UPTAKE OF HEPATITIS B SERVICES AND ITS ASSOCIATED FACTORS AMONG FEMALE SEX WORKERS IN ENTEBBE MUNICIPALITY, WAKISO DISTRICT

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DECLARATION

I Agnes Akiror, I declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

Signature……

Date……

DEDICATION

This dissertation is dedicated to my mother Mrs Acana Pauline Okello, my sisters Doreen, Hellen and brother Julius.

APPROVAL

The undersigned certify that he has read and hereby recommend for examination of a dissertation entitled; “Uptake of hepatitis B services and its associated factors among female sex workers in Entebbe municipality”. It is ready for submission.

……

Alege John Bosco

(Supervisor)

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Date……..

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OPERATIONAL DEFINITIONS

Female Sex Worker (FSW): In this study referred to a woman who engages in sex in exchange for money

Hepatitis B: Hepatitis B is a virus carried in one's blood and body fluids which infect and damage the liver; it can be acute or chronic. It has an incubation period of about five to 22 weeks. Hepatitis B is a viral infection that predominantly affects the liver. It can vary in severity, lasting a few weeks or resulting in life-long health problems, according to the U.S. Centers for Disease Control and Prevention.

Hepatitis B surface Antigen (HBsAg): This test directly for the presence of virus. If it is positive, then you may have a hepatitis B infection. This test may have to be repeated to confirm whether you have a chronic infection.

Hepatitis B services: In this study, these referred to Hepatitis B screening and Hepatitis B vaccination services

Hepatitis B Screening: Hepatitis B serologic testing involves measurement of several Hepatitis B Virus (HBV) -specific antigens and antibodies. Different serologic "markers" or combinations of markers are used to identify different phases of HBV infection and to determine whether a patient has acute or chronic HBV infection, is immune to HBV as a result of prior infection or vaccination, or is susceptible to infection (CDC, 2016).

Hepatitis B vaccination uptake: The total number who received the 3-dose series of the hepatitis B vaccine in a given strata divided by the total number of people in the strata multiplied by 100.

LIST OF ACRONYMS AND ABBREVIATIONS

CCS	Cervical Cancer Screening
CDC	Centre for Disease Control
EASL	European Association for the Study of Liver Consensus Statement
FDA	Food and Drug Administration
FSW	Female Sex Worker
GI	Gastro Intestinal
GUM	Genitourinary Medicine
HBsAg	Hepatitis B surface Antigen
HBV	Hepatitis B Virus
HCC	Hepatocellular Carcinoma
HCV	Hepatitis C Virus
HCV	Hepatitis C virus
HCWs	Health Care Workers
HIV	Human Immuno-deficiency Virus
IDU	Injection Drug Use
MOH	Ministry Of Health
MSM	Men who have Sex with Men
NWFP	North West Frontier Province
SPSS	Statistical Package for Social Sciences
STD	Sexually Transmitted Disease
STIs	Sexually Transmitted Infections
UN	United Nations

US	United States
USA	United States of America
VCT	Voluntary Counselling and Testing
VHPB	Viral Hepatitis Prevention Board
WHA	World Health Assembly
WHO	World Health Organization

ABSTRACT

Background: Hepatitis B is an important public health problem; although it is often asymptomatic initially, the long-term complications include cirrhosis and hepatic cancer, diseases that kill about a million people worldwide each year. Sexually Transmitted Infections (STIs) like hepatitis B are usually concentrated in core groups, such as female sex workers (FSWs), who have a high number of partners and receive poor health care. The Hepatitis B virus (HBV) is unique compared to other sexually transmitted diseases, because it can be prevented with the uptake of hepatitis B services which include hepatitis B screening for some at risk populations and general vaccination.

Objective: To assess the Uptake of hepatitis B services and its associated factors among female sex workers in Entebbe municipality, Wakiso district

Method: This research essentially took on a descriptive cross sectional survey design. In this study the target population was female sex workers aged 18 years old and above in Entebbe Municipality. Mapping "hot spots" was done using purposive sampling technique in order to select the participants to take part in the study, considering the hot spots for FSWs from Entebbe Municipality. Respondents were recruited using the non-probability sampling method because it is appropriate for hard to reach populations including FSWs. The researcher chose to use, structured interviews to collect the required data from the female sex workers. The structured was used to collect data from respondents.

Results: It was found that majority of the female sex workers had not taken up the hepatitis B services 108(71.5%), with the level of Hep B service uptake being 28.5% (43). The results showed that the female sex workers whose ages fell between 25 – 34 years were three times more likely to uptake hepatitis B services (OR = 3.3, CI = .220 - 40.949) and those between 18 – 24 years were twice more likely to uptake the services (OR = 2), the respondents who were single had higher odds of up taking hepatitis B services (OR = 3.265, CI = 0.227 –

22.569), and were those who had health insurance (OR = 2, CI = 0.045 – 14.896). The female sex workers who had been earlier Screened for cervical cancer before were three times more likely to uptake hepatitis B services (OR = 3.859, CI = 0.328 – 22.249) as well as those who usually sought health care services from govern health centers (OR = 3.551, CI – 0.573 – 22.023).

Bivariate analysis for the relationships between psychosocial factors and uptake of hepatitis screening services showed that How supportive family/relatives are in getting Hepatitis B screening (p = 0.004), How supportive friends are in getting Hepatitis B screening (p = 0.002), = stigmatization (p = 0.008), View about Hepatitis B screening (p = 0.006), Belief that screening is the best way to prevent Hepatitis B (p = 0.001), View about Hepatitis B vaccination (p = 0.001), and the belief getting vaccinated after a negative screening test is the best way to prevent Hepatitis B (p = 0.010) had significant relationships with the uptake of hepatitis B services uptake. At health facility level, access to Hepatitis B services (p = 0.005), distance to the nearest health facility (p = 0.001), Any Hepatitis B services available at the nearest health facility (p = 0.002), Cost of Hepatitis B vaccination services (p = 0.001), and Waiting time for Hepatitis B services (p = 0.037) had significant relationships with the uptake of hepatitis B services.

Conclusion: The uptake of hepatitis B services among female sex workers in Entebbe Municipality is generally low especially when it comes to hepatitis B screening services uptake. The uptake of these services among the FSW is influenced by factors at individual, psychosocial and at health system in that order. It is recommended that the ministry of health gives special attention in terms of outreach to marginalized groups such as commercial sex workers so that the Hep B screening services are brought closer to them given that some are stigmatized. Health education on the importance of Hep B screening and vaccination should also be intensified and especially extended to FWS.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter gives an introduction to the study, describes the background of the study, background of the study area, statement of the problem, research objectives, research questions, justification and significance of the study, and a conceptual framework

1.1 Background to the study

Hepatitis B is an important public health problem; although it is often asymptomatic initially, the long-term complications include cirrhosis and hepatic cancer, diseases that kill about a million people worldwide each year (WHO, 2012). As per the World Health Organization [WHO] (2012), hepatitis B is the world's most regular liver disease, which is brought on by a DNA-infection, the hepatitis B infection (HBV). The infection is exceedingly infectious, 50-100 circumstances more irresistible than HIV, and is transmitted between individuals through blood, semen, vaginal liquids and mucous films

The most widely recognized type of transmission is sexual transmission, yet the obtaining of the infection can likewise occur parenterally, through contact with blood and different liquids of contaminated people, in a level or vertical way (Pudelco, 2010). The predominance is higher in populaces at hazard, for example, vagrants, adolescents and sex laborers, as a rule connected with the utilization of infusing medication, prostitution and early and unprotected sexual movement. Sexually Transmitted Infections (STIs) like hepatitis B are normally packed in center gatherings, for example, female sex specialists (FSWs), who have a high number of accomplices and get weakness mind (Sopheab, 2008; Workowski and Berman, 2010). The proof demonstrates that females who take part in unlawful sex exercises

encounter high grimness, which is identified with their way of life (Mohebbi, 2005; Jeal, 2004). A few grown-ups are at higher hazard for HBV contamination.

Hepatitis B is a genuine general medical issue around the world, it is evaluated that more than two billion individuals are tainted with hepatitis B and 370 million experience the ill effects of interminable contamination by this operator (CDC, 2016). As indicated by the Centers for Disease Control and Prevention roughly, 70.7% of recently obtained HBV contaminations were the consequence of sexual contact (52.4%) or infusion sedate utilize (18.3%) among all grown-ups (Centers for Disease Control and Prevention, 2013a). In particular, high-hazard heteros (HRH), men who engage in sexual relations with men (MSM), infusion tranquilize clients (IDUs), and human immunodeficiency infection (HIV) tainted people convey a more noteworthy extent of the hepatitis B cases in the U.S (Centers for Disease Control and Prevention, 2013a).

An expected 240 million individuals are incessantly tainted and more than 780,000 individuals kick the bucket each year because of entanglements of hepatitis B including cirrhosis and liver growth (WHO, 2015). Roughly 33% of all instances of cirrhosis and half of all instances of hepatocellular carcinoma can be credited to perpetual HBV contamination, and the sickness is assessed to be in charge of 50,000-700,000 passings every year (Shepard et al., 2006; WHO, 2004). Liver ailments are basic in Africa and record for high bleakness and mortality. Reports from healing center based reviews demonstrate that around 12% of restorative confirmations and more than 20% of doctor's facility mortality in many parts of Africa were because of intense viral hepatitis, unending hepatitis, and cirrhosis and hepatocellular carcinoma. Constant transporter rates among the overall public in Nigeria went from around 12 to 48.7% in various states and urban areas (Olokoba et al., 2010)

The Hepatitis B infection (HBV) is interesting contrasted with other sexually transmitted maladies, since it can be anticipated with the take-up of hepatitis B administrations which

incorporate hepatitis B screening for some at hazard populaces and general immunization (WHO, 2012). In 1964 it got to be distinctly conceivable to recognize individuals with HBV utilizing serological testing, looking for hepatitis B surface antigen (HBsAg) (Weinbaum, Mast and Ward, 2009). Hepatitis B immunization is best measure when the three-dosage timetable is taken after (Romano, 2011; Ministério da Saúde, 2010). Despite the fact that, proof has demonstrated that HBV contamination is preventable by inoculation (Pungpapong et al., 2007), and a few antibodies have been created for this reason, wide varieties exist in take-up of HBV immunization over the globe even among human services laborers. Finish inoculation against hepatitis B is accomplished by organization of a three-measurements regimen, with the second and third dosages being given one and six months after the underlying dosage (WHO, 2015).

It is not known whether the HBV immunization gives long lasting security against HBV and if supporters are vital. In any case, it is realized that the insurance is enduring, no less than 10-15 years, if the inoculation timetable is taken after accurately (Socialstyrelsen, 2008). All HBV contaminations don't give side effects, implying that there is a hazard that individuals are infectious without knowing it (Weinbaum et al., 2009; WHO, 2012). However a few people may encounter intense side effects like jaundice, exhaustion, loss of craving, sickness and additionally stomach torment. According to the MoH, Uganda, (2015), 10% (more than 3.5 million Ugandans) are living with constant Hepatitis B contamination. In no time, by locale Hepatitis B commonness in Uganda is positioned as takes after: North East 21.7%, North Central 19.4%, West Nile 18.7%, Western 10%, Kampala 5.8%, Central 5.8%, while South West with 2.9%. Hepatitis B infection is the most common in Uganda and can be transmitted through medicinal services framework by needle sticks wounds, sexual transmission, mother to kid and blood transfusion. In Uganda, hepatitis B is 100 circumstances a greater number of diseases than HIV and can get by for 7 days outside the

body (MoH, 2015). MoH, 2011, Uganda; regardless of the hepatitis B programs by the MoH, the Hepatitis B screening rate stays low among FSWs (Lyimo et al 2012).

The Healthy People 2020 objective calls for diminishing HBV disease among high-chance populaces by 1.4 percent throughout the following ten years (United States Department of Health and Human Services, 2012). To achieve this objective, hepatitis B inoculation scope among high-chance grown-ups must be made strides. Entebbe Municipality is notable for its night life and business sex exercises; this is coupled together with inadequate data on Hepatitis B screening among FSWs in Uganda (Harrison, 2015). Sex work in Entebbe is widespread and FSWs in the region originate from various foundations. In this manner, the specialist was incited to direct a review to evaluate the take-up of hepatitis B administrations among FSWs in Entebbe Municipality, Wakiso District.

1.2 Statement of the problem

In Uganda, it is estimated that approximately 3.5 million (10%) people out of the total population of 35 million are infected with the Hepatitis B virus, with 30% (1,050,000) of those infected chronically ill and requiring treatment (MOH, 2015). It is known globally that hepatitis B is more endemic among people who have multiple partners (Sopheab, 2008; Workowski & Berman, 2010; Lok, 2009; Ott, 2012) of which majority are evidently female sex workers, making it plausible therefore that in Uganda too, that hepatitis B is highly prevalent among commercial sex workers. Specifically, this public health problem consequently could be equally significant in Entebbe municipality, a place famous for being a hot spot for commercial wide spread commercial sex work among other things (Harrison, 2015). Given that the geographical area where Entebbe is situated has a hepatitis B prevalence rate of 5.8%, it is possible that the female sex workers are contributing a considerable percentage of that statistic, yet the status of hepatitis B service uptake including

screening and vaccination among this group of people has not yet been meticulously studies not to mention the associated factors of service uptake.

In 2010, the World Health Assembly (WHA) recognized Viral Hepatitis as a global Public Health Problem and the need for Governments and Populations to take actions to prevent diagnose and treat viral Hepatitis and called upon WHO to develop and implement a comprehensive global strategy to support these efforts. With this call, the government of Uganda in 2015 officially rolled out hepatitis B vaccination services of adolescents and adults against hepatitis B disease. Three Hepatitis B specialized clinics were set up and among them are one in the central region at Mulago: Hepatitis/STI Clinic were 686 cases are registered, complicated cases are referred to the Gastro Intestinal (GI) Clinic and Co-infections that is HIV/HBV are referred to HIV/AIDS Clinics (MOH, 2015). Nevertheless, it is known as to what extent high risk groups like female commercial sex worker use the hepatitis B services provided in this area.

1.3 Objectives of the study

1.3.1 General objective

To assess the Uptake of hepatitis B services and its associated factors among female sex workers in Entebbe municipality, Wakiso district

1.4 Specific objectives

I. To determine the level of uptake of hepatitis B services among female sex workers in Entebbe Municipality Wakiso District
II. To determine the individual attributes influencing the Uptake of Hepatitis B services among female sex workers in Entebbe Municipality
III. To explore the psychosocial factors influencing the Uptake of Hepatitis B services among female sex workers in Entebbe Municipality

IV. To determine the health system factors influencing the Uptake of Hepatitis B services among female sex workers in Entebbe Municipality

1.5 Research questions

I. What is the level of uptake of hepatitis B services among female sex workers in Entebbe Municipality

II. What are the individual attributes influencing the Uptake of Hepatitis B services among female sex workers in Entebbe Municipality, Wakiso District?

III. What are the psychosocial factors influencing the Uptake of Hepatitis B services among female sex workers in Entebbe Municipality

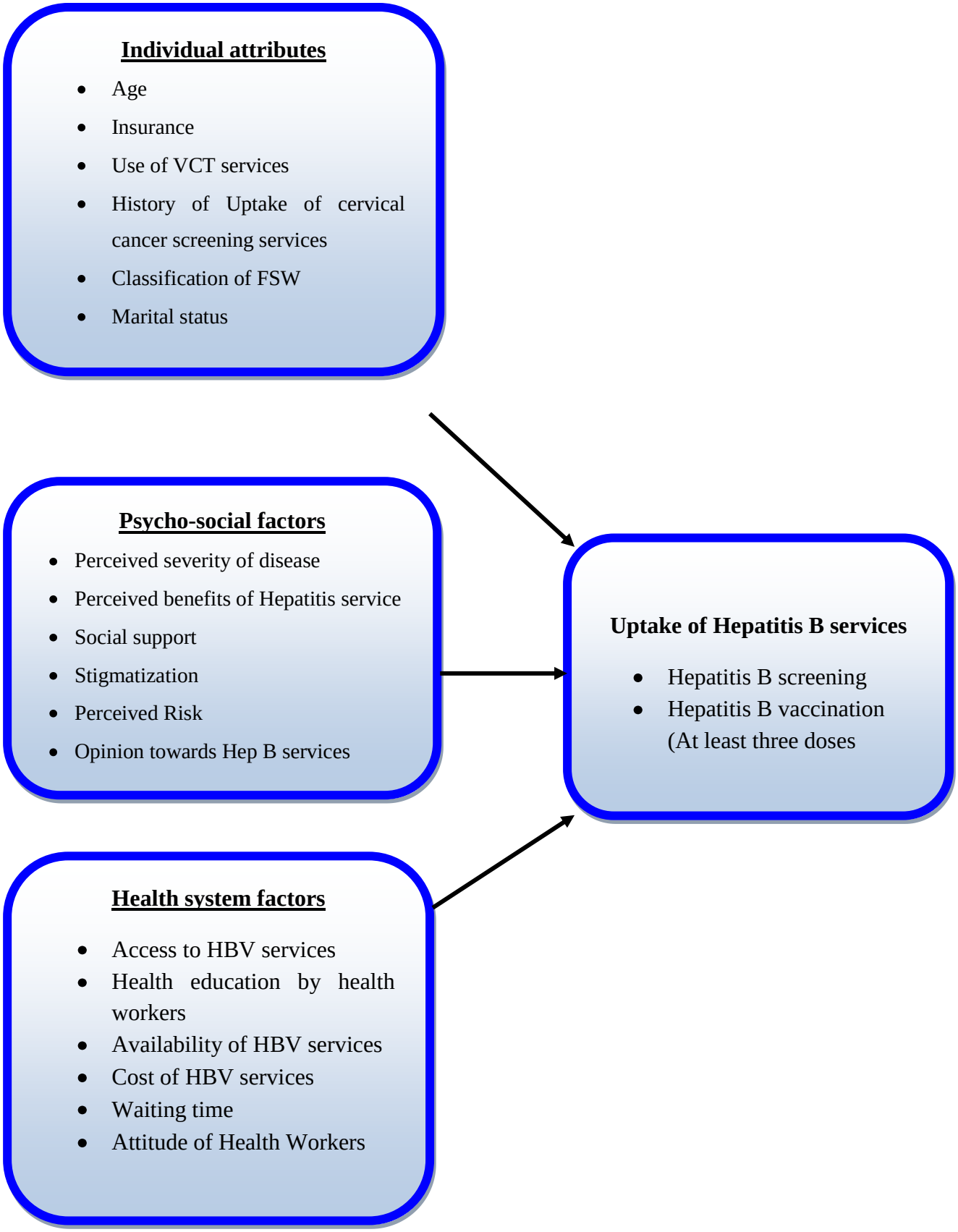
IV. What are the health systems factors influencing the uptake of Hepatitis B services among female sex workers in Entebbe Municipality

1.6 Justification and significance of the study

This study sought to assess the Uptake of Hepatitis B services among Female sex workers in Entebbe Municipality. No study had been carried out in Uganda to this effect, hence the great need and rationale for this study. Data will be generated from the study and will be used as a basis for subsequent studies and interventions on uptake of Hepatitis B services among FSWs in Entebbe, and Uganda at large. Through regular screening and timely intervention, the morbidity and mortality of Hepatitis B can be reduced among FSWs.

Study findings will guide policy makers to put in place strategies to ensure that FSWs' reproductive health concerns are addressed adequately in the facilities they use or through organizations that provide services to them, despite their work being illegal in Uganda. The results and recommendations made in this study will add valuable information to the ministry of health and other stakeholders to address issues of Hepatitis B screening uptake among FSWs.

1.7 Conceptual framework



Narrative of the conceptual framework

The figure above shows the variables identified for the study that affect uptake of Hepatitis B services. They were used to help understand uptake of Hepatitis B services among Female sex workers in Entebbe Municipality. According to figure 1 above, the identified variables include; individual attributes psychosocial factors and health systems factors. The individual attributes that affect Uptake of Hepatitis B services and were investigated include; age, education level, income, Insurance, Use of VCT services, history of Uptake of cervical cancer screening services and Classification of FSW, marital Status.

The psychosocial factors include; Perceived severity of disease, Perceived benefits of Hepatitis service, Social support, Stigmatization, Perceived Risk and the Opinion towards Hep B services

The health system factors that were studied include; Availability of the HBV services, access to the HBV services, cost of HBV services, waiting time and attitude of health Workers.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review of literature aligned to the uptake of hepatitis B services among female sex workers but biased towards the study objectives. The literature was sourced from English language data bases and repositories; there was no date limitation on the review. The data bases used included PUBMED, MEDLINE, CINAHL plus, Wan Fang database and PubMed, were used by searching the seven English key words. The key words are "Hepatitis B", "HBV", "Health belief model", "hepatitis B vaccination", "screening", "female sex workers", and "hepatitis B services". At the end of the review, 73 studies contained the abstracts and full-texts were identified. (PUBMED: 33 MEDLINE: 10, CINAHL plus: 3, Wan Fang database: 16, PubMEd: 11).

2.1 Uptake of cervical cancer screening services among female sex workers

The hazard for HBV disease differs generously by nation of beginning, for instance, people conceived in nations with a predominance of HBV contamination of 2% or more prominent record for 47% to 95% of those with ceaseless HBV disease in the United States (Chou, 2004). Another imperative hazard figure for HBV disease is absence of inoculation in outset in people conceived in created nations to with guardians from a nation or locale with high predominance (≥8%, for example, sub-Saharan Africa, focal and southeast Asia, and China (Chou, 2004; Weinbaum, 2008; Kowdley, 2012; Ott, 2012). Since HBV disease predominance may bit by bit change after some time, take note of that a few nations and locales with pervasiveness rates between 5-7% are thought to be profoundly endemic ranges and in these territories in this manner, hepatitis B administrations take-up is of central significance.

The Centers for Disease Control and Prevention (CDC) utilizes a predominance limit of 2% or more prominent to characterize nations with high hazard for HBV contamination (Weinbaum, 2008). Since this limit is generously higher than the evaluated pervasiveness of HBV disease in the general U.S. populace (0.3% to 0.5%) (Weinbaum, 2008; Kowdley, 2012; Wilkins, 2010), it is a sensible edge for choosing to screen a patient populace or hazard bunch. Extra hazard bunches for HBV disease with a pervasiveness of 2% or more prominent that ought to be screened incorporate HIV-constructive people, infusion medicate clients, family unit contacts or sexual accomplices of people with HBV contamination, and men who have intercourse with men (Weinbaum, 2008; Alter, 2004; Torbenson, 2004)

The CDC suggests screening for HBsAg with tests endorsed by the U.S. Nourishment and Drug Administration, trailed by an authorized, killing corroborative test for at first receptive outcomes for high hazard bunches like sex specialists (Weinbaum, 2008). Immunoassays for recognizing HBsAg have a reported affectability and specificity more noteworthy than 98% (U.S. Preventive Services Task Force, 2010). A positive HBsAg result demonstrates intense or incessant contamination.

Testing for antibodies to HBsAg (hostile to HBs) and hepatitis B center antigen (against HBc) is additionally done as a feature of a screening board to recognize disease and resistance. Intense HBV disease (gained inside 6 months after contamination) is described by the presence of HBsAg and took after by the presence of IgM hostile to HBc. The vanishing of HBsAg and the nearness of hostile to HBs and against HBc show the determination of HBV disease and regular invulnerability. Hostile to HBc, which endure forever, are available simply after HBV contamination and don't create in people whose invulnerability to HBV is because of inoculation.

People who have gotten HBV inoculation have just hostile to HBs. Conclusion of interminable HBV disease is portrayed by diligence of HBsAg for no less than 6 months.

Levels of HBV DNA can vacillate and are not a dependable marker of interminable contamination (Weinbaum, 2008; Lok, 2009)

Vaccination

The present system to dispose of HBV transmission incorporates widespread inoculation of all babies during childbirth and immunization of teenagers and high-chance grown-ups like business sex specialists, for example, (Mast, 2005). Three dosages of HBV immunization result in a defensive counter acting agent reaction of more noteworthy than 90% in grown-ups and more prominent than 95% in young people (Chou, 2004). The CDC prescribes that powerless people who are screened for HBV disease may, if demonstrated, get the principal measurements of the HBV immunization at a similar therapeutic visit (Mast, 2006)

The USA Food and Drug Administration (FDA) authorized the initial 25 hepatitis B infection (HBV) antibody in 1982 for newborn child vaccination programs around the world (Kao et al., 2009). From that point forward, sheltered and compelling HBV antibodies have been accessible as the best method for counteracting HBV sickness and its results around the world (Herck et al., 2008). In spite of the presence of a compelling inoculation program, up to 400 million individuals worldwide are incessantly tainted with HBV right now (Fe'rir et al., 2008; Talas, 2009).

In Brazil, the hepatitis B immunization is accessible in general wellbeing system since 2013 for individuals up to 49 years old and need populaces, paying little respect to age, including sex specialists (Ministério da Saúde, 2010). Regardless of the accessibility of the immunization against hepatitis B, inoculation scope does not occur all around in the populace and this adds to more individuals presented to the infection. In the Brazilian setting, vaccination is free and studies have demonstrated decreased inoculation among sex specialists. In the Midwest, 89.6% of sex specialists had low immunization scope and poor adherence to

hepatitis B antibody (Carneiro, 2014). While in Holland, an inoculation program actualized in 2002 to particular populaces decreased the occurrence of hepatitis B from 1.8 to 1.2 (Hahné, 2013).

Still in Brazil, a review with 721 female sex specialists found that 27.6% of them had not been inoculated against hepatitis B; 60.1% were qualified for immunization, and, still, just 37.5% had gotten each of the three measurements of the antibody (Carneiro, 2014). An overview led in six nations indicated contrasts in immunization practices and found no antibody record against hepatitis B and additionally in under a large portion of the populace. The lion's share of ladies, spoke to by 105 (68.6%) ladies, never made earlier examination for hepatitis B and 48 (31.4%) said they had made. In this review, just 7.1% ladies reported having gotten three measurements of immunization, 52.2%, the main dosage, and 5.8%, the second measurements. Amid the exploration, inoculation was offered and, 35.9% acknowledged the welcome and were immunized.

2.2 The individual attributes influencing the Uptake of Hepatitis B services among female sex workers

Health insurance

Health insurance cover is another variable to consider when looking at receipt of hepatitis B immunization. National reviews have shown that having medical coverage is fundamentally connected with hepatitis B immunization (Chen and Cantrell, 2006; Jain et al., 2004; Ladak et al., 2012; Lu et al., 2011). As indicated by the Institute of Medicine Report on America's Uninsured Crisis: Consequences for Health and Health Care, 45.7 million people in the U.S. were without health care coverage in 2007 (Institute of Medicine, 2009). Additionally, half of all grown-ups matured 18-64 years need vaccination scope (Institute of Medicine, 2003). Thus, uninsured people endure more awful wellbeing results and survival rates than those

with protection (Institute of Medicine, 2004, 2009). Likewise, the writing proposes that therapeutic suppliers are not ready to advance and prescribe the antibody to their patients when they are not secured for hepatitis B (Institute of Medicine, 2009, 2004).

Therapeutic suppliers typically buy the antibody in advance and are repaid after organization to the patient (Hinman et al., 2004). In any case, buying the hepatitis B antibody is not without its issues. For example, medical coverage for hepatitis B for those under 65 years old is for the most part given by businesses (63%), general wellbeing programs (13%), or acquired specifically of pocket (2%) by people (Holahan and Cook, 2008). Nonetheless, many secretly safeguarded grown-ups must meet deductibles constrains before the antibody will be secured (Institute of Medicine, 2010). Additionally, those secured under open projects have bring down hepatitis B immunization rates since open suppliers can't bear the cost of the buy of neither the antibody nor its organization (Centers for Disease Control and Prevention, 2010; Institute of Medicine, 2010). Open projects for immunization buy are accessible, however they are constrained.

Place of routine medicinal services

A few reviews propose that getting to the medicinal services framework by means of a facility, HMO or some other routine place of human services is an essential authoritative consider assuming a part hepatitis B immunization among high-chance grown-ups. For instance, high-chance grown-ups who got deterrent wellbeing administrations (e.g., flu immunization, malignancy screening, yearly physical exam) or HIV testing at a center will probably get hepatitis B inoculation (Jain et al., 2004; Ladak et al., 2012; Lu et al., 2011; Lum et al., 2008; MacKeller et al., 2001; Siconolfi et al., 2009; Weinbaum et al., 2008a).

Jain and partners (2004) evaluated immunization scope among high-hazard grown-ups matured 18-49 years. Men will probably be inoculated in the event that they had as of late gotten a HIV test; though, ladies (64%) will probably be immunized against hepatitis B on

the off chance that they had as of late gotten other preventive wellbeing administrations, for example, a disease screening or a physical exam. In this review, hepatitis B immunization take-up for men and ladies was 64% and 74%, individually. Lum et al. (2008) found that hepatitis B inoculation among youthful infusion medicate clients was connected with earlier HIV testing and administrations got at syringe trade programs. Another review by Lu and partners (2011) found that hepatitis B immunization was connected with HIV testing, getting hepatitis An antibody, and accepting the flu immunization. These information recommend that getting to human services through HIV and STD guiding locales or other safeguard wellbeing administrations could help with decreasing HBV transmission among high-chance gatherings if inventive projects were executed.

Interestingly, Ladak and partners (2011) found that high-chance grown-ups who had been tried for HIV in restorative settings were less inclined to be immunized against hepatitis B in contrast with the individuals who had not been tried for HIV. These information bolster the idea that getting to the human services framework may upset a man's longing to be immunized against HBV disease relying upon the get to point.

Use of health care services

A late visit to one's medicinal services supplier and additionally a doctor's proposal may assume a part in hepatitis B inoculation. Lu and partners (2011) demonstrated that hepatitis B immunization was connected with seeing one's therapeutic supplier more than two circumstances in the 12-month time frame. Samoff and partners (2004) reported that a medicinal services supplier's proposal for hepatitis B immunization were connected with inoculation take-up among MSM. Correspondingly, Rhodes and partners (2002) demonstrated that MSM who had a late medicinal services visit will probably be inoculated against hepatitis B. These discoveries recommend that the individuals who have visit

correspondence and contact with their medicinal services supplier will probably be immunized as a result of expanded supplier contact and patient correspondence about unsafe practices.

Specifically, a few reviews reported that MSM who have uncovered their sexual introduction or sexual practices to their human services supplier will probably be inoculated than men who have not unveiled their sexual introduction or sexual practices (Gilbert et al., 2010; MacKellar et al., 2001; Reiter and Brewer, 2011). Conversely, different reviews suggest that doctor information of high-hazard practices, for example, unprotected sex, HIV positive status, being MSM or IDU did not really enhance inoculation rates. In particular, Tedaldi et al. (2004) discovered low hepatitis B inoculation take-up among high-hazard heteros, MSM, and IDUs going to a HIV outpatient center for HIV treatment. That is, just 32% of the patients accepting HIV treatment and care had gotten one measurement of hepatitis B antibody, albeit all were considered at hazard for HBV disease. Additionally, Spradling and partners (2010) discovered low inoculation scope among HIV contaminated patients who were accepting antiviral treatment for their HIV (31.6%).

Age

Nguyen et al., (2010), in a study of 1704 Vietnamese Americans in northern California and Washington DC, found that more youthful age, US habitation >10 yrs, less Vietnamese familiarity, were refered to as the real purposes behind screening for Hepatitis B. Then, Strathdee et al., (2011) evaluated the social and basic components connected with HIV contamination among female sex specialists who infuse medicates in the Mexico US outskirt area. The benchmark examinations of the HIV positive and HIV negative ladies demonstrated that the two gatherings of ladies were comparable as for socio-socioeconomics.

The two gatherings did not contrast in age. There was no distinction in age when they initially exchanged sex, the quantity of years they reported being in sex work. There were

likewise no noteworthy contrasts between HIV positive and HIV negative ladies in responsive needle sharing, sharing infusion or the quantity of male customers. The review highlights the way that there is no impact of age on the exercises of the FSWs including looking for social insurance administrations. The present review will decide the impact of age on the screening for Hepatitis B among FSWs.

Stop et al., (2012), surveyed the financial disparities in consummation of hepatitis B immunization arrangement among Korean ladies. The across the country talk with overview uncovered that the entire HBV scope rate was 39.8%. Being of more established age indicated noteworthy negative impacts on the finish of the HBV antibody arrangement. The review demonstrated that age impacts getting HBV antibody, this is like getting HBV screening test. The present review will particularly survey the impact of age on hepatitis B screening among female sex laborers.

Religion

Van der veen et al., (2009) evaluated Hepatitis B screening in the Turkish-Dutch populace in Rotterdam, the Netherlands. In this subjective appraisal of socio-social determinants, it was found that hepatitis B screening conduct might be impacted by the social view of hepatitis B, the social standard with respect to inoculation, the social standard in regards to screening and the social support in regards to HBV screening. Religious obligation was observed to be a socio social subject identified with hepatitis B screening among others. The other subject incorporated the religious principle in regards to wellbeing and malady. The propelling elements were the religious duty regarding one's wellbeing. The above review has exhibited the impact of religion on Hepatitis B screening in European nations. The present review will figure out whether religion has in any capacity an impact on the conduct of FSW as respects to Hepatitis B screening.

Education level

Ruan et al., (2009) analyzed the associates for syphilis, HIV, hepatitis C among men who engage in sexual relations with men in Beijing, China. The diseases were connected with less training. In an alternate review by Strathdee et al., (2011), training was not connected with the wellbeing related exercises among female sex laborers. Taylor et al., (2005), took a gander at Hepatitis B mindfulness, testing, and information among Vietnamese American men and ladies. It was observed that being taught was connected with HBV testing among Asians. Essentially, Ma et al., (2015) found that training had a positive huge association with HBV screening whereby those with not as much as secondary school instruction were less inclined to be screened. The reviews above took a gander at how instruction influences screening among the gatherings of men engaging in sexual relations with men furthermore men and ladies however not FSW.

As indicated by Adibi et al., (2007), in the examination of demeanors towards premarital screening for hepatitis B infection contamination in Iran, advanced education level was connected with more inspirational states of mind and subsequently all the more screening support for youthful grown-ups. The review examined the impact of instruction on the level of screening for HBV in the overall public in Iran and found a relationship. The present review explored this relationship among female sex specialists in Wakiso region of Uganda.

Marital status

Van Jaarsveld et al., (2006) found that wedded or living together individuals have more constructive aims and higher participation rates at screening than non-wedded individuals. When they balanced for the marriage impact, it was likewise found that enticing accomplices together altogether expanded screening expectations among ladies. The present review will figure out whether conjugal status of FSWs has any impact on their take-up of hepatitis B screening.

Bivol .S. et. al.,(2011) Republic of Moldova ; double the rate in Chisinau contrasted with Balti reported having a spouse or live-in accomplice in the previous 12 months. Among those, exclusive 15% in Chisinau and 17% in Balti reported predictable condom utilize. Triple the rate of FSWs in Chisinau contrasted with Balti reported having easygoing sex accomplices in the previous 12 months. Among those, 85% in Chisinau (middle of 5) and 55% in Balti (middle of 3) had at least two easygoing accomplices in the previous 12months. Just 23% in Chisinau and 35% in Balti reported reliable condom use with easygoing accomplices in the previous 12 months.

As indicated by Ashraf .N., et. al., Bangladesh, 2010, 96/246 (39%) relatives dwelling at same families with HBsAg positive members were additionally HBV-seropositive [74 (30.1%) for against HBc and 22 (8.9%) for both HBsAg and hostile to HBc], which was altogether higher among relatives (39%) than that of study members (29%). In bivariate examination, HBV-seropositivity was fundamentally connected with wedded status, history of jaundice, surgical operations, needle-stick wounds, going by unregistered human services suppliers, accepting treatment for sexually transmitted ailments (STD), creature chomps; ear-nose-body puncturing in females; circumcision, and going by group hair stylist for shaving in guys. In strategic relapse examination, wedded status (OR 1.32; $p = 0.04$), surgical operations, creature nibbles, going to unregistered human services suppliers (OR 1.40; $p = 0.01$); and ear-nose-body puncturing in females (OR 4.97; $p < 0.001$) were fundamentally connected with HBV-seropositivity. Be that as it may, the two reviews were from various nations furthermore among different gatherings of individuals and FSWs.

Income

Taylor et al., (2005) explored the hepatitis B mindfulness, testing, and information among Vietnamese American men and ladies. It was resolved that family unit pay was connected with HBV testing among Asians. In another review by Ma et al., (2015) to survey hepatitis B

screening among Chinese Americans, it was found that family wage was not connected with hepatitis B screening. As per Nguyen et al., (2010), in northern California and Washington DC, bring down salary was connected with less testing. Unmistakably, the above reviews don't demonstrate a relationship between wage level and screening, the present review will investigate this relationship promote among the FSW.

In any case, Njuki et al., (2014), utilizing verbal and social post-mortems to investigate wellbeing looking for conduct among HIV positive ladies in Kenya, found that poor ladies were more averse to get to formal wellbeing administrations. They additionally noticed that financial status, transportation costs added to the postponements or imperatives in looking for care v, for example, screening. This review indicates how wage impacts looking for human services, however it doesn't plainly determine screening administrations. The present review will find out the financial status of FSW furthermore evaluate the impact of their financial status on looking for human services benefits especially Hepatitis B screening.

2.3 Psychosocial factors influencing the Uptake of Hepatitis B services

Perceptions

Bigham, M, et al (2006) utilized a cross-sectional review of the Hepatitis B inoculation conduct among the babies in British Columbia after the usage the all inclusive baby vaccination program, which depended on the Health Belief Model scales. 487 of the newborn children's folks or watchmen were incorporated with the phone study. Hep B vaccination scope of no less than 1 or 3 shots of immunization was 89% and 78%, individually. Guardians who had their youngsters inoculated had a fundamentally higher impression of HBV contamination (Mean score 3.97 versus 3.71, $p<0.05$), had more signals to activity (3.26 versus 2.40, $p<0.05$), bring down saw hindrances (2.42 versus 2.66, $p<0.05$) and saw more noteworthy advantages (3.69 versus 3.21,$p<0.05$). There was a noteworthy relationship

between the suggestion with the medicinal services proficient, including attendant and specialist, and Hep B inoculation conduct (Bigham, M, et al., 2006).

Guided by the Health Belief Model, Ma, G. X. et al (2005) investigated hazard observations and hindrances with the HBV screening and immunization among the Vietnamese migrants. 359 grown-ups with low financial status were incorporated into the review. The review demonstrated that the members who got screening had a high score in saw seriousness of the HBV disease. Moreover, those screened depicted altogether less saw obstructions. Inoculation conduct was like screening conduct. In any case, the members who did not take the immunization reported absence of data about the time and address of inoculation. Those with relatives who have the historical backdrop of HBV or for whom the doctor suggested inoculation were emphatically connected with immunization conduct. A calculated relapse investigation found that apparent hindrances were adversely identified with the screening and immunization conduct. The Health Belief Model was a solid match with screening and inoculation conduct (Ma, 2007).

Social support:

Van der Veen et al., (2009) evaluated Hepatitis B screening in the Turkish-Dutch populace in Rotterdam, the Netherlands. In this subjective evaluation of socio-social determinants, it was found that the social support with respect to HBV screening impacts the screening or potentially inoculation conduct. Social support was likewise a socio-social subject identified with hepatitis B screening. Propelling elements included social support to get tried for Hepatitis B. It has been unmistakably shown that having social bolster increments getting tried for Hepatitis B. This review will figure out whether it is a similar case for the FSW; that is whether they require social support to get tried.

Hu et al., (2011) explored the obstructions to screening for hepatitis B infection contamination in Asian Americans. It was demonstrated that social elements influence HBV

screening, including the regard for power, older folks and guys in the basic leadership prepare. A solid faith in regard can prompt to people to conceal their HBV disease from relatives along these lines not getting support. In another review by Njuki et al., (2014), utilizing verbal and social post-mortem examinations to investigate wellbeing looking for conduct among HIV positive ladies in Kenya, absence of family bolster added to delays in looking for care.

Stigmatization

Cohan et al., (2006) in a review in San Fransisco USA and Lazarus et al, (2012) in Canada built up that sex laborers frequently conceal their contribution in sex work and medication use because of dread of being judged and treated inadequately. When they reveal their occupation, they regularly encounter vilifying conduct from staff, dissatisfaction, disgracing, different patients gazing, and addressing about their work in a sexualizing and corrupting way.

As indicated by Day and Ward (1997); a gathering of sex laborers in Amsterdam was set up to talk about more secure sex and pass out condoms to other sex specialists in the seedy area of town. Activities were campaigned for decriminalization in order to diminish the disgrace and separation upon people who offer or purchase sexual administrations and to set up fundamental rights at work including word related wellbeing and security.

Supposition/ opinion towards HBV administrations

Baars et al., (2009) in a review to decide the immunization take-up and familiarity with a free hepatitis B inoculation program among female sex laborers found that of the 259 business sex specialists that were met at their work in Netherlands, 79% reported attention to the chance to get hepatitis B inoculation, and 63% answered to be inoculated against hepatitis B. The review surveyed the level of looking for immunization by the business sex specialists,

however it is likely that sex laborers that look for inoculation are likewise getting screened, the review did not evaluate the level of screening for hepatitis B among female sex laborers.

Nguyen et al., (2010), in a study of 1704 Vietnamese Americans in northern California and Washington DC, just 60% had HBV screening and 26% had HBV immunization. Wei et al., (2013) researched the ebb and flow circumstances of (AIDS), syphilis and hepatitis B screening among ladies amid the primary trimester of pregnancy from remote precipitous regions and investigated the impacting components. 83 ladies did not get AIDS, syphilis and hepatitis B screening. The motivation behind why the 42% of the pregnant ladies did not get screening was on account of they didn't comprehend AIDS, syphilis, hepatitis B screening. From the above review, 58% of the ladies got hepatitis B screening.

Ezemu (2007) examined the level of mindfulness and take-up of Hepatitis B screening in Owerri, South-Eastern Nigeria. He found that however the level of familiarity with Hep B screening was high at 52.8%, the level of genuine screening was low at just 7.1%. The most well-known explanations behind not taking the test among this gathering of individuals was the absence of mindfulness, no requirement for it, and the dread of terrible outcomes. This review took a gander at Hep B screening and its level among ladies.

2.4 The health system factors influencing the Uptake of Hepatitis B services among female sex workers

Access to services

Van der veen et al., (2009) surveyed Hepatitis B screening in the Turkish-Dutch populace in Rotterdam, the Netherlands. Seen low viability of the Dutch human services administrations was seen as a hindrance to hepatitis B screening. Thus, Njuki et al., (2014), utilizing verbal and social post-mortem examinations to investigate wellbeing looking for conduct among HIV positive ladies in Kenya, found that the separation to office and transportation costs added to postponements/requirements in looking for care. As indicated by Ghys et al (2001)

in an imminent associate review done in Côte d'Ivoire, month to month screening of female sex specialists by method for meeting, vaginal examination (bimanual, outside, and speculum), and microscopy fundamentally lessened HIV, chlamydia, and gonorrhea contaminations and expanded steady condom utilize. Worldwide Network of Sex Work Projects (NSWP), 2011 and Behets et al (2003); deliberate screening for sexually transmitted contamination got sex specialist bolster in a worldwide conference and a Madagascar examine. WHO, Switzerland, 2013; suggests that sex laborers be offered intermittent screening for asymptomatic sexually transmitted contaminations.

Availability of services

In a review by Ma et al., (2015) to survey hepatitis B screening among Chinese Americans, it was found that accessibility of an essential human services supplier, and incessant doctor visits empowering elements demonstrated a noteworthy association with HBV screening. In a comparable review by Njuki et al., (2014), utilizing verbal and social examinations to investigate wellbeing looking for conduct among HIV positive ladies in Kenya found that wellbeing framework obstructions added to delays in looking for care administrations, for example, screening administrations.

Ali et al., (2009) in Pakistan represented that Pakistan conveys one of the world's most noteworthy weights of incessant hepatitis and mortality because of liver disappointment and hepatocellular carcinomas. A weighted normal of hepatitis B antigen commonness in pediatric populaces was 2.4% (territory 1.7–5.5%) and for hepatitis C counter acting agent was 2.1% (territory 0.4–5.4%). A weighted normal of hepatitis B antigen commonness among sound grown-ups (blood givers and non-contributors) was 2.4% (territory 1.4–11.0%) and for hepatitis C counter acting agent was 3.0% (territory 0.3–31.9%). Rates in the high-hazard subgroups were far higher. The high predominance rates of HBV and HCV in multi-

transfused populaces are because of blood transfusions, however constrained information are accessible about the acts of blood donation centers in Pakistan.

Luby et al., (1995) in Karachi examined 24 haphazardly chose blood donation centers. He found that while 95% had reagents and hardware to test for HBV, no one but 55% could screen for HIV and 23% for HCV. half of blood donation centers consistently used paid blood givers and just 25% effectively enlisted intentional blood contributors. Later information about the practices are not accessible. In 2001, Ahmed reported a higher commonness of HBV in expert blood benefactors when contrasted with intentional blood contributors (9% versus 0.8%, $p < 0.001$). Thompson et. al., (2009) in USA distinguished 33 flare-ups of hepatitis B or C infection that were epidemiologically connected to slips in contamination control hones in nonhospital social insurance offices. Eighteen episodes bringing about 173 people with occurrence HBV contamination and 16 flare-ups bringing about 275 people with episode HCV disease were recognized. As indicated by Phrasisombath .K. et. al., 2012; Vuylsteke B. et. al., Cote d'Ivoire, 2001 and Wong WCW et. al., Hong Kong China, 2006; it was however found that when no options are accessible, sex laborers may self-cure; counsel customary healers, sedate store administrators, drug specialists, road merchants, or companions; travel home for treatment; defer treatment; or not look for care by any means.

Cost of services

Bhatt, (2012) noticed that cost gives off an impression of being a standout amongst the most huge considers deciding wellbeing looking for conduct including screening. Lessening the cost prompts to more prominent human services use and safeguard mind looking for conduct. The evacuation of client expenses in many circumstances expands human services usage rates. As indicated by Berry (2008), the bigger obstacle to wellbeing is that most wellbeing administrations are not accommodated free, requiring ruined patients to pay huge measures of

cash. The present review will decide the impact of cost of administrations on the take-up of Hepatitis B screening. Be that as it may, the two reviews were not centered around the Hepatitis B infection in this way the present review will inspect particularly how costs influence take-up of Hepatitis B benefits by FSWs in Entebbe Municipality, Wakiso District.

Waiting time

As per Street Health, 2014; Persist Health Project, New York, 2014; Kurtz SP et. al., 2005; Downe S., et. al., 2009 and Phrasisombath K. et. al., 2012; noticed that sex specialists frequently confront basic hindrances to getting to medicinal services, for example, long holds up, prohibitive hours, unwelcoming spaces, dread of capture, legitimate status prerequisites, badly designed area, absence of transportation, failure to pay, absence of privacy, and no entrance to a social laborer.

Attitude / Demeanor of Health specialists

As indicated by Rekart (2015) numerous wellbeing specialists have constrained preparing on sex work and don't know how to manage sex related issues when all is said in done. As indicated by Johnson, 1992; medicinal services laborers ought to acclimate themselves with "general safety measures", which is characterized by Center for Disease Control, as an arrangement of insurances intended to counteract transmission of HIV, HBV, and other blood-borne pathogens while giving emergency treatment or social insurance. Under all inclusive insurances, blood and certain body liquids of all patients are considered conceivably irresistible for HIV, HBV and other blood borne pathogens. HBV is a need occupationally gained contamination that is connected with genuine open and individual wellbeing results, and is thought to be the most vital reason for word related obtained viral hepatitis among specialists and medical attendants who are especially uncovered through contact with blood and emissions over the span of releasing their obligation (Kermode, 2005; Goniewicz et al,

2012). As indicated by Dannetum et al (2006); the danger of getting HBV in these frameworks of wellbeing specialists is four circumstances more noteworthy than that of the overall public.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter discusses the methodology that was used to collect and analyze data. This includes the research design, area of study, sample size determination, sampling technique, data collection methods, data processing analysis, and data presentation.

3.2 Study design

This research essentially took on a descriptive cross sectional survey design, seeking "to describe the level of uptake of hepatitis B services among female sex workers in Entebbe Municipality and the factors associated with it". This design also corresponds to what Bryman describes as Cross-sectional research design that aims at getting data from multiple cases at a given point in time so as to analyze relationships across a number of variables of interest (Bryman, 2004).

The survey was chosen because it employs the use of questionnaire or interview procedure to collect data (Johnson and Christensen, 2004). This research design was chosen because of the advantages it has over the other designs which include relatively lower resource intensity and the no need for follow up of study subjects given that the study population was a sensitive one (female sex workers). Two general approaches were used due to the nature of the study. Data collected were used for purpose of statistical description, interpretation and to determine the relationship between variables that were the focus of the survey.

3.3 Sources of Data

The sources of data were; Primary data, the key respondents was the females or women of reproductive age residing in Entebbe Municipality, Wakiso District. The researcher will use

Interviewer Administered Questionnaires to collect the required data: Interviewer Administered Questionnaires was used for the chosen individuals within the study area, to assess the of Uptake of Hepatitis B services among Female sex workers in Entebbe Municipality, Wakiso District.

3.4 Study Population

Population refers to an aggregate of people or things that a researcher has in mind from which one can obtain information and draw conclusions (Franken and Wallen, 2000). A population targeted for a specific study shares a number of common features. In this study the target population was female sex workers aged 18 years old and above in Entebbe Municipality Wakiso District, to provide a deeper insight on the uptake of Hep B services among Female sex workers.

3.4.1 Eligibility criteria

Inclusion

The study included Female sex workers above 18 years, Female sex workers who were operating in the area of Entebbe municipality and Female sex workers who consented to participate in the study.

Exclusion

The study excluded Female sex workers who reported operating in Entebbe municipality for the first time and Female sex workers who could not set aside atleast 20 minutes for interview were excluded

3.5 Sample Size Calculation

The sample size was determined a fomular by Kish Leslie for estimate sample sizes in cross sectional studies (1965) as shown below

$$n = \frac{Z^2 * p * q}{d^2}$$

Where, n = the desired sample size (for study population more than100, 000).

Z = the standard normal deviation at 1.96 for a confidence limit of 95%,

p = 0.1; taken as proportion of Hepatitis B prevalence among FSWs, 10% in Uganda ((MoH, 2015).

d = the permissible error at +/-5%; 0.05, and

q = the proportion of population without Hepatitis B at q = 1- p = 1- 0.1 = 0.9

$$n = \frac{(1.96^2) \times 0.1 \times 0.9}{(0.05^2)}$$

n = 138 respondents.

=138 + 10% non-response rate

=138+13.8 =151 respondents

3.6 Sampling Procedures

Sampling techniques are methods used in selecting a sample. According to Krishnaswami (2004), sampling techniques are classified into two types; Probability and non-probability sampling. In this study, only non-probability (purposive) sampling methods have been used. Non probability, purposive sampling technique were used because it was convenient for the highly mobile individuals. Mapping "hot spots" was done using purposive sampling technique in order to select the participants to take part in the study, considering the hot spots for FSWs from Entebbe Municipality aiming to select those that are most likely to provide the required number of participants (Female sex workers).

Selecting participants: Respondents were recruited using the non-probability sampling method because it is appropriate for hard to reach populations including FSWs. Initial respondents were selected from bars, guest houses and streets with the subsequent

participants recruited into the study through the initial respondents until 151 respondents were recruited.

3.7 Study Variables

The study variables include the dependent and independent variables. The outcome variable is Uptake of Hepatitis B services among FSWs. The independent variables are basically 3 and they include; the individual attributes psychosocial factors and health system factors.

3.8.1 Dependent variable

The dependent variable was Uptake of Hepatitis B services

3.8.2 Independent variables

Individual attributes: Age, Religion, Insurance, Use of VCT services, Uptake of cervical cancer screening services, Education level, Marital status, Income, health seeking behavior

Psychosocial factors: Perceived severity of disease, Perceived benefits of Hepatitis service, Social support, Stigmatization, Perceived Risk and Opinion towards Hep B services

Health System Factors: Availability of the HBV services, access to the HBV services, cost of HBV services, waiting time and attitude of Health Workers

3.9 Data collection techniques

3.9.1 Methods

The researcher chose to use, structured interviews to collect the required data from the female sex workers. This method was chosen on the premise that the intended study population (sex workers) was to be found on "duty" and so a method that could collect data in a short time without tasking so much the memory of the respondent was more appropriate. The structured interview methods involved asking the respondents leading questions which also had a set of answers from which the FSWs could pick, it was the most appropriate method for use in this case. Secondly, the other reason for this choice is that I anticipated that the literacy levels of

the potential respondents would vary. Not all the potential respondents were expected to posses the skill of reading, comprehending and writing. Because of this, it would not be easy to look for such respondents who posses those skills and therefore, a face-to-face structured interview was preferred also for "standardization of both the asking of questions and the recording of answers" (Bryman, 2004).

3.9.2 Data collection tools

Structured questionnaires

The structured was used to collect data from respondents. A questionnaire is a group or sequence of questions designed to elicit information from an informant or respondent when asked by an interviewer or completed unaided by the respondent. Structured questionnaires with close ended questions were used to collect quantitative data. Structured questionnaire were used because they provide more accuracy since the respondent is limited to the given responses, thus recall bias is minimized.

3.10 Data analysis plan

The data collection tools were checked to confirm that they had been adequately filled before being coded. Data was then analyzed using Statistical Package for Social Sciences (SPSS) version 20.0 computer program. Both descriptive and inferential statistics were computed. At univariate level of analysis, data was presented using tables, graphs and descriptions. Numeric variables were presented in tables in form of frequencies and percentages, as well as in descriptive form through frequencies, percentages, and means. Inferential statistics was done using chi-square test to test for association of variables. Statistical inferences were drawn to ascertain relationships between various variables tested. A P value < 0.05 was considered statistically significant.

Multivariate analysis

At multivariate analysis, multinomial logistic regression were used on only independent variables that were statistically significant at bivariate analysis to obtain how collectively those variables contribute to adherence to exposed infant feeding guidelines. The associated p-values were observed to see whether they were statistically significant i.e. less than 0.05. For those that were statistically significant they were interpreted based on the odds ratio.

3.11 Measurement of the dependent variable

The dependent variable (uptake of hepatitis B services) was measured basing on two indicators;

- Ever being screened for hepatitis B and ;-
- Being vaccinated for Hepatitis B with at least three doses

Therefore the sample population which had been screened and the sample population which had been vaccinated with at least three doses was computed to obtain the mean number of respondents who up taken the services.

3.12 Plan for Dissemination

The results of the study will be compiled into a report / final dissertation that will contain the results, and recommendations. A copy of the report will be submitted to the institute of health policy and management at International Health Sciences University (IHSU) for academic reasons and approval. Copies of the approved report will be disseminated to LCs among others. Also, if the results are approved by the research committee, conferences, publications and seminars will be used as arenas for disseminating the results to other people / stakeholders so that other interested people can learn from this study.

3.13 Ethical Issues

Approval: This study was conducted with due approval by the university research ethics committee at IHSU, from which the research obtained an introductory letter to go with in the field.

Permission: an official letter that explains the objectives, rationale and expected outcomes of the study were written to local authorities' office from the University requesting cooperation. The principal investigator communicated to the local authorities' office and obtained written consent from the office as well as from households on which the study was conducted.

Confidentiality; The respondents were assured that the information they pass on was to be kept as confidential information, and that it would be used in such a way that it could not be traced back to a particular respondent.

The respondents were also be assured of maximum respect during the entire process of data collection

Respect for Respondents; In addition, the right to decide whether or not to participate in the study was explained. Similarly, the Researcher informed the respondents that they were free to choose not to answer particular questions that they felt they should not answer. Lastly, a consent form was availed to the respondents for signing after an elaborative explanation of the subject matter in the research study.

Other ethical issues that were considered in this study include the fact that the participation in the study was completely voluntary. The privacy of the participants was duly respected as they were not compelled to respond to questions which they were not comfortable with. The identities of the participants were made anonymous and collected data cannot be traced to any of them.

CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter is presented in three main sub-sections; the first sub-section presents data findings in descriptive terms; the second sub-section shows results of Bivariate analysis, while the third sub-section presents findings on the effect of a combination of various selected variables on the dependent variable obtained using Binary logistic regression analysis. The results are presented in chronology with the objectives of this study.

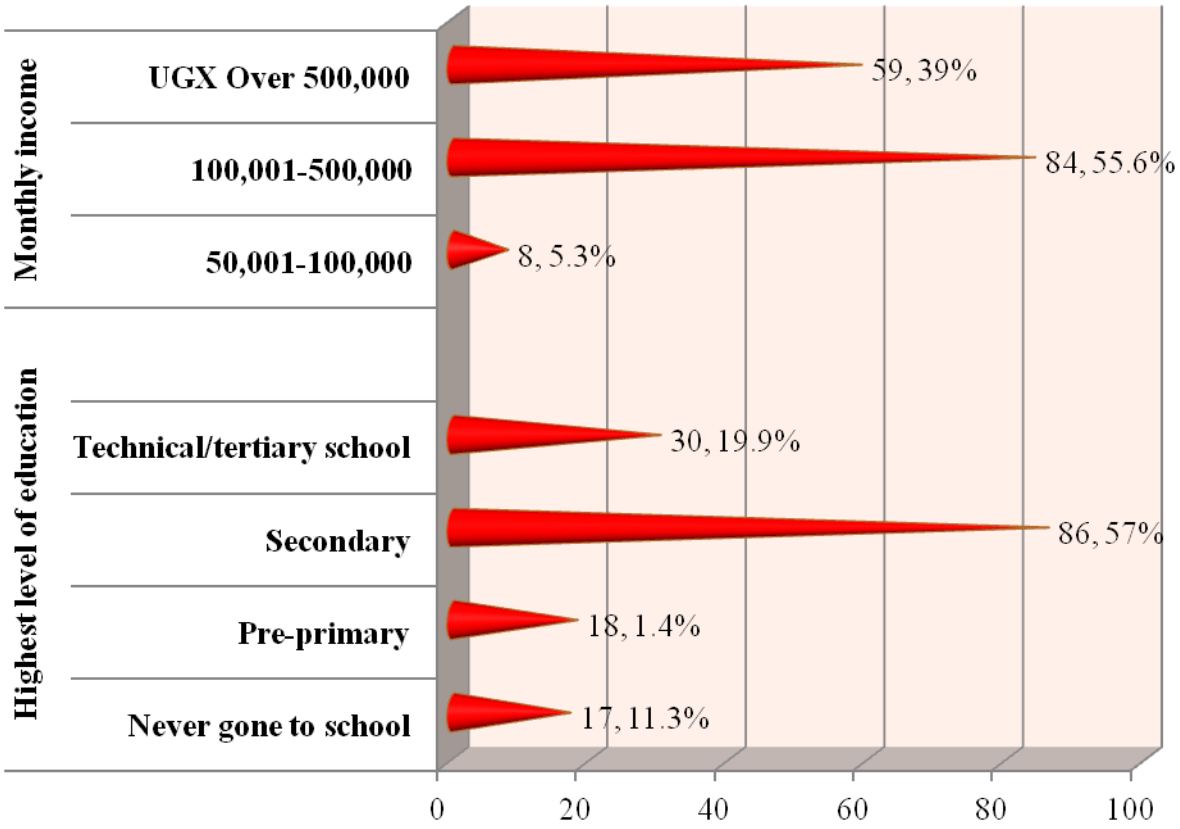
4.1 Respondent bio data

Table 1: Bio data (socio demographics) of the FSWs who were sampled

Variable	Frequency	Percent
Age of respondent		
18-24 years	74	49.0
25-34 years	40	26.5
35-44 years	25	16.6
45 years and above	12	7.9
Total	**151**	**100.0**
What is your marital status		
Single	93	61.6
Married/cohabiting	27	17.9
Divorced/separated	20	13.2
Widowed	11	7.3
Total	**151**	**100.0**
Religion of respondent		
Roman catholic	54	35.8
Protestant/Anglican	48	31.8
Muslim	27	17.9
Pentecostal	18	11.9
No religion	4	2.6
Total	**151**	**100.0**

From a socio demographic perspective, the results in the table above show that almost half of the female sex workers had ages in the range of 18 – 24 years 74(49%) and the mean age was 21.3 years. Majority of the female sex workers sampled were single 93(61.6%), and as for the religious denominations, majority of the FSWs were Roman Catholics 54(35.8%).

Figure 2: Monthly income and highest education level



Furthermore, the monthly incomes of majority of the female sex workers ranged between 100,000 – 500,000/= a month 84(55.6%), and the highest education level achieved was secondary level 86(57%).

Table 1.1: Socio demographic factors associated with hepatitis B service uptake

Individual attributes	UPTAKE OF HEPATITIS B SERVICES				
	Uptake n = 43	**No uptake n = 108**	**X^2**	**df**	**p-value**
Age of respondent					
18-24 years	32(43.2%)	42(56.8%)			
25-34 years	4(10.0%)	36(90.0%)	16.609	3	0.001
35-44 years	4(16.0%)	21(84.0%)			
45 years and above	3(25.0%)	9(75.0%)			
Marital status					
Single	36(38.7%)	57(61.3%)			
Married/cohabiting	3(11.1%)	24(88.9%)			
Divorced/separated	2(10.0%)	18(90.0%)	12.704	3	0.005
Widowed	2(18.2%)	9(81.8%)			
Religion					
Roman catholic	29(53.7%)	25(46.3%)			
Protestant/anglican	8(16.7%)	40(83.3%)			
Muslim	2(7.4%)	25(92.6%)	27.301		0.001
Pentecostal	3(16.7%)	15(83.3%)		4	
No religion	1(25.0%)	3(75.0%)			
Education level					
Never gone to school	11(64.7%)	6(35.3%)			
Pre-primary	10(55.6%)	8(44.4%)			
Secondary	16(18.6%)	70(81.4%)	22.609	3	0.000
Technical/tertiary school	6(20.0%)	24(80.0%)			
Income					
50,001-100,000	1(12.5%)	7(87.5%)			
100,001-500,000	33(39.3%)	51(60.7%)	10.886	2	0.015
Ugx over 500,000	9(15.3%)	50(84.7%)			

The results in the table above show that all socio demographic characteristics statistically significant influences on the uptake of hepatitis B services among FWS in Entebbe municipality; Age ($p = 0.001$), marital status ($p = 0.005$), Religion ($p = 0.001$), Education level ($p = 0.000$) and income ($p = 0.015$).

4.2 Uptake of hepatitis B services

Table 2: Uptake of hepatitis B services among female sex workers in Entebbe Municipality

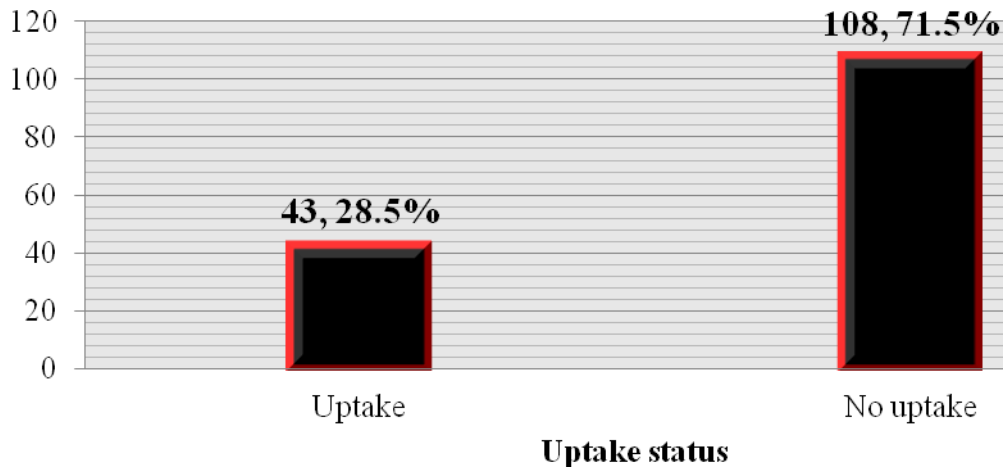
Service Uptake indicator	Frequency	Percent
Ever been screened for Hepatitis B		
Yes	24**	15.9
No	127	84.1
Total	**151**	**100.0**
When last had the Hepatitis B screening test		
Less than 3months ago	6	25.0
3-6 months ago	14	58.3
6-12 months ago	4	16.7
Total	**24**	**100.0**
Result of the screening test		
Positive	15	62.5
Negative	9	37.5
Total	**24**	**100.0**
Where screening was done		
Hospital	13	54.2
Clinic	9	37.5
Outreach	2	8.3
Total	**24**	**100.0**
Been vaccinated with the hepatitis B vaccine		
Yes	62	41.1
No	89	58.9
Total	**151**	**100.0**
Number of Hepatitis B taken		
Three doses	62**	100
Total	**62**	**100.0**

*****Figures used to compute uptake of hepatitis B services***

The results in the table above show the dynamics of hepatitis B services uptake among the female commercial sex worker. The results show that majority of the FSWs had never been screened for Hepatitis B 127(84.1%) and only 15.9 % (24) had been screened. For the women who had been screened, majority had last had a Hepatitis B screening test in a period between 3 – 6 months prior to the study 14(58.3%), with the Result of the screening test being positive among the majority who had been screened 15(62.5%).

For the female commercial workers who had been screened, majority had been screened at hospital 13(54.2%). Hepatitis B vaccination had not been taken up by majority of the female sex workers 89(58.9%), however for those who had been vaccinated, all of them reported receiving the recommended three doses of Hepatitis B vaccine 62 (100%)

Figure 2: Level of uptake of hepatitis B services among female sex workers in Entebbe Municipality Wakiso District



Taking the number of FSW who had been screened for Hep B and the FWS who had been vaccinated, it was found that majority of the female sex workers had not taken up the hepatitis B services 108(71.5%), with the level of Hep B service uptake being 28.5% (43)

4.3 Individual characteristics of the female sex workers

Table 3: Individual characteristics of the female sex workers in Entebbe Municipality

Characteristic	Frequency	Percent
Classification of FSW		
Call girl	43	28.5
Street hawker	60	39.7
Bar based	44	29.1
Escort agency employee	4	2.6
Total	**151**	**100.0**
Nature of job allow you to get time to seek HBV services (vaccination and screening)		
Yes	101	66.9
No	50	33.1
Total	**151**	**100.0**
Have health insurance		
Yes	11	7.3
No	140	92.7
Total	**151**	**100.0**
Ever gone for an HIV test		
Yes	122	80.8
No	29	19.2
Total	**151**	**100.0**
Have you ever gone for cervical cancer screening		
Yes	33	21.9
No	118	78.1
Total	**151**	**100.0**
Where health care is usually sought from		
Clinic	43	28.5
Drug shop	35	23.2
Government Health centers	24	15.9
Government hospitals	30	19.9
Private hospitals	19	12.6
Total	**151**	**100.0**

Individually, it was found that most of the female sex workers were street hawkers 60(39.7%) by classification, and majority mentioned that the Nature of their job allowed them to get time to seek HBV services (vaccination and screening) 101(66.9%). Majority of the respondents did not have health insurance 140(92.7%), however, more than three quarters of

them had ever gone for an HIV test 122(80.8%. More than three quarters of the respondents had never gone for cervical cancer screening 118(78.1%), and most of them reported that they usually sought health care from clinics 43(28.5%).

Table 4: The individual attributes influencing the Uptake of Hepatitis B services among female sex workers in Entebbe Municipality

Individual attributes	UPTAKE OF HEPATITIS B SERVICES				
	Uptake n = 43	**No uptake n = 108**	**X^2**	**df**	**p-value**
Age of respondent					
18-24 years	32(43.2%)	42(56.8%)			
25-34 years	4(10.0%)	36(90.0%)	16.609	3	0.001
35-44 years	4(16.0%)	21(84.0%)			
45 years and above	3(25.0%)	9(75.0%)			
Classification of FSW					
Call girl	26(60.5%)	17(39.5%)			
Street hawker	10(16.7%)	50(83.3%)	27.301	4	0.000
Bar based	6(13.6%)	38(86.4%)			
Escort agency employee	1(25.0%)	3(75.0%)			
What is your marital status					
Single	36(38.7%)	57(61.3%)			
Married/cohabiting	3(11.1%)	24(88.9%)			
Divorced/separated	2(10.0%)	18(90.0%)	12.704	3	0.005
Widowed	2(18.2%)	9(81.8%)			
Nature of job allows you to get time to seek HBV services (vaccination and screening)					
Yes	37(36.6%)	64(63.4%)			
No	6(12.0%)	44(88.0%)	9.964	1	0.002
Have health insurance					
Yes	8(72.7%)	3(27.3%)			
No	35(25.0%)	105(75.0%)	11.406	1	0.001
Ever gone for an HIV test					
Yes	37(30.3%)	85(69.7%)			
No	6(20.7%)	23(79.3%)	1.069	1	0.301
Ever gone for cervical cancer screening					
Yes	15(45.5%)	18(54.5%)			
No	28(23.7%)	90(76.3%)	5.976	1	0.014
Where health care is usually sought from					
Clinic	17(39.5%)	26(60.5%)			
Drug shop	7(20.0%)	28(80.0%)			
Government Health centers	11(45.8%)	13(54.2%)	11.258	4	0.024
Government hospitals	4(13.3%)	26(86.7%)			
Private hospitals	4(21.1%)	15(78.9%)			

The results in the table above show the relationships between the individual characteristics of the respondents and the uptake of hepatitis B services. The individual characteristics which had significant relationships with service uptake include; Age of respondent ($p = 0.001$), Classification of FSW ($p = 0.000$), marital status ($p = 0.005$), whether the nature of job allows FSW time to get time to seek HBV services (vaccination and screening) ($p = 0.002$), Having health insurance ($p = 0.001$), ever being screened for cervical cancer screen ($p = 0.014$) and type of health facility where health care is usually sought from by the respondent ($p = 0.024$). Disaggregation of the data showed that most of the FSW who up took hepatitis B services were aged between 18 – 24 years (43%), call girls (60.5%), and single (38.7%), insured (72.7%), screened for cervical cancer before 15(45.5%) and those who usually sought health care services from govern health centers (45.8%).

Table 5: Regression analysis for the individual attributes influencing the Uptake of Hepatitis B services among female sex workers in Entebbe Municipality

	B	S.E.	Sig.	Exp(B)	95.0% C.I.for EXP(B) Lower	Upper
Age of respondent						
18-24 years	.699	1.304	.592	2.012	.156	25.917
25-34 years	1.099	1.333	.410	3.002	.220	40.949
35-44 years	-.510	1.234	.679	.601	.053	6.742
45 years and above						
Classification of FSW						
Call girl	-1.862	1.652	.260	1.155	.006	3.957
Street hawker	-.214	1.624	.895	.807	.033	19.479
Bar based	1.281	1.621	.429	3.602	.150	86.353
Escort agency employee						
Marital status						
Single	.818	1.173	.486	3.265	.227	22.569
Married/cohabiting	1.273	1.288	.323	3.572	.286	44.623
Divorced/separated	1.389	1.347	.302	2.010	.286	16.147
Widowed						
Nature of job allows you to get time to seek HBV services (vaccination and screening)						
Yes	-1.256	.739	.089	3.285	.067	21.212
No						
Have health insurance						
Yes	-1.605	.763	.035	2.201	.045	14.896
No						
Ever gone for cervical cancer screening						
Yes	-.152	.491	.757	3.859	.328	22.249
No						
Where health care is usually sought from						
Clinic	.501	.946	.596	1.650	.258	10.540
Drug shop	.931	.864	.281	2.537	.467	13.790
Government Health centers	.254	.990	.798	1.289	.185	8.973
Government hospitals	1.267	.931	.174	3.551	.573	22.023
Private hospitals						

When the significant variables in table 4 were fitted in a logistic regression model, the results showed that the female sex workers whose ages fell between 25 – 34 years were three times more likely to uptake hepatitis B services (OR = 3.3, CI = .220 - 40.949) and those between

18 – 24 years were twice more likely to uptake the services (OR = 2), the respondents who were single had higher odds of up taking hepatitis B services (OR = 3.265, CI = 0.227 – 22.569), and were those who had health insurance (OR = 2, CI = 0.045 – 14.896). The female sex workers who had been Screened for cervical cancer before were three times more likely to uptake hepatitis B services (OR = 3.859, CI = 0.328 – 22.249) as well as those who usually sought health care services from govern health centers (OR = 3.551, CI – 0.573 – 22.023).

4.4 The psychosocial factors among female sex workers in Entebbe Municipality

Table 6.1: Psychosocial support received

Item	Supportive	Unsupportive	Total
How supportive partner/husband is in getting Hepatitis B screening	10(37.0%)	17(63.0%)	27(100.0%)
How supportive family/relatives are in getting Hepatitis B screening	60(39.7%)	91(60.3%)	151(100.0%)
How supportive friends are in getting Hepatitis B screening	65(43.0%)	86(57.0%)	151(100.0%)

Majority of the FSWs who were not single stated that their partners / husbands were unsupportive in getting Hepatitis B screening 17(63%). Majority of the FSW stated that their family/relatives were unsupportive in getting Hepatitis B screening 91(60.3%), and so where the friends are in getting Hepatitis B screening 86(57%).

Table 6.2: Psychosocial factors

	Frequency	Percent
Kind of social support received from family and friends if you decide to have a Hepatitis B screening test		
Financial help / money	26	17.2
Information about the screening test	30	19.9
Encouragement	70	46.4
Information about where to go for the test	25	16.6
Total	**151**	**100.0**
Ever been stigmatized		
Yes	83	55.0
No	68	45.0
Total	**151**	**100.0**
View about Hepatitis B screening		
Comfortable	22	14.6
Uncomfortable	9	6.0
Disgusting	13	8.6
Don't know	107	70.9
Total	**151**	**100.0**
Believe it is the best way to prevent Hepatitis B		
Yes	31	20.5
No	120	79.5
Total	**151**	**100.0**
View about Hepatitis B vaccination		
Comfortable	52	34.4
Uncomfortable	15	9.9
Disgusting	4	2.6
Don't know	80	53.0
Total	**151**	**100.0**
Believe getting vaccinated after a negative screening test is the best way to prevent Hepatitis B		
Yes	103	68.2
No	48	31.8
Total	**151**	**100.0**

When asked about the Kind of social support they received from family and friends in case they decide to have a Hepatitis B screening test, most of the FSWs mentioned that they got encouragement 70(46.4%). More than half of the FSWs reported ever being stigmatized 83(55%) and majority did not have any view on hepatitis B vaccination 107(70.9%). Majority of the FSWs did not believe that screening was the best way to prevent Hepatitis B 120(79.5%). Majority of the respondents did not have any View about Hepatitis B vaccination 80(53%), but believed that getting vaccinated after a negative screening test was the best way to prevent Hepatitis B 103(68.2%).

Table 7: The psychosocial factors influencing the Uptake of Hepatitis B services among female sex workers in Entebbe Municipality

	UPTAKE OF HEPATITIS B SERVICES				
	Uptake	**No Uptake**	**X^2**	**df**	**p-value**
How supportive partner/husband is in getting Hepatitis B screening					
Supportive	3(30.0%)	7(70.0%)			
Unsupportive	12(70.6%)	5(29.4%)	4.201	1	0.052
How supportive family/relatives are in getting Hepatitis B screening					
Supportive	25(41.7%)	35(58.3%)			
Unsupportive	18(19.8%	73(80.2%)	8.504	1	0.004
How supportive friends are in getting Hepatitis B screening					
Supportive	27(41.5%)	38(58.5%)			
Unsupportive	16(18.6%)	70(81.4%)	9.560	1	0.002
Kind of social support received from family and friends if decided to have a Hepatitis B screening test					
Financial help / money	6(23.1%)	20(76.9%			
Information about the screening test	7(23.3%)	23(76.7%)			
Encouragement	26(37.1%)	44(62.9%)	5.254	3	0.154
Information about where to go for the test	4(16.0%)	21(84.0%)			
Ever been stigmatized					
Yes	31(37.3%)	52(62.7%)			
No	12(17.6%)	56(82.4%)	7.124	1	0.008
View about Hepatitis B screening					
Comfortable	11(50.0%)	11(50.0%)			
Uncomfortable	3(33.3%)	6(66.7%)			
Disgusting	7(53.8%)	6(46.2%)	12.508	3	0.006
Don't know	22(20.6%)	85(79.4%)			
Believe it is the best way to prevent Hepatitis B					
Yes	16(51.6%)	15(48.4%)			
No	27(22.5%)	93(77.5%)	10.252	1	0.001
View about Hepatitis B vaccination					
Comfortable	25(48.1%)	27(51.9%)			
Uncomfortable	3(20.0%)	12(80.0%)	17.119	3	0.001
disgusting	2(50.0%)	2(50.0%)			
Don't know	13(16.2%)	67(83.8%)			
Believe getting vaccinated after a negative screening test is the best way to prevent Hepatitis B					
Yes	36(35.0%)	67(65.0%)			
No	7(14.6%)	41(85.4%)	6.669	1	0.010

Bivariate analysis for the relationships between psychosocial factors and uptake of hepatitis screening services showed that How supportive family/relatives are in getting Hepatitis B screening ($p = 0.004$), How supportive friends are in getting Hepatitis B screening ($p = 0.002$), = stigmatization ($p = 0.008$), View about Hepatitis B screening ($p = 0.006$), Belief that screening is the best way to prevent Hepatitis B ($p = 0.001$), View about Hepatitis B vaccination ($p = 0.001$), and the belief getting vaccinated after a negative screening test is the best way to prevent Hepatitis B ($p = 0.010$) had significant relationships with the uptake of hepatitis B services uptake.

Table 8: Regression analysis for the psychosocial factors influencing the Uptake of Hepatitis B services among female sex workers in Entebbe Municipality

					95.0% C.I.for EXP(B)	
	B	**S.E.**	**Sig.**	**Exp(B)**	**Lower**	**Upper**
How supportive family/relatives are in getting Hepatitis B screening						
Supportive	-.804	.414	.052	3.448	.199	11.009
Unsupportive						
How supportive friends are in getting Hepatitis B screening						
Supportive	-.990	.390	.011	2.372	.173	5.799
Unsupportive						
Ever been stigmatized						
Yes	-.517	.440	.240	.596	.251	2.413
No						
View about Hepatitis B screening						
Comfortable	-1.524	.579	.009	2.218	.070	9.678
Uncomfortable	-.376	.848	.658	.687	.130	3.618
Disgusting	-1.275	.681	.061	.280	.074	1.062
Don't know						
Believe it is the best way to prevent Hepatitis B						
Yes	-.605	.511	.236	2.546	.201	7.486
No						
View about Hepatitis B vaccination						
Comfortable	-1.102	.501	.028	1.332	.124	4.887
Uncomfortable	-.435	.770	.572	.647	.143	2.925
disgusting	-1.976	1.085	.069	.139	.017	1.162
Don't know						
Believe getting vaccinated after a negative screening test is the best way to prevent Hepatitis B						
Yes	-.872	.558	.119	1.418	.140	5.250
No						

At regression, the results revealed that respondents for whom the family/relatives were supportive in getting Hepatitis B screening were three times likely to uptake hepatitis B

screening services (OR = 3.4, CI = 0.199 - 11.099), and those for whom friends were supportive are in getting Hepatitis B screening were 2 times more likely to uptake the services (OR = 2.3), The respondents who had Ever been stigmatized were less likely to uptake the services (OR = 0.5, CI = 0.251 – 2.413), whereas those who Viewed Hepatitis B screening as comfortable had higher chances of uptake (OR = 2.2, CI = 0.070 – 9.678).

FSWs who believe it is the best way to prevent Hepatitis B (OR = 2.5), those who Viewed Hepatitis B vaccination as comfortable (OR = 1.3), and the sex workers who believed that getting vaccinated after a negative screening test is the best way to prevent Hepatitis B (OR = 1.4) had higher odds of up taking hepatitis B screening services.

4.5 Health system factors

Table 9: Health system factors in Entebbe municipality

Factor	Frequency	Percent
Have access to Hepatitis B services		
Yes	61	40.4
No	90	59.6
Total	**151**	**100.0**
Distance to the nearest health facility		
Less than 1 km	12	7.9
1-5 km	28	18.5
>5 km	14	9.3
I don't know	97	64.2
Total	**151**	**100.0**
Presence of any Hepatitis B services available at the nearest health facility		
Yes	55	36.4
No	96	63.6
Total	**151**	**100.0**
Cost of Hepatitis B screening services at the nearest health centre from your place of residence		
Free of charge	13	23.6
less than UGX 5,000	2	3.6
Between UGX 5,001-10,000	7	12.7
Between UGX 10,001-50,000	15	27.3
UGX >50,000	18	32.7
Total	**55**	**100.0**
The cost of Hepatitis B vaccination services (complete dose) at the nearest health centre from your place of residence		
Free of charge	2	1.3
less than UGX 150,000	2	1.3
Between UGX 150,000-210,000	9	6.0
Between UGX 210,000-270,000	8	5.3
UGX > 270,000	14	9.3
I don't know	116	76.8
Total	**151**	**100.0**
Waiting time before you get the Hepatitis B services		
<30 minutes	5	9.1
>30 minutes	14	25.5
1-2 hours	32	58.2
>3 hours	4	7.3
Total	**55**	**100.0**
Ever been discriminated against in a health facility because you have asked for HBV services		
Yes	9	6.0
No	142	94.0
Total	**151**	**100.0**

Information regarding the health system among the FSWs revealed that majority of them did not Have access to Hepatitis B services 90(59.6%), and were not aware of the Distance to the nearest health facility 97(64.2%). Majority of the health workers were not aware of the Presence of any Hepatitis B services available at the nearest health facility 93(63.6%), but for those who knew that the services were there, they reported that it screening cost more than 50,000/= at the nearest health centre 18(32.7%). Majority of the FWS did not know the cost of Hepatitis B vaccination services (complete dose) 116(76.8%). The waiting time before getting the Hepatitis B services was mentioned to be 1 – 2 hours by majority of the women (58.2%) and that they had never been discriminated against in a health facility because they asked for HBV services 142(94%).

Table 10: The health system factors influencing the Uptake of Hepatitis B services among female sex workers in Entebbe Municipality

	UPTAKE OF HEPATITIS B SERVICES				
	Uptake	**No uptake**	**X^2**	**df**	**p-value**
Have access to Hepatitis B services					
Yes	25(41.0%)	36(59.0%)			
No	18(20.0%)	72(80.0%)	7.860	1	0.005
The distance to the nearest health facility					
Less than 1 km	5(41.7%)	7(58.3%)			
1-5 km	16(57.1%)	12(42.9%)			
>5 km	4(28.6%)	10(71.4%)	17.009	3	0.001
I don't know	18(18.6%)	79(81.4%)			
Any Hepatitis B services available at the nearest health facility close to place of residence					
Yes	24(43.6%)	31(56.4%)			
No	19(19.8%)	77(80.2%)	9.761	1	0.002
Cost of Hepatitis B screening services at the nearest health centre from your place of residence					
Free of charge	6(46.2%)	7(53.8%)			
less than UGX 5,000	1(50.0%	1(50.0%)			
Between UGX 5,001-10,000	4(57.1%)	3(42.9%)	5.121	4	0.275
Between UGX 10,001-50,000	5(33.3%)	10(66.7%)			
UGX >50,000	3(16.7%)	15(83.3%)			
Cost of Hepatitis B vaccination services (complete dose) at the nearest health centre					
Free of charge	1(50.0%)	1(50.0%)			
less than UGX 150,000	2(100.0%	0(0.0%)			
Between UGX 150,000-210,000	5(55.6%)	4(44.4%)	20.447	5	0.001
Between UGX 210,000-270,000	4(50.0%)	4)(50.0%			
UGX > 270,000	8(57.1%)	6(42.9%)			
I don't know	23(19.8%)	93(80.2%)			
Waiting time before you get the Hepatitis B services					
<30 minutes	4(80.0%)	1(20.0%)			
>30 minutes	7(50.0%)	7(50.0%)			
1-2 hours	7(21.9%)	(2578.1%)	8.481	3	0.037
>3 hours	1(25.0%)	3(75.0%)			
Ever been discriminated against in a health facility because you have asked for HBV services					
Yes	6(66.7%)	3(33.3%)			
No	37(26.1%)	105(73.9%)	6.853	1	0.059

The results in the table above show that access to Hepatitis B services (p = 0.005), distance to the nearest health facility (p = 0.001), Any Hepatitis B services available at the nearest health

facility (p = 0.002), Cost of Hepatitis B vaccination services (p = 0.001), and Waiting time for Hepatitis B services (p = 0.037) had significant relationships with the uptake of hepatitis B services.

Table 11: Regression analysis for the health system factors influencing the Uptake of Hepatitis B services among female sex workers in Entebbe Municipality

					95.0% C.I.for EXP(B)	
	B	**S.E.**	**Sig.**	**Exp(B)**	**Lower**	**Upper**
Have access to Hepatitis B services						
Yes	-.474	.455	.297	2.622	.255	21.517
No						
The distance to the nearest health facility						
Less than 1 km	-.476	.820	.562	2.621	.125	13.099
1-5 km	-1.043	.555	.060	3.352	.119	7.046
>5 km	-.292	.692	.673	.747	.192	2.901
I don't know						
Any Hepatitis B services available at the nearest health facility to place of residence						
Yes	-.245	.474	.606	1.783	.309	5.983
No						
Cost of Hepatitis B vaccination services (complete dose) at the nearest health centre						
Free of charge	-.845	1.652	.609	1.430	.017	10.936
less than UGX 150,000	-21.499	2.829	.999	.000	.000	.
Between UGX 150,000-210,000	-.945	.825	.252	.389	.077	1.958
Between UGX 210,000-270,000	-.419	.850	.622	.658	.124	3.481
UGX > 270,000	-.980	.665	.141	.375	.102	1.383
I don't know						
Waiting time before you get the Hepatitis B services						
<30 minutes	-2.485	1.607	.122	2.083	.004	1.945
30 minutes – 1 hour	-1.099	1.272	.388	3.333	.028	11.036
1-2 hours	.174	1.231	.887	1.190	.107	13.300
>3 hours						

The results in the table above show that women who mentioned having access to Hepatitis B services were twice more likely to uptake hepatitis B services (OR = 2.6, CI = 0.255 –

21.517), women who covered distances between 1 – 5km to the nearest health facility were three time more likely to uptake hepatitis B services (OR = 3.352, CI = 0.119 – 7.046). Female sex workers who had any Hepatitis B services available at the nearest health facility to place of residence had higher chances of to uptake of hepatitis B services (OR = 1.783, CI = 0.309 – 5.983). The logistic regression results in the table above also show that the female sex workers who rated the Cost of Hepatitis B vaccination services (complete dose) at the nearest health centre as free were actually more likely to uptake hepatitis B services (OR = 1.430, CI = 0.017 – 10.936), whereas the FSW who reported waiting time for between 30 – 1 hour before getting the Hepatitis B services were three times more likely to uptake hepatitis B services (OR = 3.333, CI = 0.028 – 11.036).

CHAPTER FIVE

DISCUSSION OF RESULTS

5.0 Introduction

This chapter contains the discussion of results (key findings) obtained for each of the study objectives.

5.1 The level of uptake of hepatitis B services among female sex workers in Entebbe Municipality Wakiso District

In this study, hepatitis B services screening was defined as uptake of screening and vaccination services. The results showed that uptake of hepatitis B screening was low at only a paltry 15.9% among the female sex workers in Entebbe Municipality. This is dissimilar to findings by Passos (2007) in Brazil were 22.3% of the FSW had been screened for hepatitis B. For those who had been screened for hepatitis, the prevalence of acute hepatitis B in the sample was 62.5% and therefore differed significantly from the prevalence of the infection in the general population of Uganda (10%) and the central region (5.8%) as per the Ministry of Health statistics (2015). This is because the study only concentrated on a high risk group for hepatitis B (female sex workers) as opposed to the general population (mixed population) that the ministry surveyed.

However, the results of this study are lower than the finding in a survey in Tehran-Iran, in a female population who engaged in illegal social behavior, were 196 females were arrested by police, 79% of whom had a history of prostitution, were positive for HBs Ag and HCV Ab, and 1.5% was HBs Ag-positive (Jahani, 2005). Still variant from the findings in this study, in Nigeria, the overall HBV prevalence among FSWs is 17.1% (Forbi, 2008).

As for vaccination, the results of this study showed that less than half of the female sex workers had been vaccinated for hepatitis. This is dissimilar to a recent study were serological evidence of vaccination was seen in 59.3% among FWS in central Iran

(Nokhodian et al, 2009). This difference in result is because in Iran, a mass education program on hepatitis and its prevention targeting all women and FSWs specifically had been rolled, and this could have increased service up take in that country as opposed to Uganda, were no health education programs on hepatitis have yet been designed for commercial sex workers.

On a positive note however, this study found that all the female sex workers who had been vaccinated had received all the three doses as recommended by CDC (2016). This finding shows that some of the commercial sex workers follow the WHO recommendations for universal vaccination against HBV as the best strategy for reducing the risk of HBV infection.

5.2 The individual attributes influencing the Uptake of Hepatitis B services among female sex workers in Entebbe Municipality

It was found that age of the female sex workers had a significant influence on the uptake of hepatitis B services ($p = 0.001$). This is similar to findings by Nguyen et al., (2010), in a Vietnam study who also found that age was related to hepatitis service uptake among sex workers. Specifically in this study, sex workers of younger age were more likely to uptake hepatitis B services compared to older sex workers. This is because given their young age, it could be that group of commercial sex workers is relatively more inquisitive on information including health information and as such have higher chances of coming across information on hepatitis B. This increases awareness and ultimately chances of using the services.

There was also a significant relationship between the Classification of FSW and the uptake of hepatitis B services among the female sex workers in Entebbe municipality ($p = 0.000$), similar to a study by Carneiro (2014) in Cambodia. Female sex workers who were call girls by classification were more likely to up take hepatitis B services. This is simply because by definition call girls are considered to be “professional” prostitutes who are on call for services

if needed by clients who are usually socio economically sound. By virtue of this the call girls earn more than their regular street counterparts and can therefore afford hepatitis services even in private settings. Secondly, given that they serve high end clients, it can be put to reason that they want to be as health as they can, and so call girls have better health seeking behaviors compared to other classes of sex workers.

The study also determined that there was a significant relationship between marital status and up take of hepatitis B screening services ($p = 0.005$) and that single FSW were more likely to up take hepatitis B services. This is contrary to findings by Van Jaarsveld et al., (2006) who found that married or cohabiting people have more positive intentions and higher attendance rates at screening than non-married people. This could be because being a martially single sex worker implies having unlimited sexual partners compared to a married prostitute who would partly committed to her husband and thus has fewer sexual partners. With the multiple partners for a single sex worker, it is probable that they aware of the higher risk of hepatitis among them hence more service uptake.

The findings of this study also showed the sex workers who stated that the nature of their job allowed them time to get time to seek HBV services (vaccination and screening) were more likely to up take screening services ($p = 0.002$). This is because with a flexible sex work job for example night time work, a female commercial sex worker can find time during the day to seek health services.

Having health insurance was found to be associated with hepatitis B services uptake ($p = 0.001$). Similar to the findings of this study, other studies have illustrated that having health insurance is significantly associated with hepatitis B vaccination (Chen & Cantrell, 2006; Jain et al., 2004; Ladak et al., 2012; Lu et al., 2011). Literature suggests that sometimes medical providers are not able to promote and recommend the vaccine to their patients when they are not covered for hepatitis B. In the case of Uganda, since hepatitis B services come at

a somewhat high cost especially in private facilities, having health insurance can immensely reduce the burden of having to foot health costs like those of screening hence with insurance, one can opt to go for full services without fear of cost and payments, hence high uptake.

There was also a significant relationship observed between ever being screened for cervical cancer screen and the uptake of hepatitis B services ($p = 0.014$). This is because up taking a cervical cancer screening test has many things in common with going for hepatitis B services for instance both involve screening and vaccination. Secondly going for CCS means that one has gotten into contact with a health worker and yet a recent visit to one's health care provider and/or a physician's recommendation may play a role in hepatitis B vaccination. Similarly to this study, Lu and colleagues (2011) showed that hepatitis B vaccination was associated with seeing one's medical provider more than two times in the 12-month period. Samoff and colleagues (2004) also reported that a health care provider's recommendation for hepatitis B vaccine were associated with vaccination uptake among sex workers.

The type of health facility where health care is usually sought from by the respondent was associated with hepatitis B service uptake ($p = 0.024$).This finding is similar to the findings of Ladak et al., (2012); Lu et al., (2011) and Lum et al., (2008) who found that high-risk adults who received preventative health services (e.g., influenza vaccination, cancer screening, annual physical exam) or HIV testing at a clinic were more likely to receive hepatitis B vaccination

In this study, female sex workers who received services from government health centers were more likely to up take hepatitis B services. This is contrary to other several studies which suggest that accessing the health care system via a clinic is an important organizational factor playing a role in hepatitis B vaccination among high-risk adults (Jain et al., 2004; MacKeller et al., 2001; Siconolfi et al., 2009; Weinbaum et al., 2008a). The FSWs who used services from government health centers were more likely to up take hepatitis B services because at

government health centers there are usually routing health education sessions were hepatitis is taught about and because at government centers hepatitis services are at are at a relatively lower cost than in private settings.

5.3 The psychosocial factors influencing the Uptake of Hepatitis B services among female sex workers in Entebbe Municipality

This study found significant relationships between psychosocial support characteristics and the uptake of hepatitis screening services among the FSWs in Entebbe, they are; how supportive family/relatives are in getting Hepatitis B screening ($p = 0.004$), and how supportive friends are in getting Hepatitis B screening ($p = 0.002$). This is because with friends and family support comes encouraging of optimism and self-esteem, buffering the, stresses of being a commercial sex worker, reduction of depression, improving sick role behavior, giving practical assistance and reduction in stigmatization, of which perpetuate behavioral chance and improve health seeking behavior.

In this study, Stigmatization had a negative relationship with the uptake of hepatitis B services ($p = 0.008$). Stigmatization comes with the actual occupation of being a female commercial sex worker since they are looked down on in society. With that therefore, a sex worker would fill un comfortable going to a public place for services especially in her areas of residence where she is known by her occupation of commercial sex work, hence poor health seeking behaviors.

The study also established that the female sex workers View about Hepatitis B screening ($p = 0.006$), Belief that screening is the best way to prevent Hepatitis B ($p = 0.001$), View about Hepatitis B vaccination ($p = 0.001$), and the belief getting vaccinated after a negative screening test is the best way to prevent Hepatitis B ($p = 0.010$) had significant relationships with the uptake of hepatitis B services uptake. These findings underscore the influence of perceptions (perceived benefits and cues to action) on health service uptake. Similar to this

study, screening behaviour was determined by perceived benefits in studies by Zhang (1999) and Bigham (2006) and cues to action in studies by Ma (2007).

The current study found that female sex workers who had positive perceived benefits of screening and vaccination had better uptake of hepatitis B services because with a set of mind that hepatitis B screening and vaccination are important one would definitely take them up in a bid to have better health.

5.4 The health system factors influencing the Uptake of Hepatitis B services among female sex workers in Entebbe Municipality

This study found a significant relationship between access to Hepatitis B services and their uptake among the commercial sex workers ($p = 0.005$), with the FSW who had access up taking the services more. This is consistent with the findings of Pathak et al., (2013) and Attaullah et al., (2011) were the respondents had difficulty in accessing the services. The difficulty in access to the hepatitis screening services among the female sex workers in Entebbe municipality could be related to the non availability of these services since the hospitals of Entebbe grade A and B offer them and are situated in the municipality center its self. With this little access therefore, come perceived barriers among the FWS and ultimately low uptake of the hepatitis screening services. This also explains the finding of this study that there was a significant relationship between having any Hepatitis B services available at the nearest health facility and the uptake of hepatitis services ($p = 0.002$). This is because the perception of non availability of the services in the health centers around the operational areas of the FSWs does not improve health seeking behavior but rather hinders it resulting into low uptake of the services.

The distance to the nearest health facility was also associated with the uptake of hepatitis B services ($p = 0.001$). Female sex workers who reported travelling between 1 and 5km were more likely to use the hepatitis B services. This is because the longer the distance to a health

facility, the more time and money one has to spend to reach the health facility both of which the female sex workers might not have especially the hawkers.

This study noted a significant influence of Cost of Hepatitis B vaccination services on the uptake of the services ($p = 0.001$). Similarly Bhatt, (2012) also noted that cost appears to be one of the most significant factors in determining health seeking behavior including screening. Reducing the cost leads to greater health care utilization and preventative care seeking behavior. The removal of user fees in most times increases health care utilization rates. According to Berry (2008), the larger impediment to health is that most health services are not provided for free, requiring impoverished patients to pay significant amounts of money.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter contains conclusions for each of the study objectives based on the key findings therein. The chapter also contains recommendations still based on the objectives of the study.

6.1 Conclusion

The uptake of hepatitis B services among female sex workers in Entebbe Municipality is generally low especially when it comes to hepatitis B screening services uptake. Only 28% (approximately three out of ten female sex workers are using the hepatitis B services in their entirety.

The study established that the individual characteristics which significantly associated with service uptake are Age of respondent, Classification of FSW, marital status, whether the nature of job allows FSW time to get time to seek HBV services (vaccination and screening), Having health insurance, ever being screened for cervical cancer screen and type of health facility where health care is usually sought from by the respondent.

The study determined that the psychosocial factors which are associated with the uptake of hepatitis screening services among female sex workers in Entebbe municipality are how supportive family/relatives are in getting Hepatitis B screening, How supportive friends are in getting Hepatitis B screening, stigmatization, View about Hepatitis B screening, Belief that screening is the best way to prevent Hepatitis B, View about Hepatitis B vaccination, and the belief getting vaccinated after a negative screening test is the best way to prevent Hepatitis B.

At health facility level, the study established that access to Hepatitis B services, distance to the nearest health facility, having any Hepatitis B services available at the nearest health facility, cost of Hepatitis B vaccination services, and Waiting time for Hepatitis B services

have significant relationships with the uptake of hepatitis B services among female sex workers in Entebbe municipality.

6.2 Recommendations

It is recommended that the ministry of health gives special attention in terms of outreach to marginalized groups such as commercial sex workers so that the Hep B screening services are brought closer to them given that some are stigmatized. Health education on the importance of Hep B screening and vaccination should also be intensified and especially extended to FWS.

The government through the ministry of health should Implement and strengthen the vaccination policy. This may include inclusion of hepatitis B education and other health education during routine maternal health services like family planning, ANC or postnatal care and even in outpatient departments were women are. This will increase awareness about hepatitis and even dispel any negative perceptions and myths about hepatitis B among the women.

Given that female sex workers are a high risk group for contracting hepatitis B, the government could consider devising a Mandatory policy for commercial sex workers to be vaccinated against hepatitis B and to demonstrate protective antibody levels in serum post vaccination

The ministry of health could consider subsidizing on the costs of hepatitis B services as cost of the services is apparently still a challenge for many commercial sex workers. Subsidization will lead to lower costs at both public and private health facilities

The attitude of HCW towards hepatitis B and vaccination is critical in uptake of the hepatitis B vaccination. The institutions should put in place programmes to keep promoting the positive attitudes of the HCW towards the HB

The government and the health institutions should make hepatitis B vaccine available for free or at a cost that most female sex workers can afford

As one of the strategies to increase hepatitis B service uptake, the ministry of health should as well intensify cervical cancer screening services uptake as these have been found to increase the chances of Hep B service uptake

As a future plan meant to increase health care service utilization, the government of Uganda could consider starting up a community based health insurance scheme for all women so that the barrier of health care costs in up taking hepatitis B services is counterbalanced especially among commercial sex workers

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APPENDICES

APPENDIX 1: CONSENT FORM

Introduction: I am, Akiror Agnes, a Master of Public Health student from International Health Sciences University, conducting a study on the "Assessment of Uptake of hepatitis B services by female sex workers in Entebbe Municipality, Wakiso District"

Purpose of the study: Is to understand the Uptake of hepatitis B services by female sex workers in Entebbe Municipality, Wakiso District.

Potential benefits, risks and discomforts: Study results will benefit subsequent studies and interventions on Uptake of hepatitis B services among FSWs in addition to guiding policy makers to put in place strategies to ensure that FSWs' reproductive health concerns are addressed adequately in the facilities they use or through organizations that provide services to them. There are no known risks or discomforts associated with this research.

Protection of confidentiality: Information collected will be confidential and not be disclosed to third parties. I the undersigned, acknowledge that the researcher has fully explained to me the nature, purpose, and procedure involved in the study.

Voluntary participation: I acknowledge that my participation is entirely voluntary and my refusal or withdrawal from this research study will not in any way affect me. I therefore sign here as proof of my consent to participate in the study.

Contact information: If you have any questions or concerns please contact 0703357849 and Email: agnesakiror@yahoo.com

Consent: I have read this consent form and have been given the opportunity to ask questions. I give my consent to participate in this study.

Signature/ thumb print: …… Date ……

Witness' signature/thumb print: …..…… Date: ……..…..…

Researcher/ PI' signature: …..…….. Date: ……...

APPENDIX II: STUDY QUESTIONNAIRE

Section I: Respondent bio data

1. What is your age?

1. 18-24 years ☐
2. 25-34 years ☐
3. 35-44 years ☐
4. 45 years and above ☐

2. Classification of FSW

1. Call girl ☐
2. Street hawker ☐
3. Bar based ☐
4. Escort agency employee ☐

3. What is your religion?

1. Roman Catholic ☐
2. Protestant/Anglican ☐
3. Muslim ☐
4. Pentecostal ☐
5. Other (specify): _____

4. What is the highest level of education you have obtained?

1. Never gone to school ☐
2. Pre-Primary ☐
3. Secondary ☐
4. Technical/tertiary school ☐
5. Other (Specify): _____

5. What do you do for a living?

1. Sell cloths ☐
2. Bar attendant ☐
3. Sell Grocery ☐
4. Sell in the market ☐
5. other (Specify): _____

6. How much do you earn in a month?

1. Less than 10,000 ☐
2. UGX 10,000-50,000 ☐
3. UGX 50,001-100,000 ☐
4. UGX 100,001-500,000 ☐
5. UGX Over 500,000 ☐

Section II: Uptake of Hepatitis B services

7. Have you ever screened for Hepatitis B?

1. Yes ☐
2. No ☐

8. If yes, when did you last have the Hepatitis B screening test?

1. Less than 3 months ago ☐
2. 3-6 months ago ☐
3. 6-12 months ago ☐
4. 1-2 years ago
5. More than 2 years ago ☐

9. What was the result of the screening test? (If negative, go to Question)

1. Positive ☐
2. Negative ☐

10. Where did you get screened?

1. Hospital ☐
2. Clinic ☐
3. Outreach ☐
4. Other (specify): _____

11. Have you been vaccinated with the hepatitis B vaccine?

1. Yes
2. No

Section III: Individual characteristics

12. What is your marital status?

1. Single ☐
2. Married/Cohabiting ☐
3. Divorced/Separated ☐
4. Widowed ☐

13. If not single, how long have you been in the above specified marital status?

6. Less than 6 months ☐
7. 6-12 months ☐
8. 1-2 years ☐
9. 3-5 years ☐
10. More than 5 years ☐

14. How many relationships have you had prior to the current marital status?

11. 2 relationships ☐
12. 3 relationships ☐
13. 4 relationships ☐
14. 5 relationships ☐

15. More than 5 relationships

15. Does the nature of your job allow you to get time to seek HBV services (Vaccination and screening)?

a. Yes ☐

b. No ☐

16. Do you have health insurance?

1. Yes
2. No

17. Have you ever gone for an HIV test?

1. Yes
2. No

18. Have you ever gone for cervical cancer screening?

1. Yes
2. No

19. Where do you usually seek health care from?

1. Clinic
2. Drug shop
3. Government Health centers
4. Government hospitals
5. Private hospitals

Section IV: Psychosocial characteristics

The following questions concern the support that you get from your partner, relatives, and family for having Hepatitis B screening (please tick one for each question)

	Item	Supportive	Unsupportive
20	**How supportive is your partner/husband for you to get Hepatitis B screening?**		
21	**How supportive are your family/relatives for you to get Hepatitis B screening?**		
22	**How supportive are your friends for you to get Hepatitis B screening?**		

23. What kind of social support do you receive from your family and friends if you decide to have a Hepatitis B screening test? (*tick those options that apply to you*)

1. Financial help / money ☐
2. Information about the screening test ☐
3. Encouragement ☐
4. Information about where to go for the test ☐
5. Other specify: _____

24. Have you ever been stigmatised?

1. Yes ☐
2. No ☐

25. What is your view about Hepatitis B screening?

1. Comfortable ☐
2. Uncomfortable ☐
3. Disgusting ☐

4. Don’t know

26. Do you believe it is the best way to prevent Hepatitis B?

1. Yes
2. No

27. **What is your view about Hepatitis B vaccination?**

1. Comfortable
2. Uncomfortable
3. Disgusting
4. Don’t know

28. Do you believe getting vaccinated after a negative screening test is the best way to prevent Hepatitis B?

1. Yes
2. No

Section V: Health system factors

29. Do you have access to Hepatitis B services?

1. Yes
2. No

30. If yes, which service exactly is available? (tick options that apply to you)

1. Screening
2. Vaccination
3. Patient counselling
4. Education
5. Follow up

31. Which specific days do you know the services are provided?

1. Daily ☐
2. Once a week ☐
3. Twice a week ☐
4. Other specify: _____

32. What is the distance to the nearest health facility?

1. Less than 1 km ☐
2. 1 – 5 km ☐
3. 5 km ☐
4. I don't know ☐

33. Are there any Hepatitis B services available at the nearest health facility to your place of residence? ☐

1. Yes
2. No ☐

34. **If No, what alternatives do you have?**

1. Traditional ☐
2. Church ☐
3. Self medication ☐
4. Other (specify):

_____

35. What is the cost of Hepatitis B screening services at the nearest health centre from your place of residence? ☐

1. Free of charge ☐
2. Less than UGX 5,000 ☐
3. Between UGX 5001-10,000 ☐

4. Between UGX 10,001-50,000 ☐

5. UGX > 50,000 ☐

6. Above 50,000

36. What is the cost of Hepatitis B vaccination services (complete dose) at the nearest health centre from your place of residence?

1. Free of charge ☐
2. Less than UGX 150,000 ☐
3. Between UGX 150,000-210,000 ☐
4. Between UGX 210,000-270,000 ☐
5. UGX > 270,000
6. I don't know

37. When you get to the health centre, about how long do you have to wait before you get the Hepatitis B service?

1. < 30 minutes ☐
2. 30 minutes ☐
3. 1-2 hours ☐
4. 3 hours ☐

38. Have you ever been discriminated against in a health facility because you have asked for HBV services? ☐

1. Yes ☐
2. No

39. If yes, what type of discrimination did you experience? ☐

1. Tribal related ☐
2. Age related ☐
3. Physical appearance related ☐

4. Income status
5. Other (specify):

END

APPENDIX III: INTRODUCTORY LETTER AND CORRESPONDENCE

IHSU INTERNATIONAL HEALTH SCIENCES UNIVERSITY
sanitas per scientiam

making a difference to health care

Dean's Office-Institute of Public Health and Management

Kampala, 7rd November 2016

RE: ASSISTANCE FOR RESEARCH

Greetings from International Health Sciences University.

This is to introduce to you **Akiror Agnes** Reg. N0. 2013-MPH-WKND-022 who is a student of our University. As part of the requirements for the award of a Master of Science Degree in Public Health, the student is required to carry out field research for the submission of a Research Dissertation.

Agnes would like to carry out research on: **"Assessing the Up-take of Bepatitis B Services among female Sex workers in Entebbe Municipality, Wakiso District".**

I therefore request you to render the student such assistance as may be necessary for research.

I, and indeed the entire University are thanking you in anticipation for the assistance you will render to the student.

Sincerely Yours,

IHSU INTERNATIONAL HEALTH SCIENCES UNIVERSITY sanitas per scientiam
★ 07 NOV 2016 ★
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