

## **Awareness of HIV/AIDS and Acceptance of Mandatory Premarital testing among youths in Lafia Local Government area, Nasarawa State**

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**Abstract:** The article is an attempt to examine awareness of HIV/AIDS and acceptance of mandatory premarital testing among youths in Lafia Local Government area of Nasarawa State. The study used health belief model as its theoretical frame of reference and also adopted Krejcie and Morgan's (1970) table for determining sample size to select 382 respondents for the study. Multistage sampling technique were use in the selection process while survey method was the design for the study and questionnaire was the main instrument used for data collection. Descriptive and inferential statistics were used to analyze the data showing tables of percentage and frequency. The study found among other things that there is high level of awareness of HIV/AIDS vis-a-vis acceptance of Mandatory premarital testing of HIV/AIDS before marriage in Lafia LGA. The study recommends making efforts to sustain the acceptance of MPHT policy by the citizens and government should continue to provide the facilities needed for the programme to thrive.

**Keywords:** Awareness, Mandatory, pre-marital test, HIV/AIDS.

### **Background to the Study**

Human Immune Virus/Acquired Immune Deficiency Syndrome has existed long before the first diagnoses in the United States in 1981 (Sharp & Harn, 2011) and it is now a major health problem globally. The major mode of transmission remains sexual intercourse, which is also a major risk factor for many other diseases. Other modes of transmission include all practices that involve the exchange of body fluids. Globally, about 38.4 million people were living with HIV and 1.5 million people became newly infected with HIV as at the end of 2021 (United Nations Programme on HIV and AIDS, 2022). Meanwhile the sub-Saharan Africa Region which continues to be most affected is the hardest hit by AIDS, with nearly 1 in every 25 adults (3.4%) living with HIV accounting for more than two-thirds of the people living with HIV worldwide in 2018, which also accounted for 51% of new HIV infections in sub-Saharan Africa (World Health Organisation, 2021). While women and girls accounted for 63% of all new HIV infections with six in every seven new HIV infections among adolescents aged 15–19 years are girls. Furthermore, girls and young women aged 15–24 years are twice more likely to be living with HIV than young men (UNAIDS, 2022). According to the World Health Organisation (WHO, 2021) report estimated that there are 25.7 million people living with HIV/AIDS in Africa, with a particularly high prevalence in Southern Africa.

The 2019 Nigeria National HIV/AIDS Indicator and Impact Survey found that 1.9 million people are living with HIV/AIDS in Nigeria as at 2018 and that Nigeria ranked third among countries with highest burden of HIV/AIDS infection out of the estimated 38.4 million HIV infections worldwide. Statistical findings also revealed the same 1.9 million people living with HIV in Nigeria in 2021: same prevalence rate with the 2019 NAIIS, report (Statista, 2023).

Despite increasing efforts made by the government to control the epidemic, statistical findings also revealed that, of the 1.9 million Nigerians living with HIV/AIDS as of 2021 the number of deaths due to AIDS amounted to 51 thousand, including both adults and children. The highest number of deaths was recorded among female adults, with 17 thousand deaths (Statista, 2022). In another report, data from the Nigeria AIDS Control Agency (NACA) put the prevalence at 4.2% for young people aged 15-24. Recent estimates put the number of adolescents aged 0-19 years living with AIDS to be 160,000. National data also suggests that 40 percent of all reported new HIV infections in Nigeria occur in youth ages 15 to 24 years which is the highest when compared to other age groups (National Agency for the Control of AIDS (NACA) 2016). In Nigeria, Nasarawa state has a high burden of HIV/AIDS infection. It is located between the country's capital and Benue state which has the highest burden of HIV/AIDS in the country. The state has consistently recorded Ante-Natal Care HIV sero-prevalence rate greater than the zonal (north central) and national averages.

The HIV prevalence rate in Nasarawa state as at 2018 was 2.0% the 6<sup>th</sup> highest in the country as revealed by the 2018 Nigeria HIV/AIDS Indicator and Impact Survey Technical Report. In Lafia the state capital of Nasarawa state, the prevalence is as high as 7.0% and ranked 3<sup>rd</sup> in the state HIV/AIDS prevalence rate (NAIIS, 2018). The prevalence of HIV/AIDS and the acceptance of mandatory premarital testing among youths in Lafia, Nasarawa State, Nigeria, present significant public health challenges that require comprehensive understanding and targeted interventions. According to recent data from the National Agency for the Control of AIDS (NACA, 2022), Nasarawa State, where Lafia is located, has HIV prevalence rate of 1.8% among adults aged 15-49, which is slightly higher than the national average of 1.4%. This highlights the vulnerability of this demographic in Lafia and similar urban centers. It is on this basis that this study was conducted to examine the nexus between awareness and acceptance of mandatory premarital HIV testing and among youths in Lafia L.G.A.

## **Literature Review and Theoretical Framework: Conceptual Clarification**

### **HIV/AIDS**

The human immunodeficiency virus (HIV) is a lent virus that causes HIV infection and AIDS. According to the American Psychological Association (2022), AIDS is a condition in humans in which progressive failure of the immune system allows life-threatening infections and cancers to thrive. Infection with HIV occurs by the transfer of blood, semen, vaginal fluid, breast milk. Within these bodily fluids, HIV is present as both free virus particles and virus within infected immune cells.

According to Rahman and Rahman (2007), the virus uses these cells to create more copies of the virus. In doing so, HIV destroys the cells and reduces the body's ability to combat other infections and diseases. This increases the risk and severity of opportunistic infections and some types of cancer. HIV that is left untreated typically develops in three stages: stage 1 is the stage of acute infection. This is when people have large amounts of HIV in the blood and the body begins producing antibodies to try and kill the virus. People typically develop flu-like symptoms 2-4 weeks after contracting HIV, which may last a few weeks. This stage is when HIV is the most transmissible to other people. Stage 2 moves a step further to chronic infection: HIV is still active and reproducing in the body but at a slower rate. Some people may not have symptoms, but the virus is still transmissible. This stage may last 10 years or more without treatment. If treatment begins, the virus may never progress to stage 3. This is the most advanced stage of

HIV, also known as AIDS. It happens when the body can no longer fight off the infection. The survival rate is around 3 years without treatment (Noronha, George & Sreedevi, 2021).

Furthermore, McNeil (2013) stated that stage 3 HIV, also called AIDS, is the most advanced stage of HIV. It typically happens if a person does not receive treatment. Doctors diagnose it when a person's CD4 blood count contains fewer than 200 cells per cubic millimeter, or if they have opportunistic infections. The chances of HIV progressing to stage 3 vary for each person and depend on many factors, such as the person's age, the body's ability to defend against HIV, accessibility of quality healthcare, the presence of other infections, a person's genetic resistance to certain strains of HIV and the strain of HIV, as some are drug resistant. HIV is transmitted when bodily fluids containing the virus are shared between people, including, blood, semen, pre-seminal fluid, vaginal fluids, rectal fluids, and breast milk. The virus cannot be transmitted through saliva.

## Youth

The United Nations define youth as those persons between the ages of 15 and 24 without prejudice to other definitions by member States (UNESCO, 2014). The African Youth Charter (2006) refers to "youth" as every person between the ages of 15 and 35 years. The Nigerian National Youth Policy (2001) defined youth as comprising all young person between the ages 18 and 35 years who are citizens of Federal Republic of Nigeria. For the purpose of this study however, the youth would refer to those persons between the ages of 15-39 years (this involves both lowest and highest ranges as provided in the above definitions). This includes male and female, Muslim or Christian, living in Lafia at the time of conducting the study.

## Mandatory Premarital HIV Testing

The MPHT is a policy which requires intending couples to undergo HIV testing as a prerequisite for entering into the marriage contract. Over the past decade, a growing number of religious communities such as the Anglican Church in Nigeria (Arulogun & Adefioye, 2010), national governments such as Saudi Arabia, Bahrain, etc. (Alswaidi & O'Brien, 2009) have adopted the MPHT as a policy, similarly, some state governments in India, China, Ethiopia, and Democratic Republic of Congo have equally introduced or passed similar laws or regulations, (Chattu, 2014). The Open Society Institute (2013) listed twenty-six (26) countries across the globe in which premarital tests are documented as a policy response to HIV either by governments or organizations. However, human rights activists contended that this trend infringes upon the human rights of people living with HIV as it equally contradicts the ethics of confidentiality and informed consent. A paper titled "HIV/AIDS policy review in Nigeria" prepared by the Centre for the Right to Health for the Policy Project (2003) stated that testing for HIV without specific proper informed consent is unconstitutional as it violates the right to privacy and the right to marry and found a family as enshrined therein. Thus, the major contention surrounding the MPHT policy has always centred on issues of fundamental human rights and ethics, as it is also feared that it may increase stigma which may further drive people away from HIV treatment.

Another argument against MPHT is that it is not cost effective in controlling the spread of HIV. Previous studies have shown that public education, counseling, and voluntary testing reduced the spread of HIV infection more effectively than premarital screening, (Turnock & Kelly, 1989; Fonner et. al., 2012). In addition, MPHT may have negative public health consequence by giving couples false sense of security if they both tested negative. This may even drag them into high risk behaviour that will make them more vulnerable. Similarly, where people infected by HIV are not bounded, a bisexual partner who contracts HIV through unprotected homosexual intercourse may pass it on to his partner (s) through unprotected sex. The spouse(s) may in turn pass it to another person or to her baby by vertical transmission through the foetus or breast-feeding. The issue of the 'window period' also poses another challenge to the viability of the MPHT. In most developing countries, rapid test kits are used to detect HIV infection, which

despite their sensitivity, would not be able to detect the infection during the ‘window period’ (Chattu, 2014).

### **The Health Belief Model**

The health belief model was originated by Hochbaum, Rosenstock and Kegeles (Burns, 1992). It was later developed and expanded by Hochbaum (1958), Rosenstock (1960; 1966; 1974), Becker (1974), and Rosenstock et al. (1988) and provides a framework for socio-psychological analysis. The health belief model suggests that decision making about health behaviours is influenced by six basic premises (Amzat & Razum, 2014), and these are perceived susceptibility to the disease, perceived severity of the disease, perceived benefits of the prevention behaviour, perceived barriers to that behaviour, cues to action, and self-efficacy as well as modifying factors.

Another assumption of the health belief model is that individuals live in a space which comprises regions of both positive and negative valences. Illness may be considered as a negative valence hence people are driven away from that region in as much as they will not be exposed to regions with greater negative valence (Cockerham, 2011). According to the model, people’s behaviours are seen as seeking regions that offer the most attractive values and therefore seek preventive measures based on their perceived susceptibility to, and perceived severity of disease which is influenced by some modifying factors. These modifying factors include demographic variables, socio-psychological variables (Cockerham, 2011; Hyder & Morrow, 2006). However, recognition of personal susceptibility and the necessity of acting alone are sometimes not sufficient factors to motivate action, therefore action cues are required to elicit the health behaviour. The Health Belief Model explains that individuals conduct an internal assessment of the net benefits of changing their behaviour and decide whether to act, that is people are likely to take an action if the perceived benefits outweigh the constraint.

Within the context of this research therefore, HIV could be termed a negative valence and couples are driven away from it by conducting premarital HIV testing in as much as undergoing the test will not subject them to a more negative valence; that of stigmatization and social exclusion.

### **Methods and Data**

The study adopted descriptive survey design. This was because it probed the opinions of the participants regarding their level of awareness of HIV/AIDS and acceptance of MPHT among youths in Lafia LGA of Nasarawa state, Nigeria. The choice of the survey design is because of its ability to cover a large population within a given period of time.

Although the population of the study was “718,328” for the thirteen wards in Lafia LGA, the target population of seven randomly selected wards for the study was “470,398”. Hence, a sample of 382 respondents was selected to represent the target population in accordance with Krejcie and Morgan’s (1970) table for determining the sample size for research purpose.

In the process of determining the sample size, the multi-stage sampling technique was adopted. First and foremost, the cluster sampling method was employed to categorize the LGA into adults, youths etc. Next, the stratified method was used to stratify the LGAs into wards. The simple random sampling technique was used to select seven wards out of the thirteen wards. Following the foregoing methods, proportionate sampling technique was employed to determine the representative sample from each selected ward to make sure that no ward was unduly represented at the detriment of another. Lastly, for the selection of respondents into the sample size for the study, the simple random sampling method was used via the fishbowl technique of replacement type.

In justifying the techniques used for sampling, the LGA was first viewed as a population with clusters of the adults, youths, children, men and also women. However, the cluster of youths was the focus of the study. Hence, in order to make the selection easy, the cluster was partitioned into strata of thirteen wards. The proportionate sampling allows for the selection of respondents in

accordance with the population of the respective wards. The simple random sampling method ensures that all the study variables were accorded equal chance of being selected and also forestalled biased selection. The purpose of fishbowl selection technique was to make sure that the right subjects are selected into the study sample.

Thus: Formula for proportionate sampling method:

Total population of the youth per Ward x Sample Size

Total population of the youth in L.G.A

Note: Sample size was selected using the Kreycie and Morgan's (1970) table.

The table below presents the sample for the study as comprehensible as possible. The sample was drawn from youths between the ages of 15-35 years.

**Table 1: Sample Selection**

S/N	Wards in Lafia L.G.A.	Population of youth	Proportionate sample	Number of respondents
1.	Adogi	64,126	$64,126 \times 382 = 52.075$ 470,398	52
2.	Agyaragu Tofa	40,160	$40,160 \times 382 = 32.613$ 470,398	33
3.	Akurba	65,703	$65,703 \times 382 = 53.355$ 470,398	53
4.	Arikya/Mankwar	68,556	$68,556 \times 382 = 55.672$ 470,398	56
5.	Ashige/Ugah	64,321	$64,321 \times 382 = 52.233$ 470,398	52
6.	Assakio	62,444	$62,444 \times 382 = 50.709$ 470,398	51
7.	Chiroma	105,088	$105,088 \times 382 = 85.339$ 470,398	85
<b>TOTAL</b>		<b>470,398</b>	<b>381.996</b>	<b>382</b>

The youths were located at their respective wards which included schools, communities, motor parks, marketplaces and in the streets. The youths were also selected through personal contacts, mutual interactions, and fishbowl sampling technique. Finally, the youths were also identified based on their age consideration (15-35) years, critical observation and evaluation was done by the researcher to ensure that wrong respondents were not drawn into the sample by mistake.

**Table 2: Respondents' Socio-demographic Characteristics**

Characteristics	Frequency	Percent (%)	Mean	St.D.
<b>Age</b>			<b>24.50</b>	<b>14.00</b>
15-19	168	44		
20-24	61	16		
25-29	67	17.5		
30-35	86	22.5		
<b>Total</b>	<b>382</b>	<b>100</b>		
<b>Sex</b>				
Male	236	61.8		
Female	146	38.2		
<b>Total</b>	<b>382</b>	<b>100</b>		

<b>Marital status</b>			
Single	140	36.6	
Married	97	25.4	
Separated	55	14.4	
Divorced	41	10.7	
Widowed	49	12.8	
<b>Total</b>	<b>382</b>	<b>100</b>	
<b>Religion</b>			
Christianity	96	25.1	
Islam	265	69.4	
TRA	21	5.5	
<b>Total</b>	<b>382</b>	<b>100</b>	
<b>Occupation</b>			
Student	93	24.3	
Self-employed	125	32.7	
Civil servant	79	20.7	
Unemployed	85	22.3	
<b>Total</b>	<b>382</b>	<b>100</b>	
<b>Level of Education</b>			
No Formal Education	17	4.5	
Primary	110	28.8	
Secondary	143	37.4	
Tertiary	74	19.4	
Others	38	9.9	
<b>Total</b>	<b>382</b>	<b>100</b>	

**Source: Author's Fieldwork, 2023**

Table 2 showcases result of the socio-demographic characteristics of respondents. It shows that majority (61.8%) of the youths were males. This implies that significant percent of the sample respondents were male while 38.2% were females. This is an indicator that both sexes were represented in the study, hence no gender bias. The result revealed that 44% of the respondents were between the ages of 15-19 years; with the least being those within the age range of 20-24 (16%). The mean age of the respondents was 24.50 years with a standard deviation of 14.00 years. The finding herein showed that the objective of the study to survey the subject matter within these age range suggests their contribution would be rich with reliable data that will enhance validity of the findings. This implies that the respondents of this study are youths who are still in their prime and will provide viable information on the subject matter under study. The table further showed that 24.3% of the youths are students.

Also, the result revealed that 37.4% of the respondents had secondary education while 4.5% have no formal education. This discovery is a testament to the assertion that the conclusion arrived at will be that of people who have different educational backgrounds, occupation, and experiences. From the revelations above, it can be deduced that the socio-demographic features of people can influence awareness of HIV/AIDS and acceptance of mandatory premarital testing because the table revealed that the respondents belong to different social class, religion, economic level and educational background, all of which may affect their ideology in relation to their standard of living and how they access healthcare in the society.

**Table 3: Factors Influencing Acceptability of MPHT in Lafia Local Government Area**

S/N	Statement	Response					Mean	St.D
		SA	A	N	D	SD		
1	Inadequate knowledge of HIV/AIDS by the youths in Lafia affects their acceptance of MPHT.	191 (50%)	154 (40.3%)	-	21 (5.5%)	16 (4.2)	4.63	.812
2	The religious belief of the youths in Lafia Local Government Area affects their acceptance of MPHT.	101 (26.4%)	272 (71.2%)	-	11 (2.9%)	7 (1.8%)	4.34	1.017
3	The cultural background of the Youths in Lafia Local Government Area influences their acceptance of MPHT.	279 (73.1%)	97 (25.4%)	6 (1.5%)	-	-	4.12	1.395
4	The cynical attitudes of the youths in Lafia Local Government Area affect their acceptance of MPHT.	25 (6.5%)	54 (14.1%)	-	83 (21.7%)	220 (57.6%)	3.97	1.410
5	The educational background of the youths in Lafia Local Government Area affects their acceptance of MPHT.	308 (80.6%)	15 (3.9%)	1 (0.3%)	53 (13.9%)	5 (1.3%)	3.92	1.489
6	Lack of adequate sensitization campaign by the LGA authorities affects the acceptance of MPHT among the youths in Lafia Local Government Area.	377 (98.7%)	5 (1.3%)	-	-	-	4.72	.637

\* SA= Strongly Agree; A= Agree; U= Undecided; D= Disagree; SD= Strongly Disagree

Source: Author's Fieldwork, 2023

From the table above, 90.3% respondents agree that inadequate knowledge of HIV/AIDS by the youths in Lafia affects their acceptance of MPHT while 9.7% respondents disagreed. This is followed by 97.6% respondents who concur that the religious belief of the youths in Lafia Local Government Area affects their acceptance of MPHT as against 2.4% respondents who do not. Also, with a mean score of 4.12 and a deviation of 1.395, the idea that the cultural background of the Youths in Lafia Local Government Area influences their acceptance of MPHT was agreed upon by majority of the respondents (74.6%) as against 25.4% who disagreed. On whether the educational background of the youths and lack of sensitization of the youths in Lafia Local Government Area affects their acceptance of MPHT, 84.5% respondents agreed to the former while 100% agreed to the latter, thus indicating that they are factors that may influence the acceptance of MPHT in the area. From the above, it is therefore plausible to state that in most Nigerian communities, the utilization and patronage of healthcare services are dependent on certain socio-cultural and socio-economic indices just as highlighted above.

**Table 4: Pearson Correlation Analysis between Awareness of HIV/AIDS and Acceptance of MPHT in Lafia LGA**

Variables	N	Mean	Std. Deviation	r-cal	P-value	decision
Awareness of HIV/AIDS	382	97.79	47.653			
Acceptance of MPHT in Lafia LGA	382	97.85	47.659	1.00	.000*	significant

< = 0.05

From the result in table 4, awareness of HIV/AIDS and acceptance of MPHT in Lafia LGA is negatively related but significant, Pearson's  $r = 1.00$ ,  $P.V. = .000$ . This indicates that there was significant relationship between awareness of HIV/AIDS and acceptance of MPHT in Lafia LGA because the P-Value (.000) is less than the 0.05 level of significance. Therefore, hypothesis one which states that there is no significant relationship between awareness of HIV/AIDS and acceptance of MPHT in Lafia LGA was rejected. This means that the level of awareness of the youths in Lafia LGA concerning HIV/AIDS affected the extent to which they accepted MPHT.

## **Discussion of Findings**

### **Level of Awareness of HIV/AIDS and MPHT acceptance among Youths in Lafia LGA.**

The study found that there was high level of awareness of HIV/AIDS and MPHT among youths in Lafia LGA. The finding reflects the responses of the participants to the questionnaires administered on them. This is because majority of the respondents indicated that they were conscious of the existence of HIV/AIDS as well as MPHT in Lafia Local Government Area of Nasarawa State, Nigeria. This finding is probably influenced by pandemic nature of the disease which necessitates its widespread awareness across the globe.

The study also found that there was high level of awareness of HIV/AIDS and MPHT among youths Lafia LGA. This is because the participant's responses showed that the youths were not unaware of the epidemic in the LGA. The finding agreed with the finding of Arya (2010) and Keating, Meakers and Adewuyi (2006) who identified differential levels of HIV/AIDS as a result of mass-media flows. This finding is against the general assumption that the level of awareness of HIV/AIDS infections is very low in the developing countries such as Africa and Latin America. This is because mass media have the capacity to inform and educate people. Furthermore, findings from the National HIV/AIDS and Reproductive Health Survey (NARHS, 2012) attested to the importance of mass media in HIV/AID sector. The same survey found that the most mentioned source of information on condom use was radio (83%) followed by television (57%) with health workers and clinics at 41.5% and 25.3% respectively.

Also, the study finding indicated that there was low level of acceptance of MPHT among youths in Lafia LGA. This is generally due to the fact that many people were afraid of testing positive in an attempt to know their statuses. The finding corroborated Manakandan (2017) who found that lack of confidentiality was a drawback of mandatory premarital HIV screening. The author further explained that though this mandatory test is welcomed by most of the countries and society, there are still a few debatable arguments regarding the acceptability of the screening test. This finding was also in consonance with that of Umar and Oche (2012) who found that there was low level of knowledge among the Muslims scholars in Sokoto compared to the Christian clergy and this was found to influence their discordant attitudes towards the MPHT. Alswaidi and O'brien (2009) previously found in some Islamic countries, such as Saudi Arabia and Bahrain that religious beliefs could be obstacles to premarital HIV testing. The finding agreed with that of this study.

## **Conclusion and recommendations**

In conclusion, the study assessed acceptance of mandatory premarital testing of HIV/AIDS among youths in Lafia Local Government Area, Nasarawa State, Nigeria. The study concluded that MPHT is a veritable tool that can be used to reduce the contraction and spread of the deadly disease in the society as it will increase the awareness on how to take proactive and precautionary measures. The study equally concluded that more youths in Lafia LGA would accept MPHT if the fear associated with the programme was erased or curtailed, at the least. Lastly, it was part of the conclusion of the study that if the factors militating against acceptance of MPHT among youths in Lafia LGA could be discouraged, the level of acceptance of the programme could significantly turn positive. Consequently, it becomes imperative for certain indices to be put in place to ensure that MPHT is enforced and accepted among youths and

intending couples in Lafia L.G.A. in particular and the society in general. Based on this therefore, the following recommendations are proffered:

1. Since the study established that there is high acceptance of MPHT among youths in the study area, efforts should be made by the government at all levels and other stakeholders in the health sector to ensure the sustainability of such acceptance among youths. This can be achieved when efforts are put in place to ensure that only factual information keep reaching members of the public so as to ward off myths and misconceptions.
2. Since there is acceptance of MPHT among youths, more efforts should be made to ensure that youths and intending couples continue to go for mandatory testing before marriage. This can be achieved when the government formulate and enforce policies to that effect. Leaders (community leaders, religious leaders, and peer leaders) should also be encouraged to admonish community members to engage in it while educating them on the benefits of MPHT; they can also achieve this feat when they invite health practitioners and other stakeholders to organize enlightenment campaigns and workshops.

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