CHAPTER I

BACKGROUND AND ORGANIZING FRAMEWORK

Introduction

Over 585 000 women worldwide die annually from childbirth complications. Ninety–nine percent of these occur in the developing world. Pregnancy Induced Hypertension complications contribute about 15% of the total deaths (Aziga, Namulema, Kaye, & Merembe, 2003). Maternal mortality can be prevented by early recognition of complications and proper treatment (Buga & Shumu, 1999). Maternal mortality is one of the indices used to evaluate a country's health care delivery and country's economical developmental stage, (Buga & Shumu, 1999)

Maternal mortality is just a tip of the iceberg. Many survive death but suffer from severe acute morbidity long after child birth such as from chronic heart disease in 11, 7 years, stroke in 10,4 years, thrombo-embolism in 4,7 years, chronic hypertension within 14 years and are likely to have cancer within 17 years according to Williams (2007).

A maternal death is a major catastrophe for the family and children of the deceased mother. It affects the future of children. Maternal deaths are known to increase the likelihood of death of the newborn (Ministry of Health and Child Welfare (MOHCW); World Health Organization (WHO); United Nations Children's Fund (UNICEF); United Nations Population Fund (UNFPA) 2000).

Reduction of maternal deaths is a high priority for the international community, especially in view of increased attention on the Millennium Development Goals (MDGs). MDGs created goals for maternal and child health, that require countries to have reduced by 2015 maternal mortality ratio by 75% compared to that of 1990.

Pregnancy induced hypertension, a condition specific to pregnancy, includes gestational hypertension, pre-eclampsia and eclampsia. Gestational hypertension includes all women who were non-hypertensive early in pregnancy, but who eventually develop hypertension without proteinuria. Maternal deaths from pregnancy induced hypertension result from complications such as renal failure, heart failure, placenta abruptio and disseminated intravascular coagulation. As a result of poor placental perfusion, there is intrauterine growth retardation, preterm birth, birth asphyxia and perinatal death (Roberts, 1994; Sweet, 1988; Myles, 2008).

Health seeking behaviour is defined as an activity undertaken by individuals who perceive themselves to have a health problem, or are ill for the purpose of finding an appropriate remedy (Rosenstock, 1966; Stretcher & Rosenstock, 1997). Different sources from which people seek health care are grouped as popular, folk and professional sectors. Popular sector includes therapeutic options such as self-treatment, advice from friends and relatives. Folk sectors includes street market drug vendors, as well as different traditional and spiritual healers. Professional sector is the officially sanctioned health facilities including public health centres, hospitals and private clinics (Faxeld, Ahlberg, Ndulo & Krantz, 1998; Kleiman, 1981).

Anecdotal evidence suggests that women at Chitungwiza Central Hospital have health seeking behaviours which range from buying over the counter drugs to relieve headache, consulting relatives on what to do with odema, epigastric pain and blurred vision, consulting a spiritual or traditional healer on convulsing and coming to hospital. All these health-seeking behaviours may delay coming to hospital, worsening the PIH complications.

Problem Statement

Pregnancy Induced Hypertension (PIH) or Gestational hypertension is the development of hypertension without proteinuria. It is diagnosed when after resting the woman's blood

pressure rises above 140/90 mmHg on at least two occasions, no more than one week apart after 20 weeks of pregnancy, in a woman known to be normotensive (Myles 2006, 2008).

Pre-eclampsia is diagnosed when the hypertension is accompanied by proteinuria. Proteinuria is measured as 1+ on dipstick or >0,3g of protein in a random clean catch specimen or an excretion of 0,3g of protein in twenty-four hours. In the absence of proteinuria, pre-eclampsia is suspected when hypertension is accompanied by symptoms including headache, blurred vision, abdominal or epigastric pain or altered biochemistry. Low platelet count and abnormal liver enzyme levels of alanine aminotransferase (ALT), aspartate aminotransferase (AST) and gamma glutamyl transpeptidose (GGT), together with blood pressure > 160mmHg systolic or > 110mmHg diastolic and proteinuria 2+ or 3+ on dipstick indicate severe pre-eclampsia (Myles 2006, 2008).

Imminent eclampsia is a more severe form of pre-eclampsia signaling that the patient can have fits anytime soon. Signs and symptoms of imminent eclampsia include a sharp rise in blood pressure, diminished urine output (due to acute vasospasms), increased proteinuria 3+, frontal headache usually severe and persistent, drowsiness or confusion (caused by cerebral oedema), visual disturbance such as blurring of vision or flashing lights before eyes (caused by retinal oedema), epigastric pain denoting liver impairment, nausea and vomiting. These should be reported immediately for urgent treatment with magnesium sulphate to avert convulsions which are associated with high mortality and morbidity for both mother and baby.

Hellp syndrome (a complication of PIH) is a syndrome of heomolysis, clevated liver enzymes and low platelet count. It is thought to present a variant of pre-eclampsia/eclampsia, Pregnancies complicated by this syndrome have been associated with significant maternal and perinatal morbidity and mortality. Which may result from disseminated intravascular coagulation

(D.I.C), acute renal failure, pulmonary oedema and subcapsulr haematoma. Infants, whose mothers develop Hellp syndrome are often small for gestational age predisposing them to perinatal asphyxia, (Myles 2006, 2008)

Eclampsia is defined as the new onset of convulsions during pregnancy or postpartum, unrelated to other cerebral pathological conditions in a woman with pre-eclampsia. It is one of the obstetrical emergencies. Eclampsia is a significant maternal life threatening complication associated with an increased risk of maternal and perinatal mortality and morbidity (Myles 2006, 2008). Causes of pregnancy induced hypertension are unknown. With early diagnosis, more severe complications like imminent eclampsia, eclampsia and Hellp syndrome can be averted.

In Zimbabwe the MOHCW have ratified for Safe motherhood Initiatives, Emergency Obstetric Care programmes which offer treatment guidelines on common causes of maternal deaths such as pregnancy induced hypertension at the lowest level of care in a bid to reduce mortality and morbidity rates associated with PIH.

PIH is an emerging clinical and public health problem at Chitungwiza Central Hospital with a prevalence estimated at 7.1% according to statistics of January 2007 to May 2009 (CCH Information Department). Eclampsia has a prevalence rate of 13.1%. Out of 121 who developed eclampsia ten died giving a case fatality rate of 8.2%. According to Maternal and Perinatal Mortality national study of 2007 carried out by MOHCW, 364 mothers died in 2006. Fifty-five percent (15.7%) of these died from PIH placing PIH among the top five causes of maternal deaths in Zimbabwe.

In South Africa eclampsia remains the most common cause of perinatal mortality and morbidity in KwaZulu Natal region (Buga & Lumu, 1999; Moodley, Mphatsoe & Gouw, 1999). In Netherlands 5% of all pregnancies are complicated by eclampsia and Hellp Syndrome

(Hardenburg et al, 2003). In Brazil, Venezuela and Mexico, it is estimated that 22% - 35% of all maternal deaths are associated with pre-eclampsia complications (Conde, Agudelo& Belizan, 2000).

From the above statistics it had been noted that pregnancy induced hypertension is a global problem but developing countries like Zimbabwe have higher rates of maternal and child mortalities due to eclampsia and bleeding (Jaramillo, Garcia & Lopez 2008; Dekker, 2001). A research in Bangaladesh by Michael et al (2007) also showed that women of child bearing age die from eclampsia. More than half of maternal deaths were due to delay in seeking care as they would have failed to identify earlier symptoms of PIH complications and other conditions.

Serious PIH complications may affect a considerable proportion of pregnant mothers with pregnancy induced hypertension if the disease is not properly managed. The success in treatment of PIH complications depends largely upon the health seeking behaviour of the pregnant women. (Myles 2006, 2008). Health seeking behaviour according to Rosenstock (1966), is an activity undertaken by individuals who perceive themselves to have a health problem or are ill for the purpose of finding appropriate remedy.

Pregnant women who develop PIH complications at Chitungwiza Central Hospital were found to be delaying to seek health care from professionals. After developing a severe headache (one of the symptoms of imminent eclampsia) the pregnant women with PIH would buy over the counter treatment (O.T.C) like aspirin, anadin etc to relieve the headache instead of quickly reporting to hospital for proper care. For abdominal pain, they ignored the symptoms after being told by friends or relatives that it happens in pregnancy. For blurred vision, confusion and convulsions they were taken to a faith healer who immersed them in water as part of a cleansing ceremony as these were be attributed to evil spirits or bad airs. During the cleansing ceremony

they risk aspirating and dying. All these delayed pregnant women from seeking health care on time.

Berkanovic, Telesky and Harwood (2000) found that black Americans wait for a certain period (days or weeks) before they take action, consult for prayers or go through traditional rituals to allow, the body to heal itself. They seek advice from a family member or a friend. If the problem does not resolve, they will finally attend a health clinic or consult a family doctor. This was also observed among pregnant women with PIH complications at Chitungwiza Central Hospital.

Several factors influence which treatment sources one seeks when symptoms of a disease arise. The person alone or in consultation with others decide that the illness needs attention. Some of the factors are related to social structures such as kinship, social networks, gender and economic status. Others are related to belief systems which define how people conceptualize the actiology of diseases (Faxeld, Ahlberg, Ndulo & Krantz, 1998). This study seeks to examine the demography and belief systems on health care of pregnant women with PIH at Chitungwiza Central Hospital. Preference for a certain belief system is thought to be influenced by modern or traditional thinking and education (Marco, Villa, Baha & Sibai, 1988; Chavhunduka, 1978; Gelfand 1974). Attitudes leads to a tendency not to seek help or delay seeking help until the condition is too serious to ignore. Black people have culturally developed an increased tolerance for illness (Harrison & Harrison 1999). It can also be the same with pregnant women with PIH complications at Chitungwiza Central Hospital.

A study in Egypt by Green (1992) showed that low levels of awareness (among women of reproductive aged 15 to 49 years) on seriousness of maternal health problems cause them to delay seeking professional care. It has been noted from above studies that the client's behaviour

is crucial in the successful management of the disease. Individual health seeking behaviour occurs against a background of their past experiences, stress, social relations, political economic and environmental characteristics of the society concerned (Rosenstock, 1996). Hence it is important to explore past experiences and environment characteristics of the pregnant women at Chitungwiza Central Hospital with PIH complications so that their health care seeking behaviours could be influenced positively.

The patient's knowledge about the disease and its management is important as it influences the health seeking behaviour of the clients (Green, 1992). Knowledge has been defined as possession of relevant facts about the disease, and knowledge of utilization of the health care facilities for treatment (Gillies, 1998). This study sought to examine the knowledge of complications of PIH so that appropriate health education programmes for the pregnant women with PIH could be designed.

A study in Tanzania by Kleinman (1981) showed that lack of information about seriousness of hypertension and heredity components of hypertension delayed the women from seeking help. Many women did not identify certain symptoms with complications of pregnancy but with normality, making the symptoms less serious in their eyes. Even serious complications like imminent eclampsia, blurred vision, reduced urine output and confusion were not identified (Manahels, Younis, Ichattab & Zurayk, 1994).

A research in Bangladesh by Lambart (2000) revealed that some pregnant women missed the early symptoms of reproductive health complications and only took action when they were severely ill, which may be a reflection of lack of knowledge on the early signs and symptoms of disease. Hence very important to equip the pregnant women with PIH complications with adequate knowledge for them to be able to identify the symptoms early and take prompt action.

The aim of reproductive health facilities is to reduce maternal mortality and morbidity related to pregnancy and childbirth. Although the benefits of public knowledge of physical disease are accepted worldwide, research on Health Care seeking behaviours among pregnant women with PIH complications aged 18-28 years is lacking which was the focus of this study.

Purpose of study

The purpose of the study was to examine the relationship between knowledge of complications and health care seeking behaviours among pregnant women with pregnancy induced hypertension aged 18 to 28 years at Chitungwiza Central Hospital

Theoretical Framework

According to Burns and Groove (1993) a conceptual model is a set of highly abstract related constructs whose purpose is to explain a phenomena of interest, express assumptions and reflect a philosophical stance. The Health Belief Model (HBM) by Rosenstock (1966) is beneficial in assessing health protection or disease prevention behaviour. In this study it was used to assess the health seeking behaviours among pregnant women with pregnancy induced hypertension complications to avert the symptoms (health prevention behaviours).

Components of the Health belief model are perceived susceptibility, perceived seriousness, perceived benefits, perceived barriers, cues to action, modifying factors and likelihood of action. This study focused on perceived seriousness, perceived benefits, perceived barriers and likelihood to take action.

Perceived susceptibility refers to the subjective risks of contracting a condition. Responses perceived susceptibility in this study the pregnant women's belief that they can develop pregnancy induced complications such as eclampsia, blurred vision, renal failure, abruptio placenta, flashes of lights before eye, continuous frontal headache, abdominal pain,

epigastric pain and reduced fetal movement, reduced urine output.

Perceived seriousness refer to perceived severity of a health condition linked to an individual's knowledge about the condition and its possible consequences. In this study perceived seriousness was the seriousness with which the pregnant women would view the preceding signs and symptoms of pregnancy induced hypertension complications, like eclampsia, continuous frontal or occipital headache, epigastric/abdominal pain, confusion. Nausea, vomiting reduced fetal movement reduced urine output blurred vision lights/dots before eyes. Implications of severity range from an emotional response to concerns regarding possible restrictions affecting self, employment, family life and social relations. In this study restrictions were resting and withdrawing from daily activities, without any reprimand from significant others.

A person's perception or view of susceptibility to disease and seriousness of disease combine to form his or her perceived threat which in this study referred to the pregnant women's belief that the complications of pregnancy induced hypertension threatened their well being lite reduced urine output indicate severity of the disease, can ignore and oedema of i.e. they can die, the baby can die, mother can have damaged kidneys, eyes, brain, heart diseases and cancer in the long run.

Modifying factors or contributing factors included demographic variables of the pregnant's women age (18-28 years) and educational background. Socio psychological variables such as social class, social group pressures, in this study these were income levels and cultural groups/ family health care practices and interpretation of the PIH complications in their environmental setting.

Structural variables such as knowledge about health conditions, previous contacts with individuals having a disease affect health seeking behaviour. In this study the structural variables

were pregnant women's knowledge of pregnancy induced complications such as abruption placenta, reduced urine output, blurred vision, flashes of light/dots before the eyes, continuous frontal or occipital headache, prior knowledge of any person who developed pregnancy induced complications and what treatment they got (could be a friend or a close relative). Also the likelihood of identifying complications when they occur.

Perceived benefits or preventive action refers to how various beneficial alternatives are believed to be feasible, acceptable and or desirable. These are the person's beliefs about the availability and effectiveness of various sources of health care and not the objective facts about the effectiveness of action determine what course of action one will take. In addition the norms and pressures of social groups influence individual behaviour on seeking care. In this study the perceived benefits of using any of the sources of health care provision by the pregnant women with pregnancy induced hypertension complication were a desire to feel well prevent fatal complications will be prevented, fits, delivered before baby dies, be examined by a doctor or nurse given correct treatment their pregnancy prolonged and to allow the baby to grow. Pregnant women with pregnancy induced hypertension needs information on complications associated with their condition and coerce them to use professional health care facilities. In influencing behaviour midwives/nurses must recognize the limits of each client's cognition, motivation and possible action (Rosenstock, 1966). This entails eliciting the client's beliefs, opinions and factual knowledge in relation to health needs, health goals and overall values (Harrison and Harrison, 1999). In this study the sole function of the investigator was to identify the pregnant women's knowledge and beliefs pertaining to pregnancy induced hypertension complications, giving them the relevant information and assisting them in recognizing and defining limitations of the complications.

Cues to action (the likelihood that the person will take any action) is influenced by the perceived benefits of the action weighed against barriers to acting, examples of barriers are costs, inconvenience, unpleasantness or how much change it requires. In this study likelihood that the person will take any action is the likelihood that the pregnant women with pregnant induced complications will report for professional treatment. Barriers to acting in this study are costs of the treatment at the hospital, cultural beliefs values and attitudes towards the hospital, hospital staff, quality of care (see figure1).

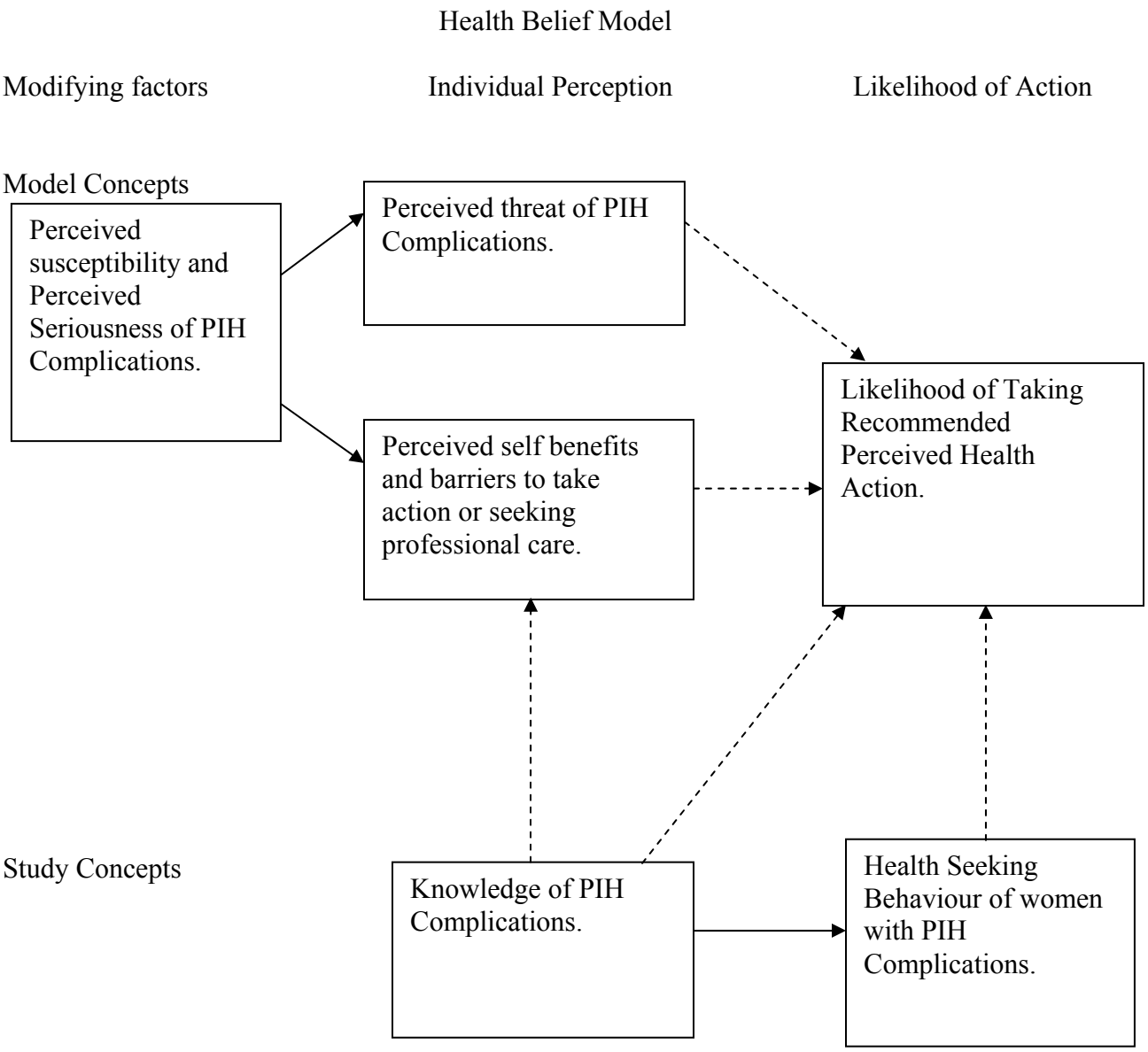

Figure I: Health Belief Model Adapted from Rosenstock, (1966).

Conceptual Definition of Terms

Pregnancy Induced Hypertension (PIH).

A condition specific to pregnancy where there is development of hypertension at or after 20 weeks gestation. PIH is diagnosed when after resting the woman's blood pressure rises above 140/90mmHg on at least two occasions no more than one week apart, in woman known to be normotensive (Myles 2006; 2008, Encyclopaedia Britannica, 2009).

Pre-eclampsia

A multi-system disorder, which can affect the placenta, kidneys, brain and other organs. Hypertension of >160mmHg systolic and >110mmHg accompanied by proteinuria, 1+ on dipstick or >0,3g of protein in a random clear catch urine. In the absence of proteinuria pre-eclampsia is suspected if there is headache, blurred vision abdominal or epigastric pain or altered biochemistry specifically low platelet count and abnormal liver enzyme levels. (Myles 2006, 2008; Encyclopaedia Britannica 2009).

Imminent eclampsia a more severe form of pre-eclampsia where there is a sharp rise in blood pressure, diminished urine output, increased proteinuria 3+, severe and persistent frontal headache, drowsiness or confusion, blurred vision or flashing lights before eyes nausea and vomiting.

Eclampsia

The new onset of seizures during pregnancy or postpartum, unrelated to other cerebral pathological conditions in a woman with pre-eclampsia (Myles 2006, 2008; Encyclopaedia Britannica, 2009).

Health Seeking Behaviour

An activity undertaken by individuals who perceive themselves to have a health problem to be ill for the purpose of finding a remedy (Merlens, 1997; Rosenstock, 1966). In this study it refers to seeking professional health care sectors such as hospitals and clinics.

Knowledge

Knowledge is a product of complete inquiries held to be true by a group of people (Barbie 1998). In this study it refers to knowledge of complications of PIH such as headache, blurred vision, abdominal pain or epigastric pain, reduced urine output, reduced fetal movements, nausea and vomiting, uncontrolled bleeding of sudden onset, generalized body weakness, very high blood pressure. Knowledge is possession of relevant facts about the disease and knowledge of utilization of health care facilities for treatment (Gillies, 1998).

Objectives of the study

1. To determine knowledge of complications among pregnant women with Pregnancy Induced Hypertension aged 18 to 28 years at Chitungwiza Central Hospital.
2. To identify the health seeking behaviours of pregnant women with PIH aged 18 to 28 years at Chitungwiza Central Hospital.
3. To examine the relationship between knowledge of complications and health seeking behaviours among pregnant women with pregnancy induced hypertension aged 18 to 28 years at Chitungwiza Central Hospital.

Research Questions

1. What knowledge of complications do pregnant women with pregnant induced hypertension aged 18 to 28 years have at Chitungwiza Central Hospital?
2. What are the health seeking behaviours of pregnant women with pregnancy induced hypertension aged 18 to 28 years at Chitungwiza Central Hospital?

3. What is the relationship between knowledge of complications and health seeking behaviours among pregnant women with pregnancy induced hypertension aged 18 to 28 years at Chitungwiza Central Hospital?

Significance to Nursing

The study indicated the knowledge that pregnant women with PIH have on PIH complications and their health seeking behaviour. For interventions to work, educators need to know what the people are thinking. They should have a broad definition of health, understand factors that impact on health and realize the effects of culture and knowledge on behaviour (Bowley, 1987). The knowledge gained would sensitize midwives to knowledge needs of pregnant women with PIH previously unrealized thereby strengthen the quality of antenatal care education. Gaining insight into the knowledge needs of pregnant women with PIH complications made an important contribution to the midwifery body of knowledge with the potential to improve quality of midwifery education.

The study created an opportunity for updating Maternal Child Health (MCH) knowledge on PIH complications, improving quality of care given to these women. The knowledge these pregnant women have on complications of PIH and their preferences of care was developed through this research. These would guide the midwives to design individualized care for pregnant women, thereby enhancing their use of health care facilities. Use of the Health Belief Model identified the interplay between beliefs on health and illness, contributing to the development of body of knowledge for the midwifery discipline. .

This study aimed at contributing to the available body of research on the Health seeking Behaviour among pregnant women with PIH complications. It systematically examined the knowledge associated with complications of PIH and determinants of decisions made in use of

different sectors of health care by pregnant women.

CHAPTER 2

LITERATURE REVIEW

The primary purpose of a literature review is to generate information on what is known and not known about the subject of interest, so that a broad understanding of the information is gained. A review of relevant literature is conducted to generate a picture of what is known about a particular situation. It also assists the investigator to identify research methods used by others, weaknesses and strengths of chosen research designs so that one can avoid them in own study.

This chapter reviewed the relevant literature with regards to the dependant variable Health seeking behaviour and independent variable knowledge of complications in pregnant women with Pregnancy Induced Hypertension aged 18 to 28 years at Chitungwiza Central Hospital. The utilisation of Health Belief Model by Rosenstock (1966) was also be discussed.

Health Seeking Behaviour

Health Seeking Behaviour is an activity undertaken by individuals who perceive themselves to have a health problem or are ill for the purpose of finding appropriate remedy (Rosenstock 1966, Stretcher & Rosenstock, 1997). The purpose of this study was to determine what activities are undertaken by pregnant women with PIH complications aged 18 to 28 years at Chitungwiza Central Hospital. Observed Health Seeking Behaviours among pregnant mothers with P.I.H. Complications were that they buy anadin or aspirin (O.T.C) to relieve headaches, seek help from relatives for odema, reduced urine output, epigastric pain and blurred vision. Spiritual healers or traditional healers were consulted on convulsing before coming to hospital. This pattern of seeking care causes the pregnant women with Pregnancy Induced Hypertension to delay to seek care. They increase their risk of dying from complications such as renal failure, heart failure, placenta abruptio and disseminated intravascular coagulation or having a permanent

ill health. This is a major concern to the midwives and obstetricians as this will curtail the MDG number 5 of reducing maternal deaths by three quarters from that of 1990 levels by 2015.It also thwarts the goals of safe motherhood introduced in 1997 to reduce maternal mortality and morbidity.

A study in Bangladesh by Michael et al, (2007) showed that women of childbearing age die of eclampsia and bleeding. More than half of these maternal deaths were due to delay in seeking care as they would have failed to identify earlier symptoms of PIH complications and other diseases.

A study in Bangladesh by Pitchforth, Teylingen, Graham & Fitzmaurice, (2007) on factors determining Health Care Utilization by pregnant women who developed pregnancy complications showed that for each reported complication those who had convulsions/fits and bleeding, 32,6% sought care from a doctor, nurse or a village health worker, 46% did not seek care and 21,6% sought care from either a village doctor (traditional healer) or herbalist or any other source from unqualified people to take care of the complication. Among those who reported high risk complication such as odema more than 73% did not seek care and only 14% sought care from a doctor or nurse. Over 62% respondents who reported having excessive vomiting did not seek any medical care, while only 17% sought care from a nurse or doctor. Among those who had suffered abdominal or epigastric pain or palpitations, a very low proportion had to see a doctor,(9,3%,11.7% and 9,1%) for each condition respectively.

Results from bivariate analysis by Pitchforth, Teylingen, Graham and Fitzmaurice, (2007) suggest that older women are more likely to use maternal health care services than younger women. About 42% of older women more than 35% respondents sought care from a doctor/nurse compared with 28,5% of younger age less than 20 years. Number of previous

pregnancies showed a U-shaped relationship with birth and the use of health care services for treatment of pregnancy complications. Percentages of women who sought care from a doctor or nurse to treat any of the pregnancy complications decreased from 29% in women with no previous pregnancies to 26,1% in women with one or two previous pregnancies. It increases again 15% in women with five or more pregnancies. The use of traditional and other health services related to a number of previous pregnancies also show the same pattern. There was a positive association between education and use of medical facilities for treatment of pregnancy complications. The percentage of women who sought care from qualified medical personnel for treating complications increased from 26,8% among illiterate women to 34,6% among women with secondary or higher education.

Results showed that husband's occupation is positively associated with the type of healthcare sought by their wives. Women whose husband's had skilled jobs or working in business where there was cash, used medical services for care of their pregnancy complications. This was shown by 34% of whose husbands were in gainful employment using medical personnel for treatment their pregnancy complications compared with 24% whose husbands were farm laborers.

Results from the study also revealed that women in gainful employment were most likely to use qualified personnel for their pregnancy complications and were empowered to make decisions concerning their use of health care facilities. About 35% of women who worked for cash went to qualified personnel for their pregnancy complications compared with only 25,3% of those who did not work. Perception of severity of diseases also was found to determine whether the woman would seek care or not. It was observed that mother's education ($P<.05$),age ($P<0,10$) appeared to be positively associated with treatment used.

This study sought to determine whether factors such as age, husband's occupation and income, woman's education, employment and income are also associated with health seeking behaviours of pregnant with PIH complications at Chitungwiza Central Hospital. Similarly the above findings were cited by Abbas and Walker (2006) from their study determinants of utilization of maternal child health services in Jordan. Their findings also included distance as determining the type of health care service sought by pregnant women when they develop complications.

Agarwa, Sing and Suneela (2007) on their study revealed that out of 100 women 76% received antenatal care either from a doctor/ private midwife while 24% did not seek antenatal care. Obstetric complications like PIH and bleeding were the most frequent among the mothers who attended antenatal care 17% than those who did not attend antenatal care 4,15%. Perceived barriers to hospital care were cited as thinking that it was not necessary 45%, lack of knowledge on the complications 27%, no one to accompany to hospital 15%, financial constrains 12%, working 7%. fear of hospital care 6% and objection from family 2%. Hence this study sought to determine whether these same factors will influence the health seeking behaviours of pregnant women with PIH complications at Chitungwiza Central Hospital. Those who sought care from hospital had knowledge of obstetric complications and risk factors associated 71/76 (93,4%), 74/76 (97,4%) respectively than women who did not seek care from hospital 12/24 (8,5%), 6/12(5%) respectively. White et al (2006) revealed that out of 75 respondents25% did not report pregnancy related complications 32% delayed to seek care for failing to identify pregnancy related risk factors. The study also revealed that women relied more on advice from their husbands, mothers, relatives and friends. Most of these women coped with pregnant related complications like abdominal pain headache vomiting and generalised body aches by lying down

or resting.

In Zimbabwe Chavhunduka and Gelfand (1978) found out that many Shona people believe that illness may either have a normal or abnormal cause. Illness could be caused by angered or aggrieved spirits that return to punish the wrongdoer or his kinsmen. The guilt or his kinsmen become sick. Diviners are consulted and advises on steps to take in order to satisfy angered spirits. It is believed that once the demands of the angered spirits have been met the matter is closed and the evil spirit will not cause trouble. Illness can be caused by ”*shave”* (alien spirits) or witchcraft .The diviner has to be first consulted to find out spiritual cause of the illness before given herbs. A normal cause normally associated with diarrhoea and flu e.t.c, the person seeks professional care while for cause of conditions regarded as abnormal such continuous headache are treated by ‘mutara” (medicine usually used to cure severe headache) or ”chinemiko” (another form of treatment for severe headache). It was observed that convulsions were believed to be caused by evil spirits. Some beliefs were revealed among the Zuni people in a study by Camazine, (2000). But contrary to the above findings is the Zuni religion where they view the beast Gods to be the most dangerous and violent Gods. These are the care givers of medicine not only medical plants but the magic power to make them effective. They are the source of black magic, witchcraft so the individual affected by them have to go there for treatment. The Zuni people often go for traditional healing before going to hospital. Pertaining to childbirth it was also revealed that their reluctant to use the hospital services was related to firmly held beliefs and desire to continue traditional practices.

In Zimbabwe it was found that people prefer to take their illness to traditional healers first then to hospital. Convulsions (usually associated with epilepsy) where there is a wide spread belief in African communities that epilepsy is caused by bewitchment or possession of evil

spirits or the devil, pregnant women are taken to spiritual healers for rituals and cleansing ceremony. Similarly a study alluded to by Camazine (2000) the Zuni people believe that convulsions in pregnancy is believed to be caused by the action of the expectant mother or father for example killing an animal which will convulse before it dies or form on its mouth. Treatment in this case requires a four day ceremony to be given various plants to induce vomiting and a few seek treatment after the ceremony. This will delay the clients from seeking care and may die.

Similarly a research by Mutambirwa in 1984 found that in rural Zimbabwe 96,6% of women of childbearing age indicated that they go to traditional health specialists for unnatural diseases such as convulsions or unexplained symptoms. About 3.05% purported to be seeking professional health care only, 0.05% said they never consult traditional healers nor go to hospital since their religion does not allow. They will consult faith healers or use self treatment. Contrary to the Chavhunduka and Gelfand (1974). Mutambirwa (1984) and Camazine (2000) found out that dual use of traditional medicine and professional care are thought to complement each other. Patients freely use both systems, each seemingly offering different aspects of medical care. According to Camazine's (2000) study medical medicine was not totally accepted and by no means replace traditional systems.

In a Pakistani research by Hunte and Sultra (1992), examined health seeking behaviour in Maternal Child Health. They found the following health seeking behaviours for obstetric complications including PIH complications in order of their preference, home/self-care treatment 64%, indigenous practitioner treatment 30%, intermediate practitioner treatment 4%, medical practitioner treatment 2%.Depending on etiological causes of illness attached to it medical care can be sought first for natural causes of illness like nausea and vomiting. Supernatural causes called “maraz” (evil spirits, bad airs and witchcraft) they sought indigenous practitioner,

treatment. Confusion and continuous headache (both attributed to evil spirits/ possession) the pregnant woman is taken to for traditional healing. The healers normally refer these women to the next faith healer or hospital if they fail to treat the illness. With convulsions they seek spiritual or traditional treatment first to be told the cause of the illness. Almost one-third of the illnesses were thought to be caused by ”maraz” (evil spirits). This pattern of health care seeking delay the women to seek medical treatment increasing the number of women with pregnancy induced hypertension dying from abruptio placenta, convulsions, renal failure and disseminated intravascular coagulation. Convulsions, stomachaches, headaches and eye problems are never taken to hospital before traditional healers as they are better treated there than in hospitals, according to Hunte and Sultra (1992)

A study by Oppong (1989) found out that dissatisfaction with previous treatment in hospitals was the reason why most pregnant women who develop complications chose to consult traditional healers. In a culturally homogenous society the secondary therapeutic effects of making the patient feel that the unseen world is supporting the therapist and involved with him in the treatment make them seek care. The traditional healers are believed to obtain knowledge of secret or future and reveal the natural origin of disease and able to see the course of disease and its prognosis, then design the most effective remedies for treating it. Problems associated with headache, stomach ache, mental problems are associated with evil spirits. The treatment of ailments was cheaper and in cash and kind and sometimes a chicken. This study sought to find out whether pregnant women with PIH complications at Chitungwiza Central Hospital associate headache, stomachache blurred vision, reduced urine output and reduced fetal movements with evil spirits, which made them seek care from traditional healers first before coming to hospital.

Similarly a study by Nemet & Bailey (2000) revealed that previous experience of place

contribute to variation in utilisation of health services. Quick service speeds flow of information and amount of time needed to put an appointment and wait for service. Contrary is Oppong 1989 findings Nemet & Bailey revealed that clients with previous experience of the problem were much more likely to use health care ($p = 0.000$) than first timers. Hence this study sought to find out whether pregnant women who suffered PIH complications before reported for medical care first.

According to Berkanovic, Telesky and Harwood (2000) Black Americans have the following health seeking behaviour when illness appears, consult for prayers and go through a traditional ceremony to allow body to heal itself, seek advice from a family member or friend. If the problem does not resolve will finally attend a health clinic or consult a family doctor.

A study on Health Seeking Behaviour of patients with obstetric complications in Zambia by Faxled, Ahlberg, Ndulo and Krantz, (1999) showed that 61% of the clients had taken some kind of medication before coming to hospital.Forty percent had taken over the counter treatment and 24% had used traditional healers (spiritual and n'angas). Studies by Uehera (2001), Greenfield (2001), Camazine (2000), aimed at finding out what transpires during an illness. Revealed that when treatment is sought a pattern or sequence is followed by members. They rely to a greater extent on home remedies, followed by traditional care, use of unqualified medical staff and finally use of professionals.

According to Greendale, Leonard and Bensen (2006) a significant proportion of women did not perceive obstetric complications on time which led to delay in seeking help. In other cases obstetric complications were perceived but care was not sought. In Indonesia a study by Chevichovsky & Meesook (1996) showed that giving of information to pregnant women by medical practitioners, made them able to observe complications. In turn demand care primarily

based on costs of the services provided, related to their income or their socio-economic status. Treatment is relatively more frequently given at home by family members or traditional healers when poor. Utilisation of health services depends on one hand on house hold's willingness to pay. Also attitudes towards care provided and availability of various services and health education given. The poor are prepared to pay the services of traditional healers and low costs of public services.

Economic differences between segments of the population had more predictive validity for the choice of health care services than education and beliefs about the origin of disease according to Jonker (1999). A study by Jonker (1999) on Health Seeking Behaviour of patients with obstetric complications in Zambia showed that a majority (75%) of pregnant women first went to a traditional healer or some other person or relative who had some knowledge on herbs if they develop obstetric complications. Only 25% reported first going to health centre. Quality of services and cost of treatment are other factors relevant for determining Health Seeking Behaviour among pregnant women who develop obstetric complications. According to Jonker (1999) introduction of user fees in public health services, inadequate quality of care in public sector made a shift in the utilization of health services increasing the use of other treatment sources such as drug vendors in the market and traditional healers. Similarly, the prohibitive costs of health care and inadequate quality of care of care in Zimbabwe might increase the use of other treatment sources. Hence this study sought to identify the Health Seeking Behaviours of pregnant women with PIH complications at Chitungwuiza Central Hospital.

In Bangladesh Ahmed, Thompson Petzold and Kabir (2005), Mugisha et. al. (2004) revealed that self-care treatment was the most common choice of treatment irrespective of age group. For both groups the most commonly consulted type of care provider was a health worker

such as a village doctor. Elderly people were less likely to choose self-care treatment and were more likely to seek professional treatment. Traditional medicine had a marginal role in the Health Seeking Behaviour of the studied population. This study sought to determine whether the same Health Seeking Behaviour in relation to age will be revealed.

A health survey carried out by Cheruchousy and Merzerk (2001), Mugisha et. al. (2004) revealed that extra costs incurred such as transportation and loss of income in making the visit are to hospital is critical to the poor hence affect utilization of health care services. The costs of services determine whether treatment will be sought. Location of the facility where the treatment is sought (clinic, home treatment, hospital, traditional healer etc. The person giving treatment (traditional professional practitioners, nurse).A positive association was indicated between household consumption levels (measured by household consumption expenditures) and the incidence of using health care facility or reporting an illness. Treatment is frequently given at home by family members and traditional practitioners if the house hold is poor. People have a likelihood of reporting illness if they have a greater chance of using medical services. Places of treatment and type of care received are clearly income related. The poorest are the most likely to be treated at home by their relatives or traditional healer. The rich were most likely to have a physician visiting their home, public facilities are heavily used by middle class. The survey concluded that low income per capita may be a barrier to access medical care in the study environment.

This study sought to determine whether the socio-economic status of pregnant women with PIH complication aged 18-28 years in Chitungwiza Central Hospital has affected their Health Seeking Behaviour. A study by Ahmed, Tomesen, Petzold and Kabir (2004) Health Seeking Behaviour in Bangladesh showed that the level of education and poverty emerged as the

two (2) most significant determinants of Health Seeking Behaviour. Those who had some education were less likely to chose self care or self treatment, or treatment from a drug store person and more likely to seek care from a formally qualified practitioner. On analysis income and level of education are significantly correlated, in a country with a stable economy. In Zimbabwe where there is poverty education and income have no relationship, based on the investigator's observation.

A study by Nemet and Bailey (2000) in Orleans county revealed that perceived competency of the provider is an important determinant of choice of treatment. If client is not satisfied with previous service provided they switch to another provider. Attitude of health care providers determine whether the client will use the health care services on last/next illness. Time of arrival and time of initiation if treatment determine whether the client will come back or not as well as household income. Patients suffering from headache or abdominal pain were most likely to treat themselves at home or go for traditional healing. Perceived quality of care was found to be most highly correlated with choice of treatment.

In a study by Mugisha et. al. (2004), it was revealed that choice of health care services made by the patient seeking treatment was first influenced by barriers. These prevent access to appropriate treatment which including financial constraint, distance to distance to health care facility, maintaining of quality of treatment. Also the seriousness with which they perceive the illness, different attributes of the health care provider type of illness and confidence in the provider of care.

This study also sought to determine whether perceived quality of treatment, waiting period before getting treatment were barrier affecting the pregnant women aged 18 to 28 years with PIH complications' health seeking behaviour.

A study by Camazine (2000) revealed that traditional healers have holistic approach to patient though the illness may not be cured and symptoms alleviated by the physicians. The traditional healer also deals with the psychological aspects of the patient's illness. The un-sensitivity of scientific medicine to noxious affects of these emotions allow for its failures. It also impels the ill to seek out other of forms healing methods. The illness may affect the ailing patient yet its etiology is of the whole society's concern and the traditional healer acts as the liason between society and the patient. The traditional healer gains acceptance of the patient by drawing upon widely held beliefs. Also meets the expectations of the sick person and his kin. Similarly Greenfield (2001) found out that medical doctors only treat symptoms and work on the surface.

Knowledge of Complications

The patient's knowledge about the disease and its management is important as it influences health seeking behaviour of clients (Green 1992). Knowledge has been defined as possessions of relevant factors about the disease and knowledge of utilization of the health care facilities for treatment (Gillies, 1998). A study in Tanzania by (Kleinman, 1981) showed that lack of information about seriousness of heredity component of hypertension delayed the women from seeking care early. Many did not identify certain symptoms with pregnancy but instead with normality. Making symptoms less serious in their eyes. Even serious complications like imminent eclampsia, blurred vision reduced urine output and confusion were not identified (Manahels, Younis, Ichattab & Zurayk, 1994).

A research in Bangladesh by Kamel Badaway, El-Zeiny & Merdan (1999) revealed that majority of pregnant women with obstetric complications including those of P.I.H. 90% had a poor overall knowledge about the obstetric complications. While the rest had only a satisfactory level. Over two-thirds (77.7%) were able to name one or more PIH complications. Of those who

at least named one complication, 69% named convulsions, 51.0% stated retinopathy, 34.3% cited reduced fetal movements and 28.3% cited renal failure. Very few 10 % stated fetal complications and abruptio placenta. Only 17% of patients were able to cite death as a complication. However 66,05% were aware of generalized odema. Very few were aware that confusion and headache were complications of PIH. Seeing flashes before the eyes was mentioned by 8.7% of patients. Less than one-third (31,7%) were able to mention heart-failure as a complication of PIH. However the majority (96,3%) were able to cite abnormally high blood pressure. Only 17.7% knew that nausea and vomiting were associated with P.I.H complications

A study in Saudi Arabia by Taha and Bella, (2001) on prevalence and knowledge of Heart Disease risks revealed 40.1% were able to cite cause of chronic hypertensive disease. Of the 227 subjects the main causes of chronic hypertensive diseases mentioned were smoking 17.6%, over eating and obesity 17.9% and lack of physical exercises mentioned by 6.2%. Diabetes mellitus a common health problem in the area and a major risk factor was mentioned by only 46 subjects. Of the 227 subjects the main preventive measures mentioned were weight reduction 19.8%, cessation of smoking 18.1% and exercise 11.0%. Control of hypertension and diabetes mellitus were mentioned by less than 6% of subjects 5.7% and 1.3% respectively, while about 15% mentioned 2 or more preventive measures. A statistically significant association between knowledge and education status of subject was found. The knowledge of causes and prevention of chronic hypertension by education level (illiterate compared with educated), showed a highly statistically significant association between knowledge and education status of subjects. This association was also apparent when knowledge of causes and prevention were analysed. Knowledge of causes and prevention of chronic hypertensive disease increase with increasing level of education.

Patients had little knowledge about their chronic condition. Three percent knew that the condition causes stroke but knowledge on the consequences of untreated hypertension was poor, less than 1% knew that renal failure could reveal poor adherence to treatment. About 80% of diabetic patients in the same study had little knowledge on how to manage hyper and hypoglycaemia and inadequate knowledge on the impact of poor diabetic control. As a result unhealthy lifestyles were common over 20% of the respondents. Their sample variance analysis showed that patients attending dedicated hypertensive clinics at the country's Health Clinics had significant lower systolic blood pressure level (6.7 -mmHg, $p < 0.05$) than those who did not attend such clinics.

Relationship between knowledge and education was also revealed in a research study in Nigeria by Simunyi, Wafula and Ndauti (2003). Of the 283 mothers, 60% had no knowledge that measles is preventable through immunizations. Only seven percent mentioned immunization. Ninety one percent associated it with high mortality but were not fully aware of the complications. A significant number of mothers with at least primary education knew that measles is preventable compared to those with no education. Similarly Kasule et al, (1997) on Zimbabwean Teenager's knowledge of AIDS and other sexually transmitted disease (78%) could name at least one disease but knowledge of symptoms and consequences of sexually transmitted diseases was very low. The overall knowledge increased with level of education. Teenage boys knew a little more than teenage girls but the difference was not statistically significant. While these studies were not identifying knowledge levels of complications of PIH. This study seeks to find out whether pregnant women's knowledge on PIH complications is associated with level of education.

A research by Ahmed, Bremer, Magzoals and Nouri (2003) revealed that there is a

significant linear association between age and level of knowledge concerning diabetic complications (x^2 = 9.14) older patients (> 60 years) tended to be less knowledgeable than younger ones. Another significant linear association was observed between age and knowledge on how to give insulin injection. More younger patients knew the correct procedure than older ones (x^2 = 11,20). No significant linear association was observed between age and level of knowledge as regards to how to control diabetes (x^2 = 0.26) screening sugar in urine (x^2 =1,54) naming medicine used (x^2 = 0.48). Knowledge of causes and prevention of Chronic Hypertensive Diseases were stratified by age (< 20 years, 20-30 years, 35-49 years $\geq$ 50 years. Similarly a study by Steeri, Sloveette, Fourier, Lombard and Everrete, (2008) revealed that with increasing age, knowledge of hypertension complications was poor and those with poor knowledge, their risk factors were poorly controlled.

On the contrary, a research by Kasule et al (1997) on symptoms and consequences of sexually transmitted diseases was very low but overall knowledge increased with age. In this study the investigator will determine whether there is any relationship between age and knowledge of PIH complications.

Relationship between knowledge of complications and Health Seeking Behaviour

A study by Ahmed, Bremer, Magazoals and Nouri (2003) to determine diabetic knowledge of disease and their management behaviour revealed that no significant linear association was observed between the overall knowledge level and the behaviour related to diabetes mellitus management (x^2 = 0.93). However a statistical linear association was observed between the patient's knowledge about hypertension as a diabetic complication and having reporting to hospital for blood pressure check (x^2 = 11.88). Those who knew about hypertension tended to have very good behaviour while those lacking knowledge were more likely to be

categorized as having a poor care seeking behaviour. A significant linear association was observed between knowledge about diabetic retinopathy and patient eye screening behaviour (x^2 = 11.11). Those who lacked knowledge tended to have a poor health seeking behaviour while those who were aware of the disorder were more likely to be classified as having very good or satisfactory care seeking behaviour. This study sought to determine any significant association between knowledge of complications and health seeking behaviour among pregnant women with PIH aged 18-28 years at Chitungwiza Central Hospital.

Theoretical framework

Health belief model by Rosenstock (1966) will be used to guide this study. It was developed on the idea that to avoid a disease an individual would believe three things. Firstly that a personal susceptibility to the disease is present, secondly occurrence of the disease would have at least moderate severity in some components of the individual's life and thirdly taking a particular action would in fact be beneficial by reducing susceptibility to the condition. If the disease were present, benefit could occur by reduction of disease's severity. In other cases the benefit should entail overcoming important psychological barriers such as costs, convenience, pain and embarrassment.

Therefore it is important for individuals to understand the importance and meaning of knowledge of complications so that they can make a rational and appropriate care seeking behaviour concerning PIH. This should assist midwives to note that an individual's behaviour occurs against a background of their past experiences, stresses, social relations, knowledge within the cultural, political and economic and environment characteristics of the society concerned.

The Health Belief Model was used by Manfredi, Warnecke, Graham and Rosenthal

(2001) to determine social psychological correlates of health behaviour and knowledge of breast self examination techniques among black women in America. The study examined relationship between fear, perceived susceptibility and belief in self-efficacy of early detection of breast cancer as correlates of the likelihood that a procedure for self-examination will actively be known. Three indices were constructed for the analysis index on knowledge of breast examination (dependant variable) was developed from two independent items in the interview. The first asked respondents to name a test used for early detection of breast cancer and the second whether the respondent would prefer self-examination. Two independent variables were constructed from attitudinal items perceived threat and perceived susceptibility to breast cancer and basis for these perceptions. The second belief system was a compilation of three items dealing with belief that breast cancer can be detected early and if treated effects of the disease are mitigated (perceived benefit). The classic paradigm associated with this research postulated a curviliniar relationship between perceived threat and behaviour.

Relationship between perceived threat and knowledge of breast examination showed that levels of threat were associated with highest levels of knowledge of the procedure. Among those who could not spontaneously name the test, but later indicated that they knew the procedure, the effects of level of threat were minimal. Those with either high or low threat levels were also unlikely to be able to name the procedure or to know how to do it. The cognitive element in the motivation to take action in response to health threatening situations is also a major component of HBM developed by Rosenstock (1966). The effects of belief on the efficacy of breast examination and knowledge of technique was examined. Those respondents who expressed agreement with a complete set of beliefs that breast cancer can be cured were most likely to be knowledgeable about breast examination.

The independent variables perceived seriousness, perceived threat and perceived benefits each were found to be strongly correlated with knowledge of breast examination. This study seeks to examine whether perceived seriousness, perceived threat and perceived benefits were strongly correlated with knowledge of PIH complications among pregnant women at Chitungwiza Central Hospital. The possible effects of knowledge and sophistication as measured by education were of interest on the relationship between moderately perceived threats, perceived benefit, perceived susceptibility and knowledge of breast examination remained the same. The results were consistent with those of researchers dealing with patients delaying in seeking treatment in the face of possible cancer symptoms. The significance of the person's relevance of a threat of illness has been repeatedly found to affect behaviour in many studies (Kelly et al, 1999). These same components of HBM perceived susceptibility, perceived threats and perceived benefits were also going to be used in this study to determine relationship between knowledge of complications and health seeking behaviour among pregnant women with PIH complications aged 18 to 28 years at Chitungwiza Central Hospital. These were proved to be of greater utility in the study by Manfredi, Warnecke, Graham and Rosenthal (2001).

This gives the investigator an idea that the HBM variables perceived susceptibility, perceived threat and perceived benefit are able to detect relationship between knowledge and health seeking behaviour among pregnant women with PIH aged 18-28 years at Chitungwiza Central Hospital. These studies (Manifredi, Warnecke, Graham & Rosenthal, 2001; Kelly et al, 1999), will assist the investigator formulating questions related to perceived threat, perceived susceptibility and perceived benefits and knowledge on PIH complications, data analysis methods as well as interpretation of findings.

Fincham and Wertheimer (2001) used the HBM to predict initial drug therapy defaulting.

The purpose of the study was to test the ability of HBM to predict one segment of compliance continuum. The Initial defaulters were obtained over a four month period among those who defaulted their prescriptions. Those who accepted as having defaulted were taken as the sample and a control group matched to them and were given same questionnaires through matching. Chi-square analysis of defaulting and control groups indicated that they did not significantly differ in any of the matching items. Perceived threat, perceived susceptibility, perceived benefits, modifying and enabling factors were used to design the instrument. The variables perceived susceptibility, perceived benefits and likelihood to take action were similarly used by Manfredi, Warneck, Graham and Rosenthal (2001) confirming utility of the HBM variables. Fincham & Wertheimer (2001) adopted these same variables of HBM from Leevittis study (1999) who used them to examine the utilization of ambulatory care services. The results showed that components of HBM provide the most influence for discriminating between compliant and defaulting patients. The study showed that the HBM has the ability to predict various types of compliance including drug therapy defaulting. The authors did not recommend any change of HBM variables based upon the results of the study. Rather further studies need to be done to taste utility of HBM as method in analyzing other defaulting or compliance related behaviour.

A study by Goldesten, Greenwood, Nattan, Massan & Kabach (2002) used the HBM to explore the factors associated with participating in the screening programme for Tay-Sachs Disease among Jewish University Students. Hundred students (23.8%) of the students were among the 1845 subjects who opted to be tested. Those students who chose to be screened were significantly different from those who did not choose to be tested that is by increased desire to have children, their knowledge about Tay-Sachs Disease and their identity as Jews. Discriminate analysis showed that Jewish identity was by far the most important variable. Three variables in

the HBM used were perceived susceptibility, perceived seriousness and social psychological factors which were found not to be associated with predicting which students would take the test or not. The three variables knowledge of Tay-Sachs Disease, desire to have children and Jewish identity were strongly associated with participating in the screening. The conclusion given was that genetic screening was not typical of other health behaviours. In this study ethnicity played a major role but cannot be manipulated to coerce populations at risk to participate in screening behaviours. Further researches needed to determine whether a relationship between perception, being Jewish would relate to other diseases which need screening. This study will seek to determine whether pregnant women's knowledge or religion would play a role in their Health Seeking Behaviour.

The other study which used the HBM was by Uehara, (2001) on its relevance to Australian smokers whose results showed that there was an increased awareness of smoking behaviours showing that modifying factors were the most important predicting factors. This study will assist the midwifery teacher, the investigator to emphasize on the demographic variables, psycho-social variables and structural variables when teaching the students of midwifery. As this will make them able to manipulate the variables among their patients to yield positive Health Seeking Behaviours.

Summary

The literature revealed that pattern of Health Seeking is similar in different parts of developing countries. A significant number showed that they use self-treatment, traditional healers, faith healers and professional care when the previous fail. Health Seeking Behaviour of clients with PIH complications are a major concern to midwives as it puts the pregnant women at a higher risk of dying before getting the right care or have permanent ill health. Literature

revealed that those with Knowledge of disease complications have good health seeking behaviour compared to those without knowledge, (Manfredi, Warnecke, Graham and Rosenthal, 2001). The HBM was shown to be of greater utility in predicting Health Seeking Behaviour among clients of different populations.

CHAPTER 3

METHODS

This chapter addresses methods which include the research design, sampling plan, sampling procedures, samples size, variables, instruments, data collection plan, protection of human subjects and data analysis.

Research Design

A research design maximizes control over factors that may interfere with the validity of a study finding whilst guiding the investigator in planning and implementing the study in a way that is likely to achieve the intended goal (Burns & Grove, 1997). A descriptive correlational design will be used for the study. According to Polit and Hungler descriptive correlational study designs describe relationship among variables rather than inferring cause and effect relationship. The variables under study were knowledge of complications as the independent variables and health seeking behaviour as the dependent variable. Descriptive research aims at observing, describing and documenting aspects of a situation as it currently exists while correlational research examines relationships among variables as they naturally occur (Polit & Hungler 1997; Burns & Grove 1993). An investigator who is engaged in a descriptive and correlational research study combines aspects of both descriptive and correlational research. The researcher has no control over the independent variables but aims to describe how one variable is related to another but not causality pathways. Hypothesis for later studies may be developed from correlational studies. Many interrelationships in a situation may be identified. Complex casual pathways may not be fully understood though.

In nursing research a descriptive correlational research is useful, as the investigator cannot manipulate the independent variable due to practical constrains. It is an efficient and

useful method of collecting large amounts of data about a problem area in a relatively short time. It helps in solutions of mainly practical problems as it is often strong in terms of realism.

The descriptive correlational study will be appropriate as the investigator sought to describe the relationship between knowledge of complications and health seeking behaviours among pregnant women with PIH complications aged 18 to 28 years at Chitungwiza Central Hospital. The study describes the knowledge of PIH complications, health seeking behaviour as well as relationship between knowledge of PIH complications and health seeking behaviour among pregnant women aged 18 – 28 years.

Sampling Plan

A sampling plan describes the strategies that will be used to obtain a sample for the study and is defined as the process of selecting subjects (Burns & Grove, 1997). A sampling plan specifies in advance how study participants are to be selected and how many to include. The aim is to increase representativeness, decrease systematic bias and determine sampling error. In this study a non-probability sampling method was used, where there was no random selection of elements from the population. Subjects were selected as they came in, that is convenience sampling (Polit & Hungler 1993).The subjects were selected as they come in since the rate of patient flow and the time limit could not correlate. Most clients were either unbooked or were not given health education so could not be included. The investigator ended up taking everyone who came in meeting the inclusion criteria.

In this study pregnant women with PIH complications represent the entire population. Burns and Grove, (1993) purports that sampling decision has a major impact on generalizability of findings to other populations and in other settings. Use of non- probability sampling gives no credit to the results as it does not give everyone in the population a chance to be chosen. Sample

defines the selected group of people or elements that represents the entire population, Polit and Hungler (1993) states that it is advantageous to use a sample because it is more practical and less costly than collecting data from the entire population. In this study the sample refers to pregnant women with PIH complications aged 18 to 28 years. The element is the most basic unit about which information is collected. It could be a person, event or behaviour in every other single unit of study. In this study, elements are referred to as subjects as they are people.

Study site

Pregnant women with PIH complications were selected from Chitungwiza Central Hospital, Caesar ward and postnatal ward. The hospital is a referral centre. Receives clients with complications from Chitungwiza City Health Clinics, surrounding rural health clinics and from Marondera Provincial Hospital. Chitungwiza Central Hospital sometimes receives complicated clients from Harare City Clinics as self referrals. A feasibility study revealed that an average of 130 – 200 cases adult clients aged 15 – 50 years are referred with PIH complications, some of the clients who developed complications are booked at Chitungwiza Central Hospital hence referred from ante natal clinic. Chitungwiza Central Hospital is an ISO: 9001 certified/only public institution in the Southern Africa Region. It is a referral centre offering preventive, promotive, curative and rehabilitation services in maternal child health, medical and surgical conditions for both adults and children. It is a multidisciplinary training hospital. The pregnant mothers are booked, given education on their conditions and treated if they get complications.

Target Population

Target population comprises the aggregate of cases about which the research would like to make generalization (Polit & Hungler, 1993). The elements meet a designed set of criteria. In this study the target populations was all pregnant women with PIH complications aged 18 to 28

years.

Accessible Population

Accessible population is the aggregate of cases that meet the sampling criteria and are accessible to the researcher as a pool of subjects for a study (Polit & Hungler, 1993). One can generalize findings from the accessible population to the target population. In this study accessible population were pregnant women with PIH complications. Those aged 18 to 28 years.Referred or booked at Chitungwiza Central Hospital. Together with those admitted into Caesar ward and postnatal wards.

Sampling Criteria

Sampling criteria is the essential characteristics of the target population (Burns & Grove, 1993). Sampling criteria refers to inclusion and exclusion criteria which helps to control extraneous variables. It ensures homogeneity and provide a guideline for sample recruitment. For production of credible results, extraneous variables which could interfere with measurement were controlled. Inclusion criteria refers to the specific characteristics the investigator wishes to include in a study. Whereas exclusion criteria refers to characteristics not wanted in the study. Inclusion criteria is this study included clients aged 18 to 28 years. These were booked and had 3 antenatal visits or more. They had with complications such as pre-eclampsia, eclampsia, disseminated intravascular coagulation imminent eclampsia.These included reduced fetal movements and cessation of fetal movements and had a chance of being health educated on the signs and symptoms of PIH complications. Had to be admitted in Caesar ward and at Chitungwiza Central Hospital, own referral or from clinic. Should have recovered from effects of eclampsia for at least three days within which they will be able to participate in a verbal interview. These should not have previously suffered from PIH complications. as this will

increase their knowledge of the disease thereby introducing bias. The participants were able to speak Shona or English. Exclusion criteria included those with confusion, less than three antenatal care visits. As they did not meet the criteria. The unconscious were left out. They were not able to communicate verbally and could not give a consent to participate. Those suffered PIH more than once were left out as this will introduce bias.

Sample Size

A sample of sufficient size is essential to describe the phenomena, describe relationship or determine the effect of treatment (Burns & Grove, 1993). Power is to detect significant relationships and differences. Power increases as sample size increases (Burns & Grove, 1993). The larger the sample the more representative it is of the population. A larger power gives a smaller sampling error (Polit & Hungler, 1993). Power is a function of significance level, sample size and effect size (Burns & Grove, 1993).

Power refers to the ability of the research to detect differences among variables. Power tries to control the likelihood of making a type II or beta error. This arises when an investigator accepts the null hypothesis when it should be rejected. The investigator can directly affect power by increasing sample size or a relaxing alpha criteria of the test. For example power decreases when criteria is 0.01 than 0.05. Power is therefore subject to the researcher's control. In this study power of .80 was accepted for nursing research according to Cohen quoted in Burns and Grove (1993). If power is high one is able to detect the smallest differences that exist through the statistical test. A power of 0.80 will result in a 20% chance of not being able to detect existing differences or relationships.

The significance level (alpha) was 0.05 which is conventionally accepted for social research. This proposes that in 5 times out of 100 results will not be reliable, hence in ninety five

times out of a hundred the results will be reliable ensuring the investigator that results are credible. Significance level tries to control the likelihood of making a type I error, occurring when the results are credible. The investigator rejects the null hypothesis by mistake when it should be actually accepted. A finding is significant when the significance level is 0.05 or less since, it shows a stronger evidence against the null hypothesis. In this study the significance level of 0.05 was used as an alpha set at 0.01 needs much larger samples (Burns & Grove, 1993).

Effect size measures the degree to which the null hypothesis is false (Burns & Grove, 1993). It is an index of strength of the independent variable on the dependent variable. As the value of effect size increases power also increases whilst the needed sample size reduces. The effect size is the parameters in which the investigator has least control but its value can be estimated in correlational descriptive studies (Polit & Sherman, 1990). Nursing studies use the medium effect .5 which this study adopted. Power calculations enable the investigator to provide evidence of worthiness of carrying out the study. The study should not be underpowered leading to not significant results or overpowered leading to resource wastage or use of more than necessary resources. Basing on Lipsey (1990) tables of estimating sample size, with an effect size of 0.5 significance of 0.05 and power of .80 sample size will be 65 plus 20 to cater for an attrition rate giving a sample size of 80. This research used a sample size of 80.

Sampling Procedure

Non-probability sampling was used to recruit the sample of pregnant women with PIH complications this was due to the decrease in the number of patients admitted with PIH complications meeting the criteria. There was also a time limit. Had only 30 days of collecting data to meet the deadline of submission. Ended up taking respondents meeting the criteria as they came. There was no way of ensuring that every member of the population could be selected

which increased the risk of a biased sample (Polit and Hungler, 1995). The three commonly used non-probability sampling methods are convenience, quota and purposive sampling. In this study the convenience sampling method was used to recruit a sample of 80 pregnant women admitted with PIH complications at Chitungwiza Central Hospital Caesar ward and postnatal ward. The available subjects might not be typical of the population with regards to the critical variables being measured. Although convenience sampling increases the possibility of samples that are not representative it has commonly been used in nursing studies (Polit & Hungler, 1995; Burns & Grove, 1993). Subjects were interviewed as they come in. For this study a convenience sampling was used. The reason being that the clients with PIH complications meeting, the criteria were not coming as predicted. Most clients came unbooked with less than 2 antenatal visits. As a result clients meeting the criteria were taken as they came in. PIH increase in numbers during a cold season and reduce in hot season. As a result convenience sampling had to be used as data was collected between September and October.

Variables

The investigator observed variables in their natural setting. Variables are concepts with values which vary from individual to individual for example height can take any value and varies from subject to subject (Polit & Hungler, 1993). In this study the variables were Health Seeking Behaviour (dependent variable) and knowledge of complications (independent variable). Variables can be defined conceptually and operationally. A conceptual definition provides a variable or concept within a theoretical meaning through concept analysis or concept synthesis or theory definition. Operational definition means defining a concept or variable in terms of the operation or procedure by which it is to be measured (Polit & Hungler, 1995).

Health seeking Behaviour

Conceptually health seeking behaviour is defined as an activity undertaken by individuals who perceive themselves to have a problem or are ill for the purpose of finding a approved remedy (Rosenstock, 1966; Stretcher & Rosenstock, 1997). Health seeking behaviour was operationalized using the health seeking behaviour Interview Schedule which addressed perceived seriousness, perceived benefits, perceived barriers and likelihood of taking action Adapted questions from literature by Manfredi, Warnecke, Graham & Rosenthal (2001); Kelly et al (1999); Hunte & Sultan (1992); Rosenstock (1996). Questions were focused on where the clients would go to source for help or what they would do on noticing PIH complications. The actions depended on what they perceived as the causes of the complications. The causes were among witchcraft = 1, punishment from God = 2, evil spirits = 3 and worsening PIH = 4. Action was also prompted by perceived seriousness of PIH complications. They would respond 'yes' or 'no' to a given set of questions. The respondents were also to respond on what action they took first before going to hospital. Finally they had to indicate what they perceived as benefits of going to hospital or clinic first on noticing complications. They would be respond 'yes' or 'no' to a given set of questions, (see Appendix B, Section C).

Knowledge of Complications

Conceptually, knowledge has been defined as possession of relevant facts about the disease and knowledge of utilization of health care facility for treatment (Gillies, 1998). Knowledge of complications was operationazised using the Knowledge of PIH interview schedule, which addresses knowledge of PIH complications adopted from Myles (2006; 2008), Sweet, (1998), Robertson, (1994), (see section B). Eighteen PIH complications were listed and respondents were supposed to indicate 'yes' or 'no' against each complication. 'Yes' indicated

they knew it was a complication and a score of one was given. A 'no' indicated they did not know that it was a complication and a score of zero was given. The scores were added to detect the knowledge level of the subjects on PIH complications. A score of 50% and above indicated that they had knowledge of PIH complications. Below 50% indicated that they had no knowledge of PIH complications.

Demographic variables

Demographic variables addresses subject's age, religion, marital status, occupation of self, income per month for self, occupation of spouse, and spouse's income per month, level of education, and whether they had PIH before, what is the current health problem that caused you to be admitted, (see Section A).Questions adopted from literature by (White et. al. 2006); Steer; Sloveeth, Fourier, Lombard and Everete (2005). Ahmed, Bremer Magols and Nour 2003; Kasule et. al. 1997; Sumunyi , Wafula, and Nduati (2003); Taha & Bella, (2001). Demographic data such as age, marital status, level of education, income and previous experience of the condition determine the client's predisposition to PIH complications and the level of knowledge they had on the condition (Myles 2006; 2008). The same demographic variables determine the individual's health seeking behaviour and knowledge levels, (Kasule et al, 1997).

Instrument

An instrument is a device that is used to collect data (Polit & Hungler, 1995). The investigator used an interview schedule with closed ended questions and one open ended question based on literature review. Interviews involve verbal communication between the investigator and subjects during which the sought information is provided to the investigator (Burns & Grove, 1997). The structured interview was chosen for this study as it includes strategies that provide increasing amount of control by the investigator over the context of the

interview. Face to face was chosen because it allowed the investigator to get more information from the respondents through incidental comments, bodily and facial expression, tone of voice and opportunities to probe further where there was need.

According to Cormark (1996), such structured instruments tend to be straightforward. They provide factual responses that can be counted or analysed statistically. These have one added advantage of producing highly reliable data given that each subject is studied using the same set of questions in the same environment. Disadvantages of close-ended questions are that the investigator may over look important alternatives if subjects choose alternatives that misinterpret their position thereby introducing bias, (Polit & Hungler, 1995). The questions were translated into Shona by an expert in linguistics who is a family friend for free. Translation eased administration and understanding of the instrument thereby acknowledging the role of language as a medium of communication with the subjects in the study. Local language allowed for optimum exchange of ideas and key words, which was within the comprehension of respondents.

Close-ended questions offer subject's a number of alternative responses from which the subjects choose the one that closely matches the appropriate answer. Close-ended questions are difficult to construct but easy to administer and analyse. They are generally more efficient than open-ended questions and are useful with subjects who are unable to express themselves and with same type of questions which may seem less objectionable in a closed form, than in an open form. Disadvantages of close-ended questions are that the investigator may overlook important alternatives of subjects who chose not to represent their position thereby introducing bias (Polit & Hungler, 1995). The decision to use open or close-ended questions is based on the sensitivity of the topic, the verbal ability of subjects and the point in time available. The time available for this study is very limited as there is a deadline to meet hence the close ended questions were

found to be ideal. In this study a three part structured interview schedule with a total of 80 items were used to describe the demographic data, knowledge of complications and health seeking behaviour. Instrument item sampling ensured validity by evaluating systemic error.

Health Seeking Behavior

Health seeking behaviour made up of perceived seriousness, perceived benefits, perceived barriers and likelihood to take action. Questions were adopted from Mugisha et. al. (2000); Camazine (2000), Greenfield (2001), Nemet & Bailey (2000); White et. al. (2006); Willliams (2007); Scott (1999); Pitchforth, Teylenga Graham & Fitzmaurice (2007); Mutambirwa (1987), Chavhunduka & Gelfand (1987), Jonker (1998) and Hunt & Sultana. Facelid, Aihlberg, Ndulo & Krantz (1998)

Perceived seriousness

Perceived seriousness (seriousness with which pregnant women perceive/view the PIH complication) was measured by questions adopted from the following literature, Ahmed, Tomson, Petzold & Kaur (2005). Ahmed, Adams, Chowddhury & Bhuiya (2000), Manhust, Dialmy, Ryan & Mahjair (2000); Chavhunduka & Gelfand (1987). Mugisha et. al. (2004); Nemet & Bailey (2000); Mutambirwa (1987); Camazine (2000) and Greenfield (2001). Perceived seriousness was measured in three parts. Firstly by items 29 to 36 which measured the seriousness with which the subjects perceived causes of PIH complications where they indicated the cause as either witchcraft, punishment from God, bad airs/ evil spirits or worsening PIH complication. A score of 1 was given for worsening PIH complication and zero for the other causes giving a total score of 8.

Yes indicated that the respondents did not perceive the symptoms with seriousness and a total of one awarded. It indicated that the respondents would not seek any help for the cited

symptoms. A zero was awarded for a no which indicated that they perceived the consequences of PIH complications with seriousness and would do something about the symptoms.

Secondly by items 37 to 45 which measured the perception of seriousness of consequences of PIH complications on themselves where they responded yes or no to listed items. Yes indicated that they did not perceive the consequences with seriousness and a score of one awarded giving a total score of 9. A zero was awarded for a no which indicated that they perceived the consequences of PIH complication with seriousness.

Thirdly by items 46 to 53 which measured the seriousness with which the subjects perceived the first treatment they sought for the PIH complication such as seeking treatment from self/home treatment, traditional healers, hospital non-professional workers treatment, faith healers hospital/clinic or i did not have it, where they will indicate 'yes' or 'no'. Yes was awarded a score of one for using hospital/clinic and the rest a score of zero. Perceived serious on seeking treatment meant going to hospital/clinic. Giving perceived seriousness a total score of 25 (See Section C).

Perceived Benefits

Perceived benefits was developed from literature by Kelly et. al., 1999; Manfredi Warnecke, Graham & Rosenthal, 2001; Kamel Badawyl, El-Zeing & Merdan, 1999). Its comprised of 6 items, questions 54 to 59 namely fatal complications can be prevented, convulsions can be prevented, my baby can be delivered quickly before it dies, my condition is monitored by a nurse and doctor. I am given correct treatment and my pregnancy can be prolonged to allow my baby to grow, clients gave a yes or no response. A score of one given for "yes" giving a total of 6 and zero for "no" yes indicated that there was an advantage and no that there was no advantage of going to hospital.

Likelihood to Take Action

Item 60 the likelihood of taking action was measured by an open-ended question. What will motivate you seek medical treatment on noticing PIH complications? The item was not scored. Subjects' responses were grouped and analysed.

Barriers to action

Barriers to action (measure difficulties associated with not reporting to hospital on noticing PIH complications)was developed from literature by from literature by Kelly et al (1999), Manfredi, Warnecke, Graham & Rosenthal (2001); Karmel, Badawyl, El-Zeiny & Merdarn, 1999). Mugisha et. al. (2004) Oppong (1989) Bekanovic, Telesky and Herwood (2000), Hunte and Sultra (1992) Paras, Sing or Suneela (2007), Michael et. al. (2007) Chavhunduka & Gelfand (1987); Nemet or Bailey (2000). It comprises of 20 items, questions 61 to 80 namely my family does not use medical treatment, I did not have money to pay for the services, decision to go to hospital has to be made by husband or significant others, my religion does not allow me to use medical treatment, I was the only one at home so could not leave children alone at home, the reception at the hospital is poor, waiting time to get treatment is too long, services provided are not to expectation, my sister was previously not treated adequately, some of the diseases are not for hospital treatment, traditional healers do not have consultation fees, symptoms I presented with needed exorcising before medical treatment, I do not come to hospital unless referred by a traditional healer, I come to hospital when home treatment has failed, thinking that it was not necessary, faith healers offer free treatment, fear of hospital care, I did not have transport money to go to hospital, I failed to identify the symptom of PIH. I was be-witched by someone who was jeolousy of my pregnancy .A "yes" or "no" response was to be given, giving a total score of 20 for a score of 1 for yes and a score of zero for no. yes indicated

there was a barrier and no there was no barriers. The barriers were scored 1 for yes and zero for no. Yes indicated there was a barrier and no there was no barrier. Total scores for health seeking behaviour was 51. The score was achieved by adding scores for (perceived seriousness 25scores + perceived benefits 6 scores + barriers to action 20 scores = 51scores) concepts making up health seeking behaviour, good behaviour rated by a score of 0 – 17, bad behaviour 18 – 34 and very bad /poor behaviour 35 – 51, (see section B and C).

Knowledge of Complications

Knowledge of complications, comprises 18 items to elicit the knowledge of PIH complications the pregnant women have. It was developed from literature by (Myles ,2006,2008;Sweet,1988;Roberts,1989). Manahels, Younnis, Ichattab-Zuray (1999), Kamel, Badaway, El-Zeing – Merdas (1999); Simunyi, Wafula & Ndouti (2003); Kasule et. al. (1997), Ahmed, Bremer, Magazoals & Nouri (2003) and Taha & Bella. Items 11 – 28 asked respondents about the knowledge of complications such as blurred vision, rapid weight gain, convulsions first time in pregnancy, flashes of light or dots before the eyes, swelling of face and fingers, reduced urine output, reduced fetal movements, death of fetus inside uterus, death of mother, abdominal or epigastric pain, confusion, drowsiness or feeling sleepy, continuous frontal headache, facial twitching,uncontrolled bleeding of sudden onset, generalized body weakness, nausea and vomiting and very high blood pressure. The responses were scored as follows one for “yes”, indicating a correct answer or knowledge and zero for “no”, indicating a wrong answer or no knowledge. Total score for knowledge was 18. A score of below 50% indicated that subjects had no/ poor knowledge of PIH, a score above 50% indicated subjects had good knowledge on the complications of PIH (see section B).

Demographic Data

The demographic section comprises of ten questions adopted from the following literature White et. al. (2006); Steer, Sloveette, Fourier, Lombard & Everret (2008); Ahmed, Bremer, Magzoals & Nour (2003), Taha & Bella (2001); Ahmed, Tomesen, Petzold & Kabir (2004); Cheruchousy & Merzerk (2001); Mugisha et. al. (2006) and Abbas and Walker (2006) to elicit information on the subjects age, religion, (apostolic churches representing Johane Marange, Ruvheneko, Johane yechishanu), Pentecostal churches e.g. ZAOGA; Main stream churches e.g. Roman Catholic, Methodist, Anglican, Salvation Army and Evangelical Lutheran church; Islamic (Moslems)) and traditionalists, marital status, occupation and monthly income of subject, occupation and monthly income of spouse, level of education, whether they have suffered PIH before and the current health problem that caused them to be admitted (see Section A).

Validity

Validity is the ability of an instrument to measure what it is actually set out to measure (Polit & Hungler. 1995). Simplicity, clarity of instrument to earlier sections in the instrument. Content validity was tested by giving content experts in MCH & Midwifery to review it and representatives of relevent population on what is to be measured on knowledge of complications using questions (adopted from Myles (2006, 2008), Sweet, (1988). Health seeking behaviour was to be measured using questions constructed from the following Health Belief Model variables. These were perceived seriousnes, perceived benefits, perceived barriers and likelihood of taking action.

Reliability

Reliability is the degree of consistency with which an instrument measures the attribute of interest (Burns & Grove, 1993). Possible errors may be the instrument itself or in the way it is

used by the researcher. Pilot study was used to test validity & reliability of instrument.

Pilot Study

A pilot study is a small version or trial run of the major study (Pilot & Hungler, 1995). The pilot study was carried out using 10 subjects with similar characteristics with those of study subjects. This was to check whether the instrument was valid and reliable. The pilot study was carried out at Chitungwiza Central Hospital. Permission was first obtained from the Chief Executive Officer and the executive members of the hospital. Ten participants who met the inclusion criteria were chosen using a systematic convenient sampling method. The pilot study was carried over 5 days interviewing 2 clients per day. To avoid instrumentation which introduces bias the research subjects who were used for the pilot study were not selected again for the main study. The purpose of the pilot study was to assess the reliability and validity of the instruments and feasibility of systematic sampling. It alerted the investigator on things taken for granted. Clients booked and with PIH complications are not admitted predictably. Hence use of systemic random sampling not feasible. It turned out that there were some who were admitted at the local clinic. Some come already in labour/ delivered but with PIH complications. It allowed evaluation of the effectiveness, clarity, cultural relevance of questions, and length of time needed to answer questions. Procedure for recording responses pre-testing allowed an assessment of reliability and validity issues of the instrument. It also issued the investigator an opportunity to become familiar with questions.

Reliability is the degree of consistency with which an instrument measures the attribute it is supposed to measure Polit and Hungler (1995). Validity is the degree to which an instrument measures what it is supposed to measure. Content validity was established by giving experts in obstetrics, senior midwives and midwifery tutors. This was to analyse the items in order to see

how well the phenonmena being measured was captured. The item not employed was added to section A as a suggestion from an expert. For Section B medical cause was changed to complicating PIH. It was confusing clients and appeared vague they were responding differentially. Items 29 to 36 were moved to section C. They were measuring seriousness with which the pregnant women viewed the causes of PIH complications. These were convulsions, confusion, flashes of lights/dots in eyes, reduced fetal movement. As well as continuous frontal headache, generalized oedema abdominal or epigastric pain and nausea and vomiting. On before coming to hospital what treatment did you seek first the column of did not have the problem was not there. It was a common response among the subjects during a pilot study. Three more items were added reduced fetal movement, nausea and vomiting and convulsions first time in pregnancy. This Changed the score from 5 to 8. It also affected the numbering on perceived benefits to change from 51 to 56 to 54 to 59. Item 42 PIH will kill me to PIH cannot kill me. Forty-three PIH can kill my baby to PIH cannot kill my baby. Forty-four PIH can damage my kidneys, eyes and brain to PIH cannot damage my kidneys, eyes and brain.

Forty-five PIH can predispose me permanently to heart disease, cancer and reduced life span to PIH cannot predispose me permanently to heart disease, cancer reduced life span. They were not indicating the seriousness and distorting the scoring. All responses were supposed to be negative for the seriousness to come out clearly. On perceived barriers item 72 was removed as it was eliciting same responses with item 73. Item 80 was changed to item 60 as it was introducing systemic bias. The clients would have responded no to items 60 to 69 but would mention the same responses for change/motivating them to come to hospital if improved. Barriers numbering as a result changed from 60 to 79 to 61 to 80. Four more barriers were identified as clients were citing them. These were thinking it was not necessary, fear of hospital care, did not have money

to pay for transport and I failed to identify the problem. Changing the score from 16 to 20. It also determined how long the interviews lasted .The interviews lasted 20 to 25 minutes, half of what was planned for previously.

Data Collection Plan

A data collection plan details how the study will be implemented (Burns & Grove, 1993). It is necessary to provide the ground work implementation of data collection process. Burns and Grove (1993) further outlines that data collection plan includes selection of a setting, selection of sample, development of supportive relationship with staff working in the area. Considering time and cost factors, planning data collection procedures and planning the organization of data .Data analysis and interpretation and communication of findings and evaluation plan. It helps to identify sources of bias and address ethical issues. The study proposal needs formal or informal approval and support from different sources. Permission to carry out the study was sought from the Medical Research Council of Zimbabwe, an ethical review board for the protection of human subjects in the study. The research committee in the Department of Nursing Science reviewed the proposal to reduce study risks to respondents in the study. A written informed consent form was utilized for the protection of subjects' rights. Potential benefits of the study described to subjects which thereafter subjects gave permission to participate in the study.

Permission to carry out the study was also sought from the Chief Executive Officer and executive members of Chitungwiza Central Hospital. It is crucial to ask for permission at the site of study as these individuals influence the possibility of obtaining an adequate sample. The sisters in the wards assisted in the identification of clients. Burns and Grove (1993) suggest that establishing a good working relationship is essential to gain cooperation and support. There is also need for courtesy and politeness in order to gain access to the subjects. The informed

consent form, purpose and benefits of the study were explained to ward sisters and doctors looking after the patients to gain their maximum cooperation. This was to ward sisters and doctors looking after patients. The purpose was to gain their maximum cooperation.

Data Collection Procedure

A request to use the same room was forwarded to the sister-in-charge. Ensure consistency of environmental conditions so as to prevent introducing extraneous variables. Privacy was ensured and noise controlled. This could influence responses on the dependent variable. Visits to the ward were arranged so as not to coincide with critical ward routines. This facilitated use of the reproductive Health sister's office for interviews. Ward sisters were told not to inform clients about the interviews before hand. This was to prevent them from influencing the subjects which could have introduced bias. According to Burns and Grove (1993), recruiting the number of subjects originally planned is critical. As data analysis and interpretation of findings depend on an adequate sample size. Burns and Grove (1993) regard direct contact with potential subjects as the most effective form of recruitment. In this study a face-to-face contact was used to recruit 80 subjects. Reassurance and explanations through informed consent was ensured. This was done to obtain the required response and reduce attrition

Too much information was not given to prevent attrition that could have introduced bias. Subjects selected drop out of the study impatience if too much information is sought. Subjects were allowed to attend to crucial issues first those with personal transient factors such as wanting to solve pressing issues were not inconvenienced. Data collection was carried out from mid September to mid October, 2009. Threats on internal validity was reduced by interviewing the subjects at one point in time and in the mornings only. The number to be interviewed per day were from five to six. The investigator took 20 to 25 minutes per subject during 2 hours of

interviewing subjects per day. The investigator took into account the unforseable problems that could have interfered with implementation of data collection plan. Such as institutional changes, subject mortality, resistance from ward staff, lack of experience in data collection technique. Computer breakdowns, or occurrence of industrial actions which did not happen during data collection. Of significance clients admitted were few and had to change from simple random sampling to convenience sampling.

Face to face interview which is a type of self report method for data collection was used. The investigator checked from the admissions register for those admitted with PIH complications. Clients were interviewed from 10.00 to 12.00 hours daily. The interview was carried out from the reproductive Health sisters office after doctors rounds. So as to reduce anxiety of subjects when they thought they could miss the doctors round. The investigator spent five to ten minutes getting informed consent and interview each subject for 20 to 25 minutes or same period so as not to introduce bias. The investigator was presentable and not over dressed with a white coat. Student identity card exposed to minimize situational contaminants that would affect the subjects responses.

Protection of Human Subjects

Ethics refers to the quality of procedures with the respect to adherence to professional, legal and social obligations to research subjects (Polit & Hungler, 1995). In order to protect subjects from possible harm that could have resulted from carrying out this study. The investigator requested permission from the Chief Executive Officer and executive members of Chitungwiza Central Hospital. As well as the sister in charge of the ward where the clients were admitted.

The mothers were given the objectives of the study and informed consent. Those willing

to participate filled in the consent form that revealed the objectives of the study. Those determining the relationship between knowledge of complications and health seeking behaviour among pregnant women with PIH complications aged 18 to 28 years. Polit and Hungler (1995) indicate that humans should be treated as autonomous agents capable of controlling their activities. Prospective study subjects had the right to voluntarily decide whether or not to participate. Subjects were informed that they could refuse to answer questions or withdraw from study at any time. Hence not participation or withdrawing would have not prejudiced their client status. Subjects were free to ask questions and get answers or explanations. The promised time for conducting interviews were adhered to, to avoid unnecessary delays. Mothers were given information on the benefits of the study results to themselves. That is mortality and morbidity related to PIH complications will be reduced if the clients choose the right source of health care.

Interview schedules were coded, as no name was to be included to ensure anonymity. All responses of the study were considered to be sensitive and confidential. Were kept under lock and key. Subjects were interviewed in privacy and confidentiality adhered to. The interview schedule and consent form were submitted to the Department of Nursing Science and Medical Research Board for approval.

Data Analysis

Data analysis is conducted to reduce, organize and give meaning to data (Burns & Grove, 1995). In this study, statistical procedures were used to determine whether the phenomenon is present or not in the population (Burns & Grove, 1995). Planning data analysis involves coding and selection of appropriate techniques to analyse the data.

Coding is the process of transforming data from categories, words or phrase into numerical symbols that can be computerized (Burns & Grove, 1995). Numbers to each question

were recorded into a code book thereby documenting the count on value of every variable that was entered into a computer file. This was kept in its original form and was not changed during the process . The investigator entered data directly from the instrument into the computer outlet. In which it was cleaned and detected coding and input errors by checking raw data on the collection tool against the data entered into the computer. Data was classified to produce reliable findings according to Burns and Grove, (1995). Data was analysed using the statistical package for Social Sciences (SPSS-PC). Research questions were analyzed using descriptive and inferential statistics. Descriptive statistics allow the investigator to organize the data in such a way that it gives meaning and to facilitate insight (Burns & Grove, 1995).

Sample demographics were analysed using descriptive statistics such as frequencies, percentages, mean, mode and standard deviation.

Health seeking behaviour as the dependent variable was analysed using the descriptive statistics. The dependent variable was reflected by the second research question. "What are the health seeking behaviours of pregnant women with pregnant induced hypertension aged 18 to 28 years at Chitungwiza Central Hospital?"

Knowledge of PIH complications as the independent variable was analysed using descriptive statistics. The independent variable was reflected by the research question. "What knowledge of complications do pregnant women with pregnant induced hypertension aged 18 to 28 years have at Chitungwiza Central Hospital?"

Inferential statistics was used to determine the relationship between the independent and dependent variables. The Pearson correlation test was used to examine the relationship between independent variables knowledge of PIH complications and dependent variable health seeking behaviour. Linear regression analysis was used to test the strength of relationship between the

knowledge of PIH complications and health seeking behaviour. The relationship is reflected by the third research question. “What is the relationship between knowledge of PIH complications and health seeking behaviour among pregnant women with pregnancy induced hypertension aged 18 to 28 years at Chitungwiza Central Hospital.” The results were presented in table format using frequencies and percentages.

Summary

This chapter addressed the study methodology. That is study design, sampling plan, sample size, sampling procedure, variables, instrument, data collection plan. Also human rights consideration, data collection procedures and data analysis procedures used.

CHAPTER 4

RESULTS

The purpose of the study was to describe and examine the relationship between knowledge of PIH complications and health seeking behaviours among pregnant women aged 18 to 28 years at Chitungwiza Central Hospital.

The data sought to answer the following questions.

1. What knowledge of complications do pregnant women with PIH aged 18 to 28 years have at Chitungwiza Central Hospital?

2. What are the health seeking behaviours of pregnant women with PIH aged 18 to 28 years at Chitungwiza Central Hospital ?

3. What is the relationship between knowledge of complications and health seeking behaviours among pregnant women with PIH aged 18 to 28 years at Chitungwiza Central Hospital?

The data was collected from 15 September to 18 October, 2009.Using a face to face interview schedule. Eighty subjects participated in the study. The response rate was 100%. Data was analyzed using the Statistical Package for Social Science (SPSS-Pc).

Descriptive statistics namely frequencies, percentages, means and averages were used to describe knowledge of PIH complications and health seeking behaviours of pregnant women aged 18 to 28 years at Chitungwiza Central Hospital. Inferential statistics specifically the Pearson Product Moment correlation test was used. To determine the relationship between knowledge of PIH complications and health seeking behaviours. Simple regression was used to

examine the strength of the relationship between the independent variables and dependent variables. Data is presented in tabular form

Respondents` Demographic Characteristics

Table 1 shows demographic characteristics in terms of age, religion, and marital status. Eighteen (22.5%) respondents were aged 28 years, ages ranged from 18 years to 28 years. The mean age of respondents was 22.63 years with a standard deviation of 3.74 years. Thirty-six (45%) respondents were from apostolic churches, with 27 (33.8%) belonging to mainstream churches and 17 (21.2%) being of pentecostal churches. Seventy-three (91.1%) respondents were married, 5 (6.2%) were divorced. None (0%) were widowed and the rest were evenly distributed at 1 (1.3%) for single and separated respectively.

Table 2 shows demographic characteristics of respondents' employment status, monthly income, spouse employment and spouse monthly income. Sixty-three (78.7%) respondents were not employed with 16 (20%) on skilled employment and 1 (1.3%) unskilled. Thirty-three (41.3%) respondents had a monthly income of 101 to 200 USD, 31 (38.8%) are on a monthly income of 0 – 100 USD, 11 (13.8%) with a monthly income of 201 – 300 USD. Three (3.8%), and 2 (2.5%) had a monthly income of 301 – 400 USD and 401 USD and above respectively. Forty-eight (60%) spouses were on unskilled employment, 31 (38.7%) were skilled workers with 1 (1.3%) on no employment. Twenty-nine (36,2%) spouses had a monthly income of 101 – 200 USD, 24 (30%) had a monthly income of 201 – 300. The rest 8 (10%) had an income of 301 – 400 USD and 401 USD and above equally. Eleven (13.8%) earned between 0 – 100 USD.

Table 3 shows demographic characteristics of respondents related to educational level, ever suffered PIH and current health problem that caused admission. From the table 49 (61.2%)

respondents attended school from form 1 to four, 14 (17.5%) attended primary education with a few 8 (10%) attending form 5 to 6 and tertiary education respectively. One (1.3%) had never been to school.

Sixty-seven (83.8%) respondents had not suffered PIH before with 13 (16.2%) having suffered PIH before. Forty-one (51.1%) respondents were admitted for imminent eclampsia, 13 (16.3%) having been admitted for reduced fetal movements and with no fetal movement felt respectively. Ten (12.5%) were admitted for eclampsia with 3 (3.8%) being admitted for pre-eclampsia.

Knowledge of PIH Complications.

Table 4 shows knowledge of PIH complications which include blurred vision, rapid weight gain convulsions for the first time in pregnancy, flashes of lights or dots before eyes, swelling of face and fingers, reduced urine output, reduced fetal movement, death of fetus inside uterus and death of mother. Fifty-five (68.8%) of the respondents indicated that blurred vision is a complication of PIH, 25 (31.2%) indicated no. Fifty-nine (73.8%) indicated yes whilst 21 (26.2%) indicated no on extreme weight gain. On convulsions for the first time in pregnancy 48 (60%) indicated yes and 32 (40%) indicated no. For flashes of light before the eyes 56 (70%) indicated yes and 24 (30%) indicated no. On swelling of face and fingers 77 (96.2%) indicated yes with 3 (3.8%) indicating no. For reduced urine output 53 (66.2%) indicated no with 27 (33.8%) indicating yes. On reduced fetal movement 55 (68.8%) indicated a yes whilst 25 (31.2%) indicated a no. On death of fetus inside uterus 69 (86.2%) indicated a yes whilst 11 (13.8%) indicating a no. On death of mother 73 (91.2%) indicated a yes with 7 (8.8%) showing a no.

Table 5 shows knowledge of PIH complications, which included abdominal or epigastric pain, confusion, drowsiness/feeling sleepy, continuous frontal headache, facial twitching, uncontrolled bleeding of sudden onset, generalized body weakness, nausea and vomiting as well as a very high blood pressure.

On abdominal or epigastric pain, 43 (53.8%) indicated a yes, whilst 37 (46.2%) indicated no. For confusion 55 (68.8%) indicated a no, whilst, 25 (31.2%) indicated a yes. For drowsiness/feeling sleepy 53 (66.2%) indicated yes whilst 27 (33.8%) indicated no. On continuous headache 67 (83.7%) indicated a yes with 13 (16.3%) indicating no. Fifty-seven (71.3%) indicated no and 23 (28.7%) indicated yes for facial twitching as a complication of PIH. On uncontrolled bleeding of sudden onset 68 (85%) indicated no with 12 (15%) indicating yes. On generalized body weakness 51 (63.8%) indicated yes and 29 (36.2%) indicated no. Same responses were found for nausea and vomiting. All the 80 (100%) respondents indicated a yes for high blood pressure.

Table 6 shows knowledge on PIH complications with a maximum score of 18 and a minimum score of 4. A total score of 9 and above showed the pregnant women had knowledge of PIH complications and those who scored below 9 had no knowledge of PIH complications.Sixty-five(81,3%) scored above 50% with 15(8,7%) scoring below 50%. Thirteen (16.3%) scored 11 while 10 (12.5%) scored 12. Eight (10%) scored 17 and 6 (7.5%) scored 9 while 4 (5%) scored 14 and 17. Nine (11.3%) scored 15 and 6 (7.5%) scored 9 whilst 3 (3.8%) scored 4, 5, 6 and 16. Five (6.3%) scored 10 and 13 whilst 2 (2.5%) scored 8 and 18. The mean score was11,65. Median score 12 and standard deviation 3.69. Forty-one (51.3%) scored above the mean score. Though the more frequent score was 11 (16.2%) was below the mean score.

Table 1

Demographic Characteristics 1

(N = 80)

Variables	Frequency	Percentage
Age		
18	11	13.8
19	12	15.0
20	7	8.8
21	12	15.0
22	3	3.7
23	2	2.5
24	7	8.8
25	3	3.7
26	2	2.5
27	3	3.7
28	18	22.5
Religion		
Apostolic	36	45.0
Pentecostal	17	21.2
Main Stream Churches	27	33.8
Islamic	0	0
Traditionalist	0	0
Marital Status		
Married	73	91.1
Single	1	1.3
Widowed	0	0
Divorced	5	6.3
Separated	1	1.3

Table 2

Demographic Characteristics 2

(N = 80)

Variables	Frequency	Percentage
Employment Status		
Skilled employment	16	20.0
Unskilled employment	1	1.3
Unemployment	63	78.7
Monthly income		
USD 0 – 100	31	38.7
USD 101 – 200	33	41.3
USD 201 – 300	11	13.8
USD 301 – 400	3	3.7
USD 401 and above	2	2.5
Employment Status of Spouse		
Skilled employment	31	38.7
Unskilled	48	60.0
Unemployed	1	1.3
Monthly Income of Spouse		
USD 0 – 100	11	13.8
USD 101 – 200	29	36.2
USD 201 – 300	24	30.0
USD 301 – 400	8	10.0
USD 401 and above	8	10.0

Table 3

Demographic Characteristics 3

(N = 80)

Variables	Frequency	Percentage
Education		
Grade 1 – 7	14	17.5
Form 1 – 4	49	61.2
Form 5 – 6	8	10.0
Tertiary	8	10.0
Never been to school 5	1	1.3
Ever suffered PIH		
Yes	13	16.2
No	67	83.8
Admission reason		
Pre-Eclampsia	3	3.8
Eclampsia	10	12.5
Imminent eclampsia	41	51.1
Reduced fetal movement	13	16.3
Cessation of fetal movement	13	16.3

Table 4

Knowledge of PIH Complications (1)

(N = 80)

Variables	Frequency	Percentage
Blurred vision		
Yes	55	68.8
No	25	31.2
Rapid weight gain		
Yes	59	73.8
No	21	26.2
Convulsions first time in pregnancy		
Yes	48	60.0
No	32	40.0
Flashes of light or dots before eyes		
Yes	56	70.0
No	24	30.0
Swelling of face and fingers		
Yes	77	96.2
No	3	3.8
Reduced Urine Output		
Yes	27	33.8
No	53	66.2
Reduced fetal Movement		
Yes	55	68.8
No	25	31.2
Death of fetus inside uterus		
Yes	69	86.2
No	11	13.8
Death of Mother		
Yes	73	91.2
No	7	8.8

Table 5

Knowledge of PIH Complications (2)

(N = 80)

Variables	Frequency	Percentage
Abdominal or Epigastric Pain		
Yes	43	53.8
No	37	46.2
Confusion		
Yes	25	31.2
No	55	68.8
Drowsiness/feeling sleepy		
Yes	53	66.2
No	27	33.8
Continuous frontal headache		
Yes	67	83.7
No	13	16.3
Facial Twitching		
Yes	23	28.7
No	57	71.3
Uncontrolled bleeding of sudden onset		
Yes	12	15.0
No	68	85.0
Generalized Body Weakness		
Yes	51	63.8
No	29	36.2
Nausea and vomiting		
Yes	51	63.8
No	29	36.2
Very high blood pressure		
Yes	80	100.0
No	0	0.0

Table 6

Knowledge of PIH Complications Scores

Valid	Frequency	Percentage
4	3	3.7
5	3	3.7
6	3	3.7
7	4	5.0
8	2	2.5
9	6	7.5
10	5	6.3
11	13	16.3
12	10	12.5
13	5	6.3
14	4	5.0
15	9	11.3
16	3	3.7
17	8	10.0
18	2	2.5

Health Seeking Behaviour

Constituted of perceived seriousness, perceived benefit, perceived barriers and likelihood to action

Perceived Seriousness

Table 7 shows factors associated with perceived seriousness of PIH complications such as convulsions, confusion, flashes of light or dots before eyes and reduced fetal movements in relation to their causes. On convulsions 44 (55%) of respondents perceived causes convulsions as being caused by bad airs/evil spirits, 32 (40%) as worsening PIH condition. Four (5%) attributed the cause to witchcraft. Confusion was attributed to bad airs or evil spirits by 46 (57.5%) whilst 28 (35%) as having a worsening PIH condition, with 6 (7.5%) relate it to witchcraft. On flashes of lights or dots before the eyes 39 (48.8%) cited bad airs/evil spirits as the cause, 37 (46.2%) cited it as worsening PIH condition, with 4 (5%) attributing it to witchcraft. Reduced fetal movements were cited as worsening PIH condition by 49 (61.2%) with 27 (33.8%) citing bad airs/evil spirits while 4 (5%) attributed it to witchcraft. Of the 80 respondents none (0%) cited punishment from God for confusion, flashes of light or dots before the eyes and reduced fetal movements.

Table 8 shows perceived seriousness of PIH complications such as continuous frontal headache, generalized oedema, abdominal or epigastric pain, nausea and vomiting On continuous frontal headache 67 (83.7%) cited the cause as worsening PIH, 8 (10%) cited the cause as evil spirits/bad airs 4 (5%) attributed it to witchcraft and 1 (1.3%) attributed it to punishment from God. Generalized oedema was attributed to worsening PIH by 59 (73.7%) with 18 (22.5%) citing bad airs/evil spirits as the cause, 2 (2.5%) cited witchcraft and 1 (1.3%) cited punishment from

God. Abdominal or epigastric pain was attributed to worsening PIH by 55 (68.7%) whilst 22 (27.5%) attributed it to evil spirits/bad airs with 2 (2.5%), and 1 (1.3%) attributed it to witchcraft and punishment from God respectively. Seventy (87.5%) attributed nausea and vomiting to worsening PIH with 10 (12.5%) attributing it to evil spirits/bad airs. None (0%) cited witchcraft nor punishment from God.

Table 7

Perceived Seriousness (1) Seriousness with which causes are viewed

(N = 80

Variables	Frequency	Percentage
Convulsions		
Witchcraft	4	5.0
Punishment from God	0	0.0
Bad airs/evil spirits	44	55.0
Worsening PIH	32	40.0
Confusion		
Witchcraft	6	7.5
Punishment from God	0	0.0
Bad airs/evil spirits	46	57.5
Worsening PIH	28	35.0
Flashes of light/dots before eye		
Witchcraft	4	5.0
Punishment from God	0	0.0
Bad airs/evil spirits	39	48.8
Worsening PIH	37	46.2
Reduced fetal movement		
Witchcraft	4	5.0
Punishment from God	0	0.0
Bad air evil spirits	27	33.8
Worsening PIH	49	61.2

Table 8

Perceived Seriousness (2) Seriousness with which causes are viewed

(N = 80)

Variables	Frequency	Percentage
Continuous frontal headache		
Witchcraft	4	5.0
Punishment from God	1	1.3
Bad airs/evil spirits	8	10.0
Worsening PIH	67	83.7
Generalized Oedema		
Witchcraft	2	2.5
Punishment from God	1	1.3
Bad airs/evil spirits	18	22.5
Worsening PIH	59	73.7
Abdominal or Epigastric Pain		
Witchcraft	2	2.5
Punishment from God	1	1.3
Bad airs/evil spirits	22	27.5
Worsening PIH	55	68.7
Nausea and vomiting		
Witchcraft	0	0.0
Punishment from God	0	0.0
Bad airs/evil spirits	10	12.5
Worsening PIH	70	87.5

Table 9 shows factors associated with the seriousness with which pregnant women view PIH complications such as having a headache, blurred vision, reduced urine output, having reduced fetal movements, generalized oedema whether PIH cannot kill mother nor baby, effect of PIH on kidneys, eyes and brain and whether PIH cannot predispose one permanently to heart disease, cancer and reduced life span.

On perception of having a continuous headache as nothing to worry about 51 (63.8) responded yes with 29 (36.2%) responding no. On blurred vision can be ignored/resolves on its own 46 (57.5%) responded yes with 34 (42.5%) responding no. On reduced urine output as not a serious complication 41 (51.3%) responded yes whilst 39 (48.7%) responded no which is a same response for having reduced fetal movements is normal in pregnancy. On generalized oedema is part of normal happening in pregnancy 42 (52.5%) responded yes whilst 38 (47.5%) responded no. With PIH cannot kill me 5 (6.2%) responded yes with 75 (93.8%) responding no. Seventy-five (93.8%) responding no and 5 (6.2%) responding yes for PIH cannot kill my baby. On PIH cannot damage my eyes, kidneys and brain 68 (85%) responded no with 12 (15%) responding yes. On PIH cannot predispose me permanently to heart disease, cancer and reduced life span 61 (76.2%) responded no with 19 (23.8%) responding yes.

Table 10 shows treatment sought first before coming to hospital for flashes of lights or dots before the eyes and headaches related to perceived seriousness of condition. For flashes of lights or dots before the eyes, 41 (51.3%) sought treatment from faith healers, followed by 33 (41.0%) who sought no treatment or slept, 1 (1.3%) did not encounter the problem with the rest 1 (1.3%) evenly distributed among traditional healers, hospital non-professionals, hospital or clinic and 2 (2.5%) sought self/home treatment. For headaches 40 (49,8%) sought self/home treatment,, 24 (30%) first sought treatment from faith healers, 12 (15.0%) went to hospital or clinic. The rest

were evenly distributed 1 (1.3%) among traditional healers, hospital non-professional workers treatment, doing nothing or sleeping and not having the headache.

Table 11 shows treatment sought first for generalized oedema, abdominal or epigastric pain and confusion related to perceived seriousness of condition. On generalized oedema 38 (47.5%) sought treatment first from a traditional healer, 32 (40.0%) did not do anything /slept, 5 (6.2%) went to hospital or clinic with 2 (2.5%) going to traditional healers and hospitals non-professional workers treatment. One (1.3%) sought self or home treatment. With abdominal and epigastric pain 39 (48.8%) sought treatment from faith healers 26 (32.4%) did nothing/slept. Five (6.2%) sought clinic or hospital treatment first 4 (5%) sought self/home treatment, 2 (2.5%) sought traditional healers treatment, 3 (3.8%) did not have the problem. One (1.3%) sought treatment from hospital non-professionals.

On confusion 64 (80%) did not have it, 12 (15%) sought treatment from faith healers, with 3 (3.7%) having not sought any treatment/slept. One (1.3%) sought treatment from hospital/clinic. None (0%) sought self/home treatment, traditional healers hospital non-professionals.

Table 12 shows perceived seriousness pertaining to which treatment was sought first for reduced fetal movements, nausea and vomiting and fits. On reduced fetal movements majority 32 (40%) did nothing/slept, 24 (30%) did not have reduced fetal movement, 17 (21.2%) sought care from faith healers and 6 (7.5%) sought are from a hospital or clinic. One (1.3%) sought care from hospital non-professional workers treatment whilst no one sought self-treatment or traditional healers treatment. For nausea and vomiting 53 (66.2%) did nothing/slept, 18 (22.5%) sought care from the faith healers, 5 (6.2%) did not have it, 3 (3.8%) sought care from the hospital or clinic.

One (1.3%) sought care from hospital non-professional workers. None sought care from the traditional healer, self/home treatment. On fits 69 (86.2%) did not have them, 9 (11.3%) sought care from faith healers, 2 (2.5%) sought care from the hospital or clinic. None sought self/home treatment traditional healer and hospital non-professional workers treatment respectively.

Perceived benefits

Table 13 shows perceived benefits of reporting to hospital early on noticing PIH complications. Perceived benefits include fetal complications are prevented, convulsions can be prevented, my baby can be delivered quickly before it dies, my condition is monitored by a nurse or doctor, I am given correct treatment and my pregnancy can be prolonged to allow my baby to grow.

On fatal complications are prevented, 64 (80%) indicated yes and 16 (20%) indicated no. On convulsions can be prevented 34 (42.5%) indicated yes and 46 (57.5%) indicated no, my baby can be delivered quickly before it dies 61 (76.2%) indicated yes and 19 (23.8%) indicated no. Seventy-seven (96.2%) indicated yes and 3 (3.8%) indicated no for my condition is monitored by a nurse/doctor. For I am given correct treatment yes was indicated by 50 (62.5%) and no cited by 30 (37.5%). For my pregnancy can be prolonged to allow my baby to grow 62 (77.5%) indicated yes whilst 18 (22.5%) indicated no.

Table 9

Perceived Seriousness (3) Seriousness with which PIH complications are perceived

(N = 80)

Variables	Frequency	Percentage
Having a continuous Headache is nothing to worry about		
Yes	51	63.8
No	29	36.2
Blurred vision an be ignored/resolves on its own		
Yes	46	57.5
No	34	42.5
Reduced Urine Output is no serious complication		
Yes	41	51.3
No	39	48.7
Having reduced fetal movements is normal in pregnancy		
Yes	41	51.3
No	39	48.8
Generalized oedema is part of normal happening in pregnancy		
Yes	42	52.5
No	38	47.5
PIH cannot Kill me		
Yes	5	6.2
No	75	93.8
PIH cannot kill my baby		
Yes	5	6.2
No	75	93.8
PIH cannot damage my kidneys eyes brains		
Yes	12	15.0
No	68	85.0
PIH cannot predispose me permanently to heart disease cancer and reduced life span		
Yes	19	23.8
No	61	76.2

Table 10

Perceived seriousness with which Treatment is Sought first (1)

(N = 80)

Variables	Frequency	Percentage
Flashes of lights/dots before eyes		
Self/home treatment	2	2.5
Traditional healers	1	1.3
Hospital non-professional workers treatment	1	1.3
Faith healers	41	51.3
Hospital/Clinic	1	1.3
Nothing/sleeping	33	41.0
Did not have it	1	1.3
Headache		
Self/home treatment	40	49.8
Traditional healers	1	1.3
Hospital non-professional workers treatment	1	1.3
Faith healers	24	30.0
Hospital Clinic	12	15.0
Nothing/sleeping	1	1.3
Did not have it	1	1.3

Table 11

Perceived seriousness Treatment Sought first (2)

(N = 80)

Variables	Frequency	Percentage
Generalized Oedema		
Self/home treatment	1	1.3
Traditional healers	2	2.5
Hospital non-professional workers treatment	2	2.5
Faith healers	38	47.5
Hospital Clinic	5	6.2
Nothing/sleeping	32	40.0
Did not have it	0	0.0
Abdominal Epigastric Pain		
Self/home treatment	4	5.0
Traditional healers	2	2.5
Hospital non-professional workers treatment	1	1.3
Faith healers	39	48.8
Hospital Clinic	5	6.2
Nothing/sleeping	26	32.4
Did not have it	3	3.8
Confusion		
Self/home treatment	0	0.0
Traditional healers	0	0.0
Hospital non-professional workers treatment	0	0.0
Faith healers	12	15.0
Hospital Clinic	1	1.3
Nothing/sleeping	3	3.7
Did not have it	64	80.0

Table 12

Perceived seriousness treatment sought first (3)

(N = 80)

Variables	Frequency	Percentage
Reduced fetal movements		
Self/home treatment	0	0.0
Traditional healers	0	0.0
Hospital non-professional workers treatment	1	1.3
Faith healers	17	21.2
Hospital Clinic	6	7.5
Nothing/sleeping	32	40.0
Did not have it	24	30.0
Nausea and Vomiting		
Self/home treatment	0	0.0
Traditional healers	0	0.0
Hospital non-professional workers treatment	1	1.3
Faith healers	18	22.5
Hospital Clinic	3	3.8
Nothing/sleeping	53	66.2
Did not have it	5	6.2
Fits		
Self/home treatment	0	0.0
Traditional healers	0	0.0
Hospital non-professional workers treatment	0	0.0
Faith healers	9	11.3
Hospital Clinic	2	2.5
Nothing/sleeping	0	0.0
Did not have it	69	86.2

Table 13

Perceived Benefits

(N = 80)

Variables	Frequency	Percentage
Fetal Complications are Prevented		
Yes	64	80.0
No	16	20.0
Convulsions can be prevented		
Yes	34	42.5
No	46	57.5
My baby can be delivered quickly before it dies		
Yes	61	76.2
No	19	23.8
My condition is monitored by a nurse/doctor		
Yes	77	96.2
No	3	3.8
I am given correct treatment		
Yes	50	62.5
No	30	37.5
My pregnancy can be prolonged to allow my baby to grow		
Yes	62	77.5
No	18	22.5

Likelihood of Taking Action

Table 14 shows responses offered by the subjects on the open-ended questions what will motivate you to go to hospital immediately on noticing complications. Sixty-nine (86.3%) of respondents indicated that if the health personal could give enough time to ask questions about their condition and given to time to open up it will motivate them to come to hospital, with 64 (80%) citing good reception and friendly health personnel, whilst 63 (78.8%) mentioned that they needed the health personnel to educate them on their conditions and interpret finding to them. Sixty-one respondents (76.3%) mentioned improvement of health personal attitude towards clients with 59 (73.8%) citing free treatment whilst 48 (60%) wants the hospital to provide them with linen. Clean environment was mentioned by 35 (43.8%), with 30 (37.5%) mentioning proper ventilation and being allowed to bring their holy water to hospital whilst 10 (12.5%) mentioned good palatable food and supply of cheap drugs. Twenty-five (31.3%) cited cash and kind for payment and 23 (28.8%) that the user fee should be reduced or correlated it to quality of treatment provided .Whilst 62 (77.6%) mentioned provision of quality service and 56 (70%) citing fast service. Sixty-nine (86.3%) mentioned that each individual be given time to ask questions and opening up whilst 20 (25%) mentioned that there should be a credit facility at entry point.

Barriers to Action

Table 15 shows barriers to actions namely my family does not use medical treatment, I did not have money to pay for the services, decision to go to hospital has to be made by my husband or significant other, my religion does not allow me to use medical treatment and I was the only one at home so could not leave children alone/or no one to accompany me to hospital.

On my family does not use medical treatment 77 (96.2%) responded no and 3 (3.8%) of responded yes. For I did not have money to pay for the services 59 (73.8%) responded yes whilst 21 (26.2%) responded no. On decision to go to hospital has to be made by my husband or significant other and on my religion does not allow me to use medical treatment the responses were 79 (98.7%) responded no and 1 (1.3%) responded yes respectively for I was the only one at home so could not leave children alone /no one to accompany me to hospital 67 (83.8%) gave no for a response and 13 (16.2) gave yes for a response.

For table 16 shows further barriers to action such as reception at the hospital is poor/unfriendly health personnel, waiting time to get treatment is too long, services provided are not to expectations, my relative/friend was previously not treated adequately and some of the diseases are not for hospital treatment. For reception at the hospital is poor/unfriendly health personal 42 (52.5%) indicated yes and 38 (47.5%) indicated no. On waiting time to get treatment is too long 56 (70%) responded yes whilst 24 (30%) responded no. As for services are not to expectation 65 (81.2%) responded yes whilst 15 (18.8%) responded no. On my relative or friend was previously not treated satisfactory 24 (30%) responded yes whilst 56 (70%) responded no. For some of the diseases are not for hospital treatment, 44 (55%) responded no and 36 (45%) responded yes.

Table 17 shows more barriers to action such as traditional healers accept cash in kind for payment, symptoms presented with needed exorcism before medical treatment, I do not come to hospital unless referred by a traditional or faith healer, I come to hospital when home treatment has failed, and thinking that it was not important.

On traditional healers accepting cash in kind for payment 7 (8.8%) responded yes whilst

73 (91.2%) responded no. Regarding symptoms presented with which needed exorcism before medical treatment 37 (46.2%) responded yes whilst 43 (53.8%) responded no. For I do not come to hospital unless referred by a traditional or faith healer, 58 (72.5%) responded no whilst 22 (27.5%) responded yes. Regarding I come to hospital when home treatment has failed 62 (77.6%) responded yes with 18(22,5%) responding no. for thinking that it was not important, 54 (67.5%) responded yes whilst 26 (32.5%) responded no.

Table 18 shows the following factors related to perceived barriers namely I was bewitched by someone who was jealous of my pregnancy, faith healers offer free treatment, fear of hospital care, I did not have money to pay for transport and I failed to identify the PIH problem.

For I was bewitched by someone who was jealous of my pregnancy 69 (86.2%) responded no and 11 (13.8%) responded yes. As for faith healers offering free treatment 47 (58.8%) responded no whilst 33 (41.2%) responded yes. For fear of hospital care 59 (73.8%) responded no with 21 (26.2%) responding yes. For I did not have money to pay for transport 63 (78.8%) responded no with 17 (21.2%) responding yes. Lastly for I failed to identify the PIH problem 70 (87.5%) responded yes whilst 10 (12.5%) responded no.

Table 14

Likelihood of Taking Action

(N = 80)

Variable	Frequency	Percentage
Likelihood of taking action (factors which motivate pregnant women with PIH to come to hospital on noticing complications		
Quality of care	23	28.8
Education on condition and interpreting of findings	63	78.8
Good reception and friendly health personnel	64	80.0
Proper ventilation	30	37.5
Clear environment	35	43.8
Credit facility at entry point	20	25.0
Good palatable food	10	12.5
Quality service	62	77.9
Free treatment	59	73.8
Cash in kind payment	25	31.3
Allow us to bring our holy water	30	37.5
Improvement of health personal attitude towards clients	61	76.3
To give each individual her time to ask questions and opening up	69	86.3
Supply cheap drugs	10	12.5
To be supplied with hospital linen	48	60.0
Fast service	56	70.0

Table 15

Barriers to Action (1).

(N = 80).

Variables	Frequency	Percentage
My family does not use medical treatment		
Yes	3	3.8
No	77	96.2
I did not have money to pay for services.		
Yes	59	73.8
No	21	26.2
Decision to go to hospital made by my husband or significant other		
Yes	1	1.3
No	79	98.7
My religion does not allow me to use medial treatment		
Yes	1	1.3
No	79	98.7
I was the only one at home so could not leave children alone/no one to accompany me to hospital		
Yes	13	16.2
No	67	83.8

Table 16

Barriers to Action (2).

(N = 80).

Variables	Frequency	Percentage
Reception at the hospital is poor/unfriendly health personnel		
Yes	42	52.5
No	38	47.5
Waiting time to get treatment is too long		
Yes	56	70.0
No	24	30.0
Services provided are not to expectation		
Yes	65	81.2
No	15	18.8
My relative or friend was previously not treated adequately		
Yes	24	30.0
No	56	70.0
Some of the diseases are not for hospital treatment		
Yes	36	45.0
No	44	55.0

Table 17

Barriers to Action (3).

(N = 80).

Variables	Frequency	Percentage
Traditional healers accept cash in kind for payment		
Yes	7	8.8
No	73	91.2
Symptoms presented with needed exorcising before treatment		
Yes	37	46.2
No	43	53.8
I do not come to hospital unless referred by a traditional/faith healer		
Yes	22	27.5
No	58	72.5
I come to hospital when home treatment has failed		
Yes	62	77.5
No	18	22.5
Thinking that it was not important		
Yes	54	67.5
No	26	32.5

Table 18

Barriers to Action (4).

(N = 80).

Variables	Frequency	Percentage
I was bewitched by someone who jealousy of my pregnancy		
Yes	11	13.8
No	69	86.2
Faith healers offer free treatment		
Yes	33	41.2
No	47	58.8
Fear of hospital care		
Yes	21	26.2
No	59	73.8
I did not have money to pay for transport		
Yes	17	21.2
No	63	78.8
I failed to identify the PIH problem		
Yes	70	87.5
No	10	12.5

Table 19 shows Health Seeking behavior scores. One to 17 indicated a good health seeking behavior and those scoring 18 to 34 bad health seeking behavior and those scoring 35 – 51 indicated a very bad/poor health seeking behaviour. Nine (11.3%) scored 23 and 26, 8 (10.0%) scored 25 whilst 7 (8.8%) scored 21. Six (7.5%) scored 20, and 24 whilst 5 (6.3%) scored 27, 28 and 29. Three (3.8%) scored 16 and 22 and 2 (2.5%) scored 15, 16 and 31 whilst 1 (1.3%) scored 13, 14, 17, 18, 30, 32, 33 and 35. The highest score was 35 and the lowest score recorded was 13. Mean score was 23.85 with 44 (55%) scoring above the mean. 23 and 26. Standard deviation of the scores 4,8. Seven(8,8%) attained a score of 0-17,72(90,4%) attained a score of18-34 and. One (1,3%) attained a score of 35-51.

Pearson Correlation Coefficient

Table 20 shows the Pearson correlation analysis to establish if there was a relationship between knowledge of PIH complications and health seeking behavior. The results showed a positive correlation ($r = .319^{**}$, $p < .01$), which shows a weak positive relationship between knowledge of PIH complications and health seeking behavior. As knowledge of PIH complications increases, the mother's health seeking behavior improves.

Regression Analysis

Table 21 shows s significant positive effect ($b = .387$, $B = 319$, $F = 8.844$, $P < .01$) of knowledge of PIH complications on health seeking behaviour. The significant regression coefficient (b) indicates improvement of health seeking behaviour for every unit change in knowledge of PIH complications. The $R^2 = .102$ indicates that pregnant mothers` knowledge of PIH complications explains a 10% variance on their health seeking behavior. Results support that knowledge of PIH complications has a positive effect on health seeking behaviour.

Table 19

Health seeking behavior scores

Valid	Frequency	Percentage
13	1	1.3
14	1	1.3
15	2	2.5
16	3	3.8
17	1	1.3
18	1	1.3
19	2	2.5
20	6	7.5
21	7	8.8
22	3	3.8
23	9	11.3
24	6	7.5
25	8	10.0
26	9	11.3
27	5	6.3
28	5	6.3
29	5	6.3
30	1	1.3
31	2	2.5
32	1	1.3
33	1	1.3
35	1	1.3

Table 20

Pearson correlation coefficient matrix of knowledge of PIH complications and health seeking behavior

		Y
		1000
X		.319**
P< .05*	**p < .01	p < .001***

Y = Health Seeking behavior

X = Knowledge of PIH complications.

Table 21

Regression Analysis of Health Seeking Behaviour

Variable	B	SEB	Beta
X	.387	.130	0.319***
Constant	19.346	.1588	
R^2 = .102		F = 8.844	

*p < .05 **p < 01. *** p < .001

N = 80

X = Knowledge of PIH complications

CHAPTER 5

DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS

Summary

This chapter presents a summary of study findings, implications, conclusions and recommendations based on findings. The purpose of this study was to describe and examine the relationship between knowledge of PIH complications and health seeking behaviour. Eighty pregnant mothers with PIH complications were interviewed at Chitungwiza Central Hospital Health Seeking Behaviour was operationalized using Rosenstock`s (1966) Health Belief Model

Data analysis using descriptive statistics using frequencies, percentages, means and averages to describe knowledge on PIH complications and health seeking behavior of pregnant women aged 18 to 28 years at Chitungwiza Central Hospital. Inferential Statistics especially the Pearson Product Moment test was used to examine relationship between independent variables of knowledge of PIH complications and dependent variable health seeking behavior. Simple regression analysis was used inorder to examine the strength of relationship between the independent variable and dependent variable at a significance level of 0,05.Results came out at a significance level of 0.01.Data was presented in tabular form.

Application of the Pearson Correlation coefficient test of knowledge of PIH complications of pregnant woman aged 18 to 28 years showed that knowledge of PIH complications were positively correlated and significant to health seeking behaviour $r = .319$, $p = < .01$). This implies that an increase in knowledge of PIH complications will positively affect the pregnant women's health seeking behaviour. The strength of the relationship between knowledge

of PIH complications and health seeking behaviour is indicated by R^2 = ,102, (F = 8.844, p = <.01) meaning that the independent variable knowledge of PIH complications explain 10% of the variance in health seeking behaviour. Regression is coefficient (b, .387) p < 004. B = 319, F = 8.844. of the independent variable knowledge of PIH complications is significant (p = < .01). Therefore, the regression coefficient b (-.387) represents a change of 3 in health seeking behaviour for a unit change in knowledge of PIH complications.

Regarding knowledge, the maximum attained score was 18 and minimum score was 4. Those with knowledge, had a score above 50% and those without knowledge had a score below 50%. Most 65(81.3%) pregnant women had knowledge of PIH complications achieving a total score above 50%. Of note is that the majority of the respondents did not know that uncontrolled bleeding of sudden onset 68(85%), facial twitching 57(71,3%), confusion 55(68,8%) and reduced urine output 53(66,2) were pregnancy induced hypertension complications.

For health seeking behaviour, the maximum score attained was 35 and the minimum score was 13. A score of 0 – 17 indicated a good health seeking behaviour, 18 to 34 bad health seeking behaviour and 35 – 51 a very bad health seeking behaviour. Only 8 (10%) of the respondents had a good health seeking behavior, with the majority 72(90%) seeking least care e from hospital/clinic and most seeking care from faith healers first for generalized oedema, abdominal/epigastric pain and flashes of light/dots before eyes.

Discussion and implications

Sample demographics

All respondents belonged to some religious sect as indicated by apostolic 36(45%), mainstream churches 27 (33.8%) and pentecostal 17(21,2). That most study respondents were of apostolic sect religion 36(45%) This may explain the predominant use of faith healers churches. The majority 73 (91,3%) of respondents were married. Most of the respondents 63 (78,8%) were not employed with 48 (60%) of their spouses on unskilled employment. This finding may explain why the majority of respondents and their spouses had an income of 101 to 200 USD, 33 (41,3) and 29 (36,3%) respectively. According to Central Statistics Office, the poverty datum line is pegged at 400 USD/month almost doubling what the respondents are getting per month. This might explain why most 59(73,8%) respondents were citing having no money as a barrier to come to hospital as there was not enough to spare for medical treatment.

Sixty-eight(82,5%) of respondents attained secondary education indicating high levels of education in the sample as in the general population in Zimbabwe. Only one(1.3%) had never been to school. The findings in this study were similar to the findings by Kasule et. al. (1997) that education is positively related to knowledge. Taha and Bella (2001), similarly noted that knowledge increased with level of education.

Sixty-seven (83.8) had never suffered PIH before and only 13(16.2%) had. There was no difference in knowledge scores amongst women who suffered PIH before and those who did not suffer PIH before. Most probably there was not enough health education on clients` condition. Two out of 13 of those who suffered PIH before indicated that there was no benefit in going to hospital early to prevent fatal complications and fits. This was contrary to research findings by

Nemet and Bailey (2000) who revealed that clients with previous experience with the disease were likely to use health care (P=000) than first timers

Most 41(51.3%) women were admitted for imminent eclampsia (signs and symptoms a sharp rise in blood pressure, diminished urine output, severe and persistent frontal headache, drowsiness, confusion, blurred vision, flashing of lights/dots before eyes, epigastric pain, nausea and vomiting). For eclampsia10 (12,5%) (admitted with convulsions first time during pregnancy or postpartum. With preeclampsia only 3 (3,8%) were admitted (present with high blood pressure and proteinuria sometimes with headache, blurred vision abdominal or epigastric pain when there is only high blood pressure with no proteinuria. A study by Buga and Lumu (1999) revealed that 5% of all pregnancies are complicated by eclampsia more than what was revealed in this study. Similarly a study by Conde, Agudelo and Belizan (2000) in Brazil a higher percentage 22-35% of deaths were associated with preeclampsia compared to 3,8 in this study These studies did not cite other complications as this study such as reduced fetal movements and cessation of fetal movements 13(16,3%) equally

Health Seeking Behaviour

Perceived Seriousness

The reasons for doing nothing were that the mothers failed to identify the symptoms with PIH complications attributing the problems mostly to bad airs/evil spirits making them first going for exorcism before hospital treatment. The above findings concur with what was revealed in a study by Chavhunduka and Gelfand (1978) who indicated that many people believe that illness caused by evil spirits or bad airs or witchcraft, needing the diviner to be consulted first for exorcism. Hunte and Sultra (1992), Jonker (1999), Ahlberg, Ndulo and Krantz (1999) attributed .

almost one-third of illnesses to evil spirits/bad air. This pattern of health seeking delay the pregnant women from seeking medical treatment increasing the number of pregnant women dying with PIH complications which could be prevented if diagnosed and treated early.

Findings from the study indicated that the pregnant women with PIH complications sought care from different sources depending on their perception of the causes such as convulsions caused by airs/evil spirits for 44(55%) confusion 46 (57,5%). flashes or dots before the eyes 39 (48,8%). Care was sought first from faith healers by majority for lights/dots before the eyes 41 (51.3).headache 24 (30%) generalized odema 38 (47,5%), abdominal/epigastric pain 39 (48,8%),reduced fetal movements 17(21.3%),nausea and vomiting 18(22,5%), confusion 12 (15%), fits 9 (11,3%). Of interest was that care from traditional healers was least sought and that of hospital was minimal.

For a headache 40 (51.3%) sought care from self/home treatment, with 24 (30%) seeking care from faith healers with 5% not seeking care. Only 12 (15%) sought care from hospital/clinic. One percent sought care from traditional healers. For generalized oedema 38 (47.5%) sought care from faith healers while 32 (40%) did not seek care.Only 5 (6.3%) sought care from the hospital/clinic. Only 2 (2.5%) sought care from a traditional healers. For abdominal pain 39 (48.8%) sought care from a faith healer 26 (32.5%) did not seek care with only 5 (6.3%) seeking care from hospital/clinic. Four (5%) used self or home treatment. The findings are not consistent with findings by Pitchforth, Teylingen, Graham and Fitzmaurice (2007). They reported that care was sought more from doctor and village health worker.

Pitchforth, Teylingen, Graham and Fitzmaurice (2007) revealed that for each reported complication those who had convulsions and fits and bleeding 32.6% sought care from a doctor,

nurse or village health worker, 46% did not seek care and 21.6% sought care either from a traditional healer, herbalist or any other source from unqualified people to take care of complications. Similarly Uehera (2001) revealed that among those who reported high-risk complication like oedema more than 73% did not seek care and only 14% sought care from a doctor or nurse. Over 62% respondents who reported having excessive vomiting did not seek medical care while only 17% sought care from a doctor or a nurse. Among those who had suffered abdominal/epigastric pain a very low proportion had to see a doctor, 9.3% and 11.7% respectively.

It is of concern that use of the hospital/clinic first was minimal for flashes of light 1 (1.3%), headaches 12 (15%) general oedema (6.3%) abdominal/epigastric pain (5%), confusion, reduced fetal movements (7.5%), nausea and vomiting 3 (3.8%) Also 62(77,5%) came after home treatment had failed. This finding could be explained on high user fees and prevailing harsh economic environment in Zimbabwe. This is inspite that reduced fetal movement continuous frontal headache, general oedema, epigastric pain, nausea and vomiting were cited correctly as signs and symptoms of PIH by 61.3%, 83.8%, 73.8%, 68.8% and 87.5% respectively.

Reduced urine output was also not perceived as serious complications by 41(51,3%), reduced fetal movements by 41(51,3%), general oedema by 42(52,5%), headache by 51(63,8%) and blurred vision by 46(57,5%).

Perceived Benefits

On a positive note respondents` perception of benefits was encouraging, fetal complications can be prevented was cited by 64(80%), with 61(76,2%)citing that their baby can

be delivered before dying Other benefits cited were that their condition will be monitored by a nurse /doctor 77(96,2%)., they will be given correct treatment 50(62,5%),the pregnancy can be allowed to prolong with baby growing 62(77,5%) and convulsions can be prevented cited less than half 34(42,5%).

Likelihood of taking action

In this study pregnant women indicated that if the following barriers are removed that is user fees 59 (73.8%) giving individuals time to ask questions and opening up 69 (86.3%), giving of quality service 62 (77.9%), good reception and friendly health personnel 64 (80%) and improvement of health personal attitude towards clients 61 (76.3%). Health education was another motivate or mentioned by 63 (78.8%). Similarly these motivators were also revealed in several studies such as Camazine (2000), Greenfield (2001) and Nemet and Bailey (2000).

Perceived barriers

Paras, Sing and Suneela (2007), in their study revealed that PIH complications were most frequent among those who did not attend antenatal care which is about 41.5%. Perceived barriers to hospital care were cited as thinking it was not necessary by 45%, lack of knowledge of the complications by 27%. Lack of knowledge also cited in other studies by Michael et. al. (2007) and Greendale, Leonard and Bensen (2006). No one to accompany to hospital 15% financial constraints, 12% working 7% fear of hospital, 6% and objections from family 2%. Some of these barriers were cited in this study such as thinking it was not important by 54 (67.5%). Failure to identify complications by 70 (87.5%), financial constraints by 59 (73.8%) fear of hospital by 21 (26.3%) had higher percentages. Other barriers cited in this study were reception poor/unfriendly health personnel by 42 (52,5%) long waiting time for treatment by 56(70%), services not to

expectation by 65(81,5%). Quality of services provided was also revealed to be a barrier for seeking in a study by Ahmed Thomson Petzold and Kabir (2005).

On the positive side decisions were not made by husband or significant others for 79 (98.8%), contrary to what was revealed in a study by Paras, Sing, and Suneela (2007) that mothers relied more on advise from their husbands mothers relatives and friends. Religion was not a barrier for79 (98.8%).

Knowledge of PIH complications

Sixty-five (81.3%) had knowledge of PIH complications as they scored above 50%. Fifty-five (68.8%) cited blurred vision, 59 (73.8%) mentioned rapid weight gain, 48 (60%) stated convulsions first time in pregnancy, 56 (70%) cited seeing flashes of lights before eyes with 77 (96.3%) mentioning swelling of face and fingers. Reduced fetal movements were stated by 55 (68.8%), 69 (86.3%) citing death of fetus, whilst 73 (91.3%) cited death of the mother. Forty-three (53.8%) cited abdominal or epigastric pain. Feeling sleepy was cited by 53 (66.3%), with 67 (83.8%) citing continuous frontal headache, 51 (63.8%) general body weakness and nausea and vomiting respectively. Hundred percent cited a very high blood pressure. Only 17(18%) did not have knowledge of PIH complications. Fifty-three (66.3%) did not know that reduced urine output was associated with PIH complications. Confusion was not associated with PIH complications by 55 (68.8%), whilst 57 (71.3%) did not know that facial twitching is a complication of PIH and 68 (85%) did not relate uncontrolled bleeding of sudden onset to PIH complications. This finding concurs with study findings by Manahels, Younis, Ichattab and Zurayk (1994) who revealed that the clients did not regard imminent eclampsia, blurred vision reduced urine output and confusion as serious complications. The seriousness with which one

perceives a condition determine their health seeking behaviour.

In this study 81.3% had knowledge on PIH complications contrary to what was found in a research by Kemer Badaway, El-Zeing and Merdan (1999), Taha and Bella (2000) which revealed that about 90% had overall poor knowledge of PIH complications while the rest had only satisfactory knowledge. In these same studies over two thirds (77.7%) were only able to cite one or more complications whilst the results of the present study 3 (3.8%) respondents could at least mention four and above complications above two thirds were able to mention about 15 to 18. Complications which showed a high level of knowledge in this study's respondents. In the present study results revealed that 48 (60%) mentioned, convulsions, fetal death, with 73 (91.1%) mentioning maternal deaths. A very high blood pressure was mentioned by 80 (100%). In a study by Kemer, Badaway, El Zeing and Merdan (1999) for the same above complications following results revealed that results 69% mentioned convulsions lower than the present study which had 60% retinopathy 51% in this study it was put as blurred vision 55 (68.8%) which is higher than the previous study. Fetal movement were cited by 34.3% whilst in the present study it was mentioned by 55 (68.8%) almost double the previous researches results. Renal failure was cited by 28.3% in this study was put as reduced urine output and mentioned by 47(46,7%) . High blood pressure in the previous study was mentioned by 96.3% against 80 (100%) of the present study contrary to Kemal, Badamary, El-Zeing amd Mardon (1999). Study in this study the respondents mentioned rapid weight gain 59 (73.9%) swelling of fingers and face, 77 (96.3%) abdominal or epigastric pain, 43 (53.8%) drowsiness/feeling sleepy, continuous frontal headache 67 (83.8%) facial twitching, 23 (28.8%) uncontrolled of sudden of onset 12 (15%) generalized body weakness 51 (63.8%) nausea and vomiting 51 (63.8%) more. This revealed that in this study respondents knew more complications of PIH than in the previous researches.

In this study 25 (31.3%) cited confusion, 67 (83.8%) cited continuous frontal headache, 5s6 (70%) seeing flashes or dots before eyes mentioned by only (7.8%) in the other study. Higher figures than in Kemal, Badaway, El-Zeing and Merdon (1999) though the figures were not indicated.

Relationship between Knowledge PIH complications and Health Seeking Behaviour

Pearson Correlation Coefficient Test

The results of Pearson correlation revealed that knowledge of PIH complications were positively correlated to health seeking behaviour (r = .319**, p = .01). This implies that an increase in knowledge of PIH complications should improve the health seeking behaviour of pregnant women. This relationship is weak. It indicates that 99% of the results are correct and if replicated the same results can be yielded.

Regression Analysis

The strength of the relationship between knowledge of PIH complications and health seeking behaviour is indicated by (R^2 = .102 (F = 8.844, p = < .01, b .378, B .319) meaning that the independent variable knowledge of PIH complications explains a 10% at the variance in health seeking behaviour of pregnant women. A regression analysis unstandardized coefficient of (b) of the independent variable knowledge of PIH complications is significant (p = < .01). Therefore the regression coefficient b (.387) represents a change by .387 in health seeking behaviour for a unit change in knowledge of PIH complications. Standardized coefficient B .319, P < 004, indicates that knowledge alone is not as important in affecting HSB. Meaning that given a total score of knowledge of PIH complications the health seeking behaviour of an individual

can be predicted or calculated.

Theoretical Framework

The conceptual framework that guides this study is the Health Seeking Behaviour Model by Rosenstock (1966). Health seeking behaviour for the study comprises perceived seriousness, perceived benefits, perceived barriers and likelihood of taking action. Health seeking behaviour were activities undertaken by individuals who perceive themselves to have health problem to be ill for the purpose of finding a remedy (Merlow, 1997, Rosenstock, 1966). In this study perceived seriousness is the seriousness with which the pregnant woman would view the preceding signs and symptoms of PIH complications. Seriousness with which respondents view causes of PIH complications such as convulsions, generalized oedema, abdominal or epigastric pain, confusion, flashes of light/dots before the eyes, continuous frontal headache ,reduced fetal movements, nausea and vomiting against following causes witchcraft, punishment from God bad airs/evil spirits as revealed in this study.

Seriousness with which respondents view complications to threaten their lives such as having continuous headache is nothing to worry about, blurred vision can be ignored resolves on its, having reduced fetal movements is normal in pregnancy generalized oedema is normal happening in pregnancy , PIH cannot kill me nor my baby, PIH cannot predispose me to cancer or damage my eyes, kidney and brains as revealed in this study.

In this study perceived benefit of using any of the resources of health facilities by pregnant women with PIH complications. Such as fetal complications can be prevented, fits can be prevented, condition can be monitored by nurse or doctor, baby can be delivered before it is dies, one is given correct treatment and pregnancy can be prolonged to allow baby to grow.

Perceived barriers are barriers to coming to hospital such, treatment costs, reception at hospital poor, waiting time to get treatment too long, services provided not to expectation, sister previously not treated adequately, some ,first do not come to hospital unless referred by a traditional healer, come to hospital when home treatment failed, thinking was not necessary , did not have transport money and failed to identify symptoms with PIH as revealed in this study.

In this study likelihood to take action is the likelihood that the person will come for hospital for treatment. would be necessitated by removal of barriers such as removal of user fees, providing care to client expectation ,explain condition to client giving clients individual time to ask questions reducing waiting time, providing quick service and improving attitude of care givers towards clients as revealed in this study

Use of HBM model in this study helped to identify the knowledge of PIH complications, perceived seriousness, perceived benefits and perceived barriers and the action taken by pregnant women who develop PIH complications to avert their symptoms. Hence utility of HBM model was proved. The link between knowledge of complications and health seeking behaviour was confirmed as it was shown that about 10% of knowledge occurrence on PIH complications explains a variance in health seeking behaviour of pregnant women with PIH complications. Given the total score of knowledge the health seeking behaviour of pregnant women with PIH complications can be predicted. The model's utility was also proved by Manfred, Warnecke, Graham and Rosenthal (2001) to determine social correlates of health behaviour and knowledge of breast examination technique among black women in America, using the same variables perceived seriousness, perceived benefits and perceived threat.

Similarly Fincham and Werkermer (2001), Leevitus (1999) studies used the same

variables perceived susceptibility, perceived benefits and perceived seriousness and results supported the use of health seeking behaviour model to predict various types of compliance and health seeking behaviour. A study by Goldensten, Greenwood, Mattan, Massant Kebach (2009 used three variable perceived susceptibility perceived seriousness and psychosocial factors were proved to be useful the rest were not, contrary to the above studies.

Implications to Maternal Child Health/Nursing

Practice

The findings of the study indicated that if pregnant women are given knowledge on signs and symptoms of PIH complications they will improve on their health seeking behavior by 10%. This shows that there are other factors determining health-seeking behaviour which should be identified and addressed. Some of the factors are beliefs, money, quality of care and the economic environment. This under scores the need for midwives to access women of child bearing age through print and electronic media. Midwives need to stress the importance of identifying and reporting PIH symptoms early before fatal complications set in. Low monthly income contributed to the delay in seeking care after identifying the complications. On this strength, Midwifery Nurses need to become more politically active in helping to shape effective policies regarding payment of maternity services. There are some policies in place but they are ineffective. Identifying an effective focal person at each health care services. This will help midwives to be in total control of maternity care services.If one is in total control there is minimal interference from the institutional debt collectors. Families of pregnant mothers with PIH should be encouraged to join educational sessions on PIH complications and associated conditions. If everyone is knowledgeable it will help in identification of PIH complications and

quickly come to hospital before complications worsen.

The study findings indicated that there are other factors which determine health seeking behaviour of pregnant women with PIH complications such as poor reception and unfriendliness, long waiting time, attitude of healthcare workers and client expectations. Quality of health services, attitude of health care givers, hotel services provided and the environment in which services are provided. This will assist the Maternal Child Health practitioners to pay particular attention on sprucing their image and offering attractive services.

Education.

Findings on health seeking behaviour indicated that pregnant mothers ignore signs of imminent eclampsia or they seek faith healers treatment as the symptoms are not related to PIH complications. The pregnant mothers indicated some issues which need to be addressed by health care institutions. For them to be motivated to come to hospital such as being educated on their condition and be given a feedback in every and each procedure carried out on them. . Lack of perception on the specific signs of PIH complications such as reduced urine ,confusion, facial twitching and uncontrolled bleeding of sudden onset were also sighted. More emphasis on education of these aspects for knowledge on them to reach 100% as seen on a very high blood pressure. These can be a hinderance to health seeking behaviour with consequence of worsening the pregnant mothers' prognoses. There should also be an increased education on the seriousness of reduced fetal movements, generalized oedema so that they can be perceived seriously. Hence treatment sought earlier to reduce mortality and morbidity related to PIH. There is therefore an urgent need to weaken negative beliefs such as witchcraft, evil spirits/ bad airs as causes of PIH complications since beliefs may influence the care pregnant women seek first when they develop

complications.

The nursing curriculum in the schools of midwifery needs to in-cooperate topics on health seeking behaviour associated with clients with PIH complications. Health seeking behaviour has been identified as an important issue on clients with PIH complications given the unpredictable nature of the disease progression. . Hence it is very important for Maternal Child Health practitioners to identify the health seeking behaviours of pregnant women with PIH complications. To design programmes which will motivate them to use hospitals or medical facilities as soon as they notice signs of PIH complications. So that complications can be averted and maternal mortality related to PIH reduced. Churches should be targeted for giving health education information on PIH complications since this study has shown that first treatment sought was from faith healers before coming to hospital. Relating PIH complications to evil spirits/bad airs may then be reduced.

Administration

Nurse administrators needs to allocate more nursing personnel to antenatal care clinics so that pregnant women with PIH complications can be allocated adequate time for education them on their condition and reducing waiting time.

Research

This study focused on knowledge of PIH complications and health seeking behaviours among pregnant women age 18 to 28 years at Chitungwiza Central Hospital. Further studies need to be carried out in different hospitals across the country. Research should also be carried out on what type of home treatment these pregnant women use to alleviate PIH complications in

relation to the outcome of the symptom being treated. Information from this study could contribute to the body of knowledge of the nursing discipline.

Recommendations

Based on the study findings the main recommendations are

1. Public awareness and health education education stressing the importance of reporting to hospital early on observing PIH complications to reduce maternal and perinatal mortality and morbidity related to PIH complications. Particularly the following complication reduced urine output, confusion, facial twitching, bleeding of sudden onset, reduced fetal movements and generalized oedema.

2. Maternal child health nurses need to become more proactive politically for them to be able to influence policy makers on issues related to maternity fees. Clients not to be turned away despite meeting referral criterion or not.

3. On Health educating clients and community on PIH complications the midwives need to dispel myths attached to the condition such as bad airs/evil spirits or witchcraft and over emphasize those signs considered to be a normal happening in pregnancy such as generalized oedema and reduced fetal movements, that they are abnormal.

4. All schools of midwifery should in-cooperate information on health seeking behaviours delaying pregnant women with PIH complications to seek help. This will also assist the nurses in becoming more conversant and in turn accurately addressing determinants of health seeking behaviours.

5. Nurse administrators can help with allocating more experienced midwives in clinical areas and antenatal clinics to ensure adequate client assessment, time for health educating clients one on one basis and identifying subtle signs of PIH complications quickly to avert fatal complications and reduce maternal and perinatal morbidity and mortality.

6. Administrators should be aware of what motivates clients to come to hospital, for example focusing on reducing financial barriers, improving quality of care, changing attitude of health care providers towards patient care and encouraging holistic care.

7. Further studies need to be conducted to find out what actually these pregnant women with PIH complications use for self/home treatment. This will enable use of information in counseling individuals, families and significant others.

8. Research should be done to determine the relationship between type of home treatment used and symptom relief.

9. Research should be carried out on the psychosocial problems related to perinatal loss which is related to PIH complications.

10. There is need to explain further on other possible factors affecting HSB.

Limitations

1. Due to limited time the study was conducted at Chitungwiza Central Hospital only therefore caution should be taken in generalising the study findings to all pregnant mothers with PIH complications in Zimbabwe.

2. Due to reduced numbers of PIH clients related to season change and administrative constraints probability sampling was changed to non-probability sampling, which may limit representateviness and generalizability. However the wide geographical spread of the referral clinics such as Chitungwiza city clinics, Mashonaland east rural clinics Marondera Provincial Hospital and some of the Harare City Clinics may have reduced bias. On statistical analysis there was an assumption that I randomized which I did not do.

3. The findings may not reflect the health seeking behaviour of all pregnant women with PIH complications due to exclusion of the population from other provinces and those not admitted at Chitungwiza Central hospital during the study period.

4. The instruments used in this study were developed by the investigator which may have introduced bias. To combat this bias my advisors who are experts in the department of nursing science reviewed the instrument, many other experts in the field of obstetrics were also given the instrument to check whether the instrument measured what it was supposed to measure. The investigator ensured a pilot study was done and adjustments made to the instrument to ensure reliability and validity.

5. Self-reporting nature of the instrument may have introduced recall bias since the investigator relied on respondents' recall of information.

Summary

The purpose of the descriptive correlational study was used to describe and examine the relationship of knowledge of PIH complications and health seeking behaviour among pregnant women with pregnancy induced hypertension aged between 18 and 28years. The non probability

sample comprising of 80 pregnant women with PIH complications booked and have attended three or more antenatal visits, admitted with PIH complications was used to collect data

Data was coded and entered into the computer and analysed using the Statistical Package of Social Science (SPSS-PC). Descriptive statistics such as mean, percentages and standard deviation were used to describe the knowledge of PIH complications and health seeking behavior. Pearson correlation coefficient test and simple regression were used to show relationship and strength of relationship. Findings indicated that respondents of PIH complications as 65(81.3%) scored above 50%. Despite having knowledge of PIH complications most 70(87,6) respondents had poor health seeking behaviors. Data analysis indicated that knowledge of PIH complications was positively correlated and significant to health seeking behaviour ($r = .319$, $p = < .01$). meaning that an increase in knowledge of PIH complications will positively affect health seeking behavior. Although pregnant women had knowledge of PIH complications, they cited some of the most fatal complications like generalized oedema, flashes of lights/dots before eyes, abdominal pain which are signs if imminent eclampsia as being caused by evil spirits/bad airs. This may have led most of them to attend faith healing sessions first before coming to hospital.

The effect of the independent viable knowledge of PIH complications is indicated by $R^2 = .102$ ($F = 8.844$). This means that the variable knowledge of PIH complications explain a 10% the variance in health seeking behaviour. Regression coefficient (b) of the independent variable knowledge of PIH complications was significant at ($p = < .01$). Therefore the regression coefficient (19.346) represents a change in health seeking behaviour for a unit change in knowledge of PIH complications.

Maternal Child Health practitioners should therefore strengthen and design health

education methods which assist clients to quickly identify the PIH symptoms and encourage then to use the hospital. In this study use of Rosenstock Health Belief Model assisted in the identification of knowledge of PIH complications of pregnant women with PIH and identification of their health seeking behaviour. Therefore Rosenstock's Health Belief Model was partially supported by the study findings.

REFERENCE

Abbas, A.A., and Walker, G. J. A., (2006). Determinants of utilization of maternal and child health services in Jordan. International Journal of Epidermiology 1 (5) 404-407.

Agarwa, P. S.M.M., Suneela, G., (2007). Maternal Health Care Utilisation among women Urban, Slum in New Delhi African Medical Journal. 3.

Ahmed, A.S., Shams, E.I., Arifeen, M.N., & Yasmari, H., (2007). Maternal Health and Care Seeking Behaviour in Bangladesh. Social Medial Journal (50) 70 – 79.

Ahmed, S.M., Tomson, G., Petzold, M., & Kabir, Z.N., (2005). Bulletin of World Health Organisation.

Ahmed, S.T., Bremer, D.T., Magzoub, D.M., & Nouri, S.P., (2003). Socio-demographic determinants of Management behaviour of Diabetic patients Diabetics' Knowledge of the disease and Their Management Behaviour Eastern Mediterranean Health Journal 5 (5) 1974 – 983.

Ahmed,S.M., Adams, A.M., Chowdhury, M., & Bhuiya, A., (2000). Gender socio-economic development and Health seeking Behaviour in Bangladesh. Social science Medicine 51, 361 – 371.

Aiken, L.S., West, S.G., & Woodward, C.K., (1994). Health beliefs and Compliance in mammography screening recommendations in a symptomatic women Health Psychology 13, (3) 122 – 129.

Awashi, S., Verma, T., & Agarwal, R.T., (2006). Dangers signs of Neonatal illness Perception of Caregivers and Health workers in Northern India Bulletin of the World Health Organisation.

Aziga, F. & Namulema, B.N., Kaye, D. & Mutembe, F., (2003). Hypertensive Disorders of Pregnancy. East African Medical Journal 80 (3) 50 – 60.

Barron, C.R., Houfek, J.F., & Foxall, M.J., (1997). Coping styles health beliefs and breast self examination. Bulletin of the World Health Organisation

Beckenovic, E. J. B., Telesky, N. M., Harwood, C.D., (2000). Values, beliefs and behaviour regarding high blood pressure. National Medical Association Journal, 79 (4) 389-392.

Bennet, M.R., & Brown, L.K., (2006). Myles textbook for midwives. (14th ed) London: Churchill Livingstonne.

Bennet, M.R., & Brown, L.K., (2008). Myles textbook for midwives. (15th ed) London: Churchill Livingstonne.

Berkanovic, E.S., Telesky, P.T., & Harwood, N.D., (1999). Undereporty of maternal deaths on death certificates and the Magnitude of the problem Maternal Mortality 95, 478 – 482.

Buga, G.A.B., & Shumu, S., (1999). Pre-elampsia predisposes for hypertensive Diseases in next pregnancy. East African Medical Journal 76 (4), 191 – 198.

Burns, N., & Grove, S.K., (1993). The practice of Nursing research conduct critique and utilization. 2nd Edition) Philadelphia. Sanders.

Camazine, S.M., (2000). Traditional and Western Health Care among the Zuni Indians of New Mexico. Social Science Medicine (146) 73 – 80.

Champion, V., (1995). Development of beliefs and barriers scale for mammography. Cancer Nursing 18, 53 – 59.

Chavhuka, G.C. (1978). Traditional Healers and Shona Patient Mambo press.

Chernichovsky, D., Meesock, O.A., (2000). Utilisation of health service in Indonesia. Social Science Medical Journal. 23 (6), 611 – 620.

Chirdan, O.O., Zoakah, A.I., Ejembi, C.L., (2008). Impact of Health Education on home treatment and Prevention of malaria in Nigeria. Annals of African Medicine 12 (15), 112 – 119.

Cohen, J., (1988). Statistical Power analysis for the behaviour Sciences. New York, Academic Press.

Conde Agudelo, A., & Belizan, J.M.T. (2000). Risk factors for pre-eclampsia via large cohot in Latin America & Carribean women . British Medical Journal 107 (1) 75 – 83.

Conde-Agudeto, A.T.D., Berbian, M.T., (2000). Maternal mortality in South Africa African Medical Journal 15 (10), 75-80.

Dekker, S., (2001). Maternal Mortality and Morbidity in Southern Sudan, Lancet. 20 (357) 209 – 5.

Encyclopaedia Britannica, 2009.

Faxelid, E., Ahlberg, B.M., Ndulo, J., & Krantz, L., (1998). Health seeking Behaviours of Patients with obstetric complications. East African Medical Journal 75 (4) 232 – 236.

Ficham, J.E., & Wertheimjer, A.I., (2005). Using the Health Belief Model to predict Initial Drug Therapy Defauting. South African Medical Journal 20 (1) 101 – 105.

Garcia, P.J., Jaramillo, S.C., & Lopez, M.C., (2008). Reproductive Tract Infection in Rural women in Highlands jungle and Costal regards of Peru. WHO Bulletin, 82 (7), 116 – 120.

Gelfand, M., (1974). African customs in relation to preventive medicine. The Central African Journal of Medicine 27 (1) 11 –15.

Gillies, M. J., (1998). Knowledge utilization and use of health care services, social sciences medicines (40) 50-49

Glanzt, K., Lewis, F.M., Rimer, B.K., (2002). Health Behaviour and Health Education. A Health Psychology Textbook.

Goldenstern, M.T., Greenwood, V.S., Nattan, B., Massan & Kabach, (2002). White coat effects on hypertension in pregnancy much a do about nothing? British Medical Journal 106 (12)

474 – 480.

Goldstein, M.S., Greenweld, S., Nathan, T., Mospswark. Kaback, M.M., (2002). Factors Associated with participation in screening programme for Taysaes-Sachs Disease. South African Medicine 75 (2), 67 – 80.

Good, C.M., (2002). Traditional Medicine: Agenda for Medical Geography. Social science and Medicine 11, 705 – 713.

Gormark, P.S., (1996). Distance and Health Care utilization. British Medical Journal. 11 (15), 1119 – 11226.

Grant, J.M., (1995). Reproductive Health matters. Journal of Obstetrics and Gynaecology 4 (2), 70 – 78.

Green, E.C., (2002). Sexually transmitted disease ethno medicine and healthy policy in Africa. Social Sciences Medicine (30) 1111 – 1119.

Greenfield, S.M., (2001). Spiritual healing and patronage network in urban industrial Brazil. Social science Medicines (24) 1095 – 1108.

Hardenburg, R., Spaandermann, M.E.A., Ekhart, T.H., Einjndhoven, H.W., Heydon, O.W.H., & Peters, L.L.H.,(2003). Pre-eclampsia claiming maternal Bulletin of the World Health Organisation.

Harrison, L., & Harrison, L.P. (1999). Knowledge of Complications of pregnancy and care seeking behaviour. Journal of the National Medical Association 75 (4), 650 – 660.

http//www.guttmarther.org/pubs/journals/3307-507/htma.k.parveen@yahoo.com

Httpp//www.qaproject.org/pubstitleindex.html

Hunt, P.A., & Sultana, F., (1997). Health Seeking Behaviour and the Meaning of Medications in Balochistan, Pakistan. Social Science Medical Journal 34 (12), 1385 – 1397.

Jaramill, V., Garic, M., & Lopez, L., (2008), pre-eclampsia a multi-system disiorder. British Journal of obstetrics and Gynaecology 107 (1) 100 – 115.

Jonker, C., (1998). Health Care utilization in an African Township. A case-study from Lusaka. Zambia. South African Medical Journal (1) 119 – 126.

Kallander, K., Hildenwall, H., Waiswa, P., Galiwango, E., Peterson, S., & Pariyo, G., (2008). Bulletin of the World Health Organisation.

Kasule, J., Mbizvo, M.T., Gupta, S., Rusanuko, R., Movateka, W., Mpanju-Shumbusho, S.H., Kinoti, P., Padachy, J., (1997). Zimbabwean Teenagers knowledge of AIDS and other Sexually Transmitted Disease. Journal of Obstetrics and Gynaecology. 74 (2) 76 – 81.

Kawuwa, M.B., Maringa, A.G. & Usman, H.A., (2007). A community Perspective of Maternal Mortality Annals of African Medicine 6 (2) 2007. 109 – 114.

Kelly, G.R., Mamon, J.A., & Scott, J.E., (1999). Utility of the Health Belief Model in Examining Health Seeking Behaviour and Knowledge of disease

Kleinman, A., (1981). A patient and healers in the context of culture. University of California Press Limited London.

Knight, R.A., & Hay, D.A, (1999). Relevance of the health Belief Model to Australian Smokers Social Science Journal 28 (12), 1311 – 1314.

Lambart, S.D., (2000). Reproductive Morbidity and Health seeking Behaviour of adolescent pregnant mothers. Annals of African Journal (15) 120 - 130

Lipsey, M.W., (1990). Design sensitivity statistical power for non experimental research. Newbury Park: Sage Publication.

Manawab-E. L., Mahinaz, E. H., Younis, H. K., and Zurayk, H., (1994). Reproductive Morbidity and health seeking behaviour of adolescent. Pregnant mothers. Reproductive Health

Matters 4, 11.

Manehels, M., Mahinaz, E.L.H., Younis, N., Khattab, I.I., Zurayk, H., (1994). Women's' Understanding of Pregnancy Related Morbidity in rural Egypt. Social Science Medial Journal 12 (5) 550 – 560.

Manfredi, C., Warnecke, R.B., Graham, S., & Rosenthal, S., (2001). Social Psychological Correlates of Health Behaviour Knowledge of Breast Self-examination Techniques Among Black Women Social Science Medical Journal 11 (1) 433 to 440.

Manhart, L.E., Dialmy, A., Ryan, C.A., & Mahjour, J., (2000). Sexually transmitted disease in Morocco: gender influences on Prevention and Health Care seeking behaviour. Social Science Medical Science Journal 1 (3) 920 – 930.

Mekbed, A.T., & Ketsela, K., (1999). Pre-eclampsia and eclampsia second most common cause. Maternal mortality in Addis Ababa. 68 (11) 70 – 75. WHO Bulletin.

Michael, A.K., Jamil, M.K., Saha, S.T., Ahmed, E.A., Yasmin, H., Maternal Health and Care seeking behaviour in Bangladesh findings from a National survey. International Family Planning Perspectives. 15 (1), 110-119.

Michael, A.K., Kanta, J., Peter, K.S., Saha, T., Ahmed, A., Sham, E.A., Kenhill, Y. (2002). Maternal Health and care seeking Behaviour. International Family Perspectives. 78 (6) 114 – 120.

MOHCW, UNFPA, (2005). Reproductive Health Behaviour change communication strategy for Zimbabwe.

Moodley, J., Mphatsoe, M. & Gouw, E., (1999). Maternal and Perinatal mortality. East African medical Journal 90 (10), 115 – 120.

Mugisha, F., Bocar, K., Dong, H., Chepring'eno, G., Heidenberg, U., & Saverborn, R.,

(2004). Two faces of enhancing utilization of health care services: determinants of patient urination and retention of rural Burkina Faso. Bulletin of the World Health Organisation (2) 82.

Mutambirwa, J., (1985). Childbirth mother and child care amongst the indigenous people of Zimbabwe. International Journal of Obstetrics and Gynaecology 23, 275 – 285.

Mutambirwa, J., (1989). Health Problems in Rural Communities Social Sciences Medical Journal 29 (8), 927 – 930.

Muthuri, L.H.K., Kiriga, J.M., (1999). Predictors of Women's decision to ask New Partners to use Condoms to avoid HIV/AIDS in South Africa. Eastern African Medical Journal 76 (9), 484 – 500.

Nemet, C.F. & Bailey, J. B., (2000). Distance and health care utilization among the rural elderly. Social science and Medicine (50) 1197 – 1208.

Nemet, G.F., & Bailey, A.J., (2000). Distance and Health care utilization among rural elderly. African Medical Journal. 15 (10) 15 – 20.

Obimbo, E., Musoke, R.N., Were, F., (1999). Knowledge, attitudes and Practices of mothers and Knowledge of Health Workers Regarding care of the Newborn Umbilical Cord. East African Medical Journal 76 (8), 425 – 430.

Oppong, A.C.K., (2000). Healers in Traditional. Social Science Medicine 28 (6), 605 – 612.

Pitchforth, Teylingen, Graham & Fitzmaurice (2007). Health care utilization by Haiti women. Annals African Medicine.

Polit, D., & Hungler, B.P., (1995). Nursing Research: Principles and Methods. Philadephia: J.B. Lippincott.

Polit, D.F., & Sherman, R.E., (1990). Statistical Power Nursing Research.

Rankins, P.J., May, J., Govennder, J., Budlender, D., Mokate, Rogerson, C., Stavrou, A., & Wilkins, N., (2002). The seventh National HIV survey of women attending antenatal clinics of public Health services Pretoria. Department of Health.

Roberts, Y., (1994) Hypertension Control American journal of Public Health.

Rosenstock, I.M., (1966). Historical Origins of the Health Belief Model.

Rosenstok, I.M., & Stretcher, V.W. (1997). The Role of self efficacy in achieving health behaviour change Health Education Quarterly, 13, 73 – 92.

Scott, S.P., (1999). Health seeking Behaviour of patients with sexually Transmitted Diseases East African Medical Journal 75 (4), 233 – 236.

Simunye, D.E., E.M., Wafula & Nduati, R.W., (2003). Mothers knowledge attitude and practices regarding acute respiratory infections in Children in Baringo District Kenya East African Medical Journal, 80 (6) 303-307.

Spaandermann, M.E.A., Hardenburg, R., Timo, H., (2003). Epidemiology diseases have demonstrated relationship between complications of pregnancy. Internal. Journal of Obstetrics and Gynaecology, 110 (23) 1001 – 1006.

Sweet, B.R., (1988). Mayes midwifery. A textbook for Midwives. (11th ed.). Aron: Balliere. Tindall.

Taha, A.Z., Bella, H., (2000). Heart Disease Risk Factors. Prevalence and Knowledge in a Primary Care Setting, South Arabia. East Mediterranean Health Journal 4 (2), 292 – 307.

Tsuyuoka, J., Wagatsuma, Y., Makunike, B., (2001). The knowledge and Practices on Malaria among community members in Zimbabwe. Journal of Central African journal of Medicine. 47 (1), 14 – 17.

Uehara E.S., (2001). Understanding the Dynamics of illness and help seeking event

structure analysis and a Cambodian American narrative of "Spirit Invasion" Social Science and Medicine. 52, (519 – 536).

Vural, B., Vural, A., Erk, A., & Karabacak, O., (2000). Knowledge on lactational Amenorrhoea and Contraception. East African Medical Journal. 76 (7), 385 – 388.

White, K., Smell, M., Kershaw, T., Frederik, R., Gabriel, J., & Bakau, T., (2006). Health seeking Behaviour among pregnant women in Haiti. Health care for Women International 27 (9) 822 – 838.

Williams, D., (2007). Maternal Health Care, Health Care seeking Pregnancy Complications. British Medical Journal First Edition (2), 209 – 15.

Appendix A

Consent Form

Name of Investigator: Unice Goshomi

Masters of Nursing Science Degree Studies

Dear Participant

You are requested to participate in this research study to establish the relationship between knowledge of complications and health seeking behaviour among pregnant women with PIH complications aged 18 to 28 years. The study will take place over a period of four weeks during which 80 participants will be recruited for this study with no regard for race or social economic status. Your knowledge on pregnancy induced hypertension complications and the care which you seek when you notice the complications will be recorded. This will provide valuable information for improvement for the future planning and implementation of health education for mothers with pregnant induced hypertension.

This study and its protocol will be approved by the Medical Research Council of Zimbabwe, University of Zimbabwe Nursing Sciences Department and Chief Executive Officer of Chitungwiza Central Hospital. If you agree to participate in the study information will be collected and recorded on special forms. The interview will take approximately 20 – 25 minutes of your time. There is no physical risk, incurred nor emotional risk involved. You will be free to ask any questions about the study or about your involvement. You can either participate in this study or not.

You have the right to withdraw anytime. The services you receive and your relationship with the health care providers will not be affected in any way. You will not incur any costs for your participation. All study data will not include your name. Your identity will not be revealed during the study, report writing or publications. All study data will be collected and kept in a secure place and will not be shared without your permission. In the event that you have any queries you may contact the above named in

Department of Nursing Sciences
P O Box A 178
Avondale, Harare.

If you agree to participate show by signing your name

Signature of Investigator ……. Date ……

Signature of Participant …….. Date ……..

Appendix B

Interview Schedule

Section A: Demographic Data

May you please answer the following questions to the best of your ability?

1. What is your age
2. What is your religion?

Apostolic	1
Pentecostal	2
Mainstream Churches	3
Islamic	4
Traditionalist	5

3. Marital Status

Married	1
Single	2
Widowed	3
Divorced	4
Separated	5

4. What is your occupation?

Skilled employment	1
Unskilled employment	2
Not employment	

5. What is your monthly income?

USD 0 – 100	1
USD 101 – 200	2
USD 201 – 300	3
USD 301 – 400	4
USD 401 and above	5

6. What is your spouse's occupation?

Skilled employment	1
Unskilled employment	2
Not employed	

7. What is your spouse's monthly income?

USD 0 – 100	1
USD 101 – 200	2
USD 201 – 300	3
USD 301 – 400	4
USD 401 and above	5

8. What is your level of education?

Grade 1 – 7	1
Form 1 – 4	2
Form 5 – 6	3
Tertiary	4
Never been to school	5

9. Have you ever suffered PIH?

Yes	1
No	2

10. What is the current health problem that caused you to be admitted

Pre-eclampsia	1
Eclampsia	2
Imminent eclampsia	3
Reduced fetal movements	4
Cessation of fetal movements	5

Section B: Knowledge of PIH Complications

Please Answer the following questions to the best of your ability.

Which of the following are PIH complications

		1 Yes =1	2 No =0
11	Blurred vision		
12	Rapid weight gain		
13	Convulsions first time in pregnancy		
14	Flashes of light or dots before eyes		
15	Swelling of face and fingers		
16	Reduced urine output		
17	Reduced fetal movements		
18	Deaths of fetus inside the uterus		
19	Death of mother		
20	Abdominal or Epigastric Pain		
21	Confusion		
22	Drowsiness/feeling sleepy		
23	Continuous frontal headache		
24	Facial twitching		
25	Uncontrolled bleeding of sudden onset		
26	Generalized body weakness		
27	Nausea and vomiting		
28	Very high blood pressure		

Section C Health Seeking Behaviour.

Please answer the following questions to the best of your ability.

In your opinion what causes the following pregnant induced hypertension complications?

		1	2	3	4
29	Convulsions				
30	Confusion				
31	Flashes of lights/dots before the eyes				
32	Reduced fetal movement				
33	Continuous Frontal headache				
34	Generalized oedema				
35	Abdominal or Epigastric Pain				
36	Nausea and vomiting				

Key 1 = Witchcraft, 2 = Punishment from God, 3 = Bad airs/evil spirits, 4 = Worsening PIH.

(Perceived seriousness with which pregnant women view PIH complications)

		Yes =1	No =0
37	Having a continuous head ache is nothing to worry about	1	2
38	Blurred vision can be ignored, resolves on its own		
39	Reduced urine output means a serious complication		
40	Having reduced fetal movements is normal in pregnancy		
41	Generalized oedema is part of normal happening in pregnancy		
42	PIH Cannot kill me		
43	PIH cannot kill my baby		
44	PIH cannot damage my kidneys, eyes and brain		
45	PIH Cannot predispose me to permanently to (heart disease cancer and reduced life span)		

Before coming to hospital, what treatment did you seek first for the following problems?

		1	2	3	4	5	6	7
46	Flashes of lights/dots before the eyes							
47	Headaches							
48	Generalized oedema							
49	Abdominal or epigastric							
50	Confusion							
51	Reduced fetal movements							
52	Nausea and Vomiting							
53	Convulsions							

Key 1 = Self/home treatment, 2 = Traditional healers, 3 = Hospital non-professional workers treatment, 4 = Faith Healers, 5 = Hospital Clinic, 6 = Nothing or Sleeping, 7 = Did not have it.

Perceived Benefits – ((Benefits of reporting to hospital noticing PIH complications)

What are the advantages of going to hospital or clinic early on noticing PIH complications.

		Yes	No
54	Fatal complications are prevented	1	2
55	Convulsions can be prevented		
56	My baby can be delivered quickly before it dies		
57	My condition is monitored by a nurse/doctor		
58	I am given correct treatment		
59	My pregnancy can be prolonged to allow my baby to grow		

Likelihood of Taking Action (The possibility that the pregnant women with PIH complications will use medical treatment

60. What will motivate you to seek medical treatment immediately on noticing the PIH complications?

……

……

Barriers to action (difficulties associated with not using the hospital it could be personal social influences and attitudes)

What are the difficulties you have come across that prevented you from using the hospital or clinic among the following

		Yes	No
61	My family does not use medical treatment	1	2
62	I did not have money to pay for the services		
63	Decision to go to hospital has to be made by husband or significant others		
64	My religion does not allow me to use medical treatment		
65	I was the only one at home so could not leave children alone/no one to accompany me to hospital		
66	The reception at the hospital is poor/unfriendly health personnel		
67	Waiting time to get treatment is too long		
68	Services provided are not to expectation		
69	My relative or friend was previously not treated adequately		
70	Some of the diseases are not for hospital treatment		
71	Traditional healers accept cash in kind for payment		
72	Symptoms I presented with needed exorcising before medical treatment		
73	I do not come to hospital unless referred by a traditional/ faith healer		
74	I come to hospital when home treatment has failed		
75	Thinking that it was not necessary		
76	I was bewitched by someone who was jelousy of my pregnancy		
77	Faith healers offer free treatment		
78	Fear of hospital care		
79	I did not have money to pay for transport		
80	I failed identify the PIH problem		

APPENDIX C

GWARO RECHITENDERANO

ZITA REMUNZVERI/NAME OF INVESTIGATOR: UNICE GOSHOMI

Mudikanwi Mubatsiri

Ndirikukukumbira kuti undibatsire mukunzvera kwandiri kuita kwekuti pakati pavanhukadzi vanorwara neBP yenhumbu (PIH) kana vakazvitakura chete,huye vane makore ekuberekwa 18 kusvikira ku 28 kuti vanoziva here njodzi yavakatarisana nayo mudenda iri zvekare vanotsvaga rubatsiro zvaita sei. Kunzvera uku ndichakuita mukati mesvondo ina(4 weeks) huye ndichakumbira rubatsiro kuvanhukadzi 80 vandichatsvaga pasina rusarura rwemunhu,rweganda, rudzi,chitendero,hugaro hwake kana kupfuma.Ndichada kuongorora kuti apo makazvitakura munonzwisisa zvakadiyi nezve BP yenhumbu pamwe nekurapwa kwayo.Ruzivo rwatichawana ruchatibatsira mukusimudzira hutano nedzidzo yezvehutano hwevanhukadzi vanobatwa BP pese pavakazvitakura.

Kunzvera kwandiri kuti uku pamwe nehurongwa hurikutevedzwa zvichatenderwa nave Medical Research Council of Zimbabwe, University of Zimbabwe Nursing Sciences Department na Chief Executive Officer ve Chitungwiza Central Hospital.Kana muchinge matendera kuti mubatsire mukuzvera uku huchapupu hwenyu huchanyorwa mumagwaro akagadzirirwa basa iri chete.Tichakurukura nemi kwenguva inobvira pa 20 kusvikira 25 minutes..Mukunzvera uku musazvityire kuti muchakuvadzwa kana kushungurudzika nayo kwete. Munekodzero yekubvunza zvese zvamunoda pamusana pekunzvera uku kana nezveku batsira kwamuchaita.Zvirikwamuri kubatsira kana kuramba.

Kana muchinge mapinda mubasa iri munekodzero yekuramba mave pakati.Kuramba kwenyu kana kubvuma kubata neni hakurevi kuti mucharapwa zvakasiyana navamwe varwere.handinyore kana kutaura zita renyu pamapepa, huye neniwo ndovimbisa kuti mukubata kwangu hapana pandichadura zita renyu.humbowo hwese hwandinenge ndawana hunochengetedzwa zvakasimba zvekuti kana zvichikodzera kuti tigoverane navamwe tinotokumbira kutenderwa nemi.Kana muine zvamunoda kunzwisisa pamusoro pekunzvera uku kurukurai neni Unice Goshomi ku

Nursing Department,
P.O. Box A 178
Avondale
Harare

Kana mabvuma kundibatsira nyorai mucherechedzo wenyu muchikamu chinotevera

Mucherechedzo wemunzveri/Signature of
Investigator.....Date.....

Mucherechedzo wemubatsiri/Signature of
Participant.....Date.....

Appendix D
Interview Schedule
Section A: Demographic Data

1. Unemakore mangani ekuberekwa.
2. Ndechipi chinamato chako?

Mupositori	1
Pentecostal	2
Mainsteram Churches	3
Moslem/Islam	4
Zvechivanhu	5

3. Zvekuroorwa

Wakaroorwa here	1
Hauna kuroorwa/Single.	2
Shirikadzi	3
Makarambana	4
Murikugara makasiyana	5

4 Basa rako

Wakaridzidzira here.	1
Rese Rese.	2

5. Unotambira marii pamwedzi?

USD O-I00.	1
USD 101-200.	2
USD 201-300	3
USD 301-400.	4
USD 401 zvichikwira.	5

6. Mumwe wako anoita basa rei?

Raakadzidzira here.	1
Rese rese .	2

7. Mumwe wako anotambira marii?

USD 0-100 ..	1
USD 101-200	2
USD 201-300	3
USD 301-400	4
USD 401 zvichikwira	5

8 Makadzidza zvakadini?

Grade 1-7	1
Form 1-4	2
Form 5-6	3
Tertiary	4
Never been to school	5

9. Makamborwara neBP yenhumbu (PIH)

Hongu	1
Kwete	2

10 Chii chakaita kuti mupiwe mubheda muchipatara

Micherechedzo yekuti itsvo dzakuvadzwa/Pre clampsia	1
Tsviyo/Eclampsia	2
Micherechedzo yekuti tsviyo dzingangoitika nguva ipi zvayo/Imminent eclampsia	3
Mwana adzikira kutamba kwake	4
Mwana haasi kutamba	

Chikamu Chechipiri:
Knowledge of PIH Complications(Ruzivo rwenjodzi dzeBP yenhumbu)
Pindurai mibvunzo iyi nemwoyo yenyu yese
Pakati pezvirwere izvi ndezvipi zvinokonzerwa neBP yenhumbu(PIH)

		Hongu	Kwete
11	Kuona madzengerere	1	2
12	Kuwedzera uremu kwakanyanyisa		
13	Tsviyo dzakatanga nenhumbu		
14	Kuona nyeredzi panedzimwe nguva		
15	Kuzvimba kumeso neminwe		
16	Kuita weti kashoma		
17	Kuderera kwekutamba kwemwana		
18	Kufa kwemwana mudumbu		
19	Kufa kwamai		
20	Kurwadziwa nemudumbu nepachifuva		
21	Kumborasikirwa nepfungwa		
22	Kunzwa hope nguva dzese dzese		
23	Musoro unorwadzira pamhanza zvakanyanya		
24	Kugwinha kwetsinga dzekumeso		
25	Kubuda ropa pese pese		
26	Kungorukutika muyiri wese		
27	Kumira mwoyo nekurutsa		
28	B.P. Yakakwirisisa		

Mukuziva kwenyu chii chingakonzera matambudziko anotevera kuna amai vakazvitakura vaneBP yakakwidzwa nenhumbu

		Huroyi	Kurangwa na Mwari	Mamhepo/mweya yetsvina	Zvehutano
29	Tsviyo	1	2	3	4
30	Kumborasikirwa Nepfungwa				
31	Kuona Nyeredzi				
32	Kutamba zvishoma kwemhuru				
33	Kutemwa Nemusoro nechepamhanza				
34	Kungozvimba kwemuyiri				
35	Kurwadza Kwemudumbu				
36	Kumira Mwoyo kana kurutsa				

Section C Kutsvaga rubatsiro rwokuda kurapika(Health seeking behaviour).

N dapota pindurai mibvunzo yese nemazvo.

(Maonero anoita amai vakazvitakura urwere hwavo/matambudziko eBP yenhumbu)

		Hongu	Kwete
37	Musazvinetse nemusoro unogara uchitema	1	2
38	Tisazvinetse nekuona madzengerere zvinopera zvega		
39	Kuita weti shomazvinoreva zvinoreva kukwira kwedambudziko		
40	Tisazvinetse nekumbotamba zvishoma kwemwana zvinoitika nenhumbu		
41	Kungozvimba kwemiyiri wakazvitakura ndiyo nhumbu yacho tisazvinetse		
42	BP yakonzerwa nenhumbu inouraya		
43	BP yenhumbu inogona kuuraya mwana wandakatakura		
44	BP yenhumbu inogona kukuvadza itsvo, maziso nepfungwa dzangu		
45	BP yenhumbu inogona kukonzera zvirwere zvemwoyo ,gomarara nokufamba kwenguva muhupenyu hwangu .		

Musati mauya kuchipatara makamborapwa kupi pamatambudziko anotevera

		1	2	3	4	5	6	7
46	Kuona nyeredzi							
47	Kutemwa nemusoro							
48	Kungozvimba							
49	Kurwadziwa nemudumbu							
50	Kumborasikirwa nepfungwa							
51	Kudzikira kwekutamaba kwemwana							
52	Kumira mwoyo nekurutsa							
53	Tsviyo dzakatanga nenhumbu							

Key: 1 = Kuzvirapa mega kana murikumba, 2 = Kun'anga, 3 = Kurapwa neisirinyanzvi muhutano, 4 = vapositori, 5 = chipatara kana kirinika, 6 Hapana/ndakarara, 7 = Handina kuita izvozvo

Zvakanakira kuuyakuchipatara samaonero amai

Ndezvipi zvakanakira kuti mai vaende kuchipatara kana ku kirinika pavanongotanga kuona kuti vavekurwara nematambudziko e BP yenhumbu vakazvitakura pakati pezvinotevera.

		Hongu	Kwete
54	Kunodzivirirwa matambidziko anouraya	1	2
55	Tsviyo dzinogona kudzivirirwa		
56	Ndinogona kusunungutswa nekukurumidza mwana asati afa		
57	Hutano hwangu hunoongororwa nemukoti kana chiremba		
58	Ndinorapwa zvakakodzera		
59	Ndinogona kutakura nhumbu yangu kwenguva yakakodzera mwana achikura		

Mikana yekuti titore matanho ekuenda kuchipatara (Mikana yekuti vanhukadzi vakazvitakura huye vaine BP vanoenda kunorapwa kuchipatara.)

60. Chii chingakukurudzirai kuti muende kunorapwa kuchipatara chiriporipo maona matambudziko e BP yenhumbu.

……

Zvingatadzisa munhu kutsvaga rubatsiro(Matambudziko anokonzera kuti tisaende kuchipatara angave ekufunga kwedu kana ekufurirwa navamwe)

Ndeapi matambudziko amakasangana nawo akakutadzisai kuenda kuchipatara kana kukirinika chiriporipo pane anotevera

		Hongu	Kwete
		1	2
61	Mhuri yangu haidi zvekurapwa nemishonga yekuchipatara		
62	Ndakanga ndisina mari yekunobhadhara kuchipatara		
63	Chisungo chekuti ndiende kuchipatara chinoitwa nemurume wangu kana hama		
64	Chinamato changu hachinditenderi kuenda kuchipatara		
65	Ndini ndega anga ari kumba ndisina wokusiira mwana/hapana aindiperekedza		
66	Vashandi vekuchipatara havagoni kutambira kana kubata varwere zvakanaka		
67	Unomira nguva yakareba usati warapwa		
68	Haurapwi nenzira inogutsa		
69	Hama/shamwari yangu havana kubatwa zvakanaka kuchipatara		
70	Kunezvimwe zvirwere zvisingadi kurapwa kuchipatara		
71	N'anga unobvisa chero chauinacho kutura matambudziko nekurapwa		
72	Zviratidzo zvechirwrere changu zvaida kutangwe kwapumhwa mamhepo		
73	Handiuye kuchipatara ndisati ndarongerwa ne n'anga/muporofita		
74	Ndotoenda kuchipatara kana zvekurapwa kumba zvaramba		
75	Kufunga kuti hazvina basa		
76	Ndakaroyiwa navanegodo nekuzvitakura kwandakaita		
77	Mapositori haabhadharise unorapwa pachena		
78	Kutya kurapwa kuchipatara		
79	Ndanga ndisina mari yekufamba kuenda kuchipatara		
80	Ndakatadza kuona kuti rakanaga riri dambudziko rinokonzerwa neBP yepamuviri.		