.5
Yoruba	54	24.5
Bini	106	48.2
Others	24	6.4

Table 4.1 revealed that 46.8% of the respondents were male, while 53.2% were females. The age range of the respondents showed that majority of the respondents, representing 45.9% of the respondents were within the age range of 18-19 years, 33.2% were between 16-17 years, while 20.9% are between 13-15 years. Based on the class of the respondents, 19.1% were in SS I,

38.6% were in SS II, while 42.3% were in SS III. Also, from the table above, majority of the students (80.5%) were predominantly Christianity, 17.3% were Muslims, while 2.3% were of the traditional faith. Based on ethnicity, 1.4% of the respondents were Hausa/Fulani, 19.5% were Igbos, 24.5% were Yorubas, 48.2% were Bini's, while 6.4% belong to other ethnic groups.

Research Question Two

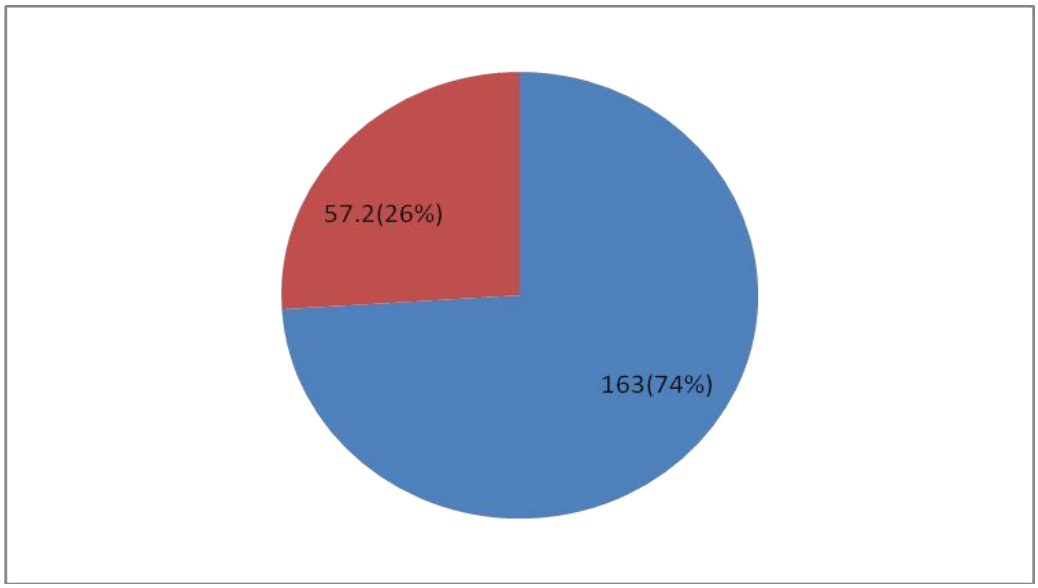
What is the knowledge of the adolescents towards vesicovaginal fistula?

	Frequency	Percentage
VVF is an abnormal opening between bladder and vagina? Yes	159	(70%)
No	71	(30%)
It is a spiritual attack on human being? Yes	142	(62.3%)
No	88	(37.7%)
It is a disease that result to leakage of urine? Yes	152	(67.7%)
No	78	(33.2%)
Victims of VVF often have repulsive smell as a result of the constant leakage? Yes	122	(53.2%)
NO	108	(46.8%)
VVF is a condition that is impossible to correct even by medical intervention? Yes	128	(55.9%)
No	102	(44.1%)

Figure 4.2: Knowledge of adolescents about vesicovagina fistula

Table 4.2 shows that 159(70%) of the adolescents believed that VVF is an abnormal opening between bladder 71(30%) of them did not affirm to it, likewise 88(37.7%) still believed it is a

spiritual attack on human being which is less than 142(62.3%) that affirmed to it. Also 152(66.8%) affirmed that the disease result to leakage of urine, when 78(33.2%) thinks otherwise. 122(53.2%) affirmed that victims of VVF often have repulsive as a result of constant



Fiqure - 4.3 Level of knowledge of vesicovaginal fistula among the adolescent

Figure 4.3 showed the level of knowledge about vesico vagina fistula among the adolescent students, 57.2(26%) of the adolescents have high knowledge on vesicovagina fistula, 163(74%) have low knowledge of vesicovagina fistula

Research Question Three

What are the adolescents perception about vesicovaginal fistula?

Table 4.4: Summary of Research Question Three

Statements	Mean	SA	A	SD	D
Early marriage may lead to development of VVF	2.184	114 49.6%	87 37.8%	27 11.7%	2 0.9%
Traditional practice like Female Genital Mutilation (FGM) may lead to the VVF.	1.543	102 44%	76 33%	44 19.1%	18 7.8%
Lack of basic education (illiteracy) can be a risk factor for an individual developing VVF.	2.244	176 76.5%	35 15.2%	17 7.4%	2 0.9%
Delivery by untrained traditional birth attendant can lead to development of VVF.	1.454	18 7.8%	29 12.6%	1 0.4%	182 79.1%
Prolonged labour can lead to development of VVF	1.956	29 12.6%	58 25.2%	153 66.5%	0
VVF is a disease condition that affects only female	1.573	102 44.4%	51 22.2%	65 28.2%	22 9.5%
VVF is common among people from rural areas.	2.379	178 81%	19 8.6%	31 9.5%	2 0.9%
It is more common among poor population than wealthy (affluent) population.	1.954	182 82.7%	39 13.2%	18 7.8%	1 0.5%
It is a disease condition that is common in developing countries.	1.585	83 37.7%	17 7.4%	130 59.1%	0
Incidence (occurrence) of VVF is more among uneducated population than educated population	2.161	176 76.5%	35 15.2%	17 7.4%	2 0.9%

People suffering from VVF often emit bad odour due to constant urine leakage.	2.151	132 60%	54 24.5%	32 14.5%	2 0.9%
People suffering from VVF are often avoided and isolated by people	1.646	138 64.8%	42 14.1%	38 15.6%	12 5.5%
VVF sufferers often have feeling of shame and rejection.	1.786	178 81%	29 8.6%	31 9.5%	2 0.9%
Individuals suffering from VVF may be divorced by their spouses because of their condition	1.673	17 7.7%	87 39.5%	114 51.8%	2 0.9%
Victims of VVF are unable to participate fully in activities that help them to make a living.	1.253	8 3.6%	101 45.9%	66 30%	35 15.9%
Prohibition of early marriage can help reduce the incidence (occurrence) of VVF	1.835	20 9.1%	190 86.4%	10 4.5%	0
Compulsory education for girl-child can help prevent the incidence (occurrence) of VVF.	2.292	174 79.1%	36 16.4%	20 9.1%	0
Abolition of harmful cultural practices like female circumcision can help reduce the development of VVF.	2.282	182 82.7%	27 12.3%	11 5%	0
Deliveries by trained/specialized birth attendant can reduce the incidence of VVF.	2.565	166 75.5%	54 24.5%	0	0
Easy access to basic healthcare facilities can help in reducing the burden (suffering) of VVF victims.	2.178	188 85.5%	32 14.5%	0	0
Overall Perception	1.935	42.26%	36.3%	13.7%	7.7%

The table above shows the perception of adolescents to vesicovaginal fistula. However, for the purpose of this study, the criterion of the mean for our remark (*Positive*>= 2.5; *Negative*<2.5) was set at **2.5** as suggested by (Ofoegbu, 2015) i.e. the cut-off, for us to agree with their views,

and if all statements pass this criterion we can say that the perception is positive, however only two statements were above this benchmark of 2.5,. Also looking at the overall perception of 42.26 % is above 50%. George and Mallery (2003) were of the view that various percentage of perception depicts (less than 50% = Negative, 50% = Moderate, More than 50% = Positive). This implies that the sampled adolescents have negative perception about vesicovaginal fistula.

4.5 Testing of Hypothesis

Ho: Hypothesis there is no significant difference between knowledge and perception of adolescent towards vesicovaginal fistula

	Knowledge about VVF*perception of VVF (Cross tabulation)						
		Knowledge					
		High	Low	X^2	df	P.value	Remark
Perception				2.73	2	0.734	There is no significant different between knowledge and perception of the adolescent students towards Vesico-vagina fistula
	Positive	69	161				
	Negative	45	11				
	Total	32	188				

Tables 4.5 indicate the cross tabulation of research variables involving perception of adolescents towards VVF. The chi-square value of 2.73 was obtained. Also, a *p*-value of .734 was obtained. Linear-by-linear association between research variables shows a value of .207 and a *p*-value of .649. Therefore, since the *p*-value (i.e. .734) is greater than the significant value .05, the null hypothesis is accepted. This means that there is no significant difference between knowledge and perception of adolescents towards Vesico-vaginal fistula.

CHAPTER FIVE

DISCUSSION OF FINDINGS, SUMMARY, CONCLUSION AND RECOMMENDATIONS

This study survey secondary school students in Iyoba and Uselu secondary school, Egor local government Benin City. Data for the study was summarized with tables, pie charts, mean, frequency and percentage. The hypothesis were tested using a non-parametric statistic.

5.1 Discussion of Findings

The socio-demographic distribution of the respondents showed that majority are female gender (53.2%), while the male gender (46.8%), also most respondent falls between the age 18-19 years (45.9%), while the least age bracket is 13-15 years and above (20.9%). Also, from the data collected, majority of the respondents are in SSIII (42.3.0%), while those in SS I had least representation (19.1%). The result also showed that majority of the respondents (80.5%) are of the Christian faith, while the least represented in terms of religion is the African Traditional Religion (2.3%). Based on ethnicity, the most represented tribe is the Binis (48.2.0%) and the least represented are those who are Hausas (1.4%).

Based on result obtained from the analysis of data collected for research question one, which test knowledge of adolescent towards vesico vagina fistula, it was observed that the respondents had a low knowledge about the causes vesico vaginal fistula, Also, it was observed that respondents had low awareness about the nature and what vesico vaginal fistula, this is in contrary with the study carried out by Ezeonu (2017) who ascertain the level of knowledge about vesico vagina fistula among adolescent, he observed that majority of the respondents had good knowledge about vesicovaginal fistula 118 (57.8%), while 86 (42.2%) have fair knowledge about the disease, His study reveal a high mean score of $\pm$ 2.746 with a mean response of 57.8%, which indicate a good knowledge of vesico vaginal fistula.

Analysis of research question two (perception of adolescent about vesicovagina fistula) showed that the level of perception of vesicovagina among the adolescent is low due to their low level of knowledge about the cause and precentation of VVF, those who have positive perception towards VVF are few and constitute (42.3%) of the population which is in accordance withAlso, it was discovered that those who are aware of the uptake got their information from different sources, ranging from the internet, hospital/clinics, friends, family members, television and newspaper.

Analysis of the data collected showed that the respondents agreed that rejection by everyone can cause a lot of social trauma to victims of VVF and also the major preventive measures against VVF is public awareness by educating the girl child, government involment in discouraging harmful traditional practice, this goes along with the study carried out by Ingwu, Nwosu, and Egbichi (2018) who attribute the social effect of the situation on family rejection, divorce from husband, social isolation which victim faces like Echiegu (2014) also in his study indicate that some of the victims were only avoided by friends but relatives and parent sticks with them but

were cut off from all social activities which leads them to social isolation and also recommended counseling and enlightenment programmes on the menace of VVF, the need to enforce training on traditional birth attendants and also improve access to obstetric services.

5.2 Summary

This research examined perception of adolescents towards Vesico-vaginal fistula in selected senior secondary schools in Ovia North-east Local government Area, Edo State The findings from the study revealed that respondents have low knowledge about vesicovaginal fistula and there is no significant different between adolescent level of knowledge and their perception. lastly that the perception of VVF among adolescent is negative.

5.3 Implication to Nursing Practice.

A major preoccupation of a nurse is to assist the community to reach, maintain and promote health issues with the aim of acting as a member of the healthcare community in assisting individuals maintain a state of optimal wellbeing. Hence, findings from this study will be of immense benefit to the nursing profession regarding the knowledge and perceptions about Vesico-vaginal fistula. Based on the inferences drawn from the study, the following are the implications on nursing profession.

1. Nursing professionals should as a matter of necessity enlighten individuals, especially adolescents who are the primary victims of VVF on the nature and predisposing factors in order to reduce the incidence of the disease condition.

2. The Nursing Council should collaborate with government and non-governmental agencies in order to strengthen existing laws that prohibits willful and forceful marriage of underage girls.
3. Nursing professionals should as a matter of responsibility as one of the primary caregivers in the healthcare sector organize periodic programmes to target vulnerable groups such as those in rural areas, those from low socio-economic background in other to intimate them on the dangers and health implications of VVF.

5.4 Conclusion

Based on the findings of the study, it can be inferred that adolescents in senior secondary schools in Egor LGA have knowledge about the cause and nature of VVF. It can also be deduced from the study that adolescents do not really have understanding about the localization (rural or urban) of the disease condition. Further, the distribution of VVF in terms of socio-economic status is not clear to them. It is noteworthy that adolescents have knowledge about the social implication of the disease condition on the victim. Also, they have some misconception about the factors that increases the incidence of Vesico-vaginal fistula. Finally, it is concluded that there is no difference between the knowledge and perception of adolescents about VVF.

5.5 Recommendations

In line with the findings and conclusions drawn from the study, the following recommendations are made:

1. Education planners who are saddled with the responsibility of formulating school curriculum should infuse topics relating to Vesico-vaginal fistula into health education curriculum. This will go a long way in educating the adolescents about the nature and dangers associated with VVF.

2. Government should strive to mount enlightenment programmes, especially among the vulnerable groups in order to expound to them the implications of exposing their underage girls to early marriage.
3. Healthcare policy makers should as a matter of responsibility draw up programmes which will serve as eye-opener to the populace on the true nature of VVF.
4. Since poverty may be a factor for underage girls being given out for marriage, government at all levels should be alive to their responsibility by creating a thriving economy which act to boost the living standard of the citizens.

5.6 Suggestion for Further Studies

This study investigated adolescents in selected senior secondary schools in Ovia North-east Local Government Area; hence generalizations cannot be made beyond the study area. Future studies may take into account a larger sample size. Further studies can also be undertaken to investigate the incidence and predisposing factors to VVF among adolescents across demographic variables such as location, religion and ethnicity.

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DEPARTMENT OF NURSING SCIENCE

SCHOOL OF BASIC MEDICAL SCIENCES

UNIVERSITY OF BENIN, BENIN CITY

QUESTIONAIRE

Dear Respondent,

I am a student of the above-named institution carrying out research on the "Perception of vesico-vagina fistula among adolescent students in Egor Local Government Area of Edo state". Please, you are required to complete this questionnaire. It is for research purpose and not for any official use. Your personal information will not be required for this study; thus a high level of anonymity and confidentiality will be maintained.

Thanks.

Instruction: Please, tick (√) the opinions you consider most appropriate in the space provided.

SECTION A (DEMOGRAPHIC DATA)

1. Sex: Male ( ) Female ( )
2. Age Range: 13-15 years ( ) 16-18 years ( ) 19years ( )
3. Class: SS1 ( ) SS2 ( ) SS3 ( )
4. Religion: Christianity ( ) Islam ( ) African Traditional Religion ( )
5. Ethnicity: Hausa ( ) Igbo ( ) Yoruba ( ) Benin ( ) Others ( )

Section B: knowledge about the Nature of Vesico-vaginal Fistula (VVF)

1. VVF is an abnormal opening between the bladder and vaginal. Yes ( ) No ( )
2. It is a spiritual attack on human being. Yes ( ) No ( )
3. It is a disease that results to leakage of urine. Yes ( ) No ( )
4. Victims of VVF often have repulsive smell as a result of the constant leakage of urine.

Yes ( ) No ( )

5. VVF is a condition that is impossible to correct even by medical intervention. Yes ( ) No ( )

Section B:

Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD)

S/N	Items	SA	A	D	SD
	Perception towards the Contributing/risk factors for Vesico-vaginal fistula (VVF)				
1.	Early marriage may lead to the development of VVF.				
2.	Traditional practice like Female Genital Mutilation (FGM) may lead to the VVF.				
3.	Lack of basic education (illiteracy) can be a risk factor for an individual developing VVF.				
4.	Delivery by untrained traditional birth attendant can lead to development of VVF.				
5.	Prolonged labour can lead to development of VVF.				
	Perception on the Prevalence of VVF				
6.	VVF is a disease condition that affects only female.				
7.	VVF is common among people from rural areas.				
8.	It is more common among poor population than wealthy (affluent) population.				
9.	It is a disease condition that is common in developing countries.				
10.	Incidence (occurrence) of VVF is more among uneducated population than educated population.				
	Perception on the physical and psychosocial Conditions of Victims of VVF				
11.	People suffering from VVF often emit bad odour due to constant urine leakage.				
12.	People suffering from VVF are often avoided and isolated by people.				
13.	VVF patients often have feeling of shame and rejection.				

14.	Individuals suffering from VVF may be divorced by their spouses because of their condition.				
15.	Victims of VVF are unable to participate fully in activities that help them to make a living.				
	Perception on the prevention/management of VVF				
16.	Prohibition of early marriage can help reduce the incidence (occurrence) of VVF				
17.	Compulsory education for girl-child can help prevent the incidence (occurrence) of VVF.				
18.	Abolition of harmful cultural practices like female circumcision can help reduce the development of VVF.				
19.	Deliveries by trained/specialized birth attendant can reduce the incidence of VVF.				
20.	Easy access to basic healthcare facilities can help in reducing the burden (suffering) of VVF victims.				

APPENDIX B

SPSS RELIABILITY RESULTS

Reliability
Scale: Knowledge about the Nature of Vesico-vaginal Fistula (VVF)

Case Processing Summary

		N	%
Cases	Valid	23	100.0
	Excluded[a]	0	.0
	Total	23	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.802	5

Reliability
Scale: Perception towards the Contributing/risk factors for Vesico-vaginal fistula (VVF)

Case Processing Summary

		N	%
Cases	Valid	23	100.0
	Excluded[a]	0	.0
	Total	23	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.798	5

Reliability
Scale: Perception on the physical and psychosocial Conditions of Victims of VVF

Case Processing Summary

		N	%
Cases	Valid	23	100.0
	Excluded[a]	0	.0
	Total	23	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.841	5

Reliability
Scale: Perception on the Prevalence of VVF

Case Processing Summary

		N	%
Cases	Valid	23	100.0
	Excluded[a]	0	.0
	Total	23	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.776	5