

THE RELATIONSHIP BETWEEN PSYCHOSOCIAL SUPPORT AND PMTCT
UPTAKE AMONG HIV POSITIVE PREGNANT WOMEN AT CHITUNGWIZA
CENTRAL HOSPITAL.

BY

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ABSTRACT

The study determined the relationship between psychosocial support and uptake of PMTCT among HIV positive pregnant women at Chitungwiza Central Hospital antenatal clinic. The independent variable was psychosocial support and the dependent variable was PMTCT uptake. Neuman's systems model guided the study. A descriptive correlation study design was employed to examine the relationship between the variables. A simple random sample of 80 subjects was recruited and interviewed using a face to face structured interview schedule. The instrument had three sections, that is, demographic questionnaire, PMTCT uptake questionnaire and a psychosocial support questionnaire. Data was analysed using the Statistical Package of Social Science (SPSS). Research questions were analysed using descriptive and inferential statistics and Pearson Product correlational coefficient test was used to determine the relationship between psychosocial support and PMTCT uptake. The statistical significance level was set at 5% or $\alpha < 0.05$ and the results showed a moderate positive significant relationship between psychosocial support and PMTCT uptake. ($r = .484$ $p < .01$) implying that as psychosocial support increases PMTCT uptake increases. This study should contribute to a body of knowledge on Maternal and Child Health and Midwifery practice

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DEDICATION

To my late father Mr. K. K. Muchakazi, I finally did it daddy. You have always wanted me to be a holder of a Masters Degree. I love and miss you a lot.

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CHAPTER 1

BACKGROUND INFORMATION AND THEORETICAL FRAMEWORK

Problem Statement

The study sought to determine the relationship between psychosocial support and the uptake of Prevention of Mother To Child Transmission of HIV (PMTCT) among HIV positive pregnant women at Chitungwiza Central Hospital.

This chapter is going to cover the background information, problem statement, purpose, theoretical framework, definition of terms, objectives, study question and the significance of the study to nursing.

Mother to child transmission (MTCT) of HIV refers to infants acquiring infection from their mothers during pregnancy, delivery and breastfeeding. According to UNICEF, (2007) 100 babies become HIV positive every day and 1.6 million children are orphaned. Just 2% of the country's 115 000 HIV positive children are on the life prolonging drugs and funds are critically low for the prevention of mother to child transmission of HIV (UNICEF, 2007). Paediatric treatment is crucial but every case of paediatric treatment AIDS is a failed case of PMTCT (UNICEF, 2007). Zimbabwe needs far far greater support in PMTCT.

In Zimbabwe HIV and AIDS threaten the lives of children more than any other disease (MOHCW, 2006). Prevention of Mother To Child Transmission (PMTCT) is a key strategy to prevent HIV infection in children. PMTCT has been discussed in many fora and it has been seen as a public health priority (MOHCW, 2006). PMTCT is directed towards reducing HIV infection in children. HIV transmission in children is through MTCT and it accounts for 7% of the HIV infection in children. MOHCW has shown its commitment to contributing towards an HIV and AIDS free generation through the introduction of the PMTCT intervention (MOHCW, 2006). Prevention of HIV infections in children remains a priority in Zimbabwe

targeting reduction of infant and child mortality rates. Many children die before their 5th birthday if they contract HIV at birth (Impact, 2007).

Globally one of the important breakthrough in the prevention of HIV/AIDS over the past decade has been the demonstration that use of antiretroviral drugs during pregnancy in HIV infected mothers can substantially lower the rates of MTCT. Single dose nevirapine for prophylaxis was the bare minimum (MOHCW, 2006). More efficacious regimens, where other ARV combinations are used, for prophylaxis were recommended when feasible and affordable. The Millenium Summit 2000 agreed on eight (8) millenium development goals with one of them, goal 6, targeting at combating HIV (MOHCW, 2006). This includes combating HIV even in children. These strategies are all targeted at reduction of maternal and perinatal mortality. The target of the millenium summit is to create an HIV free generation.

In Zimbabwe PMTCT started as a 3-site pilot project in 1999 and has since expanded to all the 10 provinces of the country (MOHCW, 2007). A total of 1422 sites offer PMTCT services where some are comprehensive sites, which provide HIV testing and ARV prophylaxis while minimum sites provide prophylaxis after women have been tested elsewhere. Roll out of the PMTCT programme started at the end of 2001 when the pilot project was completed and evaluated (MOHCW, 2007). In 2005 an estimated 26610 new HIV infections in children 0-14 years was noted and over 90% was as a result of mother to child transmission. The opening of more than 68 sites for comprehensive PMTCT and access to highly active antiretroviral therapy (HAART) is an achievement in implementation of this essential strategy. Chitungwiza Central Hospital, the study site, is a comprehensive site.

The Zimbabwean government's commitment is further demonstrated in the integration of PMTCT intervention into the routine health delivery system. PMTCT has been highlighted in the 1999 Zimbabwe HIV/AIDS policy as one of the key strategies to fight the HIV

pandemic and the introduction of the National Psychosocial Support Guidelines is also a milestone in the improvement of the PMTCT uptake in the country. The core interventions for PMTCT now include routine offer of HIV testing and counseling to all pregnant women presenting at health institutions, family planning counseling and services to prevent unintended pregnancies among HIV positive women, ARV prophylaxis to HIV positive mothers, ART to those HIV positive women in need of treatment as well as safe obstetrical practices and infant feeding education and counseling.

In 2007, in Zimbabwe, a total of 166794 pregnant women delivered in health facilities around the country. Of the women who booked at the country's antenatal clinics 150692 (92%) pregnant women were pretest counseled for HIV and 108176 (72%) of those pretest counseled accepted an HIV test and 19578 (18%) were HIV positive. Of the HIV positive 11803 pregnant women were dispensed with single dose Nevirapine (which was 60% of those who were HIV infected). A total of 7775 pregnant HIV infected women did not go through the programme which leaves their infants exposed to HIV infection leading to high infant mortality. Continued HIV infection in these families will lead to high HIV prevalence and high maternal mortality due to high HIV infection. Only 11780 (60%) of infants with HIV positive mothers received nevirapine within 72 hours of delivery. Twenty three babies from HIV positive mothers did not receive the nevirapine for prophylaxis exposing them to seroconversion leading to a real HIV infection. Such babies do not grow to witness their 5th birthday raising the infant mortality rates.

At Chitungwiza Central Hospital, in (2007), 791 mothers were booked but only 146(18.5%) went through the PMTCT programme and received single dose nevirapine for prophylaxis together with their infants . In 2008 1245 came for booking and 387 (31.1%) were positive and went through the PMTCT programme. From April to June (2009) pregnant

mothers were booked and 64 (10.7%) went through the programme. This is only 5% less the national prevalence rate though there is a possibility of improving by increasing this percentage. Nationally, the introduction of PMTCT has current challenges such as limited human resources capacity, low male participation in PMTCT and HIV testing and low disclosure of HIV status. Chitungwiza was not spared where one finds out that several reasons for the low coverage have been cited. These reasons include pregnant mothers not able to provide US\$1.00 for the tube to collect the blood, not sure of significant other's reaction and not being able to cope with a positive result.

Chitungwiza Central Hospital is a referral center with a lot of activities pertaining to health care. Of concern during this study are its opportunistic infection clinic, antenatal clinic and maternity services which make the institution a comprehensive site for PMTCT. HIV testing and counseling including provision of prophylaxis is provided at the institution. The provision of NVP and ARV for more efficacious regimens is available. The antenatal clinic provides the goal-oriented protocol of care where the health care providers provide focused care for each pregnant mother who visits the institution for care and treatment. All ages and parity are attended to as long as they are referred. Antenatal bookings and subsequent examinations are done. After the results are known initiation of treatment is done at the antenatal clinic.

The Zimbabwe prevalence rate of HIV is 15.4% (ZDHS, 2007) and so there is reduction in positive HIV results in people reporting at Chitungwiza Central hospital for care and treatment. There are also significantly low figures on the mothers who are tested and accept the PMTCT programme. This leaves some women not receiving prophylaxis exposing their infants to HIV infection. They outrightly refuse to get tested and so the millenium summit (2000) goals are then difficult to meet. The country's prevalence rate will then be false

because those, that decline to have the test, are not included when the prevalence rate is calculated and estimated.

HIV education including testing, counseling, issues of disclosure and coping with an HIV positive result is given and clients are then referred to support groups for continued support and care. Despite the education the uptake of PMTCT is low. A total of 810 nurses were trained in rapid HIV testing including those at Chitungwiza but still the uptake of PMTCT is low. The training for dry blood spot HIV testing for babies under 18 months was done and this improved the care and treatment of these mothers and their infants but the figures continue to be low (ZDHS,2007). Psychosocial support is essential to HIV positive pregnant mothers for them to enroll in PMTCT to improve on their unborn babies' outcomes (MOHCW, 2007). Psychosocial support has benefits which include empowering couples to join PMTCT at the pretest stage; providing coping mechanisms to avoid mental breakdown; encouraging adoption of positive behavior change, reducing stigma and discrimination, integrating with existing services and networking with other support services. (W.H.O, 2009).

Psychosocial support is a holistic approach to an individual, which takes into account the psychological aspects of a person and his/her social life (MOHCW, 2007). HIV/AIDS is more than just a medical problem, as it brings with it a host of psychosocial issues at the personal, interpersonal, family and social levels (Varga & Brookes, 2008). Psychosocial support which is an all encompassing concerns that include counseling, spiritual support, welfare support and social/interpersonal support should therefore be part and parcel of the continuum of care from the prevention to treatment and care to discharge planning right up to home based care. It forms the cross cutting glue that binds the provision of holistic HIV/AIDS prevention, care and support. (Varga & Brookes, 2008)

Psychosocial support is care, which enhances well-being, confidence and social functions which include support groups which may be led by a member of staff or be self-facilitated (MOHCW, 2007). The primary function of the group is likely to be mutual emotional support and the sharing of personal experience (peer support); mother-to-mother mentorship and other forms of individual support, usually provided by volunteers. The support groups may sometimes combine emotional support and companionship and ongoing counseling (MOHCW, 2007). Support groups also provide emotional support where the HIV positive clients meet and share experiences, good or bad. This support is by choice and can also bring income generating projects.

.Psychosocial support presents in different ways, there is formal support which comes through the institution as educative support with client being given HIV/AIDS information pertaining to testing, treatment and care by health workers. Counseling services are also provided. The human resource should be trained to be well knowledgeable to be able to provide the service. The psychosocial support can also be provided by the donor community which gives material support like baby's lyette and bus fare to and from the institution for care and treatment. The donor community, for example, Zimbabwe Vitamin A For Mothers And Babies (Zvitambo), Zimbabwe AIDS Prevention Programme (ZAPP) or Zimbabwe AIDS Prevention Support Organisation (ZAPSO) just to name a few, may also provide resources like blood tubes, gloves or even food to improve the provision of care for these HIV positive pregnant women. Infant formula for those mothers who opt for the formula as a method of infant feeding can also be provided to support the method of choice by the pregnant women.

The family including the significant others and spouses give emotional, material and educative support. The family's knowledge of the programme will improve the type of care and in turn may increase the uptake of PMTCT. Community support, faith based support

including linkages and referrals are also part of supportive systems which can be used to provide psychosocial support to HIV positive pregnant women.

Pregnant women are vulnerable worse still if they are HIV positive and therefore need a lot of education to enable them to accept the PMTCT programme (Varga & Brookes,2008). They need time and patience to acquire information and make informed decisions about the PMTCT programme. Nurses and lay counselors in the understaffed and over burdened health care facilities often lack the time, training and resources to fully educate clients about critical aspects of PMTCT (Varga & Brookes,2008). Successful efforts require that pregnant women receive education and support to understand the spectrum of PMTCT interventions (Varga & Brookes 2008). Other factors that require support and influenced adherence to PMTCT include HIV and early premarital pregnancy, stigma, fear of a positive test result and concerns over confidentiality and poor treatment by health care providers (Varga & Brookes 2008).

The MOHCW introduced the PMTCT Psychosocial Support Guidelines, in December 2006, with the aim of increasing and improving the uptake of PMTCT in Zimbabwe. Despite the introduction of the guidelines the uptake is still low. According to WHO psychosocial support is the first need for those found to be HIV infected yet it is not necessarily perceived as a high priority in many settings. A survey conducted by the MOHCW in 2003 on PMTCT, provision of psychosocial support was found to be a neglected area inspite of it being viewed by service providers as an integral part of PMTCT.

The Zimbabwe HIV prevalence rate (reported at ANC sentinel points) was 18.5% in 2006 and is down to 15.4% (ZDHS, 2007) . The infant mortality rate is also down to 29/1000 from 65/1000 live births while the maternal mortality rate has gone up from 555/100 000 to 729/100 000 (MOHCW,2007). The reduction of the perinatal mortality rates were attributed to effective PMTCT interventions. According to MOHCW (2007), the high maternal mortality

was attributed to high HIV and AIDS defining conditions which were not managed well. Lack of or poor psychosocial support was the major reason for delay of commencement of ARVs. Education from the health care providers was not convincing as a result not many pregnant mothers enrolled in the PMTCT programme leading them to accessing ARVs late. Poor family support, leading to failure to disclose if ever tested was a contributing factor. Lack of support from the spouse lead to mixed feeding and anxiety to the mother. Anxiety is a stressor which may lead to progression of an HIV state into an AIDS state leading to death and therefore raising the country's maternal mortality ratios (MOHCW, 2006).

The community has structures which are providing psychosocial support and so when the women visit the ANC the health care providers should be in a position to find out about the support already available to avoid duplication. Psychosocial support has some influence on the uptake of PMTCT since it has been shown by the literature cited above. There is need therefore to conduct this study to determine the relationship between psychosocial support and PMTCT uptake. The study was then to establish whether the provision of psychosocial support improves the uptake of PMTCT at the country's institutions, which in turn reduces perinatal and maternal mortality rates. These are part of the targets for the millenium development goals 4,5 and 6, which have to be achieved by 2015. The millenium development goals are a global target which will influence donor support for the country for example the Global Fund which is currently supporting most of the HIV related programmes in the country.

Purpose

The purpose of the study is to determine the relationship between psychosocial support and uptake of PMTCT by HIV positive pregnant women at Chitungwiza Central Hospital.

Theoretical Framework

Neuman's systems model was used to guide the study. The rationale for choosing this model to guide the study is that the model depicts the nurse as an active evaluator and intervener. The client or clients system reacts to or may potentially react to stressors in the environment. In this study the client is the HIV positive pregnant woman who has reacted to the positivity as a stressor and reports for antenatal care where the nurse / midwife evaluates the total human and select the appropriate interventions. In this study the intervention, primary, secondary or tertiary, is the introduction or PMTCT interventions to the mother. The appropriateness will come in the form of the levels of uptake according to their level of infection. The client system is influenced by its own variables which are physiological psychological, sociocultural, developmental and spiritual.

In this study the client, HIV positive pregnant woman is living in the society or community where they are influenced by the actions taken by the people they stay with. According to MOHCW (2007) psychosocial support is a holistic approach to an individual which takes into account the psychological aspects of a person and his or her social life. In a big way Neuman, in the model, is addressing the psychosocial aspect of the client, as influencing the type of care which the client will receive or is to receive. The actual outcomes are the results or the effectiveness of selected interventions and are evaluated in relation to mutually set goals. Neuman addresses the four central concepts of her model which are person, nursing, environment and health.

Nursing is a unique profession concerned with the interrelationship of all variables in a client's possible or actual response to stressors. In the study the client's stressor is positive HIV in pregnancy and it is the responsibility of the nurse to work with the client to be able to cope with this positive status. Neuman explains the client's variables as physiological,

psychological, sociocultural, developmental and spiritual. In the study the psychosocial support, which the investigator is studying in relation to PMTCT intervention, is among the variables mentioned by Neuman. These variables affect the client's reaction to stressors. They may affect positively and influence the client to accept interventions or negatively leading to the client refusing to go through the interventions which will lead to progression of disease and death may occur. Nurses should serve as coordinators of health care for the clients, says Neuman, and in this study nurses fulfill by offering care and treatment for positive HIV clients. Through purposeful interventions, nursing can help individuals, families and groups to retain, attain and maintain a maximum level of optimal system wellness (Fitzpatrick & Whall, 1996). The nurse is seen as an intervener whose goal is either to reduce the client's encounter with stressors or to mitigate her perceived effect through implementation of appropriate interventions within the three levels of prevention (Fitzpatrick & Whall, 1996). The nurse may choose to intervene at the primary prevention level by helping the client to strengthen her ability to respond to the stressor. At antenatal clinic the nurse gives health education to all who come for booking with the intention of preventing them from contracting HIV. Health promotion is a component of this level of prevention.

Secondary prevention interventions are appropriate when a stressor reaction occurs and are aimed at treatment of symptoms. In this study this is the level of prevention intervention because the client (HIV positive pregnant woman) has already contracted HIV and the aim is to treat and prevent the spread of infection to the unborn baby. The outcome of these interventions are strengthened lines of resistance that protect the basic client structure and help the HIV positive pregnant woman to attain system stability. Tertiary prevention interventions are appropriate to help the client to reconstitute and thereby maintain the current level of wellness after stressor reaction occurs and some degree of system stability is achieved. When

the HIV positive pregnant woman goes through the PMTCT intervention they are then referred to support groups based in their own communities for continued care and support.

The Nursing Process within the model consists of three components; nursing diagnosis, goals and outcomes. A large component of the nursing diagnosis involves nurse assessment of all factors influencing the client. The client's family, spouse, church and even community influences her response to care and in the study it is the responsibility of the nurse to assess all this support and utilize it to plan for implementation of the client's individual care and treatment. Once a problem has been identified a decision is made as to what level of intervention should be implemented and the decision results from collaborative negotiation of goals between the nurse and the client. The uniqueness of nursing described by the model is related to the holistic nature of humans and the influence of interacting variables within the client's internal, external and created environments.

According to Neuman a person is a sociocultural, psychological, physiological, spiritual and developmental being. The person, in the study, is the client or client system Neuman chose this term because of the wellness focus of the model and to indicate the collaborative lateral relationship between clients and caregivers (Fitzpatrick & Whall, 1996). In this study the client is the HIV positive pregnant woman whose wellness has been disturbed by the HIV infection in a pregnant person. Clients are composed of a basic structure of survival factors inclusive of the five client system variables namely physiological sociocultural, developmental and spiritual and surrounded by various lines of defense and resistance (Meleis, 1991). In the study the investigator seeks to find out the relationship of psychosocial support and the acceptance of PMCTC interventions, which are two of the client systems variables that is psychological and social which can also include the cultural and spiritual aspects. According to Fitzpatrick and Whall, (1996) the client or client system

whether an individual, group community or social system is a dynamic composite of the interrelationships between physiological, psychological sociocultural, developmental, spiritual and basic structure variables.

The client is described as being involved in a constant dynamic energy exchange with the environment therefore an open system (Meleis, 1991). Neuman's holistic concept of humans is related to the interrelationship of variables that determine the amount of resistance a client has in response to any given stressor. In the study the HIV positive pregnant woman has relationships with her variables heading to the acquired resistance to the positive status. Neuman's holistic approach to the client is also embedded in the need to assess the perception and meaning of the total experience to the client as well as the effect of the interrelationship of the five client variables on any given stressor.

When stressors occur the client may simply need more information about the experience or require additional assistance or from the nurse to effectively respond to the stressor. Stressor reactions occur when the flexible line of defense has failed to protect or support the normal line of defense that is considered the clients usual stability state. In the study the HIV pregnant woman's normal defense line has been disturbed.

According to (Fitzpatrick & Whall, 1996), the environment are all factors affecting or affected by the client system and consists of internal, external and created typology. The internal environment is composed of those forces contained only within the defined client boundary and correlate with intra personal stressors, identified in the model. These are factors like temperature, nutritional change or even elimination. All forces external to the defined client system such as inter and extra personal make up the external environment. In the study the institution, the community, family and the church, the donors and support groups form the external environment. The created environment is developed by the client when a threat to the

basic structure or system function exists. In the study the environment between the nurse and the client is the created environment. Therefore created environment can serve to protect the client from intra, inter and extra personal stressors and thereby function to maintain system stability by changing the response or possible response of the client to environmental stressors. The created environment is a 'process based concept of perceptual adjustment' that functions to either increase or decrease the client's wellness state by unconsciously shielding the client from the true reality of a situation, (Fitzpatrick & Whall, 1996). Because the created environments constantly exchange energy with the internal and external environments it requires energy from all system variables in order to maintain it (Meleis, 1991).

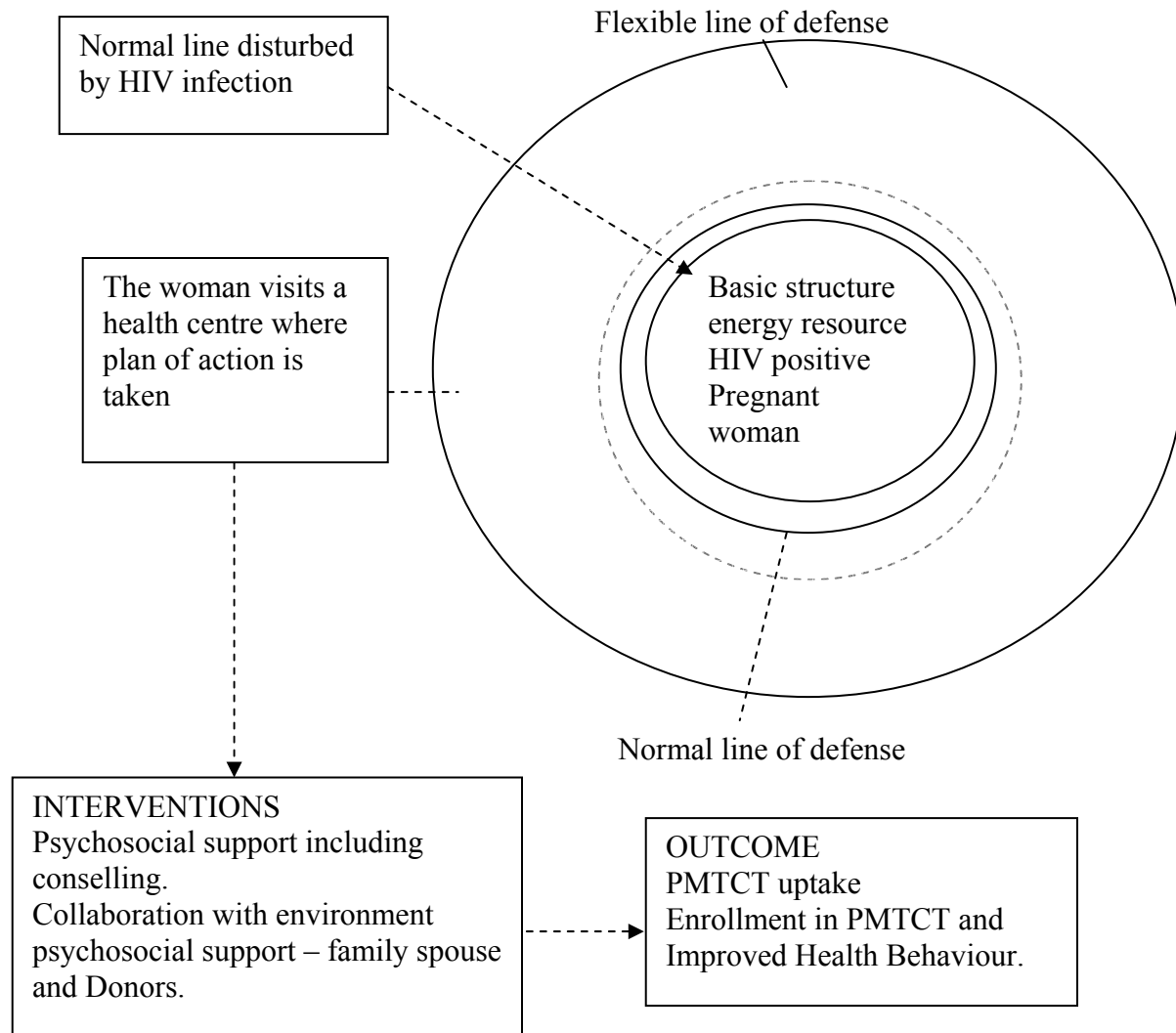
Such energy is then unavailable for actions that contribute to an improved health state (Fitzpatrick & Whall 1996). Stressors defined as "tension producing stimuli with the potential for causing disequilibrium" occur within the internal and external environments and are classified as being intra, inter or extra personal in nature.

Health is equated with living energy and is viewed as a continuum running from greatest negentropic state (wellness) to greatest entropic state (illness) (Fitzpatrick & Whall, 1996). Neuman conceptualises health as being on a continuum with wellness on one end and illness on the other (Neuman, 1982). Neuman's concept of health is that the flexible lines of defense prevent penetration of the line of defence and all parts and subparts are in harmony (steady state) with the whole of the person and that optimum wellness occurs when all needs are met (Knight, 1990). According to Neuman, health is determined by the five variables, that is, physiological, psychological, sociocultural, developmental spiritual (Fitzpatrick & Whall, 1996). In the study the HIV infection on the pregnant woman has affected the wellness of the woman and so there is need for the interventions, PMTCT interventions by the nurse to try and retain the wellness. Optimal wellness, that is the best possible level of health achievable at a

given point in time exists when system needs are met. Unmet needs reduce the wellness state. The HIV positive pregnant woman's needs of staying health and protecting her unborn baby from contracting HIV are basic and should be met. A client's degree of wellness is determined by how effectively client system variables react to environmental stressors. Neuman's definition of health allows for individual client system differences and is not considered a perfect state or some absolute standard.

The nurse empowers the HIV positive pregnant woman with knowledge on PMTCT to enable her to make an informed decision on PMTCT interventions. When there is limited or no psychosocial support, the flexible lines of defense are permeated leading to the loss of energy thus resulting in poor decision making to accept PMTCT and taking the appropriate interventions. This study proposes that as psychosocial support increases there will be an increase in the uptake of PMTCT among HIV positive pregnant women. As psychosocial support is part of the interpersonal environment, it therefore, influences the uptake of PMTCT.

THEORETICAL FRAMEWORK



Adapted from Betty Neuman's Systems Model. (Fitzpatrick & Whall, 1996)

Objectives

The study sought to:

1. Establish available psychosocial support for HIV positive pregnant women at Chitungwiza Central Hospital.
2. Identify the levels of PMTCT uptake among HIV positive pregnant women at Chitungwiza Central Hospital.
3. Examine the relationship between psychosocial support and uptake of PMTCT by HIV positive pregnant women at Chitungwiza Central Hospital.

Questions

The study answered the following questions:

1. What psychosocial support is available for HIV positive pregnant women at Chitungwiza Central Hospital?
2. What are the levels of PMTCT uptake among HIV positive pregnant women?
3. What is the relationship between psychosocial support and uptake of PMTCT?

Definition of Terms

Psychosocial Support

An ongoing process of meeting the identified needs of individuals and families in psychological issues, economic concerns, human relationships and spiritual considerations for better adjustment with chronic and life threatening illness or mental health. (WHO, 2002).

Human Being

Rational, sentient social being thinking feeling, able to choose between alternative actions, able to set goals, to select means toward goals, to make decisions and to have a symbolic way of communicating thoughts, actions, customs and reacting.

Environment

The internal environment of human beings transforms energy to enable them to adjust to continuous external environmental changes. The external environment is the formal and informal organisation.

PMTCT Uptake

Participating in the programme which involves counseling, testing, receiving results and accepting prophylactic treatment or commencing on ART for life and giving the baby prophylactic regimen including early infant diagnosis of HIV

Nursing

A process of human interaction between nurse and client whereby each perceives the other in the situation and through communication, they set goals, explore means, and agree on means to achieve goals and their actions indicate movement toward goal achievement.

OR

A process of action, reaction, interaction and transaction.

OR

A unique profession that is concerned with all of the variables which influence the response a person might have to a stressor.

Health

A dynamic life experiences of a human being which implies continuous adjustment to stressors in the internal and external environment through optimum use of one's resources to achieve maximum potential for daily living.

Significance of the study to Nursing

According to Fitzpatrick and Whall (1996) nursing is a professional discipline with a distinctive service to offer and encompasses both an art and science component. When instability or disequilibrium is evident in the client systems (person) nursing as an external regulatory or control mechanism intervenes.

The study identified factors that affect the uptake of PMTCT which are used by the Ministry of Health and health care providers to strengthen PMTCT programmes. It is the hope of the researcher that the knowledge that will be gained from the study will be used to sensitize the health workers to realise the importance of the PMTCT programme as aimed at reducing maternal and neonatal mortality of the whole country. The knowledge about all the activities undertaken during the provision of this strategy will strengthen the provision of this service by the health workers and will assist them to perform the activities holistically.

The Ministry of Health and Child Welfare (MOHCW) has indicated in the Psychosocial Support Guidelines that psychosocial support is the first need of those found to be HIV infected yet it is not necessarily perceived as a high priority in many settings. It is the hope of the researcher that Chitungwiza Central Hospital nursing staff will appreciate the need to strengthen psychosocial support through the findings of the study. The knowledge of the different psychosocial support systems available in the community will assist the health workers to incorporate the necessary support and refer to the appropriate support groups or partners to improve the care and treatment of the HIV positive women in the community

The findings of the study will also be used as a base for other studies to strengthen PMTCT uptake by HIV positive pregnant women. It will also be used as base for care and treatment of HIV positive pregnant women. The findings may be used to strengthen family union and improve community knowledge on care and support of HIV positive people. The

knowledge may be used to generate better ways, if found, to give interventions and improve the present interventions and treatment and care.

The knowledge from findings can also be used by donors who give material and monetary support to the HIV positive women to increase the support necessary for improvement of service provision. National donors, for example, the Global Fund, may also use the knowledge from findings to increase the funding of HIV programmes. They may use the knowledge from findings in the introduction of new and different psychosocial support. Improvement of the psychosocial support guidelines may be made through the findings. The findings can also be utilised by new donors who may have interest in the areas found to be important in the study to plan for new programmes to enhance the PMTCT programme currently running.

Issues of disclosure and choice of life may be made easy for the women from use of the findings. It is the hope of the researcher that the knowledge of the findings gained by the health workers may be used to fulfill their roles as counselors, educators, clinicians, advocates and even for themselves. They are also part of the community therefore the knowledge gained will assist the nurses to be effective supporters as significant others, support group members and even spouses. The study may lay foundation to personalised holistic care plans which will enhance the implementation of the PMTCT programme and care of the infant.

Psychosocial support, in the Zimbabwean context, includes cultural and spiritual concerns and so the findings from the study will enable the health workers to appreciate and strengthen this element of human life. All HIV positive women needing assistance besides PMTCT interventions will be availed the chance to choose the type of care they want through the findings of the study. The HIV positive pregnant women will be educated on the

disadvantages of not accepting the PMTCT interventions and the implications to their lives, the country's prevalence rate and mortality rates through the findings of the study.

CHAPTER 2

LITERATURE REVIEW

Literature review is gathering information in relation to a subject with the aim of forming a knowledge base of what is already known or unknown about that subject. In this study literature is going to be reviewed with regards to the dependent variable, PMTCT uptake, independent variable, psychosocial support and also the relationship between the two. Neuman's systems model will also be discussed.

PMTCT Uptake

According to the MOHCW PMTCT Participant manual (2007), globally, in 2007, an estimated 33.2 million people were living with HIV and 2.5 million were new HIV infections. HIV claimed 2.1 million lives the world over. In Sub Saharan Africa, 50% of the adults living with HIV are women, 370000 children below the age of 15yrs were newly infected mainly through mother to child transmission, more than 90% of people living with HIV (PLWH) are in the developing world (MOHCW,2007). 95% of all HIV related deaths have been in the developing world largely among young adults. In Zimbabwe, in 2007, the HIV prevalence rate was at 15.6% meaning that 1 in 6 adults aged 15-49 in Zimbabwe are living with the virus. An estimated 1.320.739 people were living with HIV in adults aged 15-49 years and over half were women. Of the total 1320739, 651 402 were women of 15-49 age group, 132 938 were children. A total of 22 518 were new HIV infections in adults. Of these 10 199 (45,3%) were women and 17 372 were children 0-14. An estimated number of 115 114 people were deaths in adults, of these 58.5% were women and 12 448 were children and at the end of 2007, 975 956 were orphans aged 0-14 (77.1%). Of the 2.3 million children currently infected with HIV, most will die without treatment within the first 5 years of life, more than half before the age of two. Even children not infected by HIV are affected by the epidemic, where 15 million

children have lost one or both parents to AIDS and these children are more likely to experience poverty, homelessness and early death. (Teasdale and Besser, 2008)

Without medical interventions, the risk of an HIV positive mother transmitting the virus to the infant in utero, during delivery or breastfeeding ranges from 25% to 48% (Teasdale and Besser, 2008). According to the Zimbabwe PMTCT and Paediatric HIV Prevention Treatment and Care National Plan (2006-2010) HIV /AIDS threatens the lives of children more than any other disease. Prevention of mother to child transmission is a key strategy to prevent HIV infection in children. (MOHCW, 2006). MOHCW has shown its commitment to contributing towards an HIV/AIDS free generation through the introduction of PMTCT intervention.(MOHCW, 2006). Mother to child transmission accounts for 7% of the HIV infection (MOHCW, 2006) .

One of the important breakthrough in the prevention of HIV/AIDS over the past decade has been the demonstration that use of antiretroviral drugs during pregnancy in HIV infected mothers can substantially lower the rate of mother to child transmission of HIV (MOHCW, 2007). Single dose nevirapine for prophylaxis was the recommended bare minimum. More efficacious regimens for prophylaxis were recommended where it was feasible and affordable (Teasdale and Besser, 2008)

A study conducted on factors influencing the mothers enrollment and participation in PMTCT found out that client counselor dynamics during pretest counseling were pivotal in determining uptake and participation. Counselor profile strongly influenced the nature of the interaction (Varga and Brookes, 2008)

PMTCT has been highlighted in the Zimbabwe HIV/AIDS Policy (1999) as one of the key strategies to fight the HIV epidemic. Government's commitment is further demonstrated in the integration of PMTCT intervention into the routine health delivery system. The core

interventions for PMTCT now include routine offer of HIV testing and counseling to all pregnant women presenting at health institutions, family planning counseling and services to prevent unintended pregnancies among HIV positive women. ARV prophylaxis to HIV positive women in need of treatment as well as safe obstetrical practice and infant feeding education and counseling (MOHCW, 2007)

According to Zvitambo (2004) mother to child transmission is not only the primary cause of HIV and AIDS in children, it accounts for more than 10% of all new infections each year. The HIV prevalence in antenatal women is even higher than in everybody else (MOHCW, 2007). Over the past five years, affordable and effective interventions for reducing MTCT and prolonging quality survival among infected infants and women in resource limited settings have become available (Zvitambo 2004). Zvitambo (2004) also noted that a critical requirement to success of these programmes will be increasing awareness of MTCT issues among men (husband, partners, fathers) and gaining their involvement in and support of the process. Zvitambo provides training on counseling, technical information, MTCT clinical care specific to HIV & AIDS in women and children, administration of drugs in the PMTCT programme, care of the care giver (special focus on helping nurses cope with how HIV& AIDS affects them personally), analysis of blood specimen by approved rapid test kits, preparation of infant blood samples for infant HIV diagnosis, accurate and confidential record, monitoring and evaluation procedures and systems. Zvitambo also procures supplies and equipment needed for PMTCT services and provides ongoing monitoring evaluation of PMTCT services delivered at each site in the supported districts.

An article published by Teasdale & Besser (2008) on enhancing PMTCT programmes through psychosocial support and empowerment of women : the mothers 2 mothers model of care stated that most peripartum transmissions occur late in pregnancy and during labour

roughly half in the days prior to delivery and 30% during active labour. Advanced maternal HIV disease (low CD4 cell count and high serum HIV viral load), HIV virus in genital fluid close to the time of birth, male sex of the infant and some types of genetically mediated immune responses in both mothers and children are all associated with increased risk of vertical transmission, says Teasdale & Besser (2008).

Karita et al (2000) said in Rwanda 40 000 infants are born to HIV positive mothers of which 10 000 may be infected perinatally. A study was conducted whose aim was to determine acceptability and feasibility of the routine utilisation of maternal oral short regimen ZDV to reduce MTCT in Kicukiru health center in Rwanda. The setting was in capital city Kigali, an urban setting. Antenatal care including HIV testing and counseling was being done. A sample size of 1123 women were recruited for the study. It was discovered that seventy percent (70%) of women accepted testing between April 1999 and Jan 2000. HIV prevalence was 23% and (89%) eighty nine percent of the HIV positive women returned for their results and (89%) eighty nine percent accepted intervention. Those who received intrapartum treatment were (70%) seventy percent and (87%) eighty seven percent opted to feed their babies with breast milk. The study concluded that, providing VCT in ANC service is the most challenging component of MTCT short term ZDV is well accepted but because mothers book late and are uncertain about gestation full course of ZDV, they can be a problem. (Karita et al, 2000).

The introduction of PMTCT strategy has current challenges such as limited human resources capacity, low male participation in PMTCT, HIV testing and low disclosure of HIV status (WHO 2003). In Zimbabwe the challenges have been large numbers of people requiring prevention, treatment, care and support services, critical human resources shortage at all levels of the health sector, weakened health system capacity to deliver services including

comprehensive PMTCT and paediatric care, treatment and support, due to economic challenges that the country is facing: weak laboratory back up services for diagnosis and follow up of children, erratic drug supplies and logistic problems. Inadequate financial resources including mothers failing to raise one United States dollar to purchase a tube for collecting the blood sample for testing (MOHCW, 2007).

Withum et al (2000) studied acceptance of test to detect early HIV infection, Serological Testing Algorithm for recent HIV Seroconversion (STARHS) and calculation of HIV incidence among persons attending anonymous test sites in San Francisco, California. Out of the 4462 persons who attended 99.7% (4449) accepted testing. Diagnosis of earliest stages of HIV infection can be important for clinical intervention, research and to help target HIV prevention activities. The idea of anonymous testing seemed acceptable as the yield was almost 100%. The problem with this was with other identification in ANC when PMTCT prophylaxis is required. Most antenatal mothers book when looking healthy which allows for planning for interventions particularly for those who book early and have an opportunity to get at least the minimum or basic package which is provided over six visits in Zimbabwe.

In Botswana, HIV prevalence established is 35%, about 8 000 babies are infected each year without intervention (40% transmission). A study was conducted in two urban areas, Francistown and Gaborone involving pregnant women. The pregnant women were offered VCT as they booked or attended ANC. The results were that 4197 women were counseled, forty six (46%) percent agreed to testing and AZT was administered to 56% of the HIV positive women and 92% of the new borns. The pregnant women were counseled on infant feeding options and 67% chose not to breast-feed. (85% in Gaborone and 57% in Francistown) It was then concluded that acceptance of HIV testing was low. Possible reasons for low

acceptance were fear of a positive result, stigmatisation, inadequate counseling and inadequate public information. (Rantona et al, 2000)

Efforts are really focused on increasing acceptance or raising uptake of PMTCT . The Botswana study revealed high prevalence of HIV infection unlike the Rwanda study which was discussed earlier. In Rwanda, it is not clear whether the decision to participate in the PMTCT intervention was made by the health worker or it was a fact of clients understanding the risks and benefits of enrolling in the programme. One would expect the urban-based studies to yield higher acceptance rate because cultural influences are relatively reduced. This could be a matter of resistance to change among urban population but one pleasing observation was that among those who tested positive, a good number decided not to breastfeed although it is not mentioned whether the infant feeding options were provided for or not.

A more efficacious ARV prophylaxis for PMTCT has been introduced to strengthen the effectiveness of PMTCT. This comes in voluntary counseling and testing and the provider initiated testing and counseling (opt out) being offered to all pregnant women during antenatal care at booking or any other level of pregnancy (MOHCW,2007). Antiretroviral (ARV) medications for PMTCT can dramatically reduce the likelihood of an infant becoming infected with HIV during gestation and delivery (Teasdale & Besser, 2008). With the introduction of highly active antiretroviral (HAART) regimens during pregnancy and labour, vertical transmission of HIV has been largely eliminated in resource rich settings such as the United States of America and Western Europe (Teasdale & Besser, 2008). However, MTCT of HIV remains the predominant source of infection in children in resource limited countries (Teasdale & Besser, 2008).

In South Africa, despite efforts to increase access to even the simplest ARV regimens, there are significant barriers in resource-limited settings, to implementation of effective public health PMTCT programmes. In low and middle-income countries less than 10% of women needing PMTCT services received them in 2006 while coverage is improving as national governments in many countries strive to implement PMTCT programmes. These continue to face obstacles from inadequate health care infrastructure including weak linkages between PMTCT services and HIV treatment programmes, over extended staff in health facilities and lack of stock of HIV test kits and ARVs. Along with health system challenges there are significant social barriers (including stigma) that prevent women from accepting HIV testing and treatment as well as the common practice of mixed infant feeding which contributes to poorer outcomes for babies. (Teasdale & Besser, 2008)

According to the PMTCT annual report of 2006 of the national PMTCT programme in Zimbabwe, has at its foundation the WHO, four (4) pronged comprehensive approach to PMTCT. WHO's framework for a comprehensive approach to prevention of HIV infection in infants and young children includes: primary prevention of HIV infection in general especially in young women and pregnant women, prevention of unintended pregnancy, reducing HIV transmission from infected women to their infants and provision of care and support to HIV infected women, their infants and their families.

Assumptions are that clients would want to be involved in their care. This would significantly contribute to the reduction in maternal and child morbidity and mortality (Nikurawu, 1996). Nevirapine prophylaxis should not be an entry point to access of treatment by women. This would dispel the notion that women are simply viewed as receptacles to produce healthy children while ignoring the fact that women are individuals in themselves and have their own treatment needs that need to be respected.

An assessment of the PMTCT programme in Zimbabwe by MOHCW (2003) confirmed that the overwhelming majority of staff would themselves or would advise their daughters to test for HIV and join the programme if they were pregnant. The findings were that of the 27% pregnant women who tested HIV positive 50% collected their results. This indicated that there is a problem because these results are meant to benefit both mother and the unborn baby. Individual pretest counseling provides an opportunity to discuss the individual implications of knowing one's HIV status. This includes discussion about the use of ARV drugs for example nevirapine, infant feeding options, condom use during pregnancy and lactation and the psychosocial support aspect is also explored.

PMTCT programme success was attributed to staff commitment and attitude mostly, community mobilisation and availability of test kits, well trained staff providing a quality service, provincial support and prioritisation of the programme and demand for PMTCT as a result of integration with other PHC services . Negative perceptions of the programme such as poor service quality, lack of access, negative attitude of staff and lack of necessary resources such treatment can have a negative impact on the programme success (Feldman et al, 2002). Feldman and colleagues also conducted a study and found out that condoms are not for use in marriage but are for prostitutes. This may make it difficult to protect the pregnant woman from reinfection in the home and so leading to programme failure (Feldman et al, 2002).

Psychosocial Support

Psychosocial support is a holistic approach of giving help to an individual which takes into account the psychological aspect of a person and his/ her social life (MOHCW, 2007). HIV& AIDS is more than just a medical problem, as it brings with it a host of psychosocial issues at the personal, inter personal, family and social levels. Psychosocial support, which is an all encompassing concept that includes counseling, spiritual support, welfare support and

social/ interpersonal support should, therefore, be part and parcel of the continuum of care from prevention to treatment and care to discharge planning right to home based care. It forms the cross cutting glue that binds the provision of holistic HIV& AIDS prevention, care and support. Psychosocial support is which enhances well being confidence and social functions which includes support groups which may be led by a member of staff or self facilitating. The primary functions of the group are likely to be mutual emotional support and the sharing of personal experience (peer support); mother to mother mentorship and other forms of individual support, usually provided by volunteers. These may sometimes combine emotional support and companionship and ongoing counseling. (MOHCW, 2007)

Teasdale & Besser (2008) conducted a study to enhance PMTCT programmes through psychosocial support and empowerment of women: the mothers 2 mothers model of care and noted that comprehensive facility and community based education and psychosocial support projects can increase awareness and acceptance of these services. Mothers 2mothers, (m2m) ; a programme designed to improve PMTCT care and outcomes, has developed a unique service model, delivered in health care facilities and communities that is cost effective easily replicable and scalable and adaptable to serve diverse cultures and communities. M2M enhances and supports PMTCT programmes by employing HIV positive mothers to join the health care team. These women known as mentor mothers are paid professional staff and essential members of a facility's health care team whose sole focus is to educate and support pregnant women and new mothers living with HIV& AIDS. These women provide comprehensive peer education and psychosocial support to pregnant women and new mothers, aimed at increasing the uptake of PMTCT services to reduce HIV MTCT, empower women and destigmatise HIV& AIDS. M2M mentor mothers are HIV positive mothers who have recently completed the PMTCT process at facilities where they work.

Nurses and lay counselors in understaffed and over burdened health care facilities often lack the time, training and resources to fully educate clients about critical aspects of PMTCT. Successful efforts require that pregnant women receive education and support to understand the spectrum of PMTCT interventions. Varga & Brookes (2008) found out that other factors found to influence adherence to PMTCT recommendations include HIV and early premarital pregnancy, stigma, fear of a positive test result and concerns over confidentiality and poor treatment by health care providers. Adolescents described elaborate strategies to avoid HIV disclosure to labour and delivery staff, despite knowing this would mean no antiretroviral therapy for their new born infants.

An independent evaluation of m2m conducted by Population Council's Horizons Program in 2005-2006 found out that m2m had a significant impact on critical components of PMTCT services. The study showed that women who received m2m were significantly more likely to have: taken NVP for PMTCT; disclosed their HIV status to a partner or other person during their pregnancy; received and recalled the results of their CD4 test and selected an exclusive infant feeding method while pregnant.

The cross sectional study of self reported PMTCT knowledge, behaviors and attitudes among HIV positive women at three facilities offering m2m services in Kwazulu Natal showed extensive coverage by the m2m programme with more than 60% of women surveyed having heard of it . In addition, mentor mothers had significant interactions (defined as two or more contacts) with nearly half of all the HIV positive women attending antenatal care. (Teasdale & Bsser, 2008). Mentors help pregnant women who have tested positive to understand their diagnosis by providing basic information on HIV and explain what steps a mother can take to reduce the risk of transmitting the virus to her baby.

By the end of 2007, m2m had become an integral component of PMTCT care at 155 facilities in South Africa and Lesotho and employed more than 600 HIV positive women. The organisation has further expanded in 2007 to provide services in Kenya, Rwanda and Zambia and opened sites in Swaziland and Malawi before the end of 2008.

Psychosocial support has benefits which include empowering couples to join PMTCT at the pretest stage, providing coping mechanisms to avoid mental breakdown, encouraging adoption of positive behavior change, reducing stigma and discrimination, integrating with existing services and networking with other support services. Supportive systems include support groups, mother-to-mother mentorship (peer support – use of PMTCT graduates), interspousal support and family support including the educative support provided by health care providers at institutions. Community support, faith based support including linkages and referrals are also part of supportive systems which can be used to provide psychosocial support to HIV positive pregnant women.

A study carried out by Dube et al (2000) found out that men did not perceive VCT as a priority. Men are thought to have better access to mass media and other sources of information which can make them better informed compared to women. Unfortunately this is not the case, they have their other priorities besides their health, their HIV status and that of their partners. Perceptions are shared during nurse client – client interaction. For the pregnant woman to participate in PMTCT they will have received the psychosocial support available to them in a positive manner be it formal or informal from community and family members (Mahere, 2004). There is need to target wider community and counseling services about MTCT for them to be supportive of women facing difficult choices offered by MTCT prevention programmes.

Theoretical Framework

According to Neuman, nursing is a unique profession concerned with the interrelationship of all variables affecting a client's possible or actual response to stressors (Fitzpatrick & Whall, 1996). A lot of work has been done using Neuman's model worldwide. Dubin (1978) considers most of the work to be relational. A relational unit is a property characteristic of a concept that can only be determined by examining the relationships among two or more other properties. Families, communities and social issues are also referred to in the Neuman model. Neuman has several assumptions and among them wellness is a dynamic composite of the interrelationship of the five client variables and represents a continuum of available system energy (Fitzpatrick and Whall, 1996). Secondary prevention relates to symptom identification and implementation of intervention to deal with system disruptions.

The relationship between client variables, physiological, psychological, sociocultural developmental and spiritual influence a client's protective mechanisms and determine a client's response (Meleis, 1991). Neuman's theory has generated limited research. Although there is a potential for utilizing the theory as a framework for research, the limited use of Neuman's theory in research raises many questions about its descriptive and explanatory powers (Meleis, 1991). In addition to Neuman's own early work (Reed 1980, 1993) has applied the concepts within the Neuman model to the family unit as the client (Fitzpatrick and Whall, 1996).

Ngadzire (2005) utilized Neuman's model to guide a study on the relationship between social support and frequency of relapse amongst schizophrenic patients aged 25-45 years attending Harare and Parirenyatwa psychiatric outpatient departments. Neuman's systems model emphasizes on the client attaining and maintaining the highest possible level of health through purposeful interventions (Neuman, 1982). Neuman's model offers a broad

flexible and inter disciplinary frame work for public health nurses giving them clear strategies for working in partnership with the community (Haggart, 1993). Neuman's model has been operationalised into the nursing process. Neuman also emphasises wholism and interrelated nature of the concepts in the model. Decker & Young (1991) used Neuman's systems model in their study on self perceived needs of primary care givers of home hospice clients. The model was used to develop the assessment instrument and data analysis. They analyzed data in relation to interpersonal stressors, intrapersonal stressors and extrapersonal stressors. Their findings in their study were that early attention in limiting the impact of stressors on caregivers can improve the caregivers ability to care for the hospice clients. Manduna (2001) used Neuman's model in studying the relationship between social support and loneliness among the elderly in Harare and Chitungwiza. Butau (2001) studied an investigation into psychosocial intrapartum midwifery practice and women's satisfaction with intrapartum midwifery care at Mabvuku polyclinic in city of Harare and found out that intrapartum midwifery care has a significant positive correlation with psychosocial intrapartum midwifery practice. Ngwenya (1999) studied relationship between family support and level of depression in women aged 21-45years Neuman conceptualizes health as being on a continuum, with wellness on one end and illness on the other.

Fuller (2000) conducted a case study where Neuman's systems model was successfully used in the comprehensive assessment and management of a twelve year old child with sclerodema. All the five variables were thought to constitute the individual system by Neuman and were used in the assessment of the child with sclerodema. The nursing interventions identified by Neuman, that is the primary, secondary and tertiary were all used in the management of the child.'

Neuman, Newman & Holder (2000) proposed the integration of leadership and scholarship in nursing practice using the Neuman's systems model. The three authors suggested that leadership and scholarship, as combined concepts, are required for 21st century scientific nursing because of the need to plan for integration of resources rather than offering fragmented services. A theoretical based approach such as the Neuman's model is hoped to assist in preventing service fragmentation and give a clear sense of direction for organizing nursing activities within any health care level, practice setting and culture.

In this study the investigator chose to use Neuman's system model because of the key components of the model namely the stressors, wellness of the client, client system, lines of defense and resistance. The interacting variables and the interventions are directed towards retention, attainment and maintenance of the client system stability. Psychosocial support (psychological and social variables) is part of the client variables. Interpersonal stressors occur between individuals and include relationships between family members.

The nurse empowers the HIV positive pregnant women with knowledge on PMTCT to enable her to make an informed decision on PMTCT interventions. Using Neuman's systems model concept, the investigator will provide the basis of understanding the relationship between psychosocial support and PMTCT uptake. The environment is viewed as a source of stressors and provides resources for managing the stressors (Neuman 1982).

In summary Neuman's system model guides the relational study to establish the relationship between the factor which is measured, manipulated or selected by the researcher to determine its relationship to an observed phenomenon which constitutes the dependant variable and the factor which is observed and measured to determine the effect on it of the independent variable.

CHAPTER 3

METHODOLOGY

This chapter presents the methodology that was used in the study. The methodology gave the study its scientific merit which is the degree to which a study possesses theoretical relevance and internal and external validity (Polit & Hungler, 1999). This chapter addresses the design, sampling plan, (sample size, sampling procedure), variables (dependent and independent), conceptual and operational definitions, instrument data collection plan (to include human rights considerations) and data analysis.

The methodology maximizes control over factors that may influence the validity of the study findings. The purpose of this study was to determine the relationship between psychosocial support and the uptake of PMTCT among HIV positive pregnant women at Chitungwiza Central Hospital.

Design

The research design has tight controls and is highly structured. It is the investigator's plan to obtain answers to the questions being asked and can also be used to test hypotheses. The design maximizes control over factors that may interfere with the validity of the study findings whilst guiding the investigator in planning and implementing the study in a way that is able to achieve the intended goal (Bums and Groove, 1997). It is the overall plan of collecting and analyzing data, including specifications for enhancing the internal and external validity for the study (Polit and Hungler, 1991). The study used a quantitative non-experimental descriptive correlation design to examine the relationship between psychosocial support and uptake of PMTCT. Correlational study design is used to examine linear relationship between two or more variables and to determine the type (positive or negative) and degree (strength) of relationship (Bums and Groove ,1997). The descriptive element of the

study involves the accurate portrayal of current phenomena of interest and the frequency with which it occurs (Polit and Beck, 2006). Studies provide basis for future research studies and a positive framework for investigating relationship between variables. A positive relationship indicates that the variables either increase or decrease together. The two variables in this study are psychosocial support and uptake of PMTCT.

Sampling Plan

A sampling plan describes the strategies that were used to obtain a sample for the study (Bums and Groove, 2005). A sampling plan includes selection of a sampling method, specification of sample size and the selection of procedures for recruiting the subjects. Sampling is the process or technique of selecting a sample of appropriate characteristics and adequate size. It is the cornerstone of research design which is set up to carry out the research (WHO, 1992). Sampling in other words is the method (or process) of selecting (for example) certain members to represent the whole group (Collins et al, 2000). A sampling plan is developed in a manner which increases representativeness, decrease systematic bias and sampling error (Polit and Hungler, 1999). Sampling error is the difference between a sampling statistic and a population parameter. A large sampling error means that the sample is not providing a precise picture of the population, it is not representative (Bums and Groove, 2005). Quality of a sample is a formation of how representative the sample is of the population under study with respect to research variables (Polit and Hungler, 1999). Data are collected from the sample rather than the entire population because it is more practical and less costly than collecting data from the entire population. A representative sample is one whose characteristics closely approximate those of the target population. However the risk of using a sample may be that the selected sample does not reflect the behaviors, traits, symptoms or beliefs of the entire population (Bums and Groove, 2005).

Sample Size

A sufficient size is essential to determine, describe a phenomenon or detect a relationship (Bums and Groove, 1993). The large the sample the more representative of the population it is likely to be (Polit and Hungler, 1991). The sample size is calculated following consideration of amount of variance in the phenomena, statistical test assumptions, significance level, power, effect size and potential attrition rate (Polit and Beck, 2006). The power, effect size and significance level are the determining factors for an adequate sample size for a correlational study (Bums and Groove, 1997). Power is the ability of the research design to detect differences or relationships that actually exist in the population and the minimum acceptable is .80 (Bums and Groove, 1997). The larger the power required the larger the necessary sample size. Increased power assists the statistical tests to pick out small differences. Power is subject to the researcher's control which can be changed by increasing the sample size by using a directional hypothesis test and/or relaxing the "p" value of the test (power decreases at 0.01 than at 0.05) (Bums and Groove, 1997). The larger the sample the more representative the population is likely to be and the smaller is the sampling error (Polit and Beck, 2006). In this study the sample size will be based on alpha 0.05, power 0.80 and effect size 0.5. Sensitivity of instruments at actually detecting the phenomenon differs between psychosocial and physiological studies. Psychosocial measures are regarded as less sensitive as compared to physiological measures (Polit and Beck, 2006). The effect size is concerned with the strength of the relationships among research variables that is the effect of the independent variable on the dependent variable. There are strengths; small 0.2, medium 0.5 and large 0.8. The medium effect size is commonly used in nursing research studies where the relationship among research variables is moderate. As effect size increases power also increases and sample size decreases. The investigator has least control on effect size. Power

calculations enable the investigator to provide evidence that the study is worth conducting. A study should neither be underpowered leading to non significant results or over powered leading to use of more resources than necessary (Polit and Sherman, 1990). In this study the power calculations were based on the Lipsey (1990) tables for estimating sample size. The study's sample size was 80 subjects.

The significance level ("p" value or alpha) affects power and the conventionally accepted level is 0.05 for social science research. This is the probability of making a type one error, which is incorrectly concluding that a relationship exists when it does not (Polit and Hungler ,1995). There are two most commonly used significance levels, that is; 0.05 and 0.01 with the minimum accepted level being 0.05 (Polit and Beck, 2006). This means that 95 times out of 100 similar results would be obtained making the findings reliable

Sampling Procedure

This describes how the investigator got the subjects either by probability or non probability sampling design. Non probability sampling design weakens the study. A sampling procedure is the way the subjects are selected for the study (Polit and Beck, 2006). In this study a probability sampling design is ideally what was used. Every second HIV positive pregnant women visiting Chitungwiza antenatal clinic for their 3rd visit on Tuesdays and Wednesdays were interviewed. A simple random probability sampling design was employed. Every second HIV positive patient who visited the study site was interviewed until the desired sample was reached. Probability sampling is used to decrease error, increase power and the cost of study is also lowered. All the HIV positive pregnant women who visited the institution on Tuesdays and Wednesdays were the only ones who were interviewed as long as they met the inclusion criteria until the sample size was reached

Study Site

The study was conducted at Chitungwiza Central Hospital. The study site represented a more accessible population to the investigator because it is a PMTCT comprehensive site where people are counseled and tested, WHO staged or having their CD4 tested and commenced on prophylaxis as necessary or commenced on ART if applicable. All the potential subjects were accessed at antenatal clinic when they visited for their subsequent examinations. Chitungwiza Central Hospital was a quasi-natural setting which could be anxiety provoking or foreign to usual experiences for some of the subjects, therefore, the investigator put that in mind when conducting the study. The subject's names and status were accessed in the ANC register.

Study Population

The study target population is the aggregate of subjects about which the investigator would like to make some generalization (Polit and Beck, 2006). These are all elements that meet sample criteria for inclusion in the study (Bums and Groove, 1993). In this study the target population was HIV positive mothers reporting for their 3rd subsequent visit at Chitungwiza Central Hospital. A target population is the entire group of persons, or set objects and events the researcher wants to study (Collins et al, 2000).

Inclusion Criteria

Inclusion criteria are a list of the characteristics essential for membership in the target population (Bums and Grooves, 2005). These refer to the sample characteristics the investigator wishes to include in the study. This is done to achieve homogeneity, control extraneous variables, provide a guideline for the sample recruitment and enable replication (Bums and Grooves, 2005). In this study HIV positive pregnant women coming for a 3rd or more subsequent antenatal visit at Chitungwiza Central Hospital were the qualifying subjects.

These mothers were able to communicate verbally in Shona or English or both to enable the investigator to collect data by interviewing the mothers.

Exclusion Criteria

Subjects who were HIV negative were excluded from the study to minimize extraneous variables for these do not really need psychosocial support to go through the PMTCT programme. Not much is done to them in line with the PMTCT programme. The mothers who had less than three antenatal visits had not received much information from the health workers and so had not even received any psychosocial support from the family and the community to use in the decision to accept the PMTCT programme. HIV positive pregnant women who could not communicate verbally in Shona or English were also excluded from the study since the investigator was only able to speak those two languages subjects. Extraneous variables affect the measurement of the study variables and the relationship among the variables. Exclusion criteria are the characteristics people must not possess, (not wanted in one's study).

Study Variables

Variables are qualities, properties or characteristics of persons, things or situations that change or vary and are manipulated or measured in research (Burns and Groove, 2005). In this study the variables under study were psychosocial support and uptake of PMTCT. The demographic variables of the subjects were also going to be studied. The independent variable, in this study the psychosocial support, was that factor which is measured, manipulated or selected by the researcher to determine its relationship to an observed phenomenon which constitutes the dependent variable (Bless & Higson-Smith, 1995). The dependent variable is that factor which is observed and measured to determine the effect on it of the independent variable: that is, it is that factor that appears, disappears, diminishes or amplifies, in short, varies as the experimenter introduces, removes or varies the independent variable.

Conceptual and Operational Definition

Operational definition is the explanation of concept or variable in terms of the operations or procedures by which it is measured (Polit and Beck, 2006). Burns and Groove (2005) define a conceptual definition as a variable concept with a connotative (abstract, comprehensive, theoretical) meaning and as is established through concept synthesis.

Psychosocial Support

In this study psychosocial support was conceptually defined as an on going process of meeting the identified needs of individuals and families in psychological issues, economic concerns, human relationships and spiritual considerations for better adjustment with chronic and life threatening illness or mental health.

Psychosocial support was operationalised as formal support from health workers at the institution and informal support from the partners, significant others, spouses, family and community including donor community.

PMTCT Uptake

Operationalised as accepting to go through counseling and testing, having a CD4 checked and commencing on prophylaxis treatment or ART for life. Also making a decision on breastfeeding options for the infant after delivery. Accepting to give the infant prophylactic treatment depending on the regimen and also testing the infant after delivery for HIV.

Conceptual definition is accepting the PMTCT programme including infant feeding options and infant diagnosis of HIV.

Demographic Variables

These are characteristic or attributes of the subject that describe the sample (Bums and Groove, 2005). These were assessed using demographic data questionnaire through a structured face-to-face interview,

Research Study Instruments

An instrument is a device or technique that a researcher uses to collect data (Polit and Hungler, 1991). The instrument had three sections, the demographic questionnaire, psychosocial support questionnaire, PMTCT uptake questionnaire. The investigator used a structured interview schedule. The investigator designed the instrument according to Neuman's system's model.

Demographic Questionnaire

The demographic questionnaire measured the demographic variables. This questionnaire obtained information about the subjects in relation to age, race, religion, level of education, occupation/employment status, marital status, parity and gravid. This information was used to provide a picture of the sample or sample characteristics (Polit and Hungler, 1995)

PMTCT Uptake Questionnaire

The PMTCT uptake questionnaire found out the levels of acceptance of PMTCT programme. Individual health seeking behaviors were identified through levels of acceptance and this brought out whether the pregnant mothers took positive moves towards protecting their unborn babies by means of taking prophylaxis. This also hoped to elicit the degree of understanding the programme by the levels of acceptance from just the single dose nevirapine to ART for life. The rating was; those who got tested and were commenced on cotrimoxazole

0, those who got tested but refused NVP 1, those who took single dose nevirapine 2, those who took MER 3 and ART for life 3. All the responses were scored.

Psychosocial Support Questionnaire

This measured the type and amount of support available to these HIV positive pregnant mothers in the institution, at home and in the community. This elicited the support that promoted positive living leading to the pregnant woman accepting the PMTCT programme or refusing it. This also elicited the reason for refusal from the pregnant women who refused testing. Their reason for refusal was also established. The rating for this variable was by Likert scale where always was rated 2, sometimes 1, and never 0. This was used to elicit the strength of psychosocial support on the uptake of the PMTCT programme.

Validity

Validity refers to the extent to which the instrument reflects the abstract construct being examined. (Bums and Groove, 1993). There are two types of validity which are study validity and instrument validity. The study validity includes statistical conclusion validity, internal, external and construct validity. The instrument validity is content, pretesting and consistency in questioning. The study validity means how far one can trust results of one's study. Construct validity examines the fitness between the conceptual definition and the operational definitions (Bums and Groove, 2005). The instrument was translated into Shona because most of the subjects were Shona speaking.

Reliability

Reliability is the degree of consistency or dependability with which an instrument measures the attribute it is designed to measure (Polit and Hungler, 1991). Reliability is considered a measure of amount of random error in the measurement technique and is concerned with such characteristics as dependability, consistency, accuracy and compatibility

(Bums and Groove, 1997). Reliability testing through a pilot study was done on the instrument prior to conducting the study. The instrument was then adjusted as necessary to bring out the intended information. Reliability testing focuses on three parts namely stability, equivalence and homogeneity.

Pilot Study

The pilot study is a smaller version of a proposed study done in order to refine the methodology (Bums and Groove, 1999). The pilot study was conducted at Zengeza clinic in Chitungwiza City. The site resembles the study site by that it also conducts ANC and PMTCT supported by some partners. Ten HIV positive pregnant women were interviewed. The time spent per each interview was assessed and some adjustment to the structure of questions and time was made after the pilot study.

Data Collection Plan

Data collection plan includes setting, time subjects consent and training of data collectors if required. Data collection plan details how the study was conducted and implemented (Bums and Groove, 2005). The process had a time frame for example, how much time was required for sampling potential subjects, explain the study, obtain a consent and actually collecting data (Bums and Groove, 2005). Permission from Medical Research Council Zimbabwe was sought. Permission was also sought from the Chief Executive Officer of Chitungwiza Central Hospital and Director Health Services Chitungwiza city for the study to be conducted. The Sister in Charge antenatal clinic and Matron 111 Chitungwiza Central Hospital were informed to gain support and co-operation. Data was collected in the midmorning period to allow for other routine procedures to take place. Informed consent, purpose and benefits of the study were explained to the mothers before enrolling into the study. Privacy and confidentiality was maintained throughout the data collection process.

Interviews were conducted in a secluded room away from the rest of the patients. Data collection was done in September 2009. The investigator allowed 5-10 minutes for obtaining the informed consent and 25-35 minutes per subject for answering to the scheduled interview. The investigator tried by all means not to express surprise, disapprove or approve during the administration of the questionnaire to reduce bias.

Human Rights Considerations

Researchers have an ethical responsibility to recognize and protect the rights of human subjects (Bums and Groove, 1993). Human rights are claims and demands that have been justified in the eyes of the individual or group necessary for self respect, dignity and health (Bums and Groove, 2005). The human rights that require protection are; the right to self-determination, privacy, anonymity, confidentiality, fair treatment and protection from discomfort and harm, (American Nurses Association, 1985). Permission to carry out the study was sought from the Medical Research Council of Zimbabwe which is an ethical review board for the protection of human subjects for studies carried out in the country. The research committee in the Department of Nursing Science reviewed the proposal to reduce study risks to the subjects in the study. Anonymity and confidentiality was assured through coding of questionnaires, locking away of personal files and no name was written in the questionnaire. No coercion by use of excessive rewards was done. Subjects participated voluntarily in the study assuring them that they may participate or withdraw as they so felt fit. Their refusal was not going to jeopardize their care and treatment by health care providers.

Data Analysis

After data collection, data analysis was conducted to reduce, organize and give meaning to data (Bums and Groove, 2005). It involved coding and selection of appropriate statistical techniques to analyse data (Polit and Becks, 2006). Coding was the process of

transforming data from categories, words or phrases into numerical symbols that can be computerized (Bums and Groove, 1993). Data was analysed using Microsoft package Statistical Package of Social Science (SPSS). A plan for inputting the data into the computer was developed into a codebook. Descriptive statistic was used to determine the mean frequencies and percentage of the study sample and demographic variables described the subjects under study. The Pearson product correlation coefficient was used to determine the relationship between psychosocial support and PMTCT uptake. The correlation analysis test was mathematically represented by correlation coefficient (r), the r value indicates the degree of linear relationship between two variables and ranges from -1 (strong negative) to +1 (strong positive) correlation. An r value of 0 indicates no relationship. A weak linear relationship has an r value of between 0.1 and 0.3, a moderate linear relationship has a value 0.3 to 0.5 and a strong linear relationship has an r value greater than 0.5 but less or equal to 1. The significant level was set at 5% or $\alpha < 0.05$.

CHAPTER 4

RESULTS

Summary

This chapter presents and analyses the research study findings. The SPSS/PC software was used to compute the statistical analysis. The purpose of this study was to determine the relationship between psychosocial support and PMTCT uptake among HIV positive pregnant mothers at Chitungwiza Central Hospital. The study variables were psychosocial support as independent and PMTCT as the dependent variable. Data was collected at Chitungwiza Central Hospital using a face to face structured interview schedule. Data was analyzed using descriptive statistics to determine the mean frequencies and percentages of the study sample. Inferential statistics that is specifically, the Pearson's product moment correlation test was used to determine the relationship between the independent and the dependent variables at the 0.05 significance level. Response rate was 100% and data is presented in tabular form.

The study sought to answer the following questions,

1. What psychosocial support is available for HIV positive pregnant women?
2. What are the levels of PMTCT uptake among HIV positive pregnant women?
3. What is the relationship between psychosocial support and uptake of PMTCT?

Data was analyzed in two stages. The first stage involved analysis of data using descriptive statistics like frequencies, percentages, means and mode. Descriptive statistics were used to describe the study sample in terms of demographic characteristics such as age, marital status, level of education, religion and employment status. The second stage of the analysis involved establishing the relationship between psychosocial support and PMTCT

uptake in the study sample. The inferential statistical test Pearson's correlation coefficient was used to demonstrate the strength of the relationship in the study sample.

Sample Demographics

Table 1 indicates that the participant's ages ranged from 18 to 49yrs. They were grouped into 3 groups which were 18-28, 29-39 and 39-49. Forty five(56.3%) were in the 18-28 age group, 33 (41.3%) were in the 29-39 age group while only 2 (2.5%) were in the 40-49 age group. The mode was in the 18-28 age group. Among the respondents 72 (90%) were married while 7(8.8%) were single and 1(1.3%) was separated. All of the women were at least once pregnant with 18(22.5%) being pregnant for the first time, 18(22.5%) being pregnant for the second time, the majority having the 3rd pregnancy which was 28(35%), with 9(11.3%) having the forth, 6(7.5%) the fifth and only 1(1.3%) having the seventh pregnancy. Amongst the respondents 25(31.3%) had no child at all while 26(32.5%) had one and 29(36.3%) had two or more children. For those who had children 25(31.3%) had no live child, 30(37.5%) had 1 child and 18(22.5%) had two live children. Three (3.8%) had 3 children alive and 4(5%) had 4 live children. At least all women attended school of some sort with 8(10%) attending primary level, 62(77.5%) secondary level and 10(12.5%) going up to tertiary level. Of all the respondents 67(83.8%) live with their husbands, 6(7.5%) live alone while 4(5%) live with their parents. Those who lived with a friend were 2(2.5%) and one was living with a relative. Most of the respondents reside in an urban setting 72(90%), with 6(7.5%) living in the rural areas and had come as referrals to the research site and only 2(2.5%) living in the farming areas.

Table 1:

Demographic Variables of Respondents 1.

(N= 80)

Variable	Frequency	Percentage
<u>Age in years</u>		
18-28	45	56.2
29-39	33	41.3
40-49	2	2.5
<u>Marital status</u>		
Married	72	90.0
Single	7	8.8
Separated	1	1.2
<u>Number of pregnancies</u>		
1	18	22.5
2	18	22.5
3	28	35.0
4	9	11.3
5	6	7.5
7	1	1.2
<u>Number of children in all</u>		
None	25	31.3
One	26	32.5
Two or more	29	36.2
<u>Number of live children</u>		
0	25	31.3
1	30	37.5
2	18	22.5
3	3	3.7
4	4	5.0
<u>Level of education</u>		
Primary	8	10.0
Secondary	62	77.5
Tertiary	10	12.5
<u>Whom do you live with</u>		
Husband	67	83.8
Alone	6	7.5
Parents	4	5.0
Friends	2	2.5
Relative	1	1.2
<u>Place of residence</u>		
Rural	6	7.5
Urban	72	90.0
Farm	2	2.5

Most of the respondents were Christians with 1(1.3%) being traditional, 21(26.3%) going to Pentecostal churches, 24(30%) going for old mainstream churches like Roman Catholic, Reformed Church in Zimbabwe and Methodist just to mention a few. Those that were attending apostolic churches were 28(35%) with 6(7.5%) not going to church at all. Only 12(15%) were formally employed, with 48(60%) not employed at all while 20(25%) were self employed. Most of the respondents' spouses were formally employed with 44(55%) while 21(26.3%) were self employed and 8(10%) were not employed at all. Among the respondents only 7(8.8%) were not applicable since they did not have spouses. As for the monthly income, 66(82.5%) were below US\$500, 5(6.3%) around US\$500 and only 9(11.3%) were above US\$500.

Table 2:

Demographic Variables of Respondents 2

(N =80)

Variable	Frequency	Percentage
<u>Religion</u>		
Traditional	1	1.2
Pentecostal	21	26.3
Mainstream	24	30.0
Apostolic	28	35.0
None	6	7.5
<u>Employment status</u>		
Not employed	48	60.0
Self employed	20	25.0
Formally employed	12	15.0
<u>Spouse's employment status</u>		
Not employed	8	10.0
Self employed	21	26.2
Formally employed	44	55.0
Not applicable	7	8.8
<u>Monthly income</u>		
Below US\$500	66	82.5
US\$500	5	6.3
Above US\$500	9	11.2

PMTCT Uptake

There was a wide range of responses to the twenty one questions in the PMTCT uptake questionnaire. This questionnaire was establishing the knowledge of the respondents on the programme, the level of uptake and when the respondents got aware of their status. Table 3 indicates that 57(71.3%) were first tested when they came to book at ANC while only 23(28.8%) knew their status before getting pregnant. Out of the total respondents only 34(42.5%) were aware of their spouses status while 46(57.5%) did not know about their spouses status. There were devastating responses to the respondents' feeling about their positive status were 10(12.5%) felt that they were dead and doomed and 2(2.5%) actually wanted a second opinion because they could not take it, but 68(85%) had accepted their status and were taking it like any other condition. As for the PMTCT programme 47(58.3%) heard about it during booking at ANC while 33(41.3%) had already heard about it before they came for booking. 74(92.5%) received some information on PMTCT while only 6(7.5%) said they were never given information about it even though they had received the prophylactic drugs. Table 4 shows responses to questions 19-21, which indicates that 30(37.5%) respondents received information about PMTCT from a counselor, 28(35%) from a nurse, 14(17.5%) got it from the media. 6(7.5%) from relatives and friends while two (2.5%) got it from literature. All clients received some information about HIV but 20(25%) felt it was not adequate while 58(72.5%) felt it was adequate. Only 2(2.5%) felt it was very adequate that they were very comfortable using it to protect themselves, their babies and their spouses. The knowledge about regimen used was very wide where 23(28.8%) knew about nevirapine, 31(38.8%) knew about the most efficacious regimen with nevirapine, zidovudine and combivir. Of the total respondents only 13(16.3%) knew about antiretroviral therapy for life while 13(16.3%) could

not remember any. 67(83.8%) were offered some drugs while 13(16.25%) said they were not offered any.

Table 3:

PMTCT Uptake Variables 1

(N=80)

Variable	Frequency	Percentage
<u>When first tested</u>		
Before ANC or pregnancy	23	28.8
During ANC	57	71.2
<u>Knowledge about spouses' status</u>		
Yes	34	42.5
No	46	57.5
<u>Feelings about status</u>		
Have accepted	68	85.0
Dead and doomed	10	12.5
Need second opinion	2	2.5
<u>When first heard about PMTCT</u>		
Before pregnancy	33	41.3
During ANC	47	58.7
<u>Information on PMTCT</u>		
Yes	74	92.5
No	6	7.5

Table 4

PMTCT Uptake 2

(N=80)

Variables	Frequency	Percentages
<u>First source of information</u>		
Nurse	28	35.0
Counselor	30	37.5
Media	14	17.5
Relatives and friends	6	7.5
Literature	2	2.5
<u>Adequacy of HIV information</u>		
Not adequate	20	25.0
Adequate	58	72.5
Very adequate	2	2.5
<u>Possible regimen for PMTCT</u>		
Nevirapine	23	28.8
Nevirapine, zidovudine+combivir	31	38.8
ART for life	13	16.2
Cant remember	13	16.2
<u>Were you offered drugs</u>		
Yes	67	83.8
No	13	16.2

Table 5 indicates that 32(40%) were offered nevirapine, 19(23.75%) were offered the more efficacious regimen, 10(12.5%) were already taking ART for life, 6(7.5%) were not yet taking anything while 13(16.25%) could not remember what they were offered. On asking when they were going to take the drugs they were offered 43(53.8%) were already taking, 7(8.8%) were going to take at 28wks and 27(33.8%) were going to take them at delivery and 3(3.75%) were not applicable because they were not going to take anything. When asked why they were taking these drugs, there was a variety of responses where 49(61.25%), the majority, wanted to protect their unborn babies. 14(17.5%) were taking to reduce the viral load, 4(5%) were taking to raise the CD4 cell count and 1(1.25%) took because the CD4 count was low, 8(10%) did not know why they were taking the drugs 4(5%) just said they were not taking them. Among the respondents who were taking the drugs 72(90%) were not having problems though 3(3.75%) were having sleeplessness, headache and dizziness, 3(3.75%) were having heart burn and loss of appetite,, 1(1.25%) was having warts on the perineum and buttocks and only 1(1.25%) had reacted to nevirapine and had recovered and now was fine. When asked about why they enrolled the respondents had a lot of reasons for why they enrolled where 47(58.75%) wanted to protect the baby, 10(12.5%) wanted to know their status, 12(15%) wanted to live long and see their child grow and 3(3.75%) just thought it was the best. 4(5%) said so they could get help, 2(2.5%) said because it was a must, they were forced to and 1(1.25%) said they were already taking ARVs while 1(1.25%) did not know why, which was very unfortunate. Responding to the question on the benefits of enrolling, the respondents were very open where 37(46.25%) said this would lengthen their own lives, 12(15%) said they will have an HIV negative baby, 14(17.5%) wanted to protect their baby, 9(11.25%) would know their status through the enrollment and 3(3.75%) said they would get free treatment. 5(6.3%) did not know the benefits though they had actually enrolled in the programme. When

asked about whether they regret joining the PMTCT programme 71(88.8%) were not regretting at all while 9(11.25%) were regretting. Among the respondents 66(82.5%) have chosen the feeding method for their baby while 14(17.5%) were still to decide on how they were going to feed their baby. Responding to whether they felt that all women be routinely tested when they came for booking 77(96.3%) felt it was the ideal while 3(3.75%) felt people should make their own decision to get tested. It should not be mandatory. When asked whether they were using condoms at home the respondents had 3 different answers where 46(57.5%) said always, 3(3.75%) said sometimes and 31(38.8%) said no. on explaining the above provided answers the respondents had this to say, 35(43.75%) said they were using to prevent reinfections, 9(11.25%) were using them to protect their child, 9(11.25%) were not using because the husband was not aware of their status and 12(15%) were not having sex. Of the respondents 5(6.25%) the husband was refusing, 2(2.5%) said that was what was there and 2(2.5%) were using because they were a discordant couple.

Table 5

PMTCT Uptake 3

(N=80)

Variables	Frequency	Percentage
<u>Which drugs were you offered</u>		
Nevirapine	32	40.0
Zidovudine	19	23.8
ART for life	10	12.5
Not yet taking	6	7.5
Cant remember	13	16.2
<u>When are you going to take the drugs</u>		
Already taking	43	53.8
At 28 weeks	7	8.8
At delivery	27	33.7
Not applicable	3	3.7
<u>Explain why you are taking the drugs</u>		
Protect my baby	49	61.3
Reduce viral load	14	17.5
Raise my CD4 cell count	4	5.0
CD4 was low	1	1.2
Do not know	8	10.0
Not taking	4	5.0
<u>Problems with the drugs</u>		
None	72	90.0
Sleeplessness, headache & dizziness	3	3.8
Heart burn & loss of appetite	3	3.8
Warts on perineum & buttocks	1	1.2
Reacted on NVP but now fine	1	1.2

Table 6;

PMTCT Uptake 4

(N=80)

Variable	Frequency	Percentage
<u>Reasons for enrolling</u>		
To protect my baby	47	58.8
To know my status	10	12.5
Live long and see child grow	12	15.0
I thought it was the best	3	3.8
So that I can get help when I need it.	4	5.0
I was told it was a must	2	2.5
I was already on ART	1	1.2
I don't know	1	1.2
<u>Benefits of enrolling</u>		
Lengthen my own life	37	46.3
Have an HIV negative baby	12	15.0
Protect the baby	14	17.5
Know your status	9	11.2
Get free treatment	3	3.7
I don't know	5	6.3

Table 7:

PMTCT Uptake 5

(N=80)

Variables	Frequency	Percentage
<u>Do you regret joining</u>		
Yes	9	11.2
No	71	88.8
<u>Have you chosen feeding option</u>		
Yes	66	82.5
No	14	17.5
<u>Do you feel all women should be routinely tested at ANC</u>		
Yes	77	96.3
No	3	3.7
<u>Do you use condoms at home</u>		
Always	46	57.5
Sometimes	3	3.7
No	31	38.8
<u>Explain your answer</u>		
Prevent reinfection	35	43.8
To protect the child	9	11.2
Husband not aware of status	9	11.2
Not having sex	12	15.0
Husband refuses	5	6.3
Because that's what is there	2	2.5
We are a discordant couple	2	2.5
Husband was away	6	7.5

When asked about what should be done to improve the programme 61(76.50%) were satisfied with what was going on and did not want any adjustments, 8(10%) felt more information should be given about the issues such as feeding options, labor and HIV prophylaxis for the baby, 2(2.5%) said people should not be forced to join the programme and 3(3.75%) felt that educators where to have good public relations and be receptive. Only one felt that husbands should be forced to look after the wife and baby during breastfeeding period since some of the respondents were being sent away by their husbands because of the positive status, another 1(1.25%) felt that spouses should actively participate in the programme, 1(1.25%) also felt that privacy should improve where they go to the Opportunistic Infection Clinic (OIC) to collect the drugs, 1(1.25%) said drugs should be supplied for a longer period not for one month and 2(2.5%) felt positive mothers were to get support in line with infant formulae since some will feel they do not want to breast feed but can not afford the formulae.

Table 9 shows that the total scores ranged from 4 to 12 from a possible score of 14 where the mode was 10 and the median was 7.5 and the mean.

Table 8:

PMTCT Uptake 6

(N=80)

Variables	Frequency	Percentage
<u>What should be done to improve programme</u>		
Nil of note	61	76.6
More information should be given about issue	8	10.0
People should not be forced to join	2	2.5
Educators to have good PR and be receptive	3	3.6
Husbands should be forced to look after wife during BF period	1	1.2
Spouses should actively participate	1	1.2
Privacy should improve	1	1.2
To be supplied with tablets for a longer period	1	1.2
Positive mothers to get support in line with infant formulae	2	2.5

Table 9

Total PMTCT Uptake Score

(N=80)

		Frequency	Percent	Valid percent	Cumulative percent
Valid	4.00	3	3.7	3.7	3.8
	5.00	3	3.7	3.7	7.4
	6.00	2	2.5	2.5	9.9
	7.00	11	13.8	13.8	23.7
	8.00	10	12.5	12.5	36.2
	9.00	11	13.8	13.8	50.0
	10.00	26	32.5	32.5	82.5
	11.00	9	11.2	11.2	93.7
	12.00	5	6.3	6.3	
Total		80	100.0	100.0	100.0

Psychosocial Support

The psychosocial support questionnaire has 37 questions and the respondents responded to all. Table 10 indicates that at least 56(70%) had told someone about their status while 24(30%) had not. Of those that responded and told someone 43(53.8%) the first day they were tested, 3(3.75%) in the first week and 10(12.5%) disclosed after the first week. Among those who disclosed 48(60%) disclosed to their husband or spouse, 7(8.8%) to a relative and 1(1.25%) to a friend. When finding out on the reaction of the person disclosed to, 25(31.3%) just accepted, 24(30%) was not known since they were not told, 8(10%) were quiet and did not say anything and 6(7.5%) were shocked and worried but accepted. A further 6(7.5%) did not accept and needed to go for a second test, 3(3.75%) did not believe and are saying it's a lie, 2(2.5%) were shocked and now are seeking divorce, 3(3.75%) were angry and said they were not naughty, 1(1.25%) said its yours, you look after it and 2(2.5%) were frightened. Table 11 indicates that 56(70%) respondents had already disclosed to someone, 5(6.3%) were going to disclose during pregnancy but 9(11.25%) were going to disclose later and 10(12.5%) were never going to disclose. On finding out whether there was someone who shows love and affection 63(78.85%) had someone always, 8(10%) had someone sometimes and 9(11.25%) never had someone who showed love and affection. 57(71.3%) always had someone to share worries with, 15(18.8%) sometimes had someone and 8(10%) never had someone to share worries with. For someone to confide in 55(68.8) always had someone to confide in, 15(18.8%) sometimes had someone and 10(12.5%) never had anyone to confide in. finding out on someone who assisted when confided in bed 62(77.5%) always had someone to assist them, 10(12.5%) sometimes had someone to assist them and 8(10%) never had someone to assist when confided in bed. Fifty one (63.8%) always had someone to give advice about the woman's condition 10(12.5%) sometimes had while 19(23.8%) never had. From table 12,

49(61.3%) always had someone to take them to the clinic while 13(16.3%) sometimes had someone and 18(22.5%) never had someone to take them to the clinic. Sixty six(82.5%) always had someone to give them meals, 8(10%) sometimes had and 6(7.5%) never had someone to give them meals. On help with medication 52(65%) always had someone to help 5(6.3%) sometimes and 23(28.8%) never had someone helping them. As they progressed with the programme 32(40%) always had someone giving information to understand the situation while 41(51.3%) sometimes had though 7(8.8%) never was given information to understand the situation. Forty (50%) always had someone to help with the chores at home while 12(15%) sometimes had and 28(35%) had to do the chores by themselves, husbands provided for 68(85%) of the respondents while 5(6.3%) provided for themselves, 6(7.5%) were provided for by their parents and 1(1.3%) was provided for by a relative.

Table 13 indicates on how the spouse feels about their partner's HIV status and it brought out extreme responses where 37(46.25%) have accepted and were supportive, 4(5%) wanted to be tested also, 4(5%) were not concerned and did not discuss the issue, 22(27.5%) were not known since they were not told and 2(2.5%) were now refusing and sending their partners away. Two (2.5%) had not yet accepted and had a lot of questions that needed answers, 2(2.5%) sometimes got angry, 2(2.5%) were surprised and did not believe it, 1(1.25%) felt guilty because they were promiscuous. On the knowledge about support groups 55(68.8%) were told though 25(31.3%) were not aware of them, 13(16.3%) were full members of a support group while 67(83.8%) were not. Seventy (87.5%) had not received any assistance while 10(12.5%) had received something though not always. The support received was in form of 3(3.8%) for food, 2(2.5%) medicines, 5(6.3%) emotional support and the bulk of the respondents had received nothing.

Table 14 shows 6 variables where 39(48.8%) had some knowledge of the donors available and 41(51.3%) had no idea. Out of those who knew about the donor's availability 7(8.75%) always received some assistance while 5(6.3%) sometimes received something from the donors. The majority of the respondents 68(85%) did not receive anything from them. Those that received something 8(10%) were groceries and training, 1(1.25%) money for transport and food, 1(1.25%) clean water, 2(2.5%) medicines and emotional support and 1(1.25%) was not given anything because she is working though others were being given. On finding out whether the support they received influenced their decision to enroll in the programme the majority 45(56.3%) acknowledged the support while 35(43.8%) felt otherwise. Seventy seven (96.3%) received information on prevention of transmission of HIV while 3(3.75%) said they did not received any. For those that received 42(51.25%) were told by a midwife, 35(43.75%) by a counselor and 1(1.3%) by a support group member.

Table 15 indicates the variable to rate the adequacy of information received. About vertical transmission 49(61.3%) was adequate, 9(11.3%) very adequate while 22(27.5%) was not adequate. Nutrition in an HIV positive pregnant woman 45(56.3%) was adequate 6(7.5%) very adequate and 29(36.3%) was not adequate. All mothers had discussed feeding options at some stage and 45(56.3%) found the information not adequate, 18(22.5%) very adequate but 17(21.3%) still found the information not adequate. On knowledge about ARV prophylaxis for the mother 42(52.5%) found it adequate, 25(31.3%) very adequate though 13(16.3%) still found it inadequate. As for the baby's prophylaxis 40(50%) found it adequate, 13(16.3%) very adequate and 27(33.8%) still had some questions unanswered. Fifty one(63.8%) found information on condom use adequate, 22(27.5%) very adequate while 7(8.8%) found the information not adequate. For contraceptive use the bulk found the information not adequate 61(76.3), 15(18.8) found it adequate and 4(5) found the information very adequate.

Table 16 indicates the type of counseling where 69(86.3%) enjoyed the privacy and were given a one on one counseling session while 11(13.8%) were counseled in a group. The majority of the women 66(82.5%) decided on their own to enroll, 9(11.3%) were told by the midwife to do so, 2(2.5%) were assisted by the spouse to make the decision and 3(3.8%) had their family members making a decision for them.

Table 10:

Psychosocial Support 1

(N=80)

Variable	Frequency	Percentage
<u>Have you told anyone about your status</u>		
Yes	56	70.0
No	24	30.0
<u>When did you disclose</u>		
First day	43	53.8
Within the first week	3	3.7
After the first week	10	12.5
Not applicable	24	30.0
<u>Whom did you tell</u>		
No one	24	30.0
Husband/spouse	48	60.0
Friend	1	1.2
Relative	7	8.8
<u>Reaction of person you disclosed to</u>		
Just accepted	25	31.2
Not known because did not disclose	24	30.0
Nothing he remained quiet	8	10.0
Worried and shocked but accepted	6	7.5
Not accepted need to go for second test	6	7.5
Did not believe and saying it's a lie	3	3.8
Shocked and seeking divorce	2	2.5
Angry and said he is not naughty	3	3.8
Its yours, you looked for it	1	1.2
They were frightened	2	2.5

Table 11:

Psychosocial Support 2

(N=80)

Variable	Frequency	Percent
<u>If no when do you want to disclose</u>		
During pregnancy	5	6.3
Later	9	11.2
Never	10	12.5
Not applicable	56	70.0
<u>Someone who gives love and affection</u>		
Never	9	11.2
Sometimes	8	10.0
Always	63	78.8
<u>Share your worries with</u>		
Never	8	10.0
Sometimes	15	18.8
Always	57	71.2
<u>To confide in</u>		
Never	10	12.5
Sometimes	15	18.8
Always	55	68.7
<u>Help if confided to bed</u>		
Never	8	10.0
Sometimes	10	12.5
Always	62	77.5
<u>Give you advice on your condition</u>		
Never	19	23.7
Sometimes	10	12.5
Always	51	63.8

Table 12:

Psychosocial Support 3

(N=80)

Variable	Frequency	Percentage
<u>Someone taking you to the clinic</u>		
Never	18	22.5
Sometimes	13	16.2
Always	49	61.3
<u>Someone to give you meals</u>		
Never	6	7.5
Sometimes	8	10.0
Always	66	82.5
<u>Helps you with your medication</u>		
Never	23	28.7
Sometimes	5	6.3
Always	52	65.0
<u>Gives you information to understand</u>		
Never	7	8.8
Sometimes	41	51.2
Always	32	40.0
<u>Helps with chores</u>		
Never	28	35.0
Sometimes	12	15.0
Always	40	50.0
<u>Who provides food, accommodation & clothing</u>		
Self	55	6.3
Husband	68	85
Parents	6	7.5
Family member	1	1.2

Table 13

Psychosocial Support 4

(N=80)

Variables	Frequency	Percentage
<u>Spouse's feeling about status</u>		
Accepted and supportive	37	46.3
He now wants to be tested	4	5.0
Not concerned and does not discuss	4	5.0
Not known because he was not told about status	22	27.5
Refusing and sending me away	2	2.5
Not yet accepted has questions	2	2.5
Sometimes gets angry	2	2.5
He is surprised and does not believe	2	2.5
Thinks I am joking	1	1.2
Feels guilty	1	1.2
I don't have any	3	3.8
<u>Have you been told about support groups</u>		
Yes	55	68.8
No	25	31.2
<u>Are you a member</u>		
Yes	13	16.3
No	67	83.7
<u>Any support received from the community</u>		
None	70	87.5
Sometimes	10	12.5
<u>What have you received</u>		
Food	3	3.7
Medicines	2	2.5
Emotional support	5	6.3
None	70	87.5

Table 14

Psychosocial Support 5

(N=80)

Variables	Frequency	Percentage
<u>Knowledge of donors available</u>		
Yes	39	48.8
No	41	51.2
<u>Have you received any assistance</u>		
No	68	85.0
Yes	12	15.0
<u>In what form(assistance)</u>		
Nothing	67	83.9
Groceries and training	8	10.0
Money for transport+food	1	1.25
Clean water	1	1.25
Medicines and emotional support	2	2.5
Not give because we work	1	1.25
<u>Did the support influence enrollment</u>		
Yes	45	56.2
No	35	43.8
<u>Did you receive information on transmission of HIV</u>		
Yes	77	96.3
No	3	3.7
<u>Who gave you the information</u>		
Midwife	41	51.3
Counselor	35	43.8
Support groups	1	1.2
Not applicable	3	3.7

Table 15

Psychosocial Support 6

(N=80)

Variables	Frequency	Percentage
<u>Rate the adequacy of info on vertical transmission</u>		
Not adequate	22	27.5
Adequate	49	61.3
Very adequate	9	11.2
<u>Nutrition</u>		
Not adequate	29	36.3
Adequate	45	56.2
Very adequate	6	7.5
<u>Feeding options</u>		
Not adequate	17	21.3
Adequate	45	56.2
Very adequate	18	22.5
<u>Mother's ARV prophylaxis</u>		
Not adequate	13	16.2
Adequate	42	52.5
Very adequate	25	31.3
<u>Baby's ARV prophylaxis</u>		
Not adequate	27	33.8
Adequate	40	50.0
Very adequate	13	16.2
<u>Cotrimoxazole prophylaxis</u>		
Not adequate	40	50.0
Adequate	35	43.7
Very adequate	5	6.3
<u>Condom use</u>		
Not adequate	7	8.8
Adequate	51	63.8
Very adequate	22	27.5
<u>Contraceptive use</u>		
Not adequate	61	76.2
Adequate	15	18.8
Very adequate	4	5.0

Table 16

Psychosocial support 7

(N=80)

Variables	Frequency	Percentage
<u>Type of counseling</u>		
Group	11	13.8
One on one	69	86.2
<u>Who made decision to enroll</u>		
Self	66	82.5
Midwife	9	11.2
Spouse	2	2.5
Family member	3	3.8

Table 17

Psychosocial Support Total score

(N = 80)

Score	Frequency	Percent	Valid percentage	Cumulative percent
Valid 15.00	1	1.3	1.3	1.3
24.00	1	1.3	1.3	2.6
24.00	2	2.5	2.5	5.1
27.00	1	1.3	1.3	6.4
31.00	1	1.3	1.3	7.7
32.00	1	1.3	1.3	9.0
34.00	1	1.3	1.3	10.3
36.00	1	1.3	1.3	11.6
37.00	1	1.3	1.3	12.9
38.00	6	7.5	7.5	20.4
39.00	4	5.0	5.0	25.4
40.00	8	10	10.0	35.4
41.00	3	3.8	3.8	39.2
42.00	4	5.0	5.0	44.2
43.00	3	3.8	3.8	48.0
44.00	4	5.0	5.0	53.0
45.00	3	3.8	3.8	56.8
46.00	5	6.4	6.3	63.2
47.00	1	1.3	1.3	64.5
48.00	4	5.0	5.0	69.5
49.00	5	6.4	6.3	75.9
50.00	3	3.8	3.8	79.7
51.00	5	6.4	6.3	86.1
52.00	1	1.3	1.3	87.4
53.00	2	2.5	2.5	89.9
54.00	4	5.0	5.0	94.9
56.00	3	3.8	3.8	98.7
58.00	1	1.3	1.3	98.8
60.00	1	1.3	1.3	100.0
Total	80	100	100	

Table 17 shows the total score for the independent variable, psychosocial support. The score was ranging between 15 and 60 out of a total score of 70. The mode was 40 and the median was 43.

Table 18
Pearson correlation matrix

	Y
	1.000
X	.484* *
*P < .05	* * p<.01
	* * p < .000

(N = 80)

X = (psychosocial support)

Y = (PMTCT Uptake)

Table 19 Regression analysis of Psychosocial Support on PMTCT Uptake

<u>Variable</u>	<u>B</u>	<u>SEB</u>	<u>Beta</u>
X	.115	.024	.484**
Constant	3.897	1.047	
R = .234		F = 23.853	
<hr/>			
* p < .05	* * p < .01	* * * p < .000	
<hr/>			
N = 80			
<hr/>			

(X = Psychosocial support)

CHAPTER 5

DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS

This chapter discusses the summary of findings, draws conclusions and implications of the study to nursing practice, education and research. A summary of findings on the specific research study questions was addressed. Relevant literature was used as a frame of reference during the discussion. It finally gives recommendations that are based on research findings. Discussion of the conceptual framework, presentation of limitations and conclusions was also made. A sample size of 80 subjects was used.

Summary

The purpose of this correlational study was to describe and determine whether there was a relationship between psychosocial support and PMTCT uptake among HIV positive pregnant women at Chitungwiza Central Hospital. The independent variable was psychosocial support and PMTCT uptake was the dependent variable. Neuman's systems model was used to guide the study and was discussed. In the study psychosocial support was operationalised as formal support from health workers and informal support from family, community and donors. This is in line with WHO (2009) where "psychosocial support" is used to refer to a broad range of interventions as a social and psychological level. Interventions at a social level include assistance with basic needs such as food, clothing, accommodation and employment as well as basic health care, friendship, community and pursuit of happiness (WHO, 2009). Psychosocial interventions are any non - pharmacological intervention carried out in a therapeutic context at an individual, family and group level. Psychosocial interventions may include structured, professionally administered interventions (eg cognitive behavior therapy or insight oriented psychotherapy) or non – professional interventions (eg self help groups and non pharmacological interventions from traditional healers) (WHO, 2009).

PMTCT uptake was operationalised as one of the key strategies for fighting the HIV epidemic whose core interventions include counseling and voluntary testing of pregnant women, giving of ARVs to willing HIV positive mothers, safe obstetrical practices and infant feeding education and counseling (MOHCW, 2003). PMTCT uptake means participating in the programme which involves enrolling and following all the steps in the programme (Mahere, 2004).

The Pearson's correlational coefficient analysis was used to examine and determine the relationship between the variables. The relationship was a moderate positive linear relationship ($r = .484$ $p < .01$). Meaning that as psychosocial support increases PMTCT uptake improves. Forty five (56.3%) respondents found out that the psychosocial support that was availed to them either by donors, family, community and health workers assisted in their choice to enroll in the PMTCT programme. Psychosocial support has proved to be a key element among others in influencing PMTCT uptake. This is in line with a survey carried out by the MOHCW, (2003) which found out that psychosocial support as an encompassing concept that includes counseling, spiritual support, welfare support and social / interpersonal support should therefore be part and parcel of the continuum of care from prevention to treatment and care to discharge planning right to home based care. It also goes in line with Neuman's definition of a person who is a sociocultural, psychological, physiological, spiritual and developmental being. According to WHO (2003) psychosocial support is the first need for those found to be infected yet it is not necessarily perceived as a high priority in many settings (MOHCW, 2003).

Discussion and Implications

Sample demographics

The respondents' age ranged from 18 – 49 years. This is in line with MOHCW where the child bearing age is 15 – 49 years. The participants were HIV positive pregnant women and according to the findings the women were ranging from the first to the seventh pregnancy with 28 (35%) being the majority with the 3rd pregnancy. Even though the majority had the 3rd pregnancy 25 (31.3%) had no live child, with 30 (37.5%) having one child. This is in line with the findings by Impact (2007) that most babies born HIV positive die before their 5th birthday. Most of the mothers had lost their babies and were trying to have a live baby no wonder why they had enrolled in the PMTCT programme. Staying with a loved one increases the courage to join the PMTCT programme. Majority of the women were married with 72(90%) being married and 69(83.8%) staying with their husbands. Spousal support has been found to increase the uptake where the spouse gives material and emotional support. This is in line with what ZAPP (2001) found out that the family, including the significant others and spouses give emotional, material and educative support. The family's knowledge of the programme will improve the type of care and in turn may increase the uptake of PMTCT.

At least all the participants had gone through some form of education with 62(77.5%) going through secondary education and 10(12.5%) going through tertiary education up to university level. The majority of these women resided in an urban setting 72(90%). The feeling is that the urban socialised people are more enlightened in the programmes than those in the rural setting and are expected to understand the need for such programmes like PMTCT. This is in line with a study conducted in Rwanda where there was 70% acceptance of PMTCT by urban dwelling women (Karita et al, 2000) as compared to Botswana with a 46% acceptance rate in a rural setting where cultural influences were relatively high.

The majority of the respondents were affiliated to some religion with 24(30%) attending either Roman Catholic, Reformed Church, Methodist or Anglican and 28(35%) being apostolic. Previously, in Zimbabwe, the apostolic sect was not supportive of seeking formal health care but it was pleasing to find them among the majority of the women who accepted an HIV test. Psychosocial support also includes spiritual support, welfare support and social support and so it should be part of the continuum of care (MOHCW, 2007). Most of the respondents had some sort of income which ranged from below US\$500 to above US\$500 with 66(82.5%) getting below US\$500. The women with low income echoed that infant formulae was very expensive and was beyond their reach. Most of the mothers would have wished to stop breastfeeding their babies at all since breast milk contains the HIV virus and is a source of infection for their baby. A baby may be born negative but can be infected through breastfeeding (MOHCW, 2006). It was one of the respondents' sentiments that the country should provide formulae for those who do not wish to breastfeed their babies but can not afford to buy the formulae. This is in line with the study conducted by Teasdale & Besser (2008) which found out that mixed feeding contributes to poorer outcomes for babies. The Botswana study also revealed that among those who tested positive, a good number decided not to breastfeed although it is not mentioned whether the infant feeding options were provided for or not. (Rantona et al 2000)

PMTCT Uptake

In this study the majority of the participants 57(71.8%) were first tested when they came for booking at ANC and only 23(28.8%) knew their HIV status before they got pregnant. Going for an HIV test has a lot of implications in families. People would rather remain unaware of their status because having your status known has caused a lot of problems including marriage breaks. Perceptions of an HIV infection as an attribute of others may be a

barrier to PMTCT uptake. This is in line with a study conducted by Feldman et al (2002) which found out that sex workers were perceived as the only ones at risk of contracting HIV and this can be a barrier to accepting the PMTCT programme where the element of disclosure may be a hindrance to the mother to accept PMTCT for fear of being labeled a prostitute. The mothers would actually verbalise that it is difficult to disclose to their partners because some would actually be divorced or sent away with a few being supportive. Lack of knowledge is a consequence rather than a cause of the perception that HIV is an attribute of others.” If HIV has nothing to do with you why bother to find out more about it” (Feldman et al, 2002). The majority of the respondents were not aware of their spouse’s HIV status with 46(57.5%) not knowing and only 34(42.5%) being aware. Some of the women voiced the concern that they could not even talk about it to their spouses because they do not want to hear or know about it. This concurs with findings by Dube et al (2000) who found out that men did not perceive VTC as a priority. Men are thought to have better access to mass media and other sources of information which can make them better informed compared to women. Sadly this is not the case, they have their other priorities besides their health, HIV status and that of their partner / spouses. It was concluded that pregnant women offered the opportunity to participate in PMTCT programmes face difficult decision especially about HIV testing and infant feeding. Socioeconomic and personal relationships play a key role in enabling them to participate. Cultural influences were found to have negative impact on young people and primigravidae wishing to seek voluntary testing and counseling (Dralobu et al, 2000). According to Neuman the sociocultural variable is to be considered when establishing the effects of the environment the women are surviving in.

The majority of the participants received information on PMTCT with 74(92.5%) receiving and only 6(7.5%) saying they did not. This is in line with the MOHCW strategy of

making the PMTCT an integral part of the routine health delivery services where there is routine education and offer of HIV testing and counseling to all patients presenting at health institutions, family planning counseling and services to prevent unintended pregnancies among HIV positive women. Most of the participants were aware of the levels of PMTCT interventions where there is the use of single dose nevirapine, more efficacious regimen and ART for life. Some of the participants 13(16.3%) were on ART for life and were enjoying the benefits. Twenty three (28.8%) had been offered to take nevirapine at delivery and had already been given the tablet to keep and take when they get into established labour. Thirty one (38.8%) were on the more efficacious regimen which include Zidovudine and other ARVs. They all knew how they got to get this type of regimen. This is in line with the MOHCW which has introduced different regimens for different women and their unique needs. According to literature one of the breakthrough in the prevention of HIV and AIDS over the past decade has been the demonstration that use of ARVs during pregnancy in HIV infected mothers can substantially lower the rate of mother to child transmission of HIV (MOHCW,2007). Single dose nevirapine for prophylaxis was the recommended bare minimum and more efficacious regimens for prophylaxis were recommended where it was feasible and affordable (Teasdale & Besser, 2008). With the introduction of highly active ARV (HAART) regimens during pregnancy and labour, vertical transmission of HIV has been largely eliminated in resource rich settings such as United States of America and Western Europe. However, MTCT of HIV remains the predominant source of infection in children in resource limited countries, like Zimbabwe (Teasdale & Besser,2008). The majority of the respondents were not regretting joining the programme 71(88.8%) while 9(11.5%) were regretting. On finding out why they were not regretting they gave different positive reasons why they felt they had done the right thing and mostly it turned out to be that they all wanted

an HIV negative baby. This concurs with MOHCW where it has been noted that the use of ARVs will protect the baby from contracting HIV from the mother during pregnancy and delivery. When asked whether every woman should be tested routinely at ANC when they come for booking 77(96.3%) felt it was the most ideal thing though 3(3.8%) felt people should not be forced to take the test. The test should not be mandatory but that people be given a choice to go through the test. Among those who felt it was the most appropriate move, they felt the mothers should be given the chance at least to know their status early. Withum et al (2000) noted that most antenatal mothers book when looking healthy and if identified early it allows for planning for interventions particularly for those who book early and have an opportunity to get at least the minimum or basic package which is provided over six visits in Zimbabwe through the goal oriented antenatal care.

This is also in line with Johns et al (2000) who conducted a study in the UK with the aim of increasing the uptake of antenatal HIV testing. The methodology was a retrospective review of all antenatal HIV testing over three years (1997 – 1999) which was midwife led. The setting used was London District General Hospital. It was established that acceptance of transmission reducing strategies was high among the HIV positive (75%) with ‘opt out’ approach rather than 38.7% with opt in approach. It was then concluded that universal Antenatal HIV testing is acceptable to women and can be introduced within a busy antenatal clinic (Johns et al 2000). Late booking is another strong culturally linked problem especially with previous deaths of children or abortions. There is a tendency to hide pregnancy as a cultural norm, for fear of witchcraft but this can be improved with the increased awareness and education to the community. It was concluded that there is need to target wider community with education, communication and counseling services.

Majority of the respondents used condoms at home with 46 (57.5%) using them while 31 (38.8%) were not using them. On finding out why, there was a vast range of responses where some of the participants said their husbands were refusing and others felt that condoms could not be used in the home with one's own husband. This is a true sign of lack of psychosocial support and this was as a result of either perception, lack of knowledge or some poor counseling that had gone on. The other reason could be cultural or even spiritual. This is in line with what MOHCW (2003) identified as a package for the women with individual counseling as a base. Individual pretest counseling provides an opportunity to discuss the individual implications of knowing one's HIV status. This includes discussion about the use of antiretroviral drugs for example NVP, infant feeding options, condom use during pregnancy and lactation and the psychosocial support aspect is also explored. A study conducted by Feldman et al (2002) entitled "positive women's voices and choices" where they found out that during education and counseling the misconception that condoms are not for use in marriage but are for prostitutes, may make it difficult to protect the pregnant woman from reinfection in the home and so leading to programme failure.

Sixty six (82.5%) had chosen a feeding method though they were bringing out the sentiments that the best option would be to stop breastfeeding totally and giving other options to prevent exposing the child during breast feeding for breast milk contains the HIV virus . ZAPP (2004) conducted a case study on psychosocial support for HIV-infected women in a PMTCT programme and their families on 120 families in Chitungwiza and found out that most of the families were poverty stricken and so initiated income generating projects with the intention of boosting the families income and be able to purchase the feeding options, food and clothing. When asked about what should be done to improve the programme the participants did not have much to say. Sixty one (76.25%) were satisfied with the current way

the programme is progressing while 8(10%) felt more information should be given about issues like labour, feeding options, contraceptive methods, and even condom use. Two (2.5%) felt people should not be forced to join the programme, 3(3.75%) needed the educators to be receptive, 1(1.25%) thought spouses should actively participate in the programme. One (1.25%) of the participants was being chased out of the home because she had joined the programme, so she felt husbands should be forced to look after the wife during the breastfeeding period. One (1.25%) felt privacy at OIC should improve because they go there and are served while everybody is looking on for fear of stigma and 2(2.5%) felt positive mothers need to get support in line with infant formulae since they are too poor to afford the infant formulae although they may feel it best not to breast feed. Dube et al (2000) attributed programme success to staff commitment and attitude mostly, community mobilization and availability of psychosocial support, availability of suppliers, accessibility of test (including use of mobile units) well trained staff providing a quality service, provincial support and prioritization of the programme and increased awareness and demand for PMTCT as a result of integration with other Primary Health Care services. Mahere (2004) also indicated that perceptions are shared during nurse - client interaction. For the pregnant women to participate in PMTCT they will have perceived the psychosocial support available to them in a positive manner be it formal or informal from community and family members (Mahere 2004). This concurs with the study conducted on factors influencing the mothers enrollment and participation in PMTCT which found out that client counselor dynamics during pretest counseling were pivotal in determining uptake and participation and counselor profile strongly influenced the nature of interaction (Varga and Brookes, 2008).

Psychosocial support

When asked about disclosure to anyone 56(70%) had told someone as early as the first day of testing. Forty eight (60%) had disclosed to their husbands. Twenty Four (30%) had not disclosed to anyone and 10 (12.5%) felt they were never going to disclose. Some of these women felt they were already dead and doomed now that they were HIV positive and others 68 (85%) had accepted their status. The element of stigma and discrimination is still rampant in the community and MOHCW (2003) concurs with the fact that special attention should be given to the counseling of these mothers to prevent programme failure. Individual post-test counseling provides an opportunity to revisit issues like, ARVs, condom use, infant feeding, delivery plans, positive living and disclosure to partner and partner VCT offer (MOHCW, 2003). According to Avert (2009) many women are concerned that if found to be HIV positive, their diagnosis will not remain secret, HIV related stigma and discrimination are found in all societies and can lead to social isolation and even loss of family support. When asked whether there is still someone, now that they are positive, who shows them love and affection 63(78.8%) still had someone always, 57 (71.3%) had someone to share their worries with 55(68.8%) had someone to confide in, 62(77.5%) had someone to assist them if confined to bed. Forty nine (61.3%) had someone to accompany them to the clinic if they felt ill, 66(82.5%) had someone to give them meals, 52(65%) had someone to assist them with medication where only 32(40%) had someone who would always give information to understand the situation and 40(50%) always had someone to give them assistance with household chores. Those that did not have said it was because most of the time they stayed with their working husbands and the few who did not stay with their husbands felt they were being punished for doing wrong by getting pregnant from people who did not love them. A study conducted by ZAPP identified that it is very essential that psychosocial support be provided

which could be in the form of psychological needs including emotional distress, guilt, depression, sense of inadequacy, hopelessness, relationship crisis, accepting an HIV positive status and having to live with it, coping, identifying support options, whom to tell, how to go on caring actively for oneself and for the family, fostering positive resilience, self esteem, hope and adaptation. It can also be in social needs form including, practical support addressing stigma, family needs, how to access existing services, poverty alleviation, how to relate to family and the community, care of children, HIV prevention and care management. A study was also conducted by Dube et al (2000) to learn more about needs regarding PMTCT in Africa. The findings were that most community members knew nothing or very little about MTCT. Zvitambo (2004) also noted that a critical requirement to success of these programmes will be increasing awareness of MTCT issues among men (husband, partners, fathers) and gaining their involvement in and support of the process. Men were found to be more marginalised and not prepared to support their spouses / partners or sisters in participating in the programme. This related to the responses about how the spouse felt about their HIV status . Some of the spouses accepted and were supportive 37(46.25%) but 4(5%) were not concerned and did not want to discuss, 2(2.5%) were refusing and sending them away, 2(1.5%) had not accepted and had a lot of questions, 2(2.5%) would sometimes get angry 1(1.25%) thought the wife was joking and 1(1.25%) felt guilt and 4(5%) wanted to be tested too. Twenty two (27.5%) were not known because the respondents had not disclosed to them. This concurs with what ZAPP (2004) found out in their study about psychosocial support, it was very difficult in reaching out for partners, although a number of different strategies were successfully explored, few of them were successful, men would deny their own risk of infection and often reacted violently when faced with their partner's HIV positive diagnosis. It was difficult to find non-threatening strategies to involve them. Avert (2009) also noted that

women had fears and often the greatest worry is the reaction of a male partner. When asked about availability of community support groups and donors the respondents 55 (68.8%) knew about support groups with only 13(16.3%) being members. Seven (8.8%) had received something from the community. Thirty nine (48.8%) had heard about donors with 10(12.5%) receiving assistance. The assistance from the community and donors included medicines, food, training, baby's clothes emotional support and clean water. According to ZAPP (2004), Donor support can be in the form of food and any other necessities including technical advise to start income generating projects. Zvitambo (2004) also provided training on counseling, technical information, MTCT clinical care specific to HIV & AIDS in women and children, administration of drugs in the PMTCT programme, care of the giver (special focus on helping nurses cope with how HIV and AIDS affect them personally) analysis of blood specimen by approved rapid test kits, preparation of infant blood samples for infant HIV diagnosis, accurate and confidential record, monitoring and evaluation procedures and systems. Zvitambo also procures supplies and equipment needed for PMTCT services and provides on going monitoring and evaluation of PMTCT services delivered at each site in their supported areas in Mvuma.

When asked about adequacy of information on HIV 49(61.3%) felt that it was adequate on vertical transmission, 45(56.3%) found it adequate on nutrition, 45(56.3%) on feeding options, 42(52.5%) on mother's ARV prophylaxis 13(16.3%) felt it was not adequate while 25(31.3%) really felt it was very adequate. On baby's ARV prophylaxis 40(50%) felt it was adequate but 27(33.8%) were saying it was not adequate because some of them were saying they were never told anything. The health workers just said you will be informed when you deliver. Forty (50%) felt information on cotrimoxazole use was adequate, 51(63.8%) said information on condom use was adequate while 22(27.5%) said it was very adequate. Only

15(18.8%) were informed about contraceptive use while 61(76.3%) were not told about the contraceptives. This is in line with Johns et al,(2000) who concluded that counseling serves three purposes namely informative, preventive and supportive. In group information sessions information is given to all attending ANC and to all attendees at any health facility (including men). The information includes basic facts about HIV & AIDS transmission, PMTCT interventions available for couples and VCT. This also incorporates discussion on ARVs for both mother and baby, infant feeding options, condom use during pregnancy and lactation. MOHCW (2007) also has strengthened the PMTCT programme by training Primary Counselors who do specific counseling for PMTCT. Information empowers the women to make informed decisions and protect themselves, their partners and their children,

After putting together the formal and informal support accorded to them 45 (56.3%) respondents felt that the support they received influenced their enrolling in the programme though 35(43.8%) felt it did not influence but the fact that there is a possibility of getting an HIV negative baby influenced their enrolment. As indicated by Avert (2009) the woman would say that ‘I would like to know my status if this will prevent my baby from getting infected, but on the other hand I fear knowing that I am among the dead and I am to experience much suffering of AIDS so I would not want to know my HIV status for fear of those deep thoughts’ but on the contrary MOHCW (2003) has found psychosocial support as key to PMTCT uptake though it is not receiving attention as required. Psychosocial support, if provided will always provide comfort to the mothers and assist them in ascertaining the benefits of enrolling in the PMTCT programme. Clinicians and health providers should choose which psychosocial intervention to offer to the HIV positive pregnant women, based on research evidence, how appropriate a method is to the patient’s individual situation, how acceptable it is to the patient, whether trained staff are available and cultural appropriateness.

Ramson and Yinger (2002) emphasized the need to strengthen the new role for antenatal care as the provision of voluntary HIV testing and counseling. Participation of pregnant mothers in PMTCT programme is influenced by social, cultural, religious, economic and political environment in which one is raised (Melconnen, 2003). When asked about the types of counseling they received 69 (86.3%) had one on one sessions while 11(13.8%) were in a group. One on one counseling affords the woman privacy and time to discuss innermost fears and concerns. In a group it may be otherwise where they express fear of being called names by others. This is in line with WHO which gives the three purposes of counseling as informative, preventive and supportive. Group information sessions are information giving and the information is given to all attendees at any health facility (including men) in group health talks. The information includes basic facts about HIV & AIDS transmission, PMTCT interventions available for the couples and VCT. On the contrary individual pretest counseling provides an opportunity to discuss the individual implications of knowing one's HIV status. This includes discussion about the use of ARVs, infant feeding options, condom use during pregnancy and the psychosocial support aspect. All women should be afforded the privacy to explore all the possible ways of coping with their positive HIV status.

The subjects were then asked about who made the decision to enroll, 66(82.5%) made the decision on their own and 9(11.3%) had midwives deciding for them. Unfortunately these 9(11.3%) did not get the liberty of making a choice. They were forced into the programme which may lead to programme failure. According to Nikurawu (1996) assumptions are that clients would want to be involved in their own care. Making a decision for oneself makes it one's own choice leading to compliance and programme success. This would significantly contribute to the reduction in child and maternal morbidity and mortality.

Relationship between psychosocial support and PMTCT uptake

The relationship between psychosocial support and PMTCT uptake showed a positive significant correlation ($r = .484$ $p < .01$) meaning that as psychosocial support increases PMTCT uptake increases. This study concurs with a study by ZAPP (2001) which found out that psychosocial support is key to PMTCT uptake and also concurs with Neuman's systems model which strongly illustrates that psychosocial support is part of the five client variables which when absent the initiation of interventions is difficult. Psychosocial support is supposed to be present for the client to attain and maintain wellness. The MOHCW (2003) has also indicated that psychosocial support is to be integrated in all health delivery settings at all levels to enhance PMTCT uptake. Linear regression showed a moderate significant positive effect of psychosocial support on PMTCT uptake where $R^2 = .234$ meaning that 23.4% of psychosocial support contributed to PMTCT uptake.

Theoretical framework

Neuman's systems model was used to guide the study. The squared coefficient also tells us how good our prediction of the dependent variable is. The model looked at the interventions which could be primary, secondary and tertiary and also the five client variables which are physiological, psychological, socio-cultural, developmental and spiritual. The focus of the model is proper interventions which are culturally and spiritually acceptable which were shown in the study findings where even the apostolic faith sect women where among the participant's PMTCT was regarded as a very relevant and necessary intervention which was at the secondary level since most of the women were already infected. Psychosocial support, according to the model was both formal and informal with involvement of family and community. The model guided the study since even some of the questions came from the models' assessment questionnaire. The questionnaire was not specifically for the PMTCT but

for some other condition but applicable with the secondary of intervention. The model also focuses on different levels of care where an appropriate choice by the health care provides meets the different women's needs with their special conditions and situations. According to Neuman psychosocial support is all inclusive of formal and informal support including Donors. The study managed to single out all the possible available psychosocial support as suggested by the model. Psychosocial support has proved beyond doubt that it has some influence on the uptake of PMTCT shown by the positive correlational coefficient. By using Neuman's systems model the researcher became acutely aware of how she and her colleagues could assist the HIV positive pregnant women in enrolling in the PMTCT programme.

The model gives the nurses a broad base to utilize when planned for implementation and initiation of the PMTCT programme where all the five clients variables have to be put into consideration together with the interventions that could be employed at a given time. The ability of the nurse to seriously consider involvement of spouses, significant others, family and support groups has been learnt through the use of the model. The exploration of available Donors in the community has been part of the process of provision of psychosocial support for this vulnerable group of people. The implementation of the interventions with the consideration of the client variables assists in countering stressors as indicated by Neuman's model which in turn assist the individual to return to wellness which is the aim of all programmes implemented. Nursing according to the model has a direct influence on the person's health. Neuman's systems model put emphasis on attaining and maintaining the highest possible level of health through purposeful interventions (Neuman, 1982). The study findings support that the clients' perceptions of the support available to them had an influence on their acceptance of the PMTCT programme. The results show that as psychosocial support increased PMTCT uptake also increased.

The Implications to Midwifery Practice

The integration of PMTCT programme into the routine Primary health care services makes the programme a midwifery issue. Midwives have to be aware of the levels of interventions which can be promotive, preventive, curative and rehabilitative. Also having the levels of interventions as primary, secondary and tertiary. The midwives should be working in partnership with the clients, family and community for success in the implementation of the key strategy of prevention of HIV in children for national benefit. The findings of the study should be utilized by midwives to enable them to combine all types of psychosocial support to improve the uptake. There is a positive correlation between psychosocial support and PMTCT uptake meaning that the midwives should, at all times, consider the support available to the women before just prescribing an intervention. Part of the findings indicates the expectations of the women from the midwives and this should be seriously considered when caring for the HIV pregnant women. Midwifery should be evidence based and so the findings of the study can be used as evidence to assist the midwives to plan on the best quality care provision for the women.

Research

Midwifery practice is evidence based and the study findings can add to the body of knowledge for midwifery. There is need for more research to be conducted to assist in the provision of care which will emanate from information given by clients themselves and not just theoretical prescriptions which sometimes are not very applicable and replicable in the different communities. Further studies especially on the effectiveness of exclusive breastfeeding need to be carried out. The assumption is that exclusive breastfeeding will not cause transmission but how true is it. More studies need to be conducted on what are the other factors that influence uptake of PMTCT besides psychosocial support since it has only taken

48%. This shows that there are other factors contributing to the uptake of PMTCT and what can these be. Whether they are being attended to or not may be another issue but they need to be known. This can only be through studies. The findings of this study can be utilized in administration where planning for training more midwives in PMTCT implementation and OIC is done. The curricular for all nurses, at all levels, should incorporate PMTCT interventions including psychosocial support strategies to enable the trained cadres to provide comprehensive care when they complete their training period.

Recommendations

Most of the respondents had adequate psychosocial support where they were staying with someone who would provide for their needs and so the recommendations are that:

1. The MOHCW should ensure psychosocial support is made an integral component in the PMTCT implementation to enhance the uptake..
2. Infant feeding options, for example formulae, should be made available at PMTCT sites to support the mothers who cannot afford to buy the formulae.
3. There should be spouse involvement or significant others in the care of the mothers during the process of implementing the PMTCT strategy.
4. Services for PMTCT should be made accessible, affordable and acceptable by the different cultures and spiritual groups to improve acceptance (uptake).
5. The Chitungwiza Central Hospital management should ensure that all services pertaining to treatment and care in the PMTCT strategy are provided under one roof to prevent unnecessary disclosure where the mothers have to queue in OIC for drugs.
6. Communities should be well sensitized on HIV issues including psychosocial support services available and how to access the service in case of need.

Limitations

The study was carried out at a Central Hospital setting which has its own limitation like all clients being referred. The generalisability of the findings are therefore limited to the few referred cases from all over Mashonaland East and Chitungwiza City Clinics including Beatrice Farms. The instrument on psychosocial support was developed by the investigator and was not subjected to parametric tests so reliability and validity could have been compromised. Despite all measures taken to strengthen the instrument, including borrowing some questions from the model that was used to guide the study its reliability and validity remains compromised. The psychological, sociocultural, physiological and spiritual variables of the model were the only ones covered. The other variables could have contributed differently extrapolating different responses. It is hoped that any other studies to be conducted will cover all the variables. Data was collected from clients who had three visits or more leaving the others out which may affect the findings.

Summary

Several researchers have studied psychosocial support in relation to PMTCT uptake and it has been observed that psychosocial support is a key component of care if we have to achieve the Millennium Development Goals by 2015. MOHCW have noted that psychosocial support should be an integral component in all settings but that is not in place in most of the settings. Implementation of PMTCT has reduced the infant mortality rate from 69/1000 in 2006 to 29/1000 in 2008. (DHS 2008, MOHCW, 2007). HIV poses problems to the development of the country therefore implementation towards reduction of this burden should be undertaken at all costs. The purpose of the study was to determine the relationship between psychosocial support and PMTCT uptake among HIV positive pregnant women. Neuman's systems mode was utilized. The descriptive correlational design was used and a simple

random sampling method was utilised. A total of 80 subjects participated. The study had an instrument with three sections namely demographic questionnaire, PMTCT uptake questionnaire and a psychosocial support questionnaire. The SPSS\PC software was used to analyse the data after data was coded and entered into the computer. Forty five (56.3%) accepted that the support, both formal and informal had some influence on their decision to enroll. The results show that there is positive correlation ($r = .484$ $p < .01$) of psychosocial support and PMTCT uptake. The results show that the psychosocial support has some positive effect on PMTCT uptake meaning that $R^2 = .234$. Twenty three percent (23.4%) of the psychosocial support contributed to the uptake of PMTCT. As psychosocial support increases PMTCT also increases.

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APPENDIX A

INFORMED CONSENT

Study title

Relationship between psychosocial support and PMTCT uptake among HIV positive pregnant women at Chitungwiza Central Hospital

Investigator: Miriam Mangeya

I am studying for a Master of Science in Nursing Science Degree with the University of Zimbabwe. To fulfill part of the degree programme I am required to conduct a research study. The study is entitled “The relationship between psychosocial support and PMTCT uptake among HIV positive pregnant women at Chitungwiza Central Hospital”. This study aims at providing information that will enable health care providers to identify the psychosocial support available to the women which contribute to an increase in PMTCT uptake (acceptance of PMTCT). The study may not benefit you directly but the information will enable health care providers to plan effective implementation of programmes to reduce MTCT which in turn reduces maternal and perinatal mortality.

Your participation in this study is completely voluntary and you may withdraw from the study at any time without any penalty or loss of benefits which you are entitled to. The information which you give will remain private and confidential.

The study procedures do not involve any risks and harm to you and your family. These procedures include responding to a questionnaire on demographic data, psychosocial support and PMTCT uptake. No names will be in this study because all the data will be coded, your identity will not be revealed at any time during the study or when the study is reported or published and the data collected will be kept locked in a secure place where for any reason it will not be reused without your permission.

In case you want to contact me for queries, questions about the study or about you as a subject you can find me at Chitungwiza Central Hospital box CZA 245, Chitungwiza, on telephone 070 30915 or cell No# 011424164. I have explained this study to the subject and have sought for their understanding about the informed consent.

Respondent's signature.....

Investigator's signature.....

Date...../...../.....

APPENDIX B

Instrument

Structured interview schedule.

The following is a questionnaire on uptake of PMTCT. No answer is wrong. You can answer to your best ability. This is from how you feel about the support you received from the health workers, your family, your significant others, donors and community around you. It is important that you respond to these questions honestly. The information you will give will be kept in confidence.

Section A

Demographic data

1. How old are you?

18-28

☐

29-39

☐

40-49

☐

2. What is your marital status?

married

☐

single

☐

separated

☐

divorced

☐

widowed

☐

3. How many pregnancies did you have?

.....

4. How many children do you have in all?

None

☐

One

☐

Two or more

☐

5. How many of your children are alive?

.....

6. What is your level of education?

Primary

☐

Secondary

☐

Tertiary

☐

7. Whom do you live with?

Husband

☐

Alone

☐

Parents

☐

Friend

☐

Relative

☐

8. Where do you live?

Rural

☐

Urban

☐

Farm

☐

9. What is your religion?

Traditional

☐

Pentecostal

☐☐

Mainstream

☐

Apostolic

☐

Islamic

☐

None

10. What is your employment status?

Not employed

☐

Self employed

☐

Formally Employed

☐

11. What is your spouse's employment status?

Not employed

☐

Self employed

☐

Formally employed

☐

12. What is your monthly income?

Below US\$500

☐

US\$500

☐

Above US\$500

☐

Section B

PMTCT uptake questionnaire

13. When were you tested for the first time?

Before ANC or pregnancy

☐

During ANC

☐

14. Do you know your spouse's status?

Yes

☐

No

☐

15. How do you feel about your status? Explain.

.....

16. When did you first hear about PMTCT?

Before pregnancy

☐

During ANC

☐

17. Did you receive any information about PMTCT?

Yes

☐

No

☐

18. What was your first source of your information?

Nurse

☐

Counselor

☐

Doctor

☐

Media

☐

Relatives and friends

☐

Literature

☐

19. How do you feel about the information you received about HIV?

☐

not adequate

adequate

☐

very adequate

☐

20. Which are the possible regimens used in PMTCT that you know?

Nevirapine

☐

Nevirapine, Zidovudine & Combivir

☐

ART for life

☐

Cotrimoxazole.

☐

Cant remember

☐

21. Were you offered drugs to prevent transmission of HIV to your baby?

Yes

☐

No

☐

22. If yes which drugs were you offered? Explain.

.....

23. When are you going to take the drugs?

Already taking

☐

At 28 weeks

☐

At delivery

☐

24. Explain why you are taking these drug.

.....

25. Are there any problems that you are facing with the drugs you are taking? Explain.

.....

26. Why did you enroll in the PMTCT programme?

.....

27. What are the benefits of enrolling in the PMTCT programme? Explain.

.....

28. Do you regret joining the PMTCT programme?

Yes

☐

No

☐

29. Have you chosen a feeding option?

Yes

☐

No

☐

30. Do you feel all pregnant mothers should be tested routinely as they come for booking?

Yes

☐

No

31. Do you use condoms at home?

Yes

☐

Sometimes

☐

No

☐

32. Explain your answer.

.....

33. From your experience so far with the PMTCT programme what do you think should be done to improve it?

.....

Section C

Psychosocial support questionnaire

Emotional support

34. Have you told anyone about your status?

Yes

☐

No

☐

35. When did you disclose?

First day

☐

Within the first week

☐

After first week

☐

36. Whom did you tell about your positive status?

Noone

☐

Husband/ spouse

☐

Friend

☐

Relative

☐

Any other specify.....

37. What was the reaction of the person you disclosed to? Explain.

.....

38. If you have not disclosed when do you feel you want to do so

During pregnancy

☐

Later

☐

After delivery

☐

Never

☐

Is there someone who is there for you for the following?

	N	S	A
39. Who shows love and affection			
40. To share your worries			
41. To confide in			
42. Help if confined to bed			
43. Give you advice on your condition			
44. Taking you to the clinic			
45. Give you meals			
46. Helps you with your medication			
47. Gives you information to understand the situation			
48. Help with chores			

KEY: N= NEVER, S= SOMETIMES and A= ALWAYS.

Spouse and Family support.

49. Who provides you with food, clothing and accommodation?

Self ☐

Husband ☐

Parents ☐

Friend ☐

Other (Specify).....

50. How does your spouse feel about your positive status? Explain.

.....

Community Support.

51. Have you been informed about support groups for PLWHA?

Yes

☐

No

☐

52. Are you a member of a support group?

Yes

☐

No

☐

53. Is there any support you are receiving from the community?

none

☐

sometimes

☐

always

☐

54. What have you been receiving?

food

☐

baby clothes

☐

medicines

☐

help with house work

☐

Emotional support.

☐

None

☐

Donor Support

55. Do you know of any Donors available in your area?

yes

☐

no

☐

56. Have you received any assistance from them?

No

☐

Sometimes

☐

Yes

☐

57. In what form? Explain.

.....

58. Did the support you have received influence your decision on enrolling in the PMTCT programme?

yes

☐

no

☐

Formal Support

59. Did you receive any information about prevention of transmission of HIV?

yes

☐

no

☐

60. Who gave you the information?

midwife

☐

counselor

☐

spouse

☐

support group members

☐

. How do you rate the adequacy of the information you received regarding the following?

NA A VA

61. Vertical transmission			
62. Nutrition			
63. Feeding options			
64. ARV prophylaxis for mother			
65. ARV prophylaxis for baby			
66. Cotrimoxazole use			
67. Use of condoms			
68. Contraceptive use			

KEY: NA= NOT ADEQUATE, A= ADEQUATE and VA= VERY ADEQUATE

69. What type of counselling did you receive?

Group

☐

One on one

☐

70. Who made the decision for your enrollment?

Self

☐

Midwife

☐

Spouse

☐

Family member

☐

Friend

☐

APPENDIX C

Instrument: shona

Demographic data questionnaire (Shona)

1. Mune makore mangani ekuberekwa?

18 – 28

☐

29 – 39

☐

40 - 49

☐

2. Pane zvewanano makamira papi?

Ndakaroorwa

☐

Handina kuroorwa

☐

Ndakaparadzana naye

☐

Ndakarambana naye

☐

Ndakafirwa

☐

3. Makatakura nhumbu ngani?

.....

4. Makaita vana vangani vose?

Handina

☐

Mumwe chete

☐

Vaviri nekudarika

☐

5. Mune vana vangani vapenyu?

.....

6. Pazvidzidzo zvenyu makasvika papi?

Kupuraimari

☐

Kusekondari

☐☐

Padanho repamusoro

7. Munogara nani ?

Nomurume

☐

Ndogo

☐

Navabereki

☐

Shamwari

☐

Nehama

☐

8. Munogara kupi?

Kumusha

☐

Kudhorobha

☐

Kumapurazi

☐

9. Chitendero chenyu ndechipi?

Zvechikaranga

☐

Machechi matsva

☐

Machechi akare

☐

Postori

☐

Isilamu

☐

Handina

10. Munoshanda basa rei?

Handishandi

☐

Ndinozviiira mabasa emaoko

☐

Ndinoshanda

☐

11. Murume wenyu anoshanda basa rei?

Haashandi

☐

Anozviitira mabasa amaoko

☐

Ndinoshanda

☐

12. Munowana mari yakawanda sei pamwedzi?

Pasi pe500

☐

500

☐

pamusoro pe500

☐

Section B

PMTCT Uptake Questionnaire (Shona)

13. Makaongororwa ropa kekutanga riini?

Ndisati ndava napamuviri

☐

Pandakauya kuzonyoresa

☐

14. Munoziva here mamiriro eropa remurume wenyu?

Hongu

☐

Kwet

☐

15. Munonzwa sei nemamiriro akaita ropa renyu pahutachiona?

.....

16. Makatanga kunzwa nezve PMTCT riini?

Ndisati ndava napamuviri

☐

Pandakauya kuzonyoresa

☐

17. Makataurwa nemi pamusoro pehutachiona here?

Hongu

☐

Kwete

☐

18. Ruzivo hwenyu hwokutanga makapiwa nani?

Vakoti

☐

Manzera

☐

Dokotera

☐

Munhawu

☐

Shmwari nehama

☐

Muzvinyorwa

☐

19. Munonzwa sei nezveruzivo urwu?

Hahuna kukwana

☐

Ndizvozvo hazvo

☐

Hwakakwana

☐

Hwakakwana chaizvo

☐

20. Ndeipi mishonga inoshandiswa pa PMTCT?

Nevirapine

☐

Nevirapine Zidovudine & Combivir

☐

ART for life

☐

Cotrimoxazole

☐

Handichazivi

☐

21. Pane mushonga wamakanzi mutore here?

Hongu

☐

Kwete

☐

22. Kana mati hongu ndeupi mushonga wacho?

.....

23. Muchatora riini mishonga iyi?

Ndatove kutora

☐

Pa 28 wks yemimba

☐

Pakuzvara

☐

24. Tsanangurai kuti muri kutorerei mushonga iyi?

.....

25. Pane matambudziko amuri kusangana nawo pakunwa mushonga here?

.....

26. Nemhaka yei makapinda muchirongwa?

.....

27. Chii chakanakira kupinda muchirongwa ichi?

.....

28. Munodemba kupinda muchirongwa here?

Hongu

☐

Kwete

☐

29. Makasarudza nzira yokupa nayo mwana chokudya here?

Hongu

☐

Kwete

☐

30. Munofunga here kuti zvakakosha kuti mudzimai wose awongororwe ropa paanouya

kuzonyoresa?

Hongu

☐

Kwete

☐

31. Munosevenzesa macondom here kumba kwenyu?

Hongu

☐

Dzimwe nguva

☐

Kwete

☐

32. Tsanangurai.

.....

33. Mukuona kwenyu chii chingaitwa kuti chirongwa chibudirire zvakan

Section C

Psychosocial support questionnaire (Shona)

34. Pane wamakataurira nezvamuri here?

Hongu

☐

Kwete

☐

35 Makataura riini?

Musi wandatariswa

Muvhiki yokutanga

Kwatopera vhiki

36. Ndiani wamakataurira nezvamuri?

Hapana

☐

Murume

☐

Shamwari

☐

Hama

☐

Mumwe tsanangura

☐

37. Wamakatauria akati chii nazvo?

.....

38. Kana pasina wamakataurira munotarisa kuzotaura rini?

Ndichine pamuviri

☐

Ndichazotaura zvangu

☐

Kana ndasununguka

☐

Handichambotauri

☐

Pane munhu anogara aripo kwamuri pane zvinotevera?

	N	S	A
39. Anotaridza Rudo			
40. Wautaurira nhamo dzako			
41. Waunotaurira nhunha dzako			
42. Anokubatsira kana warwara			
43. Anokuyambira			
44. Anokuperekedza kukiriniki			
45Anokupa zvokudya			
46. Kukubatsira nemushonga			
47. Anokupa ruzivo			
48. Kubatsira namabasa omumba			

49. Ndiani anokupa zvokudya, zvokupheka nopokugara?

- | | |
|------------------|--------------------------|
| Ndoga | <input type="checkbox"/> |
| Murume | <input type="checkbox"/> |
| Vabereki | <input type="checkbox"/> |
| Shamwari | <input type="checkbox"/> |
| Mumwe tsanangura | <input type="checkbox"/> |

50. Mumwe wenyu anogamuchira sei mamiriro enyu neutachiona?

.....

51. Makataurirwa here nezvemasupport group?

Hongu

☐

Kwete

☐

52. Matova mumwe wevesupport group here?

Hongu

☐

Kwete

☐

53. Pane rubatsiro rwamuri kuwana kubva kuvagarisani navavakidzani?

Hapana

☐

Dzimwe nguva

☐

Nguva dzose

☐

54. Manga muchibatsirwa nei?

Zvokudya

☐

Zvikupfeka

☐

Mishonga

☐

Namabasa epamba

☐

Kubatsira mukufunga

☐

Hapana

☐

55. Pana Donor (NGO) ari munzvimbo menyu here?

☐

Hongu

☐

Kwete

56. Pane rubatsiro rwaanga achikubatsirai narwo here?

Kwete

☐

Dzimwenguva

☐

Hongu

☐

57. Makabatsirwa nei?

.....

58. Ruzivo norubatsiro rwamakapiwa zvakakukurudzirai kupinda muchirongwa here?

Hongu

☐

Kwete

☐

59. Pane mumwe munhu anokubatsirai noruzivo rwechirongwa kana zvimwevo zvinhu
zvoupenyu here?

Hongu

☐

Kwete

☐

60. Ndiyani iyeyo?

Vana mukoti

☐

Counselor

☐

Murume wangu

☐

Vamwe vari musupport group

☐

Munoona sei ruzivo pane zvinqtevera?

NA

A

VA

61. Kutapurira hutachiona kumwana			
62. Zvokudya			
63. Nzira dzokupa mwana chokudya			
64. Mapiritsi amai			
65. Mushonga womwa			
66. Cotrimoxazole			
67. Kushandisa makondomu			
68. Kurera mhuri			

69. Makataurwa nemi muri vangani?

Mugrupu

☐

Ndiri ndoga

☐

70. Ndiyani akapa sarudzo yekuti mupinde muchirongwa?

Ini ndoga

☐

Vana mukoti

☐

Murume

☐

Vemhuri

☐

Shamwari

☐

APPENDIX D RUGWARO RWOKUTENDERANA

Musoro wenyaya

Ukama pakati porutsigiro kubva kuvamwe nekupinda muchirongwa chokudzivirira kutapurirwa kweutachiona kubva kuna mai kuennda kumwana pakati pamadzimai akazvitakura ane utachiona hweHIV pachipatara cheChitungwiza.

Zita romuongorori Miriam Mangeya

Ini ndiri mudzidzi wedzidzo yapamusoro kune zveukoti (Masters in Nursing Science Degree- MCH) pachikoro che University ye Zimbabwe. Kuti ndizadzikise zvinodiwa pazvidzidzo izvi ndinosungirwa kuita tsvakurudzo inoenderana nezvidzidzo zvangu. Tsvakurudzo yandichaita yakanangana nokuona ukama pakati porutsigiro kubva kuvamwe nekupinda muchirongwa chokudzivirira kutapurirwa kweutachiona kubva kuna mai kuenda kumwana pakati pamadzimai akazvitakura ane utachiona hweHIV pachipatara che Chitungwiza. Tsvakurudzo iyi yakanangana nokuwana ruzivo huchabatsira vehutano kuona rubatsiro runokwanisa kuvapo kubatsira madzimai kuti apinde muchirongwa chokudzivirira vana ichochi (PMTCT). Tsvakurudzo iyi inogona kusakubatsirai imi iyezvino asi zvainoburitsa zvichabatsira veutano kuti vakwanise kufambisa basa ravo zvakanaka kudzivirira vana kuutachiona zvinova zvinodzikisira kufa kwavana naanaamai munyika.

Kupinda mutsvakurudzo iyi kuda kwenyu hamumanikidzwi uye kana monzwa kuti hamuchakwanisi kupfuurira mberi munobvumirwa kudaro pasina zvakaipa zvingakuwirai imi nehama dzenyu kana kukutadzisai kubatsirwa samazuva ose. Zvose zvamuchadavira zvinochengetedzwa hazvitaaurirwi kana ani zvake imi musina kupa mvumo. Hapana mazita achashandiswa pakubudiswa kwetsvakurudzo iyi.

Kana muchida kundiwana pamwe mune mibvunzo kana zvimwevo ndinowanikwa paChitungwiza Central Hospital, Box CZA 245, Chitungwiza. Pafoni dzinoti 070 30915 kana nharembozha 011424164.

Ndatsanangudza zvizere patsvakurudzo iyi kuti ndiwane mvumo nokunzwisisa kubva kumubvunzwi.

Ruoko rwenyu.....

Ruoko rwomutsvakurudzi.....

Zuva/...../.....