

Factors Influencing Utilization of Prevention of Mother to Child Transmission of HIV/AIDS Services Among Pregnant Women In Selected Government Health Facilities In Ukwuani L.G.A of Delta State

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Abstract: This study was set out to assess the factors influencing the utilization of prevention of mother to child transmission of HIV/AIDS services among pregnant women in selected government health facilities in Ukwuani L.G.A of Delta State. In carrying out this study, the researcher received a number of related literatures in the topic. In line with the three objectives of the study, three questions were postulated. The study is significant to the pregnant women, health care providers (nurses/mid wives) to the society as well as the researcher. It exposed the level of knowledge of PMTCT, the extent of utilization and factors influencing the utilization of PMTCT of HIV/AIDS services. Descriptive non experimental design was adopted for the study, and a random sampling technique was used in selecting the health facilities while a convenient sampling was used in selecting the participants. A self developed questionnaire was administered to the respondents and same retrieved, analysis of data was done using frequency distribution table, percentage and charts. Results obtained revealed that pregnant women in Ukwuani L.G.A of Delta State had a good knowledge about PMTCT of HIV/AIDS services, but extent of utilization is very poor, due to stigmatization among other factors. Based on the findings, recommendations were made for PMTCT of HIV/AIDS should be a care part of antenatal education as well as organization of seminars and work on PMTCT of all level of health care for care providers and general population.

Keywords: HIV/AIDS, Utilization, Transmission, PMTCT services

I. INTRODUCTION

Human Immunodeficiency Virus (HIV) is the causative organism of Acquired Immune Deficiency Syndrome which was first discovered in the year 1981. *UNAIDS, (2006)* noted that despite years of campaigns, advocacy, control programmes and awareness exercises taken to curb HIV/AIDS spread, there is still a worrisome rate of increase of the infection. According to United Nations Programme on HIV and AIDS (*UNAIDS, 2006*), about 33.3 million people are estimated to live with the Virus globally; 22.5 million of this population are from the sub-sharan Africa. Over 55% of these people living with HIV are women of reproductive age who became pregnant. HIV infection in women of reproductive age increases the epidemic of Peri-natal HIV. About 2.5

million children live with HIV globally and 1.8 million are from sub-sharan Africa, world-wide, over 1,700 children became infected with HIV daily (*UNAIDS, 2006*).

United Nations Programme on HIV and AIDS (*UNAIDS, 2012*) statistics revealed that in Nigeria (2011), about 69,400 children became infected with HIV through mother to child transmission. This has led to a rise in total number of children living with HIV in the country to an unprecedented 440,000. Caroline C.K; Sascha R.E; & Athena P.K, (2013) opined that virtually all HIV infection in children occurs following mother to child transmission of 5-10% during the antenatal period/pregnancy through a damaged placenta and foeto-maternal circulation, about 10-20% occur during intra-natal period/labour/delivery by coming in contact with the mother's blood at birth and genital secretions, and about 10-15% post-natally through breast feeding.

McIntyre's and Gray, (2004) made an estimation of about 20-45% chances of baby born to an HIV positive mother to become infected without affective prevention to prevention of mother to child transmission.

According to World Health Organization (WHO, 2004) effective interactions, such as use of anti retroviral drugs both for mother and child proper and good hygiene, formula feeding, the risk of mother to child transmission has shown to reduce by 5%. Primary preventive measures include prevention of infections in parents, while secondary preventive measures involve preventing transmission of HIV from an infected mother to the infant through breast feeding. These are the three (3) approaches in reducing Mother to Child Transmission (MTCT).

Hailu, Kifle and Lamessa, (2016) observed in a study on prevention of mother to child transmission of HIV/AIDS in sebeta town central Ethiopia, that mother to child transmission (MTCT) continues to be the major source of HIV infection among children under the age of fifteen years(15years). Thus, provision of HIV Counseling and Testing (HCT) services to all pregnant women is essential in HIV prevention strategies. This Prevention of Mother to Child Transmission (PMTCT) intervention services have been at the front of global public

health activities, and have huge potential to improve both child and maternal health. Targeting women attending antenatal clinics provides a unique opportunity for implementing PMTCT programmes against HIV infection of new born babies.

Marcos Phelps, Bachman, (2012) in a study on Sociocultural factors influencing the prevention of mother to child transmission of HIV in Nigeria revealed that availability, accessibility, acceptability and affordability of resources either facilitate or hinder decisions and action towards PMTCT.

This is why it is important for the researcher to study the factors influencing utilization of Prevention of Mother to Child Transmission (PMTCT) of HIV/AIDS services among pregnant women in selected government health facilities Ukwuani L.G.A in Delta State.

Epidemiology of HIV/AIDS

National Agency for the Control of AIDS (NACA, 2014), reported the first case of AIDS in Nigeria was reported in 1986. Since then, national HIV prevalence has increased exponentially from 1.8% in 1991 peaking at 5.8% in 2001 and progressively declining since then to current figure of 3.1% in 2014 (ANC survey Report). Nigeria has the second highest burden of HIV globally with 3.4million PL HIV as at 2014. There is a considerable regional and state to state variation in HIV prevalence in the country; ranging from 1% in Kebbi state to 12.7% in Benue state.

Definition of HIV

Centre for Disease Control (CDC, 2017) defined Human Immunodeficiency (HIV) virus as a lentivirus and like all virus of this type, attacks the immune system. Lentiviruses are in turn, part of a large group of virus known as retrovirus. The name "Lentivirus" literally means slow virus because they take such a large time to produce any adverse effects in the body. It is the virus that can lead to acquired immune deficiency syndrome, or AIDS, if not treated. Unlike some other viruses, the human body can't get rid of HIV completely, even with treatment.

Mode of MTCT Transmission of HIV/AIDS/Risk Factors

1. Pregnancy

In pregnancy, immune function is suppressed in both HIV-infected and uninfected women. There is a decrease in immunoglobulin level in early pregnancy and a more significant decrease in cell-mediated immunity. Studies have shown that pregnancy may however have no effect on the progression of HIV or on the rate of death. On the other hand, HIV infected women with pregnancies were more likely to develop early pregnancy complications such as bacteria priellmonia, urinary tract infections and other infections (Rocky, Akarro, Deonisia, and Slchona, 2009).

Lawrence, Egbe Mbuagbaw, Coffin, (2011) listed factors that increase risk during pregnancy to include;

- i. High maternal viral load (the result of new infections or advanced disease).
- ii. Infection of the placenta
- iii. Maternal malnutrition
- iv. Ante partum Haemorrhage

2. During Labour/Delivery

- i. The following are the ways/conditions in which a child can be infected with HIV by a positive mother;
- ii. High maternal viral load
- iii. Early rupture of membrane four (4) hours before labour
- iv. Chorioamniatis
- v. Prolonged labour

3. During Breast Feeding: The virus can be transmitted through;

- i. Early mixed feeding
- ii. Breast absences
- iii. Niple tissue

General Mode of Transmission of HIV/AIDS

1. *Heterosexual Sex:* Approximately 80% to 95% of HIV infection in Nigeria is as a result of heterosexual sex (Odetola, 2010), factors contributing to this include Lack of intimation about sexual health and HIV, low level of Condom use and high level of STDS and preventive intercourse with an infected person.
2. *Blood Transfusion:* HIV transmission through unsafe blood accounts for the largest source of HIV infection in Nigeria (Obioma, 2011).
3. *Sharing of Sharp Objects:* Like needles, Razor blades and the use of unsterile instruments used on HIV positive patients.
4. Those who have another asexually transmitted infection such as syphilis, genital herpes, Chlamydia, Gonorrhoea or bacterial vaginosis are at greater risk of getting HIV during sex with an infected person.
5. Contact with sharp piercing objects used for scarifications, tattoos and surgical procedures (Rocky et al 2011).

Benefits of PMTCT

Lawrence et al, 2011 observed that the benefits of *PMTCT* includes

1. Identification of HIV positive mother's for targeted interventions to reduce risk of transmission of infection to their infants and access treatment, care and support services.
2. Promotion of positive behaviour change and reduction in risk of HIV transmission.
3. Increase use of dual protection methods of family planning and STI prevention such as male and female condoms.

4. Promotion of optimal infant feeding practices and support.

To the Infants

- i. Prevention of HIV transmission to infants
- ii. Promotion of early diagnosis and intervention for the HIV exposed infants

To the Health System

- i. Provision of opportunity to strengthen the health system

To the Family

- i. Promotion of communication between couples and testing of both partners
- ii. Reduction in the risk of sexual transmission to serodiscordant partners
- iii. Provision of opportunity for testing other family members

To the Community

- i. Promotion of the understanding of the HIV and AIDS epidemic among those living with HIV and AIDS within the community thereby strengthening community support structures.
- ii. Promotion of acceptance and uptake of HIV testing services

Prevention of Mother to Child Transmission of HIV Infection (PMTCT)

An HIV positive pregnant woman can transmit HIV to her unborn child during pregnancy, labour, delivery and breast feeding. In order to prevent this W.H.O introduced a set of interrelated interventions designed to block transmission of HIV from a HIV infected mother to her child during period of pregnancy and breast feeding. These interventions are offered together as a single package of care known as prevention of mother to child transmission of HIV (PMTCT). In absence of PMTCT, the risk mother to child transmission of HIV is 25-40% and as such it is recommended that all pregnant women should be actively screened for HIV and commenced on ART immediately if they are positive (Fatima et al, 2009)

The prevention of mother to child transmission of HIV involves all persons of reproductive age group. It is based on the W.H.O four-pronged approach, which are;

A. Primary Prevention of HIV Infections in Women of Reproductive Age and their partners. These includes;

- a) The use of ABC (A=Abstinence, refraining from having sexual intercourse, B=Be faithful is being faithful to one faithful partner, C= Condom use is using condoms carefully and consistently)

B. Prevention of Unintended pregnancies among HIV Positive Women through;

- 1) Providing good quality, user-friendly and easily accessible family planning services to HIV positive women that can't prevent unwanted pregnancy.

- 2) Providing and promoting consistent condoms (male/female) use combined with a more effective method of contraception (dual method) for dual protection from HIV and other SITS and from unplanned pregnancies.

C. Prevention of HIV Transmission from infected Mother's to their infants. These include; HIV Testing services; HIV and infants feeding counseling; Modifications of obstetric practices; Administration of ART to all HIV positive pregnant women irrespective of their W.H.O clinical stage and CD4+ cell count; administration of single or dual ARV prophylaxis to all infants delivered to HIV positive women.

Factors Affecting Utilization of PMTCT of HIV and AIDS Services

A number of factors have been found to impede the availability and utilization of PMTCT of HIV and AIDS services. Skinner et al, (2015) observed that PMTCT services have been recently added to several clinics that they were already

1. *Inadequate staffing and over pressure:* Since the PMTCT services were new, some elements of intervention and staff training was delayed, this inhibits full implementation. They further observed that new staff had not been added to ease accumulated pressures.
2. Bajunirwe and Muzoora, (2015) opined that there is a tendency for fear of knowledge of sexual partners and families.
3. *Fear of Death/Unknown:* Kanabus and Nobel, (2006) are of the view that same women refused to be tested because they fear learning that they have life-threatening condition, or because they do not expect their result to remain confidential.
4. *Fear of Stigmatization and Discrimination following positive result.* Skinner et al, (2015) stated that great stigma is attached to HIV and AIDS. Communities treat people living with HIV and AIDS unfairly. This create fear for woman who want to access services, they may refuse to get tested because they feel reluctant to tell their spouses and families.
5. *Poor Accessibility or Transportation:* Some women are still making use of traditional birth attendant (TBA) but it is no longer a popular practice, especially in places that are closer to clinic services. In places further from the clinics, TBAS are still widely used (Skinner et al, 2015). They further stated that most people prefer to go to the clinic when in labour, but because of lack of transportation at clinical times, some end up delivery at home with assistance of an experienced community member. The restrictions of

services site for PMTCT could be a significant barrier to pregnant women from other areas accessing services (Skinner et al, 2015).

Statement of the Problem

About 35.3 million people worldwide were estimated to be living with HIV/AIDS at the end of 2012, 3.3 million (9.3%) of which were children. HIV has led to 1.6 million AIDS related deaths of 210,000 occurred in children. In 2012, there were 2.3 million new infections with 260,000 of these infections occurring in children (UNAIDS, 2013). The researchers investigation shows that many HIV/AIDS positive mother go to a far distance where they are not recognized to receive treatment for fear of stigmatization, while many do not receive treatment at all or even go far ANC until delivery as such increasing the change of MTCT of HIV, and to death of one or both parents, single parenthood and orphans. Various factors has been attributed to this high rate of infection and the non-utilization of PMTCT services, such as lack of good services, poor facilities, poor information as regard the use of the services, inadequate funding, stigmatization and many others. This has become important for the researchers to study the factors influencing the utilization of prevention of mother to child transmission of HIV/AIDS services among pregnant women in selected government health facility in Ukwuani L.G.A of Delta State.

Objectives of the Study

The specific objectives of the study are;

1. To assess the extent of utilization of PMTCT of HIV/AIDS services among pregnant women in selected government health facilities Ukwuani L.G.A of Delta state.
2. To discuss the factors influencing the utilization of HIV/AIDS services among pregnant women in selected government health facilities Ukwuani L.G.A of Delta state.

Research Questions

1. What is the extent of utilization of PMTCT of HIV/AIDS services among pregnant women in selected government health facilities in Ukwuani L.G.A of Delta state?
2. What are the factors influencing the utilization of PMTCT of HIV/AIDS services among pregnant women in selected government health facilities in Ukwuani L.G.A of Delta state?

Significance of the study

This study will be beneficial to the following group of people in the stated ways below:

- *To the pregnant women:* this study will help to increase their awareness on PMTCT of HIV/AIDS and improve the utilization of the PMTCT services through health education, seminars antenatal visit and through good nursing-patient relationship.

- *To the health care providers (Nurses/Midwives):* This study will help increase the level of practice of standard safety precaution during nursing care of pregnancy to women in labour and especially delivery. This is achieved through attending seminars and conferences to update their knowledge of prevention and management of HIV and AIDS.
- *To the Society:* It will help to curtail the number of people living with HIV/AIDS and improve the general health of the population, thereby increasing productivity in the country at large. It also helps to dispel myths and misconceptions regarding the spread of HIV/AIDS and therefore reduce stigmatization.
- *To Researchers:* Servers as information source to researchers on related topics.

Research Design

The research design adopted is a descriptive survey; this type of design is aimed at assessing the research variable among selected government health facilities in Ukwuani L.G.A of Delta State. Descriptive survey aimed at collection of data and describing it in a systematic manner, the characteristics features or facts about a given population. It is also concerned with ongoing events.

II. METHODS AND MATERIALS

The research was conducted in Ukwuani L.G.A as a part of Anioma in Delta state. Ukwuani L.G.A is a town situated at Latitude 5°49' 21.08" N, and Longitude 6°11' 42.48" E. It has a projected population of about 160,900 inhabitants (NPCN, NBS web).

The target population of this study includes all pregnant women attending antenatal clinics in selected government health facilities in Ukwuani L.G.A of Delta state as at the time of the study.

A sample of 200 pregnant women was used for this research. A random sampling technique was used in selection of the health facilities, while convenient sampling was used to select participants present at the facilities during the time of the study. 50 women was selected from General Hospital Obiaruku, 50 was selected from Umutu General Hospital, while 25 each was selected from Akoku-Uno Primary Health care centre and Ebedei Primary Health care centre, Amai Primary Health Centre, Umukwata Primary Health Centre. A self structured questionnaire was designed by the researcher in line with the objectives and used as the instrument for data collection in the study. A total of two hundred (200) copies of questionnaire were administered to the respondents and same was retrieved. Data was analyzed and represented using percentages, frequencies, tables and charts. It contains 30 questions and divided into four (4) sections; consisting of closed and open ended questions.

A pilot study reliability method was used in this research in which the questionnaire was administered to about 10 subjects outside the population sample at the central hospital Agbor

who have the same characteristics as the population under study. This questionnaire was analyzed and relevant adjustment made before administration to research population. The reliability index is 0.6.

Research Question 1

What is the extent of utilization of PMTCT of HIV/AIDS among pregnant women in selected government health facilities in Ukwuani L.G.A, Delta State?

Table 1: Frequency Distribution of Respondents Utilization of PMTCT of HIV/AIDS Services.

S/N	Utilization	Frequency	Percentage
		N= 200	N= 100%
		Response	Rate
		Yes	No
17	Do you always take your ART medication?	18 (9.0)	182 (91.0)
18	Do you use PMTCT of HIV/AIDS services?	29 (14.5)	171 (85.5)
19	Have you been ever tested for HIV?	76 (38.0)	124 (62.0)
20	Do you know any facilities that provide PMTCT services?	188 (94.0)	12 (6.0)
21	Are you in any support group in the health facility?	44 (22.0)	156 (78.0)
Grand total		355	645
Average		71	129
Grand percentage		35.5	64.5

From the above table, 18 (9.0%) of the respondents utilized their ART medication while 182 (91.0%) do not utilize it. Also, 171 (85.5%) Of the respondents do not use PMTCT of HIV/AIDS services, while 29 (14.5%) uses PMTCT of HIV/AIDS services, 124 (62.0%) have never been tested for HIV and 76 (38.0%) have been tested. 188 (94.0%) knows the facilities that provides PMTCT services while 12 (6.0%) do not know any facility, 156 (78.0%) are in support groups in the health facility while 44 (22.0%) are not.

Figure 1: Summary of Respondents Utilization of PMTCT of HIV/AIDS services

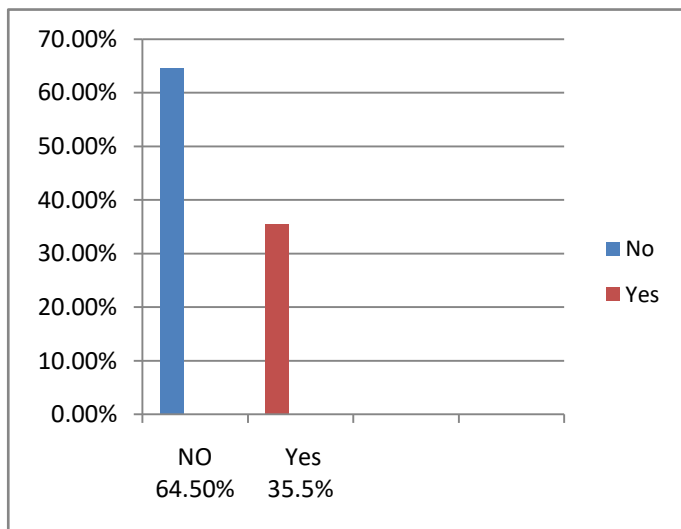


Figure 1 showing utilization of PMTCT of HIV/AIDS

services as illustrated. It shows majority (64.5%) of the respondents do not utilize PMTCT services while 35.5% do; invariably there is poor utilization of PMTCT of HIV/AIDS services.

Research Question 2:

What are the factors influencing the utilization of PMTCT of HIV/AIDS services among pregnant women in selected government health facilities in Ukwuani L.G.A, Delta State?

Table 2: Factors Influencing Utilization of PMTCT of HIV/AIDS services.

S/N	Factors	Frequency	Percentage
		N= 200	N= 100%
		Response	Rate
		Yes	No
22	Do you need permission from your spouse?	123 (61.5)	77 (39.5)
23	Does distance from health facility affect your use of facility?	122 (61.0)	78 (39.0)
24	Is there timely attendance by the health workers?	36 (18.0)	164 (82.0)
25	Does the attitude of the health workers discourage you to continue PMTCT services?	188 (94.0)	12 (6.0)
26	I won't test for HIV because people with HIV are badly treated in the society	173 (86.5)	27 (13.5)
27	Are you satisfied with the quality of PMTCT services you are currently receiving?	84 (42.0)	116 (58.0)
28	Are there financial constraints that prevented you from utilizing PMTCT of HIV/AIDS services?	187 (93.5)	13 (6.5)
29	Does the community provide adequate information about the use of PMTCT of HIV/AIDS services?	11 (5.5)	189 (94.5)
30	Does lack of adequate health centres and hospitals a barrier to the use of PMTCT services?	169 (84.5)	31 (15.5)
Grand total		1093	707
Average		121.4	78.5
Grand percentage		60.7	39.3

Figure 2: Summary of Factors Influencing Respondents Utilization of PMTCT Services

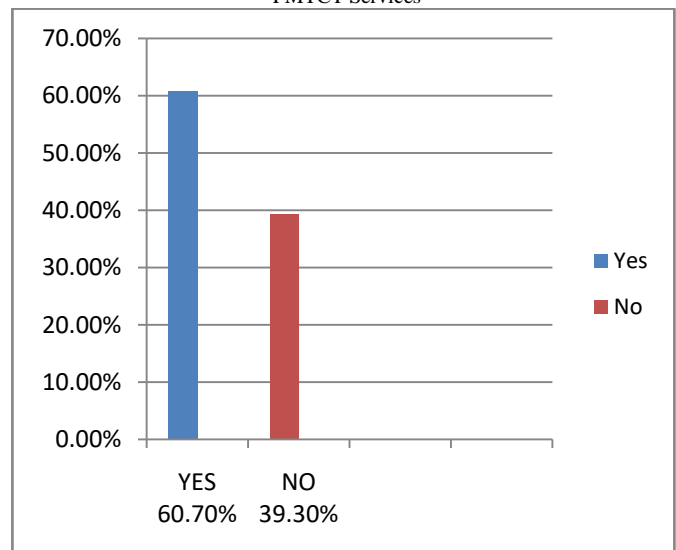


Figure 2 showing the factors influencing the utilization of PMTCT services which revealed that 60.7% of the respondents have factors that impede their level of utilization of PMTCT of HIV/AIDS services, while 39.3% have no impediment in utilizing PMTCT of HIV/AIDS services.

III. DISCUSSION OF FINDINGS

To assess the extent of utilization of PMTCT of HIV/AIDS services among pregnant women in selected government health facilities Ukwuani L.G.A, Delta State.

The result from this study revealed that the average responses and grand percentage of the responses on utilization of PMTCT which shows that 129 (64.5%) do not utilize the PMTCT services. Therefore, there are poor responses to the utilization of PMTCT services in Agbor, Delta State. This is in contrast to the WHO, (2010) findings targeting pregnant women attending antenatal clinic provides a unique opportunity for implementing and utilizing PMTCT programmes against HIV infections of new born babies, but mothers are afraid of been stigmatized by community members if receiving PMTCT services identifies them as HIV infected (Muniu and Karama, 2014).

To discuss the factors influencing the utilization of HIV/AIDS services among pregnant women in selected government health facilities in Ukwuani L.G.A of Delta State.

The result from this findings illustrated with an average and grand percentage 121.4 (60.7%) had factors that impeded their extent of utilization of PMTCT of HIV/AIDS services. This agree with Deressa et al, (2014) that lack of awareness and knowledge about the availability any benefit of ANC/PMTCT services disclosure HIV status to partner and psychological unpreparedness due to fear of being positive for HIV are the main barriers preventing mothers from HIV testing.

Implication to Nursing

The findings of the study has revealed the need for nurses especially those directly involved with caring for women before, during and about PMTCT of HIV/AIDS as well as to educate women on the availability of services. Nurses as well as other care providers need to improve on their attitude towards pregnant women as this was the leading barrier to utilization of PMTCT of HIV/AIDS services.

IV. SUMMARY

From the findings of the study, the result shows that, the extent of utilization is very poor. Factors contributing to this poor utilization include; Spousal permission to do HIV counseling and testing, financial constraints, lack of adequate health centres and hospitals. It is therefore, important that nurses should focus on screening pregnant women during antenatal, adequate health education to improve their knowledge and quality of nursing care.

V. CONCLUSION

The spread of HIV/AIDS is increasing yearly and the incident of MTCT of HIV/AIDS is also on the rise, thus there is urgent need to address this issue. Active measures to promote health behavior among child bearing women as well as prevent MTCT of HIV/AIDS have to be put in place to address the poor utilization of PMTCT of HIV/AIDS services. Factors found to be influencing this utilization includes; attitudes of health workers (94.0%), discrimination against people with HIV/AIDS (93.5%), accessibility (distance from health facility) 61.0% and financial constraints (84.5%).

Limitation of the Study

- i. Protocol from the authority for obtaining consent in order to reach out to the target population was a challenge to the researcher.
- ii. *Time:* Time limit for this study was very short.
- iii. *Finance:* This was a problem as cost of transportation to the health facilities and posting, posed a constraint, but was surmounted by the researcher.

VI. RECOMMENDATION

- i. PMTCT of HIV/AIDS should be a care part of antenatal education.
- ii. There should be improvement in the attitudes of health care workers towards people with HIV/AIDS and patients generally.
- iii. Seminars and workshops should be conducted at all level of health care for care providers and the general population on HIV/AIDS services.
- iv. Government should make provisions needed for the prevention/treatment of HIV/AIDS in health care such as health facilities and equipment and an accessible road.

Suggestions for Further Studies

- i. Further studies are needed to access perception of community and services providers on PMTCT services utilization and effective coverage.
- ii. Attitude of nurses towards care of pregnant women living with HIV/AIDS.

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