

Impact of Prevention of Mother to Child Transmission of HIV/AIDS in General Hospital Bajoga Gombe State

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Abstract

Background: There has been increasing public outcry following the frequency of children infected with HIV/AIDS, despite measures on the ground to prevent the occurrences. It is also not uncommon to find infants infected with the infection. The study focusses on the impact of prevention of mother to child transmission of HIV/AIDS in General Hospital, Bajoga, Gombe State, Nigeria.

Method: A cross-sectional survey was conducted among fifty women attending the study area, who gave written consent. Information on socio-demographic characteristics, knowledge, perception and opinion on prevention of mother to child transmission of HIV/AIDS was collected, using a semi-structured, interviewer-administered questionnaire. Data were analysed using descriptive statistics and chi-square test. Level of significance was set at $p \leq 0.05$.

Results: The average age group was 20-25 years (60%). Majority 35 (70%) of participants had heard about prevention of transmission of HIV/AIDS from mother to child. 1 (2%) have not heard. Greater number 45 (90%) of respondent had HIV negative children, with 5 (10%) had positive children. 45 (90%) respondent believed that transmission from mother to child results from unskilled birth attendants during delivery. Majority 39 (78%) thinks that protected sexual intercourse can prevent transmission. Greater number 50 (100%) are of the opinion that counselling will help greatly in preventing the mother to child transmission of HIV/AIDS. There was no significant association between socio-demographic characteristics, knowledge, perception and opinion of the participants.

Conclusion: There is need for continuing education and counselling of the public on prevention of mother to child transmission of HIV/AIDS.

Keywords: *Impact, prevention, transmission, mother, child, HIV/AIDS.*

Background of the study

There is the global outcry on the spread of HIV/AIDS cutting across all age groups. This poses a lot of medical challenges on the ability to overcome the spread especially the mother to child transmission. According to WHO about 150,000 cases of new children HIV infections are seen globally. The transfer of HIV to an unborn child during pregnancy, delivery or breastfeeding after birth is known as mother to child transmission according to WHO.

In Africa, approximately 60% of HIV infected people are women, with the majority in the productive age group and about 1.4 million HIV women become pregnant. This could be the major cause of HIV among children, UNAIDS (2010).

In respect of the WHO developed the strategic plan for global elimination of mother to child transmission of HIV for 2016-2021 and zero new HIV infection among infants by 2020, the incidence can be seen of the new cases in Nigeria like other African countries. In Nigeria, no reliable data is found on mother to child transmission. This may be attributed to many factors like poor assessment of health facility, traditional believes, herbal practices, topography, poor health institutions record keeping and or inadequate health professionals. In general hospital Bajoga, it is reported that about 3080 pregnant women came to seek antenatal care 100 of them were charginos of STIs and 12 were diagnosed with HIV/AIDS from January 2009 to January 2010. From February to December 2010 about 301 pregnant women came to the hospital to seek antenatal care and 71 were charginos of STIs while 12 were charginos of HIV/AIDS. This makes the researcher conclude that the alarming rate of HIV/AIDS in Bajoga women is on increase and the researcher pick up the interest to write on the study to determine

the impact of mother to child transmission of HIV/AIDS among the pregnant women of Bajoga community in Funakaye local government in Gombe state.

Base on WHO strategy, mother to child transmission of HIV can be eliminated, thus eliminating HIV among infants. This is clearly demonstrated in Cuba and Thailand for their ability to achieve infant and children free HIV/AIDS in 2015 and 2016 respectively, WHO (2016). In 2016, Belarus and Armenia achieved the same feat. As PMTCT is not 100% effective, elimination is defined as a reduction of transmission to such low levels (below 5%) that it no longer constitutes a public health problem.

In 2015, six priority countries (Botswana, Mozambique, Namibia, South Africa, Swaziland, and Uganda) African countries met the Global Plan target of reducing mother-to-child transmission by 90%.

Study site

The area of study is General Hospital Bajoga in Funakaye local government area Gombe state.

Study Population.

The study population is all women attending antenatal care in General Hospital, Bajoga who gave writing consent during recruitment within the period of study.

Study design

Descriptive, cross-sectional.

Study period

1 year (July 2017 to July 2018)

Sample size determination

All women attending antennal clinic during the period of study were qualified.

Sampling method

Convenience sampling: a study was carried out in the antenatal clinic where permission was granted by the nursing department; and women attending the clinic who voluntarily gave informed consent to participate in the study period.

Inclusion criteria

All women attending antenatal clinic in General Hospital, Bajoga, who gave written and informed consent.

Exclusion criteria

All women who refused consent or were not present during the period of recruitment.

Instrument

A pre-tested self-administered questionnaire was used to obtain information from the participants on socio-demographic characteristics, awareness, knowledge, and perception about mother to child transmission of HIV/AIDS and effective implementation in the study center. The questionnaire was designed in the English language. Pre-test of the questionnaires was carried out among women attending the antenatal clinic in Primary Health Centre, Bajoga.

Statement of confidentiality

All information obtained from this study has been kept confidential and will not be linked to the participants in any way. They were not assigned any identification numbers neither nor identified by their names.

Data analysis

Data were entered and analyzed using SPSS (Statistical Package for Social Science) version 22.0. Descriptive statistics have been used to summarize the data while chi-square was used to test the association between categorical variables, all analysis was done at a 5% level of significance ($p < 0.05$).

Limitation

Shortness of time, busy schedule and nature of the self-administered tool did not allow for the targeted population to be reached. I propose that the finding of this study can be generalized base on the scanty nature of study available and is to give useful information for the wider study on the impact of prevention of mother to child transmission of HIV/AIDS in all health institution within the Northern part of Nigeria.

Ethical consideration

Ethical approval was obtained from the Gombe State Ministry of Health, General ethical committee. Permission letter was also obtained from the Medical Director, General Hospital, Bajoga and Heads of the Nursing services and antenatal unit.

The respondents were assured of their confidentiality and written informed consent was obtained from each participant before the administration of the study instrument.

Data analysis

This chapter focuses on data presentation and analysis based on the responses of questionnaire items distributed to the respondent. The presentation and analysis are as follows:

A. Demography of respondents (Age group, educational level, and occupations tables 1, 2, and 3 respectively) below

Table 1. Respondents age group

Age	Respondent	Percentage
15-20	10	20%
20-25	30	60%
35-45	10	20%
Total	50	100%

The table above shows the majority (60%) respondent are within the age of 20-25, while 20% are aged 15-20 and the rest 20% (35-40).

Table 2. Respondent educational level

Educational level	Respondent	Percentage
Primary	25	50%
Secondary	15	30%
Tertiary	6	12%
None	4	8%
Total	50	100%

The table shows majority 50% of respondent had obtained primary school certificate, 30% had secondary certificate, 12% at tertiary level while 8% have not gone to school.

Table 3. Respondent occupation

Occupation	Respondent	Percentage
Student	5	10%
Civil servant	20	40%
Business	10	20%
None	15	30%
Total	50	100%

The table above shows the highest percentage is 40% representing civil servant. 30% represent none, 20% represent business while 10% represent student.

B. Knowledge of respondents (tables 4, 5, 6,7 and 8)

Table 4. Have you had of HIV/AIDS?

Option	Respondents	Percentage
None at all	1	2%
Fairly	4	8%
Small	10	20%
Details	35	70%
Total	50	100%

The above table shows Majority 98% had some knowledge of HIV/AIDS, while 2% had no knowledge.

Table 5. If your answer to question 4 is yes, then what was your sources of information?

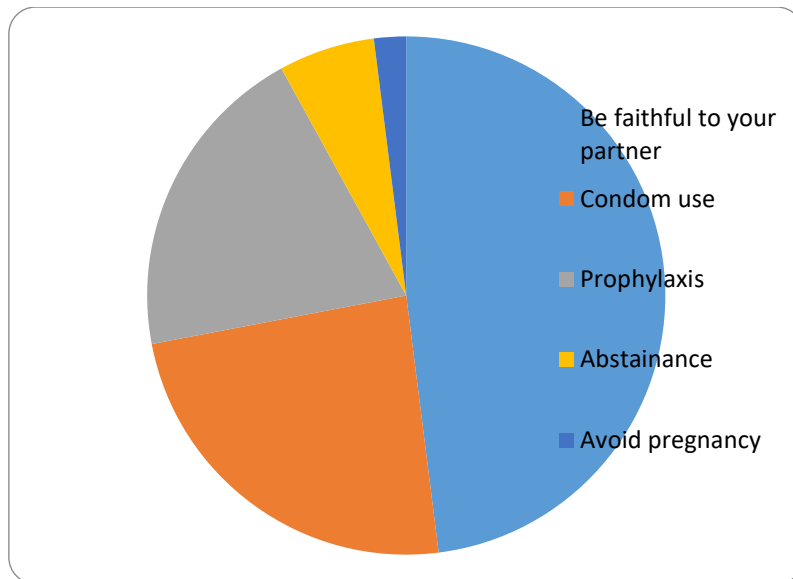
Occupation	Respondents	Percentage
Mass media	9	18%
Friends	18	36%
Health workers	17	34%
Family members	5	10%
None	1	2%
TOTAL	50	100%

The above table indicated 36% of the respondent heard from friends, 34% from health workers, 18% from mass media, and 100% through family members while 20% is none.

Table 6. How do you think HIV/AIDS can be prevented?

S/no	Respondent	Response
1.	Be faithful to your partner	24
2.	Condom use	12
3.	Prophylaxis	10
4.	Abstinence	3
5.	Avoid pregnancy	1
		50

- Be faithful to your partner = $24/50 \times 360^\circ = 172.8^\circ$
- Condom use = $12/50 \times 360^\circ = 86.4^\circ$
- Prophylaxis = $10/50 \times 360^\circ = 72^\circ$
- Abstinence = $3/50 \times 360^\circ = 21.6^\circ$
- Avoid pregnancy = $1/50 \times 360^\circ = 7.2^\circ$

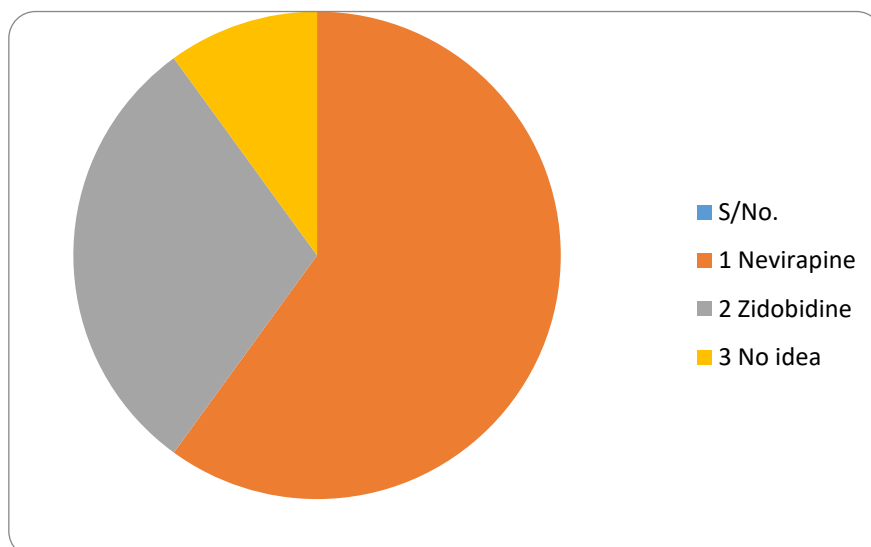


- Be faithful to your partner = $172.8^{\circ}/360^{\circ} * 100\% = 48\%$
- Condom use = $86.4^{\circ}/360^{\circ} * 100\% = 24\%$
- Prophylaxis = $72^{\circ}/360^{\circ} * 100\% = 20\%$
- Abstinence = $21.6^{\circ}/360^{\circ} * 100\% = 6\%$
- Avoid pregnancy = $7.2^{\circ}/360^{\circ} * 100\% = 2\%$

The above pie chart shows 100% respondents gave varying means of prevention of the transmission that are correct. Though, 10% did not know any drug that can be used to prevent mother to child transmission.

Table 7. Knowledge of drugs used in preventing the transmission of HIV

S/No.	Respondent	Response
1	Nevirapine	30
2	Zidobidine	15
3	No idea	5



- Nevirapine = $216^{\circ}/360^{\circ} * 100\% = 60\%$
- Zidobine = $108^{\circ}/360^{\circ} * 100\%$
- No idea = $36^{\circ}/360^{\circ} * 100\% = 10\%$

The above chart shows 90% with the knowledge of drugs used to prevent transmission while 10% represent no idea.

Table 8. Can you state whether you child has HIV/AIDS? (Negative, Positive or I don't know)

Status	Respondent	Percentage
Negative	45	90%
Positive	5	10%
I don't know	None	0%
Total	50	100%

The above table shows that 100% respondent had adequate awareness level of their children HIV/AIDS status.

C. Respondent perception on transmission and prevention of children HIV/AIDS infection (tables 9 and 10)

Table 9. By what means do you think children can have HIV/AIDS?

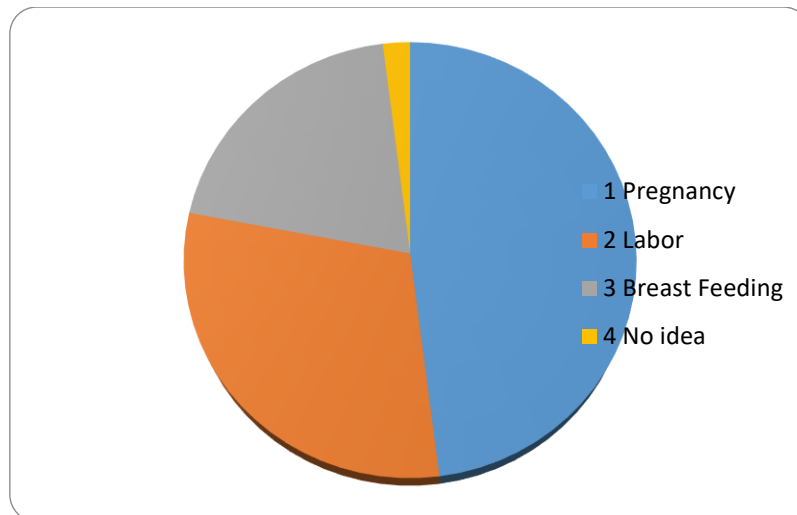
Option	Respondent	Percentage
Contaminated blood	20	40%
Hugging	0	0%
pregnancy	10	20%
Breastfeeding	15	30%
no idea	5	10%
Total	50	100%

The above table shows that 90% perceived contaminated blood, pregnancy and breastfeeding as ways of transmitting HIV from mother to child, while 10% represent had no perception.

Table 10. In your opinion how can children HIV/AIDS infection be prevented?

S/no.	Respondent	Response
1.	Pregnancy	24
2.	Labor	15
3.	Breast Feeding	10
4.	No idea	1
		Total = 50

- Pregnancy = $24/50 * 360^\circ = 172.8^\circ$
- Labor = $15/50 * 360^\circ = 108^\circ$
- Breast Feeding = $10/50 * 360^\circ = 72^\circ$
- No idea = $1/50 * 360^\circ = 7.2^\circ$



- Pregnancy = $172.8^{\circ}/360^{\circ} * 100\% = 48\%$
- Labor = $108^{\circ}/360^{\circ} * 100\% = 30\%$
- Breast Feeding = $72^{\circ}/360^{\circ} * 100\% = 20\%$
- No idea = $7.2^{\circ}/360^{\circ} * 100\% = 2\%$

The pie chart shows the 90% respondent had knowledge on means of mother to child transmission of HIV, while 2% do not have knowledge.

Discussion of major findings

Impact of prevention of mother to child transmission of HIV/AIDS in general hospital Bajoga Gombe state.

The study indicated that all respondents are in their active reproductive period. They ranged from age 20 to 40. Signifying that they are still sexually active though question on sexual partner and nature of family not asked, but the tendency of multiple sex partners in some and polygamy may not be totally ruled out among them, showing ability to spread if precautionary measures are not adhered to leading to increasing number of possible mother to child transmission, being that majority 50% attended primary education with little understanding on HIV/AIDS.

Majority 98% had some knowledge of HIV/AIDS when asked if they have heard about HIV/AIDS but 2% have not heard. Indicating there is the need for more enlightenment of the public.

36% respondent had their source of information from friends, 34% of Health workers, 10% from family members, 18% from the media while 2% did not. The study indicated all respondent had knowledge of their children HIV/AIDS status, have all were able to mention it based on information from attending health worker interpretation of laboratory results.

When asked on what do they think is responsible for mother to child transmission of HIV/AIDS varying opinion were advanced with 90% respondent said contaminated blood of the infected mother, but 2% had no idea with 8% ascribing it to pregnancy and breastfeeding. Showing that more is educational programs should be rolled out if the WHO strategy plan to eliminate mother to child transmission is to be achieved. When asked on the ways of transmission of HIV/AIDS from mother to child, the large number of the respondent (98%) were able to mention some of the ways while 2% did not. This signified lack of knowledge by some people may affect the strategy plan result of achieving a free mother to child transmission.

100% respondents gave varying means of prevention of the transmission that is correct. Though, 10% did not know any drug that can be used to prevent mother to child transmission.

Summary

This research was conducted to determine the impact of mother to child transmission of HIV/AIDS in General hospital Bajoga, Funakaye local government, Gombe State, Nigeria.

Findings from the study indicated that some respondent 2% are yet aware of HIV/AIDS, while 2% do not have knowledge of mother to child transmission. All respondent mention varying means of HIV/AIDS prevention indicating knowledge of prevent.

Recommendation

The researcher called on Government at all levels, NGOs, the General public and Healthcare professionals to collaborate in ensuring more programs aimed at eliminating mother to child transmission of HIV/AIDS are rolled out and support.

The government should employ more personnel to ensure enlightenment in every community for adequate education of the public.

Conclusion

The researcher calls for more research in the field of prevention of mother to child transmission of HIV/AIDS.

The researcher is of the opinion that this study is generalized in Gombe and all the North Eastern states of Nigeria as there is the inadequate publication on the study.

There is the call for more study on mother to child transmission of HIV/AIDS as the only way to cope the menace.

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