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Rural Farm Households Knowledge, Attitude and Perception towards HIV/AIDS in Ebonyi State, Nigeria

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Abstracts

This study investigated knowledge, attitude and perception of rural farm households towards HIV/AIDS in Ebonyi State, Nigeria. Multi-stage random sampling technique was employed to collect primary data from one hundred and eight (180) rural famers (respondents) with the aid of a questionnaire augmented with an interview schedule. Both descriptive and inferential statistical tools were employed in data analysis. Result showed that HIV/AIDS awareness among the respondent was very high (94.44%). Despite this only 33.3% of them know their HIV status. Moreover, the level of knowledge of the rural households on HIV/AIDS was general low (33.3%). The route of transmission known by the majority (66.67%) was sexual intercourse. There were misconceptions about other modes of transmission and prevention of the disease among the rural farm households. Moreover, the general attitude towards HIV/AIDS patients among the rural people revealed to be poor. The result of the multiple regression analysis showed a high value of R^2 of 72.3%. This shows that about 72.3% of the variation in the level of knowledge of the respondents on HIV/AIDS infection, transmission and prevention was caused by the socio-economic/personal characteristics of the rural farmers. The result of the factor analysis identified financial, institutional and social constraints as factors limiting rural farmer' knowledge of HIV/AIDS. It was concluded that there was high level of awareness on HIV/AIDS among rural farm households. Nevertheless, there exist some misconception on the knowledge, mode of transition and preventive measures. The study recommends that Agricultural Extension Agents should encourage the farmers over their fear of HIV/AIDS and to voluntarily present themselves for HIV/AIDS testing and counseling, government should do more campaign on HIV/AIDS transmission and prevention measures in the study area, among others.

Keywords: knowledge, attitude, perception, rural, farm households, HIV, AIDS, Ebonyi State, Nigeria.

Introduction

In several African nations, agriculture provides livelihood for about 70% of her population, especially the rural dwellers. Currently, the prevalence of HIV/AIDS particularly among farming communities has inevitably constrained agricultural and non-

agricultural production in these countries. Rural farm households in underdeveloped nations are not well informed about HIV/AIDS (National aid control programme and Ghana Health service, 2010). HIV/AIDS has continued to ravage a great population of the farming households in Nigeria including Ebonyi State. This has affected the state's agricultural output due to it's very high dependency on human labour for production. CTA, (2004) argued that about 80% of the individuals in worse hit nations depend on subsistence agriculture for their livelihood.

Wagbatsoma and Okojie (2006) opined that HIV/AIDS is a sexually transmitted disease which currently ranked 10th among the world most killer disease. UNAIDS (2009) reported that about 33.4 million persons are living with HIV. Durojaiye (2011), also reported that HIV/AIDS remains one of the world most disturbing public health challenges which has had severe devastating impact on socioeconomic, political and cultural institutions. Statistics by world Health Organization (WHO) indicated that 39.5 million people globally were infected with HIV in 2006, with sub-Saharan Africa constituting 64% of them (UNAIDS, 2006).

Sub-saharan Africa remains the hardest hit of HIV/AIDS and is home to two-third of all people living with HIV. Nigeria ranked third among nations with the high record of persons living with HIV/AIDS following South Africa and India. FMH/NACA (2003) reported that from 1991 to 2003 in Nigeria, the number of HIV/AIDS infections across pregnant women who visited hospitals for antenatal increased from 1.8 percent to 5.4 percent. This is an indication that the incidence of the dreaded disease is fast rising among all classes of humanity. Although in recent times, it appears there is a general consensus that there is sufficient knowledge about the infections of HIV/AIDS, however, available data showed that there is a rise in the proportion of persons living with HIV/AIDS, as well as those under the plague of AIDS (Tung et al; 2008). This rise may be occasioned by inadequate information on HIV/AIDS at the disposal of the general public (Tung et al; 2008).

Since HIV/AIDS was found in 1981, its impact has been particularly severe on the economies of the developing world and on the marginalized populations' in industrialized countries (United Nations Development Programme, 2001). This negative impact on agriculture is monumental. AIDS affects the rural household productive capacity by reducing the quality and quantity of household's labour and also deplete its financial resources by payment made for medical treatment (when the victim fall sick) and funeral cost (when the victim eventually dies) (Kwaramba, 1998). This may further lead to reduced household income, asset depletion, loss of entitlement such as land and reduction in remittances and food transfer as well as increases in the number of dependents thereby reducing food and other resources available per household member.

Asamoah et al., (2009) assert that in spite of rising incidence of HIV/AIDS in sub-Sahara Africa, the knowledge as well as the level of awareness is still low. Generally, female folks have lesser access to information on HIV/AIDS when compared to the male folks in both urban and rural areas. A study of 10 countries indicated that more than one in every ten adults is infected with HIV/AIDS. Another study carried out in 35 out of the 48

countries of sub-Sahara Africa revealed that young males have 20 percent possible chance of accessing right information on HIV/AIDS than young females in the area. The higher level of educational attainment among males accounted for this difference. For instance, in Rwanda young females having secondary or higher education were probably five times better aware of the major means through which HIV can be transmitted as against young females who were illiterate (DHS, 2001). In subsharan. Africa, the majority of HIV transmission occurs through heterosexual intercourse, mother-to-child transmission and unsafe blood (Walker, 2004). Interventions on HIV/AIDS and its prevention must involve a continuous and multi-generational effort that is well designed to last into the lifetimes of our children. The first incidence of AIDS was reported in Ebonyi State in 1999, when the infection of Human Immunodeficiency Virus (HIV) began to affect every region and cutting across all human population in Nigeria (Ebonyi State Action Committee on Aids, 2005). Indeed, the effects of HIV/AIDS remains great as it continued to devastate individuals, families and households in Ebonyi state affecting their physical, social, psychological and economic well-being. HIV/AIDS constitutes a great challenge especially in the agricultural sector of Ebonyi State, leading to low crop production, food security and lowering the potential for actualization of Millennium Development Goals (MDGS).

The HIV/AIDS pandemic has been described as the worst tragedy in contemporary history (Ogunbodede, 2004). As at 2016, 36.7 million [30.8 million–42.9 million] people globally were living with HIV, 1.8 million [1.6 million–2.1 million] people became newly infected with HIV, While 1 million [830 000–1.2 million] people died from AIDS-related illnesses (Joint United Nation Programme on HIV/AIDS, 2016). Also, UNAIDS Programme on HIV/AIDS 2016, reported that Sub-Saharan Africa carries a disproportionate burden of HIV, accounting for more than 70% of the global burden of infection. And that success in HIV prevention in sub-Saharan Africa has the potential to impact on the global burden of HIV. In spite of interventions from Nigeria's government and her local and foreign health partners in promoting campaigns on knowledge and awareness of HIV/AIDS among her citizens, the prevalence rate in the country is still very alarming, Nigeria has the second largest HIV epidemic in the world (UNAIDS 2016). The estimated 60% of new HIV infections in western and central Africa in 2015 occurred in Nigeria especially among youths with tendency for high sexual risk behaviours (national action committee on AIDS, 2015).

This necessitated the needs for an assessment study of this nature to determine the prevailing attitudes, knowledge and sexual behaviours among the farming households in Ebonyi State.

Many scholars, medical personnel, scientist, agriculturist and researchers have studied and investigated on HIV/AIDS, it's impact on the society and rural farmers, its prevention etc and some concerned people have also written on the roles, impact of HIV/AIDS, prevention measures adoptable, impact on women and the young ones etc but there seems to be no information on knowledge, attitude and perception of rural farm households towards HIV/AIDS in Ebonyi State, Nigeria. Hence the need for this study to examine the knowledge of farm households in Ebonyi State on HIV/AIDS so as

to prevent above mentioned social ills associated with the epidemics and its effect on agricultural production.

Objectives of the study

The broad objective of this study was to ascertain the level of knowledge, attitude, and perception of the rural farm households on HIV/AIDS in Ebonyi State, Nigeria. The specific objectives were to:

i. ascertain the sources of information to rural farm households on HIV/AIDS;
ii. assess the knowledge level, attitude, and perception of rural farm households on HIV/AIDS;
iii. determine the effects of socioeconomic characteristics of rural farm households on their level of knowledge of HIV/AIDS; and
iv. identify constrains limiting rural farm households knowledge on HIV/AIDS.

Methodology

Ebonyi State is made up of 13 L.G.As with 7,087.12 km^2 as the total land mass and estimated population of 2198371 (NPC 2006). The occupation of the people is pre-dominantly farming with over 80 percent of the population living in the rural area and are involved in agricultural production. The vegetation lies between the Rain Forest and Guinea Savannah of Nigeria. Multi-stage random sampling technique was used to select 180 respondents for the study, carried out by September, 2017.

Stage 1: Two L.G.As were selected at random from each of the three agricultural zones of the state making a total of six. L.G.As.

Stage 2: This involved random selection of three communities from each of the six L.G.As, making a total number of eighteen communities.

Stage 3: Ten rural farmers were selected at random from each of the 18 communities making a total of 180 respondents who were used for the study.

Primary data were collected with the aid of a well- structured questionnaire augmented with oral interview schedule administered to the sampled respondents.

Model Specification

Model for multiple regression analysis was stated as:

$Y = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10})$……..implicit form

$Y = bo + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8X_8 + b_9X_9 + et$….explicit form

Where:

Y	=	level of knowledge of smallholder farmers on HIV/AIDS
X_1	=	Gender (dummy) Male = 1, Female = 0
X_2	=	Age of farmer (years)
X_3	=	Education (years of formal education)
X_4	=	Marital status (dummy) (Married = 1, Not Married = 0)
X_5	=	Household size (number of persons)
X_6	=	Annual income (naira)
X_7	=	Farming experience (years)
X_8	=	Farm size (hectare)
X_9	=	Membership of co-operative society (dummy)

bo = Constant term or the intercept
b_1-b_n = the coefficients of the independent variables
et = stochastic error term.

Factor analysis was used to identify those factors that limit rural farm household's knowledge on HIV/AIDS in the study area. High loading variables were identified and named accordingly. Kaiser criterion of using variables with coefficients of 0.30 or more in naming a factor was used (Kaiser, 1958). The rule has been generally applied (Nwibo and Nwakpu 2017; Okeke, Oraka and Obasi, 2015).

Results and Discussion

Socio-Economic Characteristics of the Rural Farm Household

The socio-economic/personal characteristics of the respondents were considered and ascertained to determine their influence on the knowledge, attitude and perception of the rural households on HIV/AIDS.

More than two- third of the respondents were in their productive and sexually active age with an average of 38 years old. This implies that most of the respondents were adult who are supposed to have adequate knowledge on the existence of HIV/AIDS. About 61% of the respondents were male which is a good determinant of access to information and knowledge such as HIV/AIDS knowledge as stated by the finding of Agrawal (2002), that African women and girls are economically dependent on their male partners and suffer poor access to education and health information. The respondents cut across the different religion, Christian (83.3%), traditionalist (13.9%) and Islamic (2.7%).

The result on marital status showed that 68 percent were married while 26 percent were single. This implies that most of the rural farmers studied were married men and women. The majority (56.1%) of the rural farm households studied attained primary education as their highest educational qualification while few (27.9%) were graduates of tertiary institution. This may hamper their access to information on HIV/AIDS in the area at the disposal of the general public. It has been argued that the small holder farmers need to be armed with adequate knowledge as well as the right attitude to enable them avoid HIV and AIDS (Tuny et al., 2008; Walrond et al., 1992)

The farm size wa 2.9 hectares which is low. The average household size was 11 persons per household. The average farming experience was 21years implying that most of the respondents were experienced farmers. The average annual income was 196,830 Naira only which is classified as low income earners. The result on membership of co-operative society showed that 67.8% of the respondents were not members of co-operative societies; This may have some implication on accessing

HIV/AIDS information since the organization provide forum for easier and faster dissemination of information such as information on HIV/AIDS.

Table 1: Percentage distribution of the socio-economic characteristics of the respondents

Socio-economic characteristic	Category	Percentage	Mean
Gender	Male	60.6	
	Female	39.4	
Age			
	<20	3.8	
	21-30	21.6	
	31-40	40.5	38
	41-50	22.7	
	51 and above	11.1	
Religion			
	Christianity	83.3	
	Islamic	2.7	
	Traditionalist	13.8	
Marital status	Single	26.1	
	Married	68.3	
	Divorced	1.6	
	Widow/widower	3.8	
Educational Status			
	Primary school	56.1	
	Secondary school	31.6	
	TCII/SSCE	5.5	
	NCE/OND	3.8	
	HND/B.Sc	2.7	
Farm Size (ha)			
	1-2	16.1	
	2.1-3.0	48.8	
	3.1-4.0	23.8	2.9
	Above 4	11.1	
Household size			
	1-6	20.0	
	7.12	46.6	11
	13.18	25.0	
	19-25	6.6	
	Above 25	1.6	
Farming experience			

	1-10	11.6	
	11-20	48.3	
	21-30	18.8	21
	31-40	13.8	
	41 and above	7.7	
Annual income (N)			
	10,000-100,000	17.2	
	101,000-200,000	40.0	
	201,000-300,000	23.8	196,830
	301,000-400,000	17.7	
	Above N400,000	1.1	
Membership	Yes	32.2	
Cooperative society	No	67.7	

Source: Field Survey, 2017.

Distribution of The Respondents on Knowledge of their HIV/AIDS Status

The majority (66.67%) of the respondents had no knowledge of their HIV status. This implies that calls by health experts for regular testing to determine one's HIV status were not adhered. This could be as a result of lack of access to knowledge about HIV/AIDS or fear of knowing ones' status in spite of the benefits of knowing one's HIV status. This result supports the assertion of Akande (2001) that not up to 1 percent of sexually active persons in Nigeria urban area have been tested for HIV and in the rural areas, this figure is lesser.

Table 2: Respondents on knowledge of their HIV/AIDS status

Knowledge of HIV status	percentage
Yes	33.3
No	66.67

Source: Field Survey, 2017.

The Respondents Perceived Reasons for Reluctance to know their HIV/AIDS Status

Table 3 shows that the majority (49.44%) of the respondents who do not know their HIV/AIDS status were afraid of death, while 40% of them have fear of being stigmatized if positive and very few (17.88%) just preferred not to know their HIV status. This suggests that HIV/AIDS campaign programmes should be stepped up in this area to encourage the rural households over their fear and to voluntarily present themselves for HIV/AIDS testing and counseling. This is in line with the view of Kumar, Rao, Naveen, Vaishnavi and Sembulingam (2015), who maintained that HIV/AIDS is a life threating disease in nature and there is no cure for the disease.

Table 3: Reasons for Reluctance to know HIV/AIDS Status

Perceived Reason	percentage
Just prefer not to know	17.78
Fear of death	49.44
Fear of being stigmatized if positive	40.00
Loss of hope of survey	22.22

Source: Field Survey, 2017.

The Respondents Perception of HIV/AIDS

Table 4, shows that 100% of the respondents perceived that HIV/AIDS is real and it kills, while 94.44% of them were of the opinion that HIV/AIDS is preventable whereas 68.33% of them indicated that abstinence protect ones from HIV/AIDS and 90.0% of them believe that infected person still looks healthy. Going by this, it becomes evident that rural farming households in the study area have high perception of the existence of HIV/AIDS but do not have information on their status. This can be attributed to the intensive media campaign against HIV/AIDS through radio jingles, and other platforms in the area and is in line with the studies of Wagbatsoma and Okojie (2006); And Ibebuike et al., (2017) survey findings which revealed that students were aware of AIDs. A similar study in Chennai (Thandalam) on Evaluation of Knowledge, Attitude and Awareness of HIV/AIDS among School Children by Kumar, Rao, Naveen, Vaishnavi and Sembulingam (2015), also showed that 54.83% of the children were good in their general knowledge about HIV/AIDS disease

Table 4: Respondents on their perception of HIV/AIDS

Perception HIV/AIDS	Percentage
HIV/AIDS is real	100.00
HIV/AIDS kills	100.00
Infected person still looks healthy	90.00
It is preventable	94.44
HIV/AIDS is curable	11.11
Use of condom prevent HIV/AIDS	47.22
Abstinence protect ones from HIV/AIDS	68.33

Source: field survey, 2017.

The Respondents Knowledge of the Modes of HIV/AIDS transmission

Table 5 reveals that the majority 66.67% of the respondents believed that HIV/AIDS can be contacted through sexual intercourse, 55.56% of them indicated that it was through blood transfusion, and 53.33% of them believed is through sharing of sharp objects, whereas few 2.78% misconceived that it can be contacted through mosquito bites. This

implies that most of the respondents are aware and moderately knowledgeable about the mode of transmission of HIV/AIDS in the study area.

Table 5: Respondents Knowledge of the Modes of HIV/AIDS transmission

Mode of Transmission	percentage
Sharing of sharp objects	53.33
Blood transfusion	55.56
Sexual intercourse	66.67
Breast feeding	30.00
Mother to child	25.00
Sharing of clothing	6.67
Mosquito bites	2.78
Hand shake	5.56
Sharing toilets	5.00
Eating with same plate	6.11
Barbing saloon	38.33
Hair dressing materials such as comb etc	33.89
Sharing bed	6.67
Kissing	8.33

Source: Field Survey, 2017.

The Respondents Knowledge on Preventive Measures against HIV/AIDS

Table 6 reveals that the majority of respondents indicate that the best preventive measure were abstinence (60.5%) and the use of condom (53.8%). This is in line with the work of Mohammed, Tefera and Ahmed (2016) who reported that 53% of the secondary school students studied knew about the use of condom to prevent HIV/AIDS transmission. In Nubed and Akoachere (2016), 56.25 % had used a condom during their last three sexual encounters as the main preventive measure. The majority of respondents were fairly knowledgeable about the various routes of transmission, however, almost two thirds of the respondents have some misconceptions about HIV route of transmission. They alleged that sharing of cloths and cutleries, mosquito net, handshake, hugs and kissing and sharing toilets are also routes of transmitting HIV. Similar misconceptions have been documented by Nubed and Akoachere (2016), that misconceptions about routes of transmission were observed in 3.4 to 23.3 % of respondents. Furthermore, respondents also exhibited various other misconception about preventive measure. For example, personal hygiene, use of insecticides and use of herbs were some of the preventive measures identified by the respondents. These knowledge gap were consistent with other HIV studies carried out in other parts of the world (Mohammed1, Tefera and Ahmed, 2016).

Table 6: Respondents knowledge of preventive measures against HIV/AIDS

Preventive measures	Percentage
Avoid sharing of sharp object	38.33
Use of condom	53.89
Health education	27.78
Abstinence	60.56
Faithfulness to one partner	22.78
Personal hygiene	13.89
Avoid kissing	5.56
Using insecticides	5.00
Use of drugs and herbs	23.33
Use of native charms	16.11
Isolation, of victims	22.22
Limiting sex to one partner	21.67

Source: Field Survey, 2017.

Respondents knowledge and attitude Towards HIV/AIDS Infected Person

Table 7 reveals that most of the respondents have negative attitude towards people living with HIV/AIDS. As evident in: HIV/AIDS infected people should be isolated X=2.6, would buy vegetables from HIV/AIDS vendors (X = 2.3), would employ HIV/AIDS infected person (X = 2.3), would hesitate to sit close to HIV/AIDS patient (X= 2.7), uncomfortable if your child's classmate is positive to HIV/AIDS (X= 2.6), and infected persons should not be allowed in public schools (X=2.8). This is in line with the study of Masoudnia, (2015) aimed to determine the impact of public beliefs and perceptions about HIV/AIDS and the quality of their attitude toward people living with HIV/AIDS in Iran which he reported that most of participants had discriminatory and negative attitudes toward PLWHA. Nubed and Akoachere (2016) also reported poor HIV/AIDS attitudes among senior secondary school students in Fako Division, South West Region, Cameroon.

Table 7: Respondents knowledge and attitude towards HIV/AIDS infected person

Attitude	Mean score
Willing to care for infected relatives	2.7*
Would buy vegetables from HIV/AIDS infected vendors	2.3
Would employ HIV/AIDS infected person	2.3
Would reveal HIV/AIDS status	2.2
HIV/AIDS infected person should be isolated	2.6*
People from the cities only get infect not those in the villages 2.3	
HIV/AIDS is hereditary	1.5
Feel sympathy for persons living with HIV/AIDS	2.8*
Would hesitate to sit close to HIV/AIDS patient	2.7*
Uncomfortable if your child's classing is positive to HIV/AIDS 2.6 *	
Publication if names of infected persons	2.3
Infect persons should not be allowed in public schools	2.8*
Infected persons should not be allowed to attend social functions	2.3

*- High. **Source: Filed Survey, 2017.**

The Respondents Perceived Means of Curing HIV/AIDS

Table 8 indicates that the majority (40.55%) believed that prayers/miracles could cure HIV/AIDS; whereas few (5.56%) believed in surgical operation as a means of curing HIV/AIDS. This implies that most of the respondents believed in divine healing as a means of ensuring healing to HIV/AIDS infection as there has not been any known orthodox medical cure for it. This is in line with the demonstration that increased knowledge about AIDS is not a predictor for behavioral change (Hingson et al., 1990 a and b; Dichemente, 1991; Keller et al., 1991 and Onah et al., 2004). There is need to review the intervention strategies that are in place for prevention of HIV/AIDS among farming households in this environment especially with the necessity to include behavioral communication change strategies in radio and television broadcast as most respondents erroneously believe in divine intervention for HIV/AIDS control.

Table 8: Respondents perceived means of curing HIV/AIDS

Means of Cure	percentage
Use of drug	31.1
Herbs	11.6
Surgery	5.5
Prayers/miracles	40.5
Native charms	23.3

Source: Field Survey, 2014.

Effects of Socio-Economic Characteristics of Farm Households on their Level of knowledge of HIV/AIDS

Table 9 indicates a high coefficient of multiple determination (R^2 of 69.2%). This shows that about 69.2% of the variation in the level of knowledge of the respondents on HIV/AIDS infection, transmission and prevention was caused by combined relationship of socio-economic characteristics of the sampled respondents. This implies that the socio-economic characteristic of the rural farmers greatly influenced their level of knowledge on HIV/AIDS in the study area. The closeness of the adjusted R^2 of 69.2% to R^2 of 72.3% in numerical value indicates that the explanatory power of the regression was not exaggerated. The overall effect of the independent variables on the dependent variable was indicated by the F-ratio of 44.67 which was statistically significant at 1% level of probability indicating that the overall model is of good fit. The low value of standard error of 0.21978 is an indication that the estimated result is statistically reliable.

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The co-efficient marital status (X_4) was positive and statistically significant at 1% level of probability. This implies that it has a positive relationship to the respondents' level of knowledge on HIV/AIDS. Thus, the knowledge of HIV/AIDS is common amongst the respondents who are married. This may be due to the requirement that has been institutionalized in most communities and churches intending that couples must go through HIV/AIDS counselling and testing to know their status before they are joined as husband and wife.

The co-efficient of age of the respondents (X_2) and membership of cooperative society (X_9) all bore negative and were statistically significant at 1% level of probability. This shows that an increase in the age of the respondents will lead to a corresponding decrease in the level of knowledge of the farmers on HIV/AIDS. In other words, younger rural farming household have more knowledge about HIV/AIDS than older members. This is true because the younger people are more inquisitive to acquire new knowledge and information, as a result can explore different avenues to acquire knowledge on HIV/AIDS than the older people. Whereas, for membership of cooperative society, the a priori expectation was not met as it was expected that an increase in the number of cooperative societies a respondent belong to, should increase his level of knowledge about HIV/AIDS. This may be because out of the 180 respondents sampled, only 58 belong to cooperative society as against 122 respondents who does not and yet high level of awareness of HIV/AIDS. This implies that there are more people in the study area who do not belong to cooperative society.

The coefficients of level of educational (X_3), household size (X_5) and annual income (X_6) of the respondents were all positive and statistically significant at 1% and 5% level of probability respectively. While level of educational (X_3) and household size (X_5) were significant at 1% level of probability, annual income (X_6) was significant at 5% level of probability. This shows that increase in the respondent's educational level, household size and annual income led to a corresponding increase in their knowledge level of HIV/AIDS. This is true as educated people are more exposed to knowledge. Also, the higher the annual income of the respondents, the more access to source of information and knowledge on HIV/AIDS since wealthy farmers can afford to purchase radio, television and internet facilities where they can obtain information about HIV/AIDS. Hence the a priori expectations were met.

Finally, the coefficients of farm size (X_8) bore positive and highly significant at 1% level of probability. The positive-signs indicates that the higher the farm size, the more level of knowledge the farmer have on HIV/AIDS. In other words, farmers who have larger farm size will be more knowledgeable about HIV/AIDS. This is because since large farm is an indication of wealth, the farmers must have acquired a better source of knowledge to learn both on how to improve productivity and how to avoid diseases that can reduce your input in terms of labour, such as HIV/AIDS.

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Table 9: Effects of socio-economic characteristics of farm households on their level of knowledge of HIV/AIDS

Variables name	Regression coefficients	Standard error	t-values
Constant	1.123	0.278	4.231*
Gender	0.134	0.078	1.721Ns
Age	0.048	0.004	12.031*
Level of Educational	0.106	0.027	3.967*
Marital status	0.937	0.083	11.355*
Household size	0.076	0.010	7.890*
Annual income	0.657	0.123	2.112**
Farming experience	0.009	0.006	1.534Ns
Farm size	0.008	0.002	4.166*
Membership of cooperative society	-0.477	0.075	-6.353*
R^2	0.723		
Adj. R^2	0.692		
Std error	0.21978		
F-ratio	44.67		

***<0.05. Source: Field survey, 2017.**

Constrains Limiting Rural Households Knowledge on HIV/AIDS

Table 10 shows the Varimax rotated factor matrix on constraints to rural household's knowledge on HIV/AIDS in Ebonyi State Nigeria. From analysis of data obtained from field survey, three (3) major constraints were extracted based on the respondent's responses. Those variables with factors loading of 0.30 and above at 10% overlapping variance (Ashley et al 2006, Madukwe, 2004) were used in naming the constraints. Considerations were not given to those variables that loaded in more than one constraints and those lower than 0.30. The next thing to do as reported by Kessler (2006) was given each constrains a denomination that best describes or characterize the set of variables contained in it. In this regards, the variables were grouped into three (3) major constraints as: Constraint I (Financial), Constraint II (Institutional) and Constraint III (Social) constraints.

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Table 10: Constraints to rural household knowledge on HIV/AIDS

Constraints	Factor 1 Financial	Factor 11 Institutional	Factor 111 Social
General illiteracy	0.123	0.231	0.453
Difficulty in understanding language source	0.099	0.217	0.321
Timing of radio and TV programmes	0.124	0.435	0.123
Lack/insufficient rural campaign	0.543	0.231	0.133
Gender inequality in health care delivery	0.123	0.222	0.015
Governance and political will	0.239	0.543	0.193
Poor sex education	0.090	0.006	0.861
Lack of finance to purchase communication gadgets	0.654	0.045	0.215
Lack of health infrastructural facilities such as health facilities for testing	0.113	0.345	0.189
Poor staffing of health workers in rural areas	0.133	0.632	0.140
Inadequate support of victims of HIV/AIDS by government	0.128	0.675	0.200
Non-challant attitude of farming households about HIV/AIDS	0.134	0.234	0.008

Source: Field Survey, 2017.

Under constraints 1 (Financial factor), the specific constraining variables against Rural Households Knowledge on HIV/AIDS were: lack/insufficient rural campaign (0.543) and lack of finance to purchase communication gadgets (0.654). This implies that an increased rural campaign on HIV/AIDS and increase in the farmers' income will increase his access to information and source of information on HIV/AIDS and invariably reduce the chance of him contacting the virus.

Variables that loaded high in constraints 2 (Institutional factor) include: timing of radio and TV programmes (0.435), governance-and political will (0.543), lack of health infrastructural facilities (0.345), poor staffing of health workers in rural area (0.632) and inadequate support for victims of HIV/AIDS by government (0.675). This implies that right timing of radio and TV programmes, good health infrastructural facilities, adequate support for victims of HIV/AIDS by government and other institutional factors will increase the degree of awareness, attitude and preventive measures of the farmers on HIV/AIDS and reduce the chances of contacting the disease.

Under constraints 3 (Social factor), the constraining variables were: general illiteracy level (0.453), difficulty in understanding language (0.321) and poor sex education (0.861). This also implies that an increase in the general literacy level and sex education will increase the farmers' knowledge and perception on HIV/AIDS in the study area. Thus; financial, institutional and social constraints hindered level of knowledge of rural farm households on HIV/AIDS in the study area.

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Conclusion and Recommendations

There was high level of awareness on HIV/AIDS among rural farm households. Nevertheless, there exist some misconception about the mode of transition and preventive measures against HIV/AIDS among the rural farm households in the State. Moreover, most of the farmers could not have sufficient knowledge about HIV/AIDS due to financial, institutional and social constraints.

Finally, the attitude of the rural farm households was found to be generally poor as evident in their unwillingness to employ persons living with HIV/AIDS, among others.

Recommendation

Agricultural Extension Agents should encourage the farmers over their fear of HIV/AIDS and to voluntarily present themselves for HIV/AIDS testing and counseling. This is because farmers will listen more to Extension Agents whom they are used to than unknown NGO interventionist. Government should intensify effort in attitudinal change programs towards those living with HIV/AIDS through introduction of a comprehensive HIV/AIDS education into farmers' cooperatives and request for evidence of membership before accessing government loans and grants to instill the right knowledge and attitude in farmers towards HIV/AIDS patients. Finally, the government should train the farmers on preventive measures through the farmers' cooperative society instead of allowing them to remain in divine intervention.

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