NEAR EAST UNIVERSITY

INSTITUTE OF GRADUATE STUDIES
BIOSTATISTICS DEPARTMENT

AN ASSESSMENT OF THE RELATIONSHIP BETWEEN LEVEL OF KNOWLEDGE ON VVF AND THE AWARENESS LEVEL ON THE RISK FACTORS CONTRIBUTING TO VVF IN JAHUN GENERAL HOSPITAL OF JIGAWA STATE NIGERIA.

RUFAI ILIYASU

MASTER THESIS

NICOSIA

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DEPARMENT OF BIOSTATISTICS

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THESIS SUPERVISOR

PROF. DR. ILKER ETIKAN

NICOSIA

(2021)

ACCEPTANCE/APPROVAL

We as the jury members certify the "An assessment of the relationship between knowledge on VVF and the awareness level on the risk factors contributing to VVF in Jahun general hospital of Jigawa State Nigeria". "Prepared by Rufai Iliyasu on .....has been found satisfactory for the award of Degree of Masters.

Thesis Committee;

Chair of the committee: **Prof. Dr. İlker ETİKAN (Advisor)**
Near East University
Sig: .....

Member: **Prof. Dr. Zeki AKKUŞ**
Dicle Üniversitesi
Sig: .....

Member: **Asst. Prof. Dr. Özgür TOSUN**
Near East University
Sig: .....

Approved by: **Prof. Dr. K. Hüsnü Can BAŞER**
Director of Institute of Graduate Studies
Near East University
Sig: .....

DECLARATION

I Rufai Iliyasu,I hereby declare that this thesis report entitle ‘ An assessment of the relationship between level of knowledge on VVF and the level of awareness on the risk factors contributing to VVF in Jahun general hospital of Jigawa State Nigeria. ‘Prof. Dr. Ilker Etikan (supervisor)’ in partial fulfillment of the Near East University, Graduate School Of Health Science regulations was written by me and it is a record of my own research work and does not to the best of my knowledge breach and Law of Copyrights and has been tested for plagiarism and a copy of the result can be found in the thesis.

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DEDICATION

Firstly I want to dedicate this work to the Almighty Allah for bringing me to this level of education, I also want to dedicate this work to the Department of Biostatistics Near East University and the Department of Statistics Binyaminu Usman Polytechnic, Hadejia Jigawa State Nigeria.

ABSTRACT

An assessment of the relationship between knowledge level and awareness level of risk factors contributing to VVF in Jahun General Hospital of Jigawa State Nigeria.

Women are frequently considered as a vulnerable gender group in most third-world nations; yet, the catastrophic and humiliating repercussions of ill health, such as VVF, make them even more vulnerable in these societies, revealing their emotional fragility. The vesico vaginal fistula (VVF) problems in Jahun General Hospital occur in the presence of lack of knowledge and early marriage of teenage girls and some disease, and the most common system of vesico vaginal fistula VVF is urinary incontinence urine linkage from the vagina, which is often exacerbated by physical activities. Additionally, the patient may develop vulva discomfort, itching, and recurring urinary tract infections.

VVF community awareness information will raise awareness of the condition in rural communities, alerting health professionals and support groups to the need for primary prevention. VVF prevention necessitates strategies to educate the community on cultural, social, and psychological factors that raise the incidence of fistula. Lack of knowledge, awareness level on contributing factors and Early age of the mother obstetric complication are the most common cause of VVF, which include not only early pregnancy, but also delayed and obstructed labor.

This study used a cross-sectional research methodology to look at the connection between VVF knowledge and awareness of risk variables that contribute to VVF. The goal of this study was to examine the association between level of knowledge on VVF and level of awareness on the risk factors contributing to VVF at the Jahun General Hospital, hence a cross sectional study design was adopted.

The findings of this study revealed that there is a lack of knowledge of VVF in the Jahun and the communities around. This could be due to a lack of awareness efforts aimed at raising women's understanding contributing factors, and prevention of VVF. The respondents, according to the findings, had insufficient awareness of VVF. As a result, they lacked the necessary understanding about the occurrence of this menace. Health of women in Jigawa State and Nigeria as a whole is a major concern. The government must be fully prepared for girl child education because the majority of women who are victims of this threat lack formal education, and the majority of cases occur during the first pregnancy. Jigawa state government should put more serious on issues of women and maternal health which put woman health is jeopardy.

Key word: Vesico- vaginal fistula, Awareness, pregnancy, cross-sectional research, Data.

ÖZET

Nijerya Jigawa Eyaleti Jahun Genel Hastanesinde VVF'ye katkıda bulunan risk faktörlerinin bilgi düzeyi ve farkındalık düzeyi arasındaki ilişkinin değerlendirilmesi.

Çoğu üçüncü dünya ülkesinde kadınlar sıklıkla savunmasız bir cinsiyet grubu olarak kabul edilir; yine de, VVF gibi kötü sağlığın yıkıcı ve aşağılayıcı yansımaları, onları bu toplumlarda daha da savunmasız hale getirerek duygusal kırılganlıklarını ortaya çıkarır.

Jahun Genel Hastanesi'ndeki veziko vajinal fistül (VVF) sorunları, genç kızların bilgi eksikliği ve erken yaşta evlenmesi ve bazı hastalıkların varlığında ortaya çıkar ve en sık görülen veziko vajinal fistül VVF sistemi, vajinadan idrar kaçırma idrar bağlantısıdır. genellikle fiziksel aktivitelerle şiddetlenir. Ayrıca hastada vulva rahatsızlığı, kaşıntı ve tekrarlayan idrar yolu enfeksiyonları gelişebilir.

VVF toplum bilinçlendirme bilgileri, kırsal topluluklardaki durum hakkında farkındalığı artıracak, sağlık profesyonellerini ve destek gruplarını birincil önleme ihtiyacı konusunda uyaracaktır. VVF'nin önlenmesi, toplumu fistül insidansını artıran kültürel, sosyal ve psikolojik faktörler konusunda eğitmek için stratejiler gerektirir. Bilgi eksikliği, katkıda bulunan faktörler hakkında farkındalık düzeyi ve anne obstetrik komplikasyonunun erken yaşı, sadece erken gebelik değil, aynı zamanda gecikmiş ve engellenmiş doğumu da içeren VVF'nin en yaygın nedenidir.

Bu çalışmada, VVF bilgisi ile VVF'ye katkıda bulunan risk değişkenlerinin farkındalığı arasındaki bağlantıya bakmak için kesitsel bir araştırma metodolojisi kullanılmıştır. Bu çalışmanın amacı, Jahun Genel Hastanesi'nde VVF hakkındaki bilgi düzeyi ile VVF'ye katkıda bulunan risk faktörlerine ilişkin farkındalık düzeyi arasındaki ilişkiyi incelemekti ve bu nedenle kesitsel bir çalışma tasarımı benimsendi.

Bu çalışmanın bulguları, Jahun ve çevresindeki topluluklarda VVF hakkında bilgi eksikliği olduğunu ortaya koydu. Bunun nedeni, kadınların katkıda bulunan faktörleri anlamalarını artırmaya yönelik farkındalık çabalarının eksikliği ve VVF'nin önlenmesi olabilir. Ankete katılanlar, bulgulara göre, VVF konusunda yetersiz farkındalığa sahipti. Sonuç olarak, bu tehdidin oluşumu hakkında gerekli anlayıştan yoksundular. Jigawa Eyaleti ve Nijerya'daki kadınların sağlığı bir bütün olarak büyük bir endişe kaynağıdır. Hükümet kız çocuk eğitimine tam olarak hazır olmalıdır, çünkü bu tehdidin mağduru olan kadınların çoğunluğu örgün eğitimden yoksundur ve vakaların çoğu ilk hamilelik sırasında meydana gelmektedir. Jigawa eyalet hükümeti, kadın sağlığını tehlikeye sokan kadın ve anne sağlığı konularına daha fazla önem vermeli.

Anahtar kelimeler: Veziko- vajinal fistül, Farkındalık, gebelik, kesitsel araştırma, Veri.

TABLE OF CONTENT

List of Abbreviations and Symbols

VVF-Vesico-vaginal Fistula

AIDs- Acquired Immune Deficiency Syndrome

ANC - Antenatal Care

CI- Confidence Intervals

DHS- Demographic and health survey

EOC- Emergency Obstetric Case

FIGO- International Federation of Gynecologists and Obstetricians

HIV-Human Immune Virus

MCH- Maternal and Child Health

MDG- Millennium Development Goal

MMR- Maternal Mortality Ratio

NPC- National Population Commission

SD-Standard Deviation

SPSS- Statistical Package for the Social Sciences

STIs- Sexually Transmitted Diseases

OB-Obstetric Fistula

TBAs- Traditional Birth Attendants

UNEPF- United National Population Fund

UNICEF- United Nations Children's Funds

USAID- United states Agency for international development

WHO- World Health Organization

OPERATIONAL DEFINITION OF TERM

Awareness: refers to one's understanding or view of a situation or truth. View, feeling, or awareness of events or objects is a state or ability.

Community awareness: refers to a group's understanding or perception of a situation or reality.

Knowledge: Information, Facts, and skills obtained via study or experience.

Obstetric Fistula: An improper linking between the vaginal canal, the rectum, or the bladder that can develop after a protracted, obstructed labor.

Prevention: Reduce the chance of developing in to chronic

Prolonged or obstructed labor: occurs when, despite the uterus contracting normally, the baby is physically barred from exiting the pelvis during childbirth.

Risk Factors: Any property, exposure or characteristic of an individual that raises the possibility of getting an illness or damage is referred to as a risk factor.

Urinary bladder: The urinary bladder is a muscular structure located slightly above and behind the pubic bone in the pelvis.

LIST OF TABLES

CHAPTER ONE

1.0 Introduction

1.1 Background of the Study Area

Women are frequently considered as a vulnerable gender group in most third-world nations; yet, the catastrophic and humiliating repercussions of hostile health, such as vesic-vaginal fistula, exposed them even more at risk in these societies, revealing their emotional fragility. These women often perceive themselves to be distinct from other women in a number of ways. Despite the fact that their sexual liberty has been limited, they have find it difficult to benefit their sexuality; the rest of the infectious diseases may arises; and they age more easily and quickly than their peers who have not had their womanhood restricted. As a result of this deplorable and humiliating situation, the victims' psychological well-being is destroyed. When a person loses faith in her ability to live a good life, she is likely to live a terrible existence for the rest of her life. This is the typical state of a Nigerian woman who has been a victim of VVF.

A fistula is an aberrant channel or aperture that joins one hollow organ in the body to another as a result of injury, sickness, or condition (Mohamed & Boctor 2008, 4). Vesico-Vaginal Fistula is a strange opening between a women’s vaginal and urinary tract through were her urine leaks continuously. It is a dreadful knowledge for the patients, and it is widely regarded as the most humiliating situation that women face. It's the most prevalent type of fistula in the urinary tract. (Wall et al., 2004, 8).

The womanly organ is depicted in Figure 1, along with the area where VVF is concentrated.

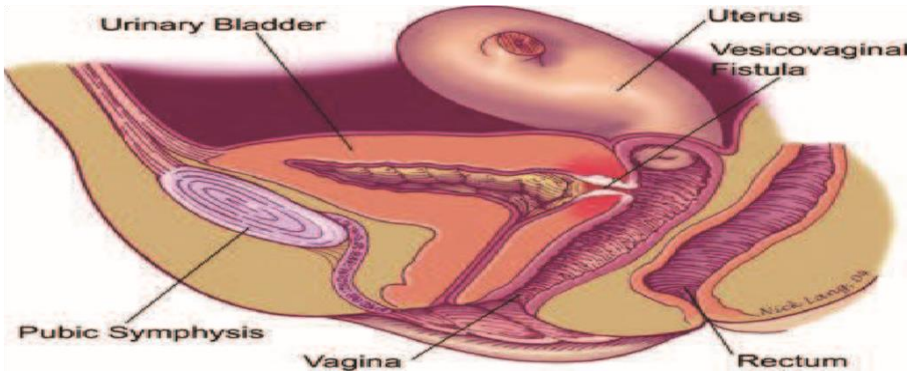

Figure 1: VVF. (Referred to 28.03.2010)

VVF can be began by diseases, medicinal treatment, or trauma. Gallbladder issues or radiation therapy can lead to medical fistula, which can develop to Vesico vaginal fistula. Inflammatory bowel illnesses such as ulcerative Colitis and Crohn's disease are known causes of disease fistula.

Obstetric Vesico-Vaginal Fistula is defined by the World Health Organization as an improper connection between the vagina, rectum, and bladder that can arise after a lengthy and obstructed labor. As a result, urine or fecal incontinence occurs on a regular basis. A vesico-vaginal fistula is a hole between the urine bladder and the vagina, whereas a rectovaginal fistula is a hole between the rectum and the vagina (Tunçalp, Tripathi, Landry, Santon, & Ahmed, 2015).

Simple and complex fistulas are the two types of fistulas. Simple fistulas are easy to detect, treat, and the virginal tract is not greatly harmed after surgery. Figure 2 shows a basic fistula that exposes the perianal region below the diaphragm of the pelvis, and the patient is operated on using simple equipment (Firous Daneshgari M.D).

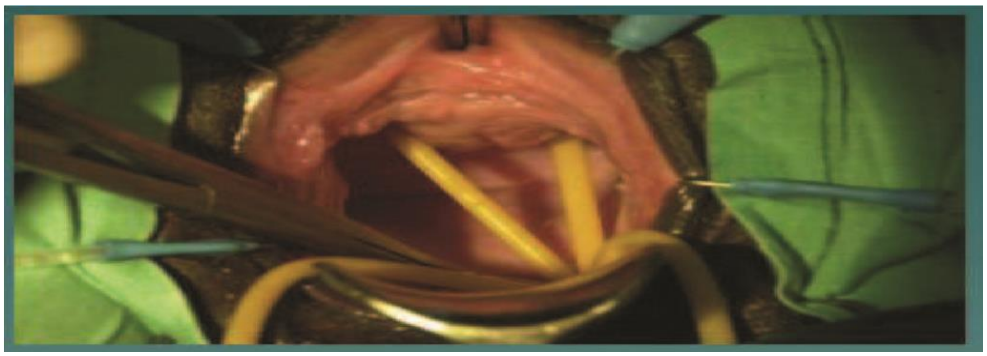

Figure 2: Simple fistula demonstrated by opening of the labia. (C-H Rochat, 2003.)

Depending on the location and treatment, a complex Vesico vaginal fistula requires a vaginal or abdominal approach. The vaginal technique is popular because it has a high cure rate, a quick recovery time, and is less difficult. Traditional treatment for a complicated vesico vaginal fistula is shown in Figure 3. After the procedure, the vaginal method decreases bleeding and infections.

Figure 3: Complex vesico-vaginal fistula repair. (C-H Rochat, 2003.)

Obstetric fistula (Obstetric Fistula) is a debilitating maternal morbidity that affects over 2 million women and girls in low-income nations (Tunçalp, Isah, Landry, and Stanton, 2014). Obstetric Fistula is most usually caused by childbirth injuries, which

happen when labor does not headway suitably and the fetal presenting half becomes entangled in the birth canal. Because emergency obstetric care is never far away from a woman in labor, Obstetric Fistula, like many other maternal mortalities and morbidities, is almost inexistent in developed nations. Obstetric Fistula can arise in developed countries as a side effect of treatments such as cancer treatment and pelvic surgery, such as post-hysterectomy (Wall, 2012).Obstetric Fistula is common in Africa, with 100,000 new instances reported per year (Tuncalp, et al., 2015; Wall, 2014).

Obstetric Vesico-vaginal fistula were been phased out in wealthy countries around the globe. The point that women in affluent nations have access to essential needs and emergency obstetric care has been associated to this (Khisa, 2016). In addition, maternal morbidity and mortality have decreased significantly in these countries. However, in pourers' nations, where obstetric vesico-vaginal fistula is still must frequent, the situation is different. According to a recent study, obstetric vesico-vaginal fistula prevalence is one among the indications that the system of health is failing to bring accessible, timely, and appropriate obstetric care (Tunçalp, 2015).

The majority of conversations concerning VVF focus on Africa; however, this is misleading because the disease exists in many other countries of the world. To that aim, a report by Wall et al. points out that there hasn't been an up-to-date survey anywhere in the world to identify the scope and locations of the plague"Questions about the incidence and prevalence of obstetric fistulas have never been included in the conventional demographic and health surveys (DHS) that are done in developing

countries to evaluate population characteristics and general health status," they assert (Wall et al). (2003:1408). Despite the fact that VVF has been frequently documented across Africa and the Indian subcontinent, there is essentially no reliable data on the subject. According to a WHO study, an estimated 2 million young women in the United States have untreated VVF, with 50,000 to 100,000 new cases reported each year (2006: 4). Because of the stigma surrounding VVF, the estimates above may be severely underestimated; as a result, many more unknown and unreported VVF victims live in fear and isolation. VVF is one of the most uncomfortable illnesses that takes women to the hospital in many African countries, despite the stigma linked to it (Kabir et al, 2003).

High maternal mortality rates, on the other hand, have been associated to the occurrence of VVF. As a result, vesico vaginal fistula has been found to be common in poor nations with significant maternal mortality (WHO 2006:1407). These nations are unquestionably in the third word.

In a university teaching hospital in Nigeria, there are 350 cases of vesico-vaginal fistula for every 100,000 deliveries. The magnitude of this problem, which affects Nigerian women, has led the country's Federal Minister for Women Affairs and Youth Development to estimate that between 800,000 and 1,000,000 untreated VVFs exist in Nigeria (Villey, 2006).According to this assessment, VVF is a serious threat to Nigerian women. The Nigerian ministry of health confirmed the above figures, estimating that 800,000 women are impacted by the scourge of VVF, the majority of them live in rural areas with inadequate or non-existent primary health care. As a

result, according to the minister, the country carries 40% of the global burden of VVF (The Guardian, 2007).

In resource-poor countries, such as Nigeria, the problem of vesico-vaginal fistula continues to be a devouring epidemic. The bulk of the cases are ascribed to protracted problematic labor as a result of obstetric health care being unavailable. Complications in labor emerge as a result of victims' small pelvis bones as a result of malnutrition. While the aforementioned conditions are the direct causes of VVF, other socio-cultural factors can predispose people to the disease. Poverty, marriage age, illiteracy, and dangerous traditional practices, such as female circumcision, are among them. Victims of VVF frequently lead worthless lives. Many of them have been abandoned or divorced by their husbands due to their foul odor and inability to engage in sexual activity or bear children, and have been shunned by their families and cultures. VVF patients experience both physical and social effects, and many of them find it impossible to work in any capacity. Surviving the suffering is incredibly difficult and pitiful; some victims turn to street begging, while others sell "bagged" water and firewood to make ends meet. Some of the VVF victims are young who may not have received even a rudimentary education. When a woman in the country's rural areas goes into labor, she usually stays at home for three days trying to push, after which her family may decide to take her to the nearest obstetric center, which could be 70 kilometers away; the lack of proper, easy, and affordable transportation adds to her traumatic experience, according to Magashi (2006).If she makes it to the clinic, the emergency obstetric surgery will be handled without a facility or experienced

attendant. If the woman makes it through the labor, she will scarcely make it through the waiting and horrific clutch of VVF.

Nigeria's maternal death rate of 948 per 100,000 live births, according to Magashi (2006), is among the highest in the world, with a range of 339 to 1716. For every maternal death, 15 to 20 other women suffer from short- or long-term maternal morbidities, the most prevalent of which is Obstetric Fistula, followed by VVF. Maternal mortality is connected to the occurrence of obstetric fistula (WHO, 2006:1407). Maternal mortality and morbidity are more common in countries and cultures that place less emphasis on girls' needs, status, and circumstances; where girls and women are routinely discriminated against; and where girls are married off as soon as possible after puberty; where women's only role is seen as wives and mothers; and where education levels are low. In many of these cultures, maternal disease, suffering, and health are considered normal, unavoidable, and part of what it is to be a woman (Sadik, 2001). It's no surprise that the plague of VVF is not regarded as a significant case of maternal death in these cultures.

Due to the nature and magnitude of the injury on its victims, there is currently no universal or generic approach used by medical practitioners to characterize or diagnose fistula. However, each author usually develops his or her own classification system based on the anatomical components of the damage, the size of the fistula, or even the classification that is the most convenient for him to use (Wall et al, 2003: 1429).

Sims (1852) divided vesico vaginal fistulas into three groups based on their location on the vagina: 1) urethra-vaginal fistulas, in which the abnormality was limited to the urethra; 2) fistulas located “at the bladder neck or root of the urethra, destroying the trigone;” and 3) fistulas involving the body and the bladder floor, and 4) Uter (Wall et al 2003: 1429).

Fistulas have been categorized in a variety of ways by subsequent authors. According to Moir (1967:17), fistulas can also be classified based on their aetiology. As a result, the following classifications were used: obstetric injury, operational injury, infection ulceration, radiation harm, and congenital abnormalities. Because of their direct repercussions on fistula victims, all of the above typologies are referred to as bodily factors of fistula. Obstructed labor, unintentional surgical damage connected to pregnancy, and crude efforts at forced abortion, according to Bello (2006), are physical factors that influence the prevalence of VVF. When pressure on the woman's pelvic wall is prolonged and unrelieved, it creates a puncture in the bladder, resulting in VVF.

It's impossible to link a specific reason to the global pandemic of VVF, just as it's difficult to link a specific cause to the scourge of fistula. The research, on the other hand, looks at the issue from both a physical and a societal perspective. The physical causes are known as direct causes, but the underlying or contributing elements to the VVF condition are known as underlying or contributing factors.

According to a report by the Nigerian News Agency (NAN), victims of Vesico Vaginal Fistula (VVF) in North West Nigeria were being transformed following treatment to help them reintegrate to society without prejudice.

Kano, Kebbi, Kaduna, Jigawa, Zamfara, Sokoto, and Katsina are the states that make up this region. After treatment, the victims were able to return to their villages and live normal lives thanks to a reintegration program backed by health officials, donor agencies, families, and community leaders. (Premium times, 6 may, 2018).

The late Alhaji Abubakar Rimi, the Governor of ancient Kano State, constructed and commissioned Jahun General Hospital in 1979.The hospital currently has a bed capacity of 146, and the facility has a total of 205 beds, with a catchment population of 400,850 people. The overall number of employees at Jahun General Hospital is as follows: medical officers 14, medical record staff 8, and other 78. Outpatient care, accident and emergency, antenatal care, postnatal care, immunization, x-rays, counseling testing of HIV that reach service family planning, maternity ward only for VVF patients, nutrition, health record, dental service, quality assurance, and blood banking system are among the services provided by the facilities officers. In addition, the hospital provides the following services for VVF patients: urine bag, external medications, and physiotherapy band exercises e.t.c.

1.2 Statement of the Problems

The maternal mortality rate in Nigeria is about 948 per 100,000 live births. According to Magashi (2006), is among the highest in the world, with a range of 339 to 1716. For every maternal death, 15 to 20 other women hurt from long-term or short-maternal morbidities, the most prevalent of which is Obstetric Fistula, followed by VVF. Maternal mortality is connected to the occurrence of obstetric fistula (WHO, 2006:1407). Maternal mortality and morbidity are mostly prevalent in countries and beliefs that prioritize girls' needs, status, and situation; where women are discriminated against; where girls are married soon after puberty; where educational levels are per low; and where girls and women's only role is seen as partners and mothers. Maternal disease, misery, and health are all regarded normal, unavoidable, and part of what it means to be a woman in many of these cultures (Sadik, 2001). It's no surprise that the VVF epidemic isn't considered a leading cause of maternal death in these nations.

1.3 Justification

The vesico vaginal fistula (VVF) problems in Jahun General Hospital occur in the presence of early marriage of teenage girls and some disease, and the most common system of vesico vaginal fistula VVF is urinary incontinence urine linkage from the vagina, which is often exacerbated by physical activities. Additionally, the patient may develop vulva discomfort, itching, and recurring urinary tract infections.

VVF prevention necessitates strategies to educate the community on cultural, social, and psychological factors that raise the incidence of fistula. Early age of the mother

obstetric complication are the most common cause of VVF, which include not only early pregnancy, but also delayed and obstructed labor: psychological immaturity is characterized by a small pelvis sized immediately following menarche (the beginning of menstruation monthly female circle): early age of the mother obstetric complication are the most common cause of VVF, which include not only early pregnancy, but also delayed and obstructed labor (often associated with a pregnancy at an early marriage).

1.4 Research Question

i. In Jahun General Hospital, what are the apparent risk factors linked with Vesico-Vaginal Fistula in women?

ii. What are the elements that influence women of reproductive age's awareness of VVF at Jahun General Hospital?

iii. What social and economic factors influence VVF in Jahun General Hospital?

iv. In Jahun General Hospital, what are the VVF prevention measures?

1.5 Study Objective

1.5.1 General Objective

l. To see if there is a link between knowledge on VVF and awareness level on contributing risk factors on VVF.

2. To assess the level of facility satisfaction among the VVF patients in Jahun general hospital.

1.5.2 Specific Objective

1. To check whether there is relationship between knowledge on VVF and level of awareness on the risk factors contributing to VVF
2. To access whether early marriage is sexily lead to VVF
3. To access the level of awareness among pregnant women on prevention of VVF in Jahun General Hospital of Jigawa state Jahun General Hospital of Jigawa state.
4. To see whether there is relationship between child bearing and VVF in Jahun General Hospital of Jigawa state.
5. To identify the major contributing factors of VVF on pregnant women in Jahun General Hospital of Jigawa state.
6. To find out whether social and economic factors influence VVF in women of reproductive age at the Jahun General Hospital.

1.6 Research Hypothesis

We interpret the results of the statistical analysis on relationship between knowledge on VVF and level of awareness on the risk factors contributing to VVF as follows:

Ho: level of knowledge on VVF are independent of each other;

H1: level of knowledge on VVF are dependent on each other.

1.7 Significant of the Study

It is hoped that the study's findings would be useful in the following ways:

1. The findings of this study will raise awareness among parents about the importance of delaying early marriage to their daughters in order to minimize VVF.

2. The findings will also improve the quality of antenatal care provided to pregnant mothers in Jigawa state.

3. The findings will help the Jigawa state Health Ministry and Primary Health Care Agency in emerging antenatal care services and VVF prevention programs for pregnant women in Jigawa state.

4. The findings of this study will also assist the government in engaging traditional rulers in disseminating and sensitizing the general public about the dangers of traditional practices and their consequences for our dear women.

5. The outcome will also educate parents on the importance of providing adequate/simple nutritional foods to women for their health and the health of the babies they are carrying in order for them to grow and have an effective labor/delivery.

6. The findings will add to existing understanding about vesico virginal fistula and the value of antenatal care services, as well as act as a resource for future research.

7. The outcome will assist the Jigawa state government and non-governmental organizations (NGOs) in streamlining their objectives towards new initiatives capable of preventing early marriage and VVF among pregnant women by using the given information.

This study's findings will illustrate how VVF patients were counseled and treated in clinic, as well as how the surveillance percent of patients with VVF issues has changed over time.

The research work is also signified to the next generation of researchers as well as the general public by expanding their knowledge of vesico vaginal and solutions to prevent difficulties at the conclusion of the study.

1.8 Scope and Delimitation of the Study

The goal of this research is to conduct a statistical analysis of a link between knowledge on VVF and awareness level on contributing risk factors on VVF. The study is limited to Jigawa State's Jahun General Hospital and does not include any other hospitals within or outside Jigawa.

Financial constraints were overcome by collecting data using questionnaires, which are both trustworthy and inexpensive. Due to time constraints, the researcher devised a work schedule to ensure that everything went according to plan and that no time was wasted. The use of skilled research assistants to perform the research also helped to overcome the time limitation.

Financial concerns, such as the lack of VVF workers for data collection and problems with retuning of the questionnaire from the responder, are the limitations of this research.

CHAPTER TWO

2.0 Literature Review

2.1 Introduction

The problem is that procedures ware expensive for majority of women's, so must of the women avoid going to government hospitals and instead go to private, faith-based clinics. Since its inception in 1992, the Obstetric Fistula center in Evangel Hospital in the municipal of has treated thousands of women. Women travel from all around Nigeria and adjacent countries to visit the Evangelical Church of West Africa clinic (Oduah, 2015). According to a report, several of the facilities' operating units lack sufficient beds, supplies, or electricity to function (Valez Ramsey & Tell, 2007). Nigeria is ironic in that it provides care to foreigners while failing to meet the requirements of its own inhabitants.

So many cases occur every year, and obstetric fistula repair specialists were unable to eliminate the backlog of cases that have not been corrected, despite the fact that success rates for previous OF repairs have been high, exceeding 90%. (Hardee, Gay, & Blanc, 2012; Ijaiya et al., 2010).

With a population of approximately 173 million people, Nigeria is Africa's most populous country (WHO, 2015). India and Nigeria combine almost account for about one-third of all maternal fatalities worldwide, and while as India's maternal mortality rate fall by about 65 percent around 1990 and 2013, Nigeria's maternal mortality rate fell by only 52 percent in the same time period (WHO, 2014). The development of capacity, institutional, and human resources for the delivery of safe motherhood

services, with a focus on emergency obstetric care, has been prioritized. Over 450 Nigerian nurses and doctors have been trained to perform Obstetric fistula repairs, and over 10,000 have been done. Fistula services Care has worked extensively in Nigeria to promote policy and facilitate the national and state-level institutionalization of Obstetric services.

Economic arguments link the high prevalence of Obstetric fistula to poverty and lack of health infrastructure: poverty sets off a chain reaction that begins with hunger and ends with child marriage. Girls' pelvic expansion is limited by malnutrition because, whereas height growth decreases after menarche, pelvic capacity continues to rise until the epiphyseal growth plates merge. Child marriage and teen pregnancy exacerbate the problem by raising the chance of cephalopelvic disproportion and extended labor, both of which raise the risk of Obstetric fistula (Rahimi, Capes, &Ascher-Walsh, 2013; Ukwoma, 2014; Wall, 2006).

Morbidity associated with pregnancy and delivery is the second biggest cause of years of healthy life lost in women of reproductive age. Pregnancy and childbirth-related morbidity is the second biggest cause of lost years of healthy living among women of reproductive age in developed countries, thanks to inaccessible quality maternal health care and a variety of socio-cultural and economic variables. The majority of the estimated 2 million women with fistulas are thought to be from Africa, portions of Asia, and the Arab world. Extrapolations based on WHO burden of disease estimates predict a potential annual incidence of 50,000 to 100,000 new cases per year, although

other health workers believe the incidence might be as high as 2 to 5 cases per 1000 deliveries in locations where emergency obstetric care is unavailable.

In one article, trained practitioners identify women and girls at risk of obstetric fistula and use innovative measures to prevent fistula from forming during delivery. Midwives can play a vital role in the prevention and management of this devastating obstetric complication, according to the paper, and community-based programs could be employed for social education to avoid fistula (Miller et al 2005, 8).

The second paper highlights how, in resource-poor countries, successful surgical treatments and repairs of exceedingly complex urinary tract fistulas can be accomplished when expert surgeons are available (Ramphal&Moodley 2006, 4). The third piece emphasized the significance of bolstering prevention programs aimed at preventing sexual assault, as well as the integration of resources to better support women who are victims of both sexual violence and incontinence (Peterman et al 2009, 8). Also, the use of blunt suture needles during caesarean section or pelvic surgical operations was scored as excellent or good, reducing needle stick injuries, and was deemed safe and effective for vaginal delivery repairs (Monar&Perlow 2008, 4).

Child marriages were the leading cause of obstetric fistula in Nigeria, showing a lack of awareness about the consequences of early marriages (Okoye et al., 2017).

A recent study of obstetric VVF signs from health surveys, fistulas were mostly and commonly connected with pregnancy (90.4%), followed by pelvic operations (5.3%), and sexual assault (4.3%) in Sub-Saharan Africa (Maheu- Giroux 2015). Obstetric

VVF has been connected to sexual assault, particularly in conflict zones (Ezeonu, 2017).

The majority of respondents in a survey of multiple facilities in the Zamfara region of northwestern Nigeria had heard of VVF before (Maiwaida et al., 2017).

Obstetric fistula has far-reaching repercussions that go beyond the evident medical problem. Mental health, child and fertility concerns, and coping techniques have little proof (Bashah et al. 2018).VVF is caused by a variety of reasons, including socioeconomic issues (Keya et al., 2018).

VVF patients have a limited understanding of the VVF. As a result, they lacked the necessary understanding about the occurrence of VVF. They blamed superstitious beliefs for the prevalence of VVF and believed that all pregnant women were not at danger. Early marriage is a common practice that increases the risk of obstructed labor and VVF. (Jacquelynealuochmaeri, 2019).

2.2 Socio-demographic factors.

The socio economic variables or demographic characteristics of individuals such as occupation, age, among others can also be a considerable factor in causing VVF. Hence, the causes of VVF are elastic and there is need to investigate the awareness of women of VVF.Early pregnancies can result in problems during childbirth, especially in young females with immature reproductive systems (Oluwakemi et al., 2019). Because teenage pregnancies account for a substantial percentage of pregnancies in developing nations and are linked to cephalopelvic disproportion, attempts to reduce obstetric fistulas should concentrate on preventing teenage pregnancy (Kimani et al.,

2017).Because they can afford it, those with higher socioeconomic level have better access to quality reproductive health services. Women's admittance to obstetric fistula repair is hampered by poverty, which is aggravated by low socioeconomic position (Keya et al., 2018). The amount of education decides who has access to reproductive health treatments. Women with higher educational levels had better admittance to reproductive health information. Females with advanced degrees seek a lot of information about the quality of care and want to put confidence with doctors (Mukabana, 2016). The low number of obstetric fistula patients who attend school is alarming, as indicated by UNFPA data showing that only 2% of married 15-19 year old Nigerian females attend school, Compared to 69% of unmarried females. The more educated a girl is, the less likely she is to marry as a young (UNFPA, 2016).

2.3 Level of awareness on VVF

Community knowledge has improved as a result of VVF campaigns, and community participation has increased as a result of public health programs. In addition, awareness about VVF and its causative factors is still low in developing countries such as Nigeria (Tebeu, de Bernis, Boisrond, Le Duc, Mbassi and Rochat, 2008; Kasamba, Kaye, andMbalinda, 2013; Amna, Sirichand and Nadeem, 2015). Also, Omiunu (2015) affirmed that awareness and knowledge about particular health challenge could lead to individuals taken steps to cushion such health challenge. It is therefore important to note that, the lack of awareness of VVF might deter the efforts put in place to cushion VVF towards attainment of SDGs in Nigeria and Africa. It is

important to think that, the lack of consciousness of VVF might deter the efforts put in place to cushion VVF towards attainment of SDGs in Nigeria and Africa. By promoting knowledge of the problem in rural areas, information on obstetric fistula community awareness will alert health experts and support groups to the need for primary preclusion (Kasamba et al., 2013).

2.4 Risk factors for VVF

There is a need to investigate people awareness on the causes. A number of factors such as demographic, biological, social, economic, cultural or environmental factors could lead to the prevalence of VVF in rising countries such as Nigeria (Hassan and Ekele, 2009). Other factors include obstetrical trauma and iatrogenic injury encountered during pelvic surgeries (Amna et al., 2015).Also, women who survive obstructed labor during pregnancy often develop a vesico-vaginal fistula (Harrison, 1985; Amna et al., 2015). In addition, Amna et al. (2015) noted that the socio economic variables or demographic characteristics of individuals such as occupation, age, among others can also be a considerable factor in causing VVF. Hence, the causes of VVF are elastic and there is need to investigate the awareness of women of VVF especially among Hausa women.

2.4.1 Early marriage and Poverty

The majority of obstetric fistula sufferers in Nigeria was as a result of child marriages, indicating a low awareness about the dangers of early marriages (Okoye et al., 2017). Obstruction of labor, which is common in Nigeria's north (the Hausa-speaking region), is linked to the practice of early marriage, which occurs commonly between

the ages of 13 and 11, and occasionally before the commencement of menstruation. Early marriage inevitably leads to early sexual encounter and consequent pregnancy at a time when a young girl's physical and mental development is insufficient to allow the baby to pass through with reasonable ease. This might cause a protracted and obstructed labor, which can damage the urinary tract and result in the pain of a fistula, or VVF.

In Nigeria, one out of 18 women will die from complications of child birth (United Nations

Funds Population Agency (UNFPA), 2015). Fistula usually occurs from a prolong labor, the baby generally dies whereas the mother may have extensive tissue damage which could lead to Vesico vaginal fistula. (Amina 2013; Hassan 2013; Imelda 2015 and Isiah 2016) noted that VVF is more common among the young, poor and uneducated rural women in the developing world. Morphy (2008) expressed that the VVF patients have several societal issues which could affect their psychological state. For example, such VVF patients wakes

Up to be wet and soaked that they feel so ashamed and humiliated. Also, Ejembi (2009) noted that the women whose first babies were still born may never get married nor have children again. For fear of reoccurrence. This is because, husband divorce them while relatives, parents and friends normally abandon them. Furthermore, they eventually end up lacking the economic status to cater for themselves and also to pay for the cost of their treatment. Hence, most of them end up with begging and prostitution.

2.4.2 Harmful Traditional Practice

Traditional practices that harm women, such for example womanly genital mutilation or cutting (FGC or FGM), increase the danger. Cutting is frequently done in an unsanitary manner, with big amounts of vaginal or vulvar tissue removed, resultant in thick scar tissue obstructing the vaginal outlet and birth canal. These behaviors are more likely to cause gynecological and obstetric issues, such as prolonged labor and fistula. Despite the absence of precise data, these procedures have been it was discovered to raise the danger of such ailments by up to seven times.

The unsafe cutting done by unskilled birth attendants before or during childbirth also contributes to the formation of fistulas. An old-style midwife or barber in some nations practices a sharp object, such as a knife, razor blade to make a cuts around the vagina to either prepare it for delivery or dislodge the obstruction and make room for the baby during labor.

The majority of instances were linked to female genital mutilation among women of reproductive age, according to a based-population demographic and health assessment conducted in Ethiopia to assess obstetric fistula incidences (Biadgilign et al., 2013). Because many sexual abuse victims do not seek medical attention, sometimes out of fear of shame or an inadequate access to health care, it is tough to quantify the incidence of fistula induced by sexual mistreatment. Sexual abuse is widespread during times of conflict, and it is often used to terrify and subjugate civilians. According to humanitarian workers in crisis areas, rape affects one among every three women, and it is the leading cause of new fistula cases (Keya et al., 2018).

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

The methodology is a systematic objectives enquiring aimed at proving and analyzing relevant information leading to the identification and solution to a problems.

Therefore this chapter emphases on the employ in the collection of data and statistical technique used for data analyses.

3.2 Research Design

The size of the population to be interviewed in this research will be the VVF victims in VVF clinic in Jahun General Hospital and the responses given by the victims will be analyzed.

This study used a cross-sectional research methodology to look at the connection between VVF knowledge and awareness of risk factors that contribute to VVF. A cross-sectional study design gathers data to form conclusions about a target population (universe) at a certain point in time. The cross- sectional research design was utilized in this investigation because the goal was to see if there was a link between VVF knowledge and awareness of the risk factors that contribute to VVF at the Jahun General Hospital.

3.3 Variables:

3.3.1 Independent variable

The following were the study's independent variables:

i. Socioeconomic variables (occupation, age, and marital status)

ii. Knowledge-based factors (Vesico-vaginal fistula services, Prevention of fistula, Presentation of VVF, Treatment and Roots of VVF)

iii. Harmful factors (Teenaged pregnancy, obstructed labor, privation of access to well-trained health providers and female genital mutilation).

3.3.2 Dependent variable

Knowledge level on VVF among reproductive-age women at Jahun General Hospital served as the dependent variable.

3.4 Study Population

In 1979, the late Alhaji Abubakar Rimi, the Governor of Kano State, built and opened Jahun General Hospital. With a catchment population of 400,850 people, the hospital currently has a bed capacity of 146 and a total of 205 beds. Medical officers 14, medical record staff 8, and other 78 are the total number of personnel at Jahun General Hospital Among the services provided by the facilities officers are outpatient care, accident and emergency, antenatal care, postnatal care, immunization, x-rays, counseling testing of HIV that reach service family planning, maternity ward only for VVF patients, nutrition, health record, dental service, quality assurance, and blood banking system. In addition, the hospital offers VVF patients the following services: urine bag, external drugs, and physiotherapy band exercises, among other things.

3.5 Target Population

The study focused on all women who are victims of VVF and are in the reproductive age bracket of 18 years or older. A simple random selection procedure was used to choose 200 people from the study's population.

3.6 Data collection

The questionnaires were distributed to all respondents after receiving approval from the director hospital management at the ministry of health in Dutse, Jigawa state. Each questionnaire came with a consent form. The questionnaire was written entirely in English. Participants who agreed to participate in the study were given an in-depth explanation of the study's aim, the kind of questions asked, and how to respond to them by experienced facilitators.

3.7 METHODS

3.7.1 Ethical considerations

The Department of Biostatistics at Near East University in Nicosia, Cyprus, and the Commissioner of Health via the Director Hospital Management Ministry of Health in Dutse, Jigawa State, provided ethical approval.

After an explanation of the study's objective, benefits, nature, process, and expected outcomes, all participants who were willing to participate in the study gave their informed oral permission. The respondents' rights to anonymity and confidentiality were respected, and they were given the option to withdraw from the study at any time for any reason.

3.7.2 Tool and validity

The research instruments were tested for content and construct validity to ensure that the items in the instrument met the study's goals, questions, and hypotheses. In addition, 200 questionnaires were used to conduct a reliability analysis.

3.7.3 Field work

The data was collected over a three-week period, with study assistants translating the questions into the local language for illiterate women. The women were interviewed in their patient’s bed by the researchers, and each one took roughly 30 minutes.

3.7.4 Statistical analysis

All data was edited for accurateness, reliability, and completeness. After then, the collected data was coded in preparation for future analysis. The acquired data was evaluated using SPSS version 21. The quantitative variables were presented in tables as numbers and percentages, and the Chi-square test was used to assess them. For demographic data, descriptive statistics were employed. All comparisons were considered significant statistically if the p-value was below 0.05. The standards are followed in all techniques, definitions, and units.

CHAPTER FOUR

4.0 Result and discussion

4.1 Response rate

Women who were VVF patients at the vesico- vaginal fistula Centre in Jahun General Hospital of Jigawa State were given 200 questionnaires as part of the study. 200 questionnaire were judged to be complete and valid after data cleaning. The completed questionnaires were deemed suitable for analysis.

4.2 Socio-demographic characteristics of respondents (n = 200)

The frequency results shows that 173 respondents which is equivalent to (86.5%) were age 18-25 while the other respondent were aged around 26-30 which the number is 27 that is (13.5%) of the respondent. Majority of the respondent were predominantly Hausa/Fulani gain 174 (87%) of the respondent then followed by Yoruba with 18 (9%) then Igbo with 5 (2.5%) and lastly the other tribe with 3 (1.5%). In term of religion of the respondent, Muslims has 177 respondent which is equivalent to (88.5%) then followed by Christianity with 23 (11.5%).

Going by frequency of the socio-demographic characteristics of the respondent, majority of them were married with (80.5%) and they were mainly reside in rural area with (74.5%) has formal education, while (64.5%) are house wife. The results also shows that the majority of them got marriage at the age of 18-35 with (50.5%) and (46.5%) married at their teenage age. 93 (46.5%) delivered at home, 60 (30%) delivered at private hospitals while 47 (23.5%) delivered at public hospital.

Lastly, 112 (56%) attended ANC 1 - 3 time in their last pregnancy while 48 (24%) did not attend.

Table 4.1 Socio-demographic characteristics of respondents (n = 200)

Independent variable	Respondent responses	Frequency
Age	18-25	175 (86.5%)
	26-30	27 (13.5%)
	>35	0
Tribe	Hausa/Fulani	174 (87%)
	Igbo	5 (2.5%)
	Yoruba	18 (9%)
	Others	3 (1.5%)
Religion	Islam	177 (88.5%)
	Christianity	23 (11.5%)
	Irreligious	0
Marital Status	Married	161 (80.5%)
	Separated	26 (13 %)
	Divorced	9 (4.5%)
	Widow	4 (2%)
Place of Residence	Rural	122 (61%)
	Urban	78 (39%)
Educational Status	Formal Education	149 (74.5%)
	No Formal Education	51 (25.5%)
Occupation	House Wife	129 (64.5%)
	Daily employment	21 (10.5%)
	Petty-trading	8 (4%)
	Animal husbandry/poultry	14 (7%)
	Others	28 (14%)
Age at first marriage	<18	92 (46%)
	18-35	101 (50.5%)
	>35	7 (3.5%)
Place of delivery	Home	93 (46.5%)
	Public hospital	47 (23.5%)
	Private hospital	60 (30%)
No. ANC attended in last pregnancy	0	48 (24%)
	1 – 3	112 (56%)
	>3	40 (20%)

4.3 Socio-demographic characteristics of the respondent on level of knowledge on VVF (n = 200)

The results shows that the respondent age ranged from 18 – 36 years, (81%) has low awareness on the knowledge of VVF while 5.5% has higher awareness about VVF among 18 – 25 years of ages, in the 26 – 30 years age category, 13.0% of the respondent also has low awareness about the knowledge of VVF. So there is no significant association between age and the knowledge of VVF among the respondents (p=0.194). Concerning their tribe, 174 (87%) were Hausa/Fulani and 86.2 % of them having low awareness on the knowledge of VVF with 5.5% having high awareness. There is no significant association between tribe and the level of knowledge on VVF (p=0.368).

Most 177 (88.5%) of the respondent their religion is Islam, 83.0% of them have low awareness on the knowledge of VVF, there is no significant statistical association between religion and the level of knowledge on VVF (p=0.251). Regarding marital status, 161 (80.5%) were married and 75.0% of them having low awareness and 5.5% having higher awareness and also there is no significant statistical association between marital status and the level of knowledge on VVF. However, the results revealed that majority of the respondent were from rural area with 122 (61%) from which 57.5% having low awareness about the knowledge of VVF and there is no significant association between place of resident and the level of knowledge on VVF (p=0.561). Majority 149 (74.5%) has formal education from which 69.0% of them have low

awareness on knowledge about VVF and there is significant association between educational status and the level of knowledge on VVF.

129 (64.5%) of the respondent on occupational status are House wives having 62.5% low level on knowledge about VVF and there is significant association between occupation and the level of knowledge on VVF (p=0.001).

Table 4.2 Socio - demographic characteristics of the respondent on level of knowledge on VVF (n = 200)

Independent variable	Respondent responses	Dependent variable		Statistical Significance
		Low awareness (n=200)	High awareness (n=200)	
Age	18-25	81%	5.5%	χ^2=3.289 d=1 P=0.194
	26-30	13%	0%	
	>35	0.0%	0%	
Tribe	Hausa/Fulani	86.2%	5.5%	χ^2=3.158 d=3 P=0.368
	Igbo	2.5%	0%	
	Yoruba	9%	0%	
	Others	1.5%	0%	
Religion	Islam	83%	5.5%	χ^2=2.77 d=1 p=0.251
	Christianity	11.5%	0%	
	Irreligious	0.0%	0%	
Marital Status	Married	75%	5.5%	χ^2=4.925 d=3 p=0.177
	Separated	13.5%	0%	
	Divorced	4.5%	0%	
	Widow	94.5%	5.5%	
Place of Residence	Rural	57.5%	3.5%	χ^2=0.034 d=1 p=0.561
	Urban	37%	2%	
Educational Status	Formal Education	69%	5.5%	χ^2=6.693 d=1 p=0.036
	No Formal Education	25.5%	0%	
Occupation	House Wife	62.5%	2%	χ^2=43.502 d=4
	Daily employment	10.5%	0%	

	Petty-trading	0.5%	3.5%	p=0.0001
	Animal husbandry/poultry	7%	0%	
	Others	14%	0%	
Age at first marriage	<18	44%	2%	χ^2=1.413 d=2 p=0.493
	18-35	47%	3.5%	
	>35	3.5%	0%	
Place of delivery	Home	45.5%	1%	χ^2=6.109 d=2 p=0.047
	Public hospital	22.5%	1%	
	Private hospital	26.5%	3.5%	
No. ANC attended in last pregnancy	0	19.5%	4.5%	χ^2=18.800 d=2 p=0.0001
	1 – 3	55%	1.0%	
	>3	20%	0.0%	

4.4 Association between Respondents level of knowledge about VVF and awareness level on the Risk factors (n = 200)

Further assessment on the respondent's level of knowledge about VVF and level of awareness on the risks factors, the results revealed that majority 92.5% of respondents has a high awareness level on risk factors and also had a high but slight knowledge levels. There is a small difference in the level of awareness between the two levels of knowledge among the respondents. There were no statistical association between the knowledge level and the level of awareness on the risk factors (p=0.796).

Table 4.3 Association between Respondents level of knowledge about VVF and awareness level on the Risk factors.

Independent variable	Respondent responses	Dependent variable		Statistical Significance
Knowledge about VVF		Awareness on the risk factors		χ^2=0.0457 d=1 P=0.796
		Low awareness (n=200)	High awareness (n=200)	
	Low	2.0%	92.5%	
	High	5.5%	0.0%	

4.5 Association between Respondents level of knowledge about VVF and Satisfaction with quality of care

The results shows that most 80.0% of the respondents are satisfied with quality of care been provided at the same time have high level of knowledge. There was a significant statistical association (p=0.001) among knowledge of VVF and the satisfaction with quality of care as presented below.

Table 4.4 Association between Respondents level of knowledge about VVF and Satisfaction with quality of care (n=200)

Independent variable	Respondent responses	Dependent variable		Statistical Significance
Knowledge level about VVF		Satisfaction with quality of care Awareness on the risk factors		χ^2=12.115 d=1 P=0.001
		Low awareness (n=200)	High awareness (n=200)	
	Low	14.5%	80.0%	
	High	3.5%	2.0%	

4.6 Responses on level of awareness on the prevention of VVF

The responses on the level of awareness on the prevention of VVF the results revealed that majority 199(99.5%) of the respondents believed that prolong obstructed labour is a risk factor for VVF, most 178(89.5%) agree that early marriage is also a risks factor. 181(89.5%) and 158(79.0%) also agree that home delivery and delivery by traditional birth attendant is risk factors on the development of VVF while 160(80.0%) were also believed that female circumcision may predispose to VVF and more than half of the respondents 105(52.5%) they do not believed that VVF is due to evil spirit.

Half of those who responded 100(50%) say that VVF is due to punishment from god while 173(86.5%) say VVF results from leakage of urine almost all the time. Lastly 179(89.5%) revealed that VVF may be prevented if pregnant women give birth by skilled attendant at birth.

Table 4.5: Responses on questions of level of awareness on the prevention of VVF (n=200)

Independent Variable	Respondent's Response (%)	
	Knowledge	
	Yes	No
Prolong obstructed labor is a risk factor for VVF	199 (99.5%)	1 (0.5%)
Early marriage is also a risk factor for VVF	178 (89%)	22 (11%)
Home delivery is also a risk factor for VVF	181 (90.5%)	19 (9.5%)
Delivery by traditional birth attendant may predispose to development of VVF	158 (79%)	42 (21%)
Female circumcision may predispose to VVF	160 (80%)	40 (20%)

Vesico-vaginal fistula is due to evil spirit	95 (47.5%)	105 (52.5%)
Vesico-vaginal fistula is due to punishment from God	100 (50%)	100 (50%)
Vesico-vaginal fistula results in urine Leakage all the time	173 (86.5%)	27 (13.5%)
Vesico-vaginal fistula may be disallowed if pregnant woman gives birth by skilled attendant at birth	179 (89.5%)	21 (10.5%)

4.7 Level of knowledge on VVF

The out-come show that most of the respondent (94.5%) have low knowledge regarding occurrence on VVF while the remaining respondents (5.5%) of them had high knowledge from the respondent as presented below.

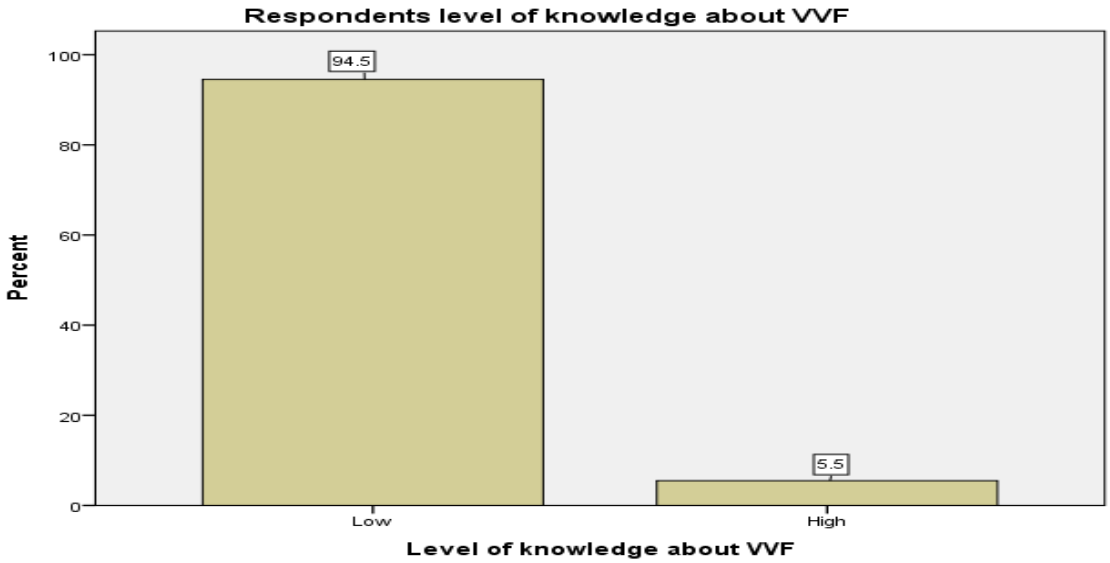

Fig 4: Level of knowledge on VVF

4.8 Respondents level on satisfaction with quality of care

The results also revealed that most of the respondent (82.0%) had high satisfaction quality of care been provided while (18.0%) had low satisfaction with quality of care been provided as shown in figure 5 below.

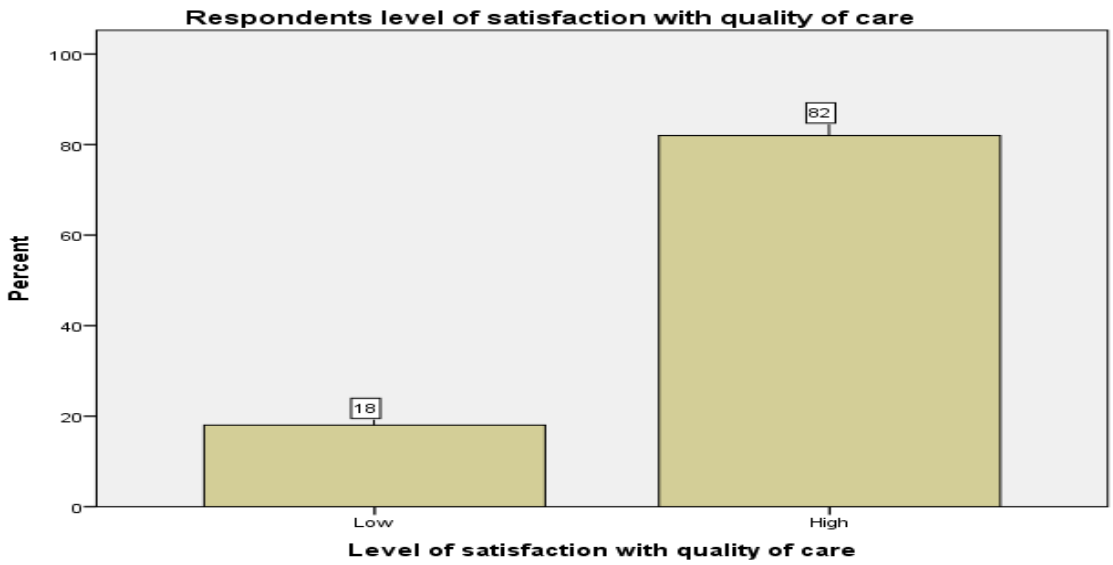

Fig 5: **Satisfaction with quality of care**

4.9 Responses on factors contributing to VVF among VVF respondent (n=200)

The study sought to determine the factors contributing to VVF among respondents. Regarding the level of awareness on the prevention of VVF occurrence, there is six (6) questions Likert scale of score between 1-4 is used in which "1" means strongly disagree and "4" stand for strongly disagree. The results show that 148(74.0%) strongly agree and 44(22.0%) agree that they believed prolong labour is a contributing factor with in the occurrence of VVF. Concerning the traditional birth attendant,

majority of the respondents agree that is also a contributing factor with 96(48.0%) strongly agree then follow by 77(38.5%) of the respondents agree.

Majority 177(88.5%) strongly agree and 65(32.5%) agree that female genital mutilation is a factor contributing to VVF occurrence while 25(12.5%) disagree. More than half of the respondents 105(52.5%) strongly agree and 66(33.0%) also agree Gishiri cut is a contributing factor on VVF among female of reproductive age in Jahun general hospital. Most 121(60.5%) strongly agree and 65(32.5%) agree that early marriage is also a contributing factor on VVF occurrence. The results is presented in table below.

Table 4.6: Responses on questions on factors contributing to VVF among VVF respondents (n=200)

Independent's Variable	Respondent's Response			
	Strongly Agree	Agree	Disagree	Strongly disagree
Prolonged labour	148 (74%)	44 (22%)	8 (4%)	0 (0%)
Traditional birth attendant	96 (48%)	77(38.5%)	25 (12.5%)	2 (1%)
Female genital mutilation	177 (88.5%)	65(32.5%)	17 (8.5%)	1 (0.5%)
Gishiri Cut	105 (52.5%)	66 (33%)	27 (13.5%)	2 (1%)
Early marriage	121 (60.5%)	65 (32.5%)	10 (5%)	4 (2%)
No Idea	0 (0%)	0 (0%)	200 (0%)	0(100%)

4.10 Responses on questions of satisfaction with facility vesico-vaginal fistula services

On the responses on questions about satisfaction with facility on VVF 186(93.0%) of those who responded were satisfied with ease of access to care, majority 141(70.5%) also satisfied with waiting time to receive the care. About the patient doctor relationship 142(71.0%) were satisfied while 144(72.0%) satisfied with hospital treatment facilities and then lastly 129(64.5%) of the respondents satisfied with the ward environment.

Table 4.7: Responses on questions of satisfaction with facility vesico-vaginal fistula services

Independent Variable	Respondent's Response (%)	
	Knowledge	
	Satisfied	Not Satisfied
Satisfied with ease of access to care	186 (93%)	14 (7%)
Satisfied with waiting time to receive care	141 (70.5%)	59 (29.5%)
Satisfied with patient doctor relationship	142 (71%)	58 (29%)
Satisfied with hospital treatment facilities	144 (72%)	56 (28%)
Satisfied with the ward environment	129 (64.5%)	71 (35.5%)

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

The study shows that the most of the contributing factors of Vesico Vaginal Fistula (VVF) are long and completed labor, child marriage and female genital mutation, in literacy, poverty and poor access to obstetric care. The research shows that Vesico Vaginal Fistula (VVF) victims are from rural areas with poor and in literate upbringings. As a matter of point, most of the respondent in this research come from a social-economic disadvantage family backgrounds and they are basically patient in the clinic, poor people habitually live in rural areas where there is unreachability of basic social amenities, like clean water, good food, and sound education and many more.

Poverty affects the quality of food consumed; as a result, patients of Vesico Vaginal Fistula (VVF) suffer from malnutrition, resulting in disproportional and delayed body growth. A contributory reason to the occurrence of VVF in Nigeria has been found as a lack of qualified obstetric care personnel.

5.2 Conclusion

The results of this research revealed that there is a lack of knowledge of VVF in the Jahun General Hospital in Jigawa State. This could be due to a lack of awareness efforts aimed at raising women's understanding contributing factors, and prevention of Vesico-vaginal fistula.

According to the findings, the respondents have inadequate knowledge level of Vesico-vaginal fistula. As a result, they lacked the necessary understanding about the occurrence of VVF.

The facts gathered in this research had better be viewed as a supplement to other research on the situation bedeviling the prevalence of Vasico vaginal Fistula and its influence on the psychosomatic well-being of Nigerian women. It is a supplement in the sense that it gives the victims a voice, which is lacking in several other reports. The research discovered that the incidence of VVF is on the rise. Cannot be explained solely from a physical standpoint; while there are physical effects, there are also social and cultural explanations for this illness. The cultural factors that predispose victims to the plague of Vesico Vaginal Fistula (VVF) are important issues that should be addressed at both the local and federal levels. It should be highlighted that Vesico Vaginal Fistula (VVF) victims' agony and suffering is caused by a lack of educational opportunities and social hardship.

5.3 Recommendations

In this research the health of women in Jigawa State and as a whole is a major concern. The government must be fully prepared for girl child education because the majority of women who are victims of this threat lack formal education, and the majority of cases occur during the first pregnancy. Jigawa state government should put more serious on issues of women and maternal health which put woman health is jeopardy.

1. Governments should rendered antenatal compulsory to pregnant woman and educate them on the duration of labour, and other vital health issues.
2. Government and independent bodies should engage in massive radio/television sensitization campaign in the effect of early marriage in our society, as the factors of Vesico Vaginal Fistula (VVF).
3. Parent should ensure that adequate/simple nutritional foods are given to the women for their healthy and the babies they are carrying to make them have growth for effective labour/delivery.
4. Government should engage traditional rulers in propagating, sensitization of populace on the menace of traditional practice and their effects to our dear woman.
5. Parent should stop early marriage to their daughters for good care of VVF occurrence.

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Appendix I

Research Questionnaire

Introduction

Dear respondent,

I am a student of Near East university Nicosia Cyprus carrying out a research on the assessment of the relationship between level of knowledge on VVF and awareness level on risk factors of VVF in partial fulfilment of the Master of Science.

Kindly respond to the statements by appropriately indicating your feelings regarding the statement given. All information given by you will be used strictly for academic research purpose only. To ensure confidentiality of responses and respondents, no names are to be indicated on the questionnaire.

Thank you so much for your kind assistance and cooperation.

Yours faithfully,

Rufai Iliyasu

Instructions:

Please fill out the below questionnaire as perfectly, honestly and entirely as possible.

There is no wrong or right answers. All the responses are confidential

SECTION A

DEMOGRAPHIC INFORMATION AND OBSTETRIC CHARACTERISTICS OF THE RESPONDENTS

1) Age: What is your age?
    a. 18-25
    b. 26-30
    c. 31-35
    d. 36 or older
2) Religion
    a. Islam
    b. Christianity
    c. Irreligious
3) Tribe
    a. Hausa/ fulani
    b. Yoruba
    c. Igbo
    d. Others
4) Marital status

a. Married

b. Separated

c. Divorced

d. Widow

5) Place of residence

a. Urban

b. Rural

6) Educational status

a. Formal education

b. No Formal education

7) Occupation

a. House Wife

b. Daily Employment

c. Petty-trading

d. Animal husbandry/poultry

e. Others

8) Age at first marriage (years)

a. < 18

b. 18-35

c. >35

9) Place of last delivery

a. Home

b. Public hospital

c. Private hospital

10) Number of ANC attended in last pregnancy

a. 0

b. 1-3

c. > 3

SECTION B

RESPONDENTS LEVEL OF AWARENESS ON THE PREVENTION OF VVF.

Variables	**Knowledge**	
	Yes	**No**
Prolong obstructed labor is a risk factor for VVF		
Early marriage is also a risk factor for VVF		
Home delivery is also a risk factor for VVF		
Delivery by traditional birth attendant may predispose to development of VVF		
Female circumcision may predispose to VVF		
Vesico-vaginal fistula is due to evil spirit		
Vesico-vaginal fistula is due to punishment from God		
Vesico-vaginal fistula results in Leakage of Urine all the time		
Vesico-vaginal fistula may be prevented if pregnant woman is delivered by skilled attendant at birth		

SECTION C

FACTORS CONTRIBUTING TO VVF AMONG PREGNANT WOMEN

S/N	Causes of VVF (From patient)	Strongly Agree	Agree	Disagree	Strongly disagree
1	Prolonged labour				
2	Traditional birth attendant				
3	Female genital mutilation				
4	Gishiri Cut				
5	Early marriage				
6	No Idea				

SECTION D
SATISFACTION WITH FACILITY VESICO-VAGINAL FISTULA SERVICES

S/N	Causes of VVF (From patient)	Satisfied	Not Satisfied
1	Satisfied with ease of access to care		
2	Satisfied with waiting time to receive care		
3	Satisfied with patient doctor relationship		
4	Satisfied with hospital treatment facilities		
5	Satisfied with the ward environment		

Appendix ii

Research Permit from Jigawa State Ministry of Health

MINISTRY OF HEALTH

JIGAWA STATE

Block B-Q2/Q3, Ground & 1st Floor, New Secretariate Complex,
P.M.B. 1003 Dutse, Jigawa State - Nigeria. E-mail: health@jigawastate.gov.ng

Hon. Commissioner Office
Tel: 0806-5489-496

Permanent Secretary Office
Tel: 0808-9807-273

Our Ref: MOH/SEC/I.S/641/V1 *Your Ref:* *Date:* 14/09/2021

Notice of Full Approval after full Committee Review

Re: An assessment of the relationship between level of knowledge and awareness level on risks factors on VVF (A case study of Jahun General Hospital) Jigawa State Nigeria

Health Research Committee assigned number: JHREC/2021/047

Name of Principal Investigator: Rufa'i Ilyasu

Address of Principal Investigator: Dept. of Biostatistics, Near East University, Nicosia, Cyprus.

Date of the meeting when the final determination of research was made: *26/07/2021*

This is to inform you that the research described in the submitted protocol, the consent forms, advertisements, and other participant information materials have been reviewed and *given full approval by the Jigawa State Health Research Ethics Committee.* This approval dates from *26/07/2021* to *27/07/2022*. If there is a delay in starting the research, please inform the HREC so that the dates of approval can be adjusted accordingly. Note that no participant accrual or activity related to this research may be conducted outside of these dates. *A ll informed consent forms used in this study must carry the HREC assigned number and duration of HREC approval of the study.* In multi year research, endeavor to submit your annual report to the HREC early in order to obtain renewal of your approval and avoid disruption of your study.

The National Code for Health Research Ethics requires you to comply with all institutional guidelines, rules, and regulations and with the tenets of the Code, including ensuring that all adverse events are reported promptly to the HREC. No changes are permitted in the research without prior approval by the HREC except in the circumstances outlined in the Code. The HREC reserves the right to conduct a compliance visit to your research site without previous notification.

Sincerely,

Dr Kabiru Ibrahim
Chairman, JGHREC
For: Honorable Commissioner