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Female Cassava Farmers Awareness and Perception of Hiv/Aids Infection in Uyo Agricultural Zone, Akwa Ibom State, Nigeria

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Abstract

The study examined the awareness and perception of female cassava farmers on HIV/AIDS infection in Uvo Agricultural Zone, Akwa Ibom State, Nigeria. The result showed that 91.7% of farmers were aware of the existence of HIV, and 96.7% were aware that HIV has no cure. Findings also showed that HIV was mostly transmitted through sexual intercourse (x=4.6), blood transfusion (x = 3.44), prenatal infection (x=2.76), sharing and use of unsterilized sharp objects (x=2.62), poverty (X=2.68). Also, the most effective sources of HIV/AIDS information dissemination were radio/television (X = 3.42), health care providers (X = 3.25), NGOs (X =3.13), Friends and relatives (X =3.05) SACA (X =2.98) and social media (X =2.88). Perception-wise, the result showed that the majority (95.8%) of farmers perceived HIV/AIDS as leading to the untimely death of farmers, 90 % perceived it as a predisposing factor to other vulnerable diseases/infections, 80.3 perceived it as being capable of leading to emotional trauma among women farmers while 75, 51.7 and 69.2 per cent said it can result in immune susceptibility, reduction in family income due to high cost of treatment and discrimination against infected persons, respectively. Findings also showed that about 90% of farmers did not know their HIV status, Also, the major preventive measures to the spread of HIV were: using condoms during sexual intercourse, (95%) proper adherence to anti-viral drugs by patients (91.6%) use of properly screened blood during transfusion of blood (83.3%), abstinence from having unprotected sex 81.6%, avoiding casual sex (66.7%), using properly sterilized sharp piercing objects like razor (61.7%t), use of new syringes and needles for injection (57.5%), the faithfulness of couple to each other (51.7%,), use of preventive drugs (40%) and praying for divine intervention, (33.3%). The paper recommended adequate sensitization and education of farmers as well as enacting enabling laws to prevent stigmatization of infected persons as a way out

Keywords: Female farmers, Awareness, Perception and Human Immune Deficiency virus

1.0 Introduction

Since the discovery of HIV/AIDS in 1981, its destructive and disruptive influence has been highlighted by various researchers. Its impact has been so devastating, especially in developing

countries. It has been established that the worst-hit region of the world is Sub-Saharan Africa where it is the leading cause of death with about 25 million people infected (NACA (2018; WHO, 2018). It is one of the most widespread diseases which have affected our society today; however, data on countries' prevalence of HIV/AIDs show that out of 10 most populous HIV nations, 8 are Africans. The most vulnerable groups are women (National Agency for the Control of AIDS (NACA) (2018), youths, itinerant workers, traders, and prostitutes. According to World Health Organization (WHO, 2018), about 30% of young women aged 15-25 years are currently living with the infection in rural areas.

In Nigeria, since its first diagnosis in 1986 its prevalence has risen substantially causing varying detrimental effects on society and the economy. According to the Nigeria HIV/AIDS Indicator and Impact Survey (NAIS), Akwa Ibom State has the highest prevalence rate of 5.5% in 2019 followed by Benue State with 5.3%. The HIV/AIDS pandemic had caused too numerous health care and economic problem in our world. Activities liable for increased transmission of this epidemic include female circumcision and infibulations, non-sexual cultural practices like medical bloodletting, ritual, medicinal enemas, and practices involving the use of shared instruments such as injection, ritual scarification, group circumcision, genital tattooing, oral tattooing, tribal marking and shaving of body hairs with unsterilized blades. Most of these traditional practices are carried out in groups by traditional birth attendants, tattooists, and local barbers. Other reasons advanced by Daniel, (2018) as liable for the increased prevalence of HIV/AIDS among women and youths in Nigeria include rural people's perception of the disease, poor level of awareness of the disease in the rural area, gender inequality and male dominance, violence and sexual violence, poverty and; cultural beliefs and practice like circumcision in the rural area.

Undoubtedly, the Cassava production subsector as a major agricultural livelihood activity of Sub-Saharan Africa is also affected by this epidemic. The epidemic has weakened rural institutions' ability to deliver extension services, lead to rising healthcare bills and resulted in labour shortages. Other notable effects of HIV Include death and loss of loved ones: (UNAIDS, 2006). This further widens the gap between food supply and demand and directly aggravates poverty in the affected households, stripping them of their valuable assets. It was in an attempt to mitigate the negative effect of HIV/AIDS infection that the National AIDS and Sexually Transmitted Disease Control Programme (NASCP) was established in 1988. To further strengthen NASCP, Government also set up the National Action Committee on AIDs (NACA) and Presidential Committee on AIDs (PCA) in 2001 as implementing bodies that later paved way for each State to establish their State Action Committee on AIDS (SACA), that was saddled with the responsibility of proper counselling and enlightenment.

In the face of these lofty initiatives and the efforts of development Agencies to minimize the incidence of HIV infection in Akwa Ibom State, the scourge has continued unabated. This, therefore, raises the question of the perception of the disease by the farmers. According to UNAIDS (2017), the question is imperative given the wide variation in perception between rural and urban dwellers on the existence and mode of transmission of the disease. Several empirical studies have been carried out on HIV awareness (Gyata, et al, 2013; Salau, et al, 2012; Umeh, et al, 2018; Agwu and Akinmgbe, 2008, Daniel 2011: and Egbo and Chukwu,2015). The consensus in these studies is that farmers are aware that HIV/AIDS is real and has no cure.

However, despite the high level of awareness, most farmers do not know their status for fear of stigmatization. Daniel (2018) reported that people's perception of fear of stigmatization and the scary nature of HIV/AIDS infection prevents them from willingly subjecting themselves to HIV tests. This invariably renders the fight against HIV a mirage as infected people continue to spread the virus. This, therefore, brings to the forefront the need to examine the awareness and perception of farmers on HIV/AIDS in the study area. Against this backdrop, this study examines the awareness, perception, and level of knowledge of women farmers on HIV/AIDS in Uyo Agricultural Zone, Akwa Ibom State, Nigeria.

2.0 Research methodology

2.1 Area of the Study

The study was conducted in the Uyo Agricultural Zone in the South region of Nigeria. The study area is centrally located in Akwa Ibom State and the commercial nerve centre assumes extra importance in the state. Akwa Ibom State lies between latitudes 4⁰32" and 5⁰33ⁱⁱ North and longitude 7⁰.35" and 8⁰.25" East. The State is bounded on the East by Rivers State, West by Cross River, North by Abia State and south by the Gulf of Guinea. Uyo Agricultural Zone is made up of Ibesikpo, Uyo, Uruan, Itu, and Ibiono Local Government Area. Administratively, the agricultural zone is segmented into 7 blocks and 53 cells. The area falls under the rainforest zone with mean annual rainfall and temperature of about 2484mm and 27⁰C, respectively. Two distinct seasons prevail in the area: the dry season (November- March) and rainy season (April-October). Among the prevailing economic activities of the Zone include farming, fishing, craftsmanship, civil service, transportation, craft etc.

2.2 Sources and method of data collection

The study made use of a structured questionnaire that was administered to selected farmers. The administration of the questionnaire was done with the help of two trained field assistants.

2.3 Sampling procedure

Multi-stage sampling was used to randomly select farmers used in the study. In the first stage, 5 blocks were randomly selected from the existing eight blocks in Uyo Agricultural Zone. These were (Uyo, Itu, Ibiono, Uruan and Nsit Atai). In the selection procedure, 8 blank papers each carrying the name of each block were folded into a basket and taken one after the other. The first 5 selections were used as the chosen blocks. In the second stage, the same procedure was adopted to randomly select 4 cells from each of the previously selected blocks making a total of 20 cells. These cells were: Ikot Oku Ikono, Etoi, Nsukara, and Ifa Atai in Uyo block. Itam, Ekit Itam, Mbak Itam, and Ikot Obio Atai from Itu block. Ikot Essien, Mbia akpan, Ikot Ebom, and Oko Ita from Ibiono block. Ndon Ebom, Adadia, Ibiaku Uruan and Nothern Uruan from Uruan block and other communities from Nsit Atai block. In the third stage, 6 female cassava farmers were randomly selected from each of the 20 cells using a list of cassava farmers that have registered with Akwa Ibom State Agricultural Development Project (AKADEP) making a total of 120 women farmers that were used for the study.

2.3 Analytical technique

In addition to descriptive statistics such as mean and simple percentages data were also analyzed using a four-point Likert type scale. The grading was categorized as: Strongly agreed= 4,

Agreed = 3, Disagreed = 2 and strongly disagreed = 1. The weighted mean score was computed as 4+3+2+hese information sources were ranked using a weighted mean (x) and the mean score was computed as 4+3+2+1 = 10/4 = 2.50. However, any mean score less than 2.50 were considered less effective, while a mean score of 2.50 and above was regarded as very effective.

3.0 Findings and discussion

3.1 Socioeconomic characteristics of farmers

Table 1 presents the distribution of farmers based on their socioeconomic characteristics. From the table, the majority (59.2) of respondents were married. 17.5 per cent were single while 12.5 and 10.8 per cent were widowed and divorced, respectively. Other studies by Bassey, et al., (2015) and Obo, (2018) reported that there were more married farmers in the study area. In terms of household size, the survey revealed a large household size of 6 -10 persons (50.8%) followed by a household size of 1-5 and greater than 10 (11.7%) with a mean of 7 persons. The huge household sizes in the study area indicate abundant labour for farm work. Bassey, et al., (2014) reported a mean household size of 6 persons in the study area. The table also showed that farmers were quite experienced with a mean of 11 years of experience. Further breakdown of this showed that 46.7 per cent had 11-15 years of experience, 20.8 per cent had above 15 years' experience while 20 and 12.5 per cent had 6-10 and 1-5 years of experience, respectively. The high year of experience possessed by female farmers in the study area will boost farm production in the study area. In the study area, Oboh (2018) reported a mean of 11 years of experience for farmers. Educationally, farmers were quite educated with a mean 9 years of education. From the table, 43.3 per cent of respondents attended secondary school, 36.7 per cent attended primary school, 3.3 per cent attended tertiary institutions while 16.7 per cent had no formal education at all. The high level of education among respondents will boost their productivity in the study area. It will also boost their ability to access and utilize HIV/AIDS-related information. In terms of age, the table showed a wide variation in respondents' ages. A breakdown of this showed a mean of 41 years. A greater per cent (42.5) of respondents were within 41-50 years of age, 25 per cent were between 31-40 years while 10 and 22.5 per cent were less than 30 and above 50 years of age, respectively. This is an indication that farmers were still young in the study area. Bassey et al. (2014) reported that the majority of farmers were in the age bracket of 31-40 years. Regarding access to extension agents, the table reveals that a greater number of farmers (67.5%) had extension contact while 32.5 per cent never had. The high contact with extension agents will enhance their access to adoption and use of HIV-related information in the study area. Oboh (2018) also attests to the high access to extension by farmers (64%) in the study area.

Variable		Frequency	Percentage
Marital status:	Single	21	17.5
	Married	71	59.2
	Widowed	15	12.5
	Divorced	13	10.8
		120	100
Household Size:	1-5	45	37.5
	6-10	61	50.8
	> 10	14	11.7
		120	100
Farming experience:	1-5 years	15	12.5
	6-10	24	20
	11-15	56	46.7
	Above 15	25	20.8
		120	100
Educational Level:	No formal education	20	16.7
	Primary school	44	36.7
	Secondary school	52	43.3
	Tertiary institution	4	3.3
		120	100
Age of Respondents:	Less than 30	12	10
	31-40	30	25
	41-50	51	42.5
	Above 50	27	22.5
		120	100
Access to Extension:	Yes	81	67.5
	No	39	32.5

Table 1: Socioeconomic characteristics of farmers in the study area.

Source: Field Survey, 2019

3.2 Perception of farmers on the existence and cure of HIV/AIDS in the study area

Table 2 presents the distribution of farmers based on their perception of the existence and cure of HIV/AIDS. The result showed that most (91.7%) of respondents are aware that HIV exists and is real while only 8.3 per cent believed that HIV does not exist. In their opinion, HIV is an indirect way of discouraging people from having sex. The high level of awareness of HIV existence was also reported by Egbo and Chukwu (2015) among women farmers in Ebonyi State. Still, in Ebonyi State, Umeh, et al., (2018) also reported that 94.44% of farm households were aware of the existence of HIV. In Benue State, Gyata, et al., (2013) also affirmed that about 97.07% of rural farmers were aware of the existence of HIV/AIDS. Considering cure, the majority (96.7%) of farmers reported that HIV/AIDS has no cure while only 3.3 per cent believed HIV is curable. When asked about the curative measures, some said it can be cured traditionally, others claim it can be cured in churches.

Existe	ence/cure of HIV	Frequency	Percentage		
Existence of HIV:	HIV exist and is real	110	91.7		
	HIV does not exist	10	8.3		
		120	100		
Cure of HIV:	HIV has no cure	116	96.7		
	HIV has a cure	4	3.3		
		120	100		

 Table 2: Distribution of farmers based on their perception of the existence and cure of HIV/AIDS in the study area

Source: Field Survey, 2019.

3.3 Distribution of farmers based on their knowledge level of the causes and mode of transmission of HIV/AIDS

The distribution of farmers based on their knowledge level of the causes and mode of transmission of HIV/AIDS is presented in Table 3. From the Table, sexual intercourse ranked 1st (x = 4.6), blood transfusion 2nd (x = 3.44) prenatal infection 3rd (x = 2.76), sharing and use of unsterilized sharp objects ranked 4th (x = 2.62) while poverty (x = 2.68) was ranked 5th. In addition, supernatural forces such as witchcraft (x = 2.24) were ranked 6th, punishment from God (x = 2.11) ranked 7th, mosquito bite (x = 2.03) ranked 8th, breastfeeding 9th (x = 1.56), others such as sharing personal belonging 10th (X = 1.42) and shaking hands with infected persons ranked 11th (X=1.13). The high transmission of HIV and AIDS through sexual intercourse, unsecured blood transfusion, and sharing of unsterilized sharp piercing objects, were reported by Egbo and Chukwu (2015) in Ebonyi State. In Benue State, Nigeria, Guyana, et al., (2013) also reported the high transmission of HIV through sex among rural farmers. The high belief by respondents that HIV can be caused by poverty (x 2.68) is a misconception and conflicts with the finding of Gyata, et al.,2013 in Benue State. Other misconceptions held by farmers were sharing personal effects and toilets with infected persons that caused HIV.

S/N	Causes/ mode of transmission of HIV	Mean	Rank
1	Sexual Intercourse (unprotected/unsafe)	4.60	1^{st}
2	Prenatal Infection	2.76	3 rd
3	Use of Unsterilized equipment	2.62	4 th
4	Blood Transfusion (unscreened)	3.44	2^{rd}
5	Handshake/sharing item with patient	1.13	11 th
6	Causes by witchcraft/supernatural	2.24	6^{th}
7	Caused by God is a divine way to punish prosecutors	2.11	7 th
8	Poverty (people of low economic)	2.68	5 th
9	Breastfeeding	1.56	9 th
10	Mosquito bite	2.03	8 th
11	Others such as swimming in the same water, and sharing toilets and food with infected persons.	1.42	10 th

Table 3: Awareness and Knowledge Level of Respondents on the Causes of HIV/AIDS

3.4 Sources of HIV/AIDS infection dissemination in the study area

Table 4 presents the major sources of information on HIV/AIDs available to farmers in the study area. From the Table, numerous HIV/AIDS information was gotten from newspaper/magazines, social media, radio and television, SACA, health care service providers, NGOs, government agencies and Parastatals, religious groups, fellow farmers, social organizations, seminar/workshops, friends and relatives as well as others.

Of the 13 information sources identified by farmers in the study area, 7 were very effective in disseminating HIV/AIDS information to farmers. A breakdown of these shows that radio and television ranked first (x = 3.42), followed by health care providers (x = 3.25) 2nd, NGOs (x = 3.13), 3rd Information from friends and relatives (x = 3.05) was ranked 4th, SACA (x = 2.98) ranked 5th while social media (x = 2.88) and other sources were ranked 6th and 7th respectively. The first ranking of radio and television as a major information source is justified in that radio and television as mass media can reach a wider audience than other sources. Similar results were reported by Egbo and Chukwu (2015)

Also, the effectiveness of social media, SACA, health care service providers as well as family and friends were reported by Egbo and Chukwu, (2015). However, the high effectiveness of NGOs differs, from the findings of Egbo and Chukwu (2015).

Among the information sources that were not effective were religious groups (x = 2.29) seminar/workshops (x = 2.25), newspaper/magazine (x = 1.97), social organization (x = 1.22), government agencies and parastatals (X = 1.13) as well as fellow farmers (X = 1.13) that were ranked 8th, 9th, 10th, 11th, 11th and12th respectively. The low dissemination of information by religious groups, social organizations, Government Agencies and Parastatals, differs from the findings of Egbo and Chukwu (2015) who reported in other studies that these sources of information were very effective.

S /	Sources	Χ	Decision	Rank
1.	Newspaper/Magazine	1.97	NE	10^{TH}
2.	Social Media	2.88	VE	6^{TH}
3.	Radio and Television	3.42	VE	1^{ST}
4.	SACA	2.98	VE	5^{TH}
5.	Healthcare Service Providers	3.25	VE	2^{ND}
6.	NGOs (conflict)	3.13	VE	3^{RD}
7.	Government Agencies and Parastatals	1.13	NE	12^{TH}
8.	Religious Groups (Conflict)	2.29	NE	8^{TH}
9.	Fellow Farmers	1.13	NE	12^{TH}
10.	Social Organization (Conflict)	1.22	NE	11^{TH}
11.	Seminar/Workshops	2.25	NE	9^{TH}
12.	Friends and Relatives	3.05	VE	4^{TH}
13.	Other Sources	2.82	VE	7^{TH}

Note: NE and VE signify Not effective and very effective, respectively Source: Field survey, 2019.

3.5 Distribution of farmers based on their perception of the effects of HIV/AIDS on female farmers in the study area

Table 5 presents the distribution of female farmers' perceptions of the effect of HIV/AIDS. The result shows a wide variation in perception across farmers. A breakdown of this showed that the majority (95.8%) of farmers perceived HIV/AIDS as leading to the untimely death of farmers, 90% perceived it as a predisposing factor to other vulnerable diseases/infections, 80.3 % perceived it as being capable of leading to emotional trauma among women farmers while 75, 51.7 and 69.2 per cent said it can result in immune susceptibility, reduction in family income due to high cost of treatment and discrimination of infected persons, respectively. An empirical study by Gyata, et al., (2013) reported that HIV/AIDS is real and deadly.

S/nPerception of respondentFrequencyPer1.HIV/AIDS results in discriminating against infected persons832.It leads to a reduction in family income due to the high cost of prevention/treatment62	Table 5: Distribution of farmers based on then perception of the encer of fir (7111)5					
against infected persons 2. It leads to a reduction in family income 62 due to the high cost of	centage					
2. It leads to a reduction in family income62duetothehighcostof	69.2					
due to the high cost of	C1 Z					
	51.7					
3. It results in immune susceptibility of 90 farmers	75					
4. It predisposes farmers to other 108 vulnerable diseases/infections.	90					
5. HIV/AID results in untimely deaths of 115 farmer	95.8					
6. It can lead to emotional trauma for 97 women farmer	80.3					

Table 5: Distribution of farmers based on their perception of the effect of HIV/AIDS

Source: Field Survey, 2011.

3.6 Level of awareness of farmers on their status and preventive measures for HIV/AIDs in the study area

Table 6 presents the distribution of farmers based on the level of awareness of their status and preventive measures for HIV/AIDs. As evidenced in the Table, only 10% of farmers were conscious of their HIV state while 90% of farmers were not. In Ebonyi State, Umeh, Nwofoke and Nwibo (2018) also reported that only 33.3% of farmers knew their statuses. Based on their knowledge of preventive measures, the result shows that respondents were aware and very knowledgeable about preventive measures. A breakdown of these shows that 95 per cent of respondents knew that HIV/AIDS, can be prevented by using condom during sexual intercourse, 91.6% knew that proper adherence to anti-viral drugs by patients can reduce its spread, 83.3% knew that the use of properly screened blood during transfusion can minimize its spread, 81.6% knew that HIV/AIDs can be prevented by abstaining from having unprotected sex while 66.7% result knew that HIV/AIDs can be prevented by avoiding casual sex. Also, 61.7 per cent were conscious that sing properly sterilized sharp piercing objects like razors can prevent its spread, 57.5% knew that the use of new syringes and needles for injection can also prevent the spread of HIV/AIDs while 51.7%, 40% and 33.3% were aware that HIV/AIDs can be prevented by the faithfulness of couple to each other, use of preventive drugs and praying for divine intervention, respectively. This implies that farmers were quite aware of the preventive measures for HIV/AIDS in the study area. In Ebonyi state, Nigeria, Egbo and Chukwu (2015) attested to the high level of awareness of female farmers on HIV/AIDs preventive measures. They also attested to the awareness of additional health information obtained by women from the antenatal clinic. In Nasarawa State of Nigeria Salau, et al., (2012) also attested to the high awareness and adoption of HIV/AIDs, preventive practice by rural youth in Nassarawa State, Nigeria. The low awareness of farmers on their HIV status affirms the finding of Egbo and Chukwu (2015) in Ebonyi, State who reported that only 16.67% of farmers were aware of their HIV status.

S/N	HIV status/preventive measure	Frequency	Percentage
Α	HIV/AIDS status:		
1	Yes	12	10
	No	108	90
		120	100
В	Preventive Measures:		
1	Abstinence from unprotected sex	98	81.6
2	Faithfulness of couples to each other's	62	51.7
3	Use of preventive drugs	48	40
4	Use of condom	114	95
5	Use of properly screened blood during transfusion	100	83.3
6	Using only sterilized sharp piercing objects	74	61.7
7	Use of new syringes and needles	69	57.8
8	Praying for divine intervention	40	33.3
9	Proper adherence to antiviral drugs by patients	110	91.6
10	Avoiding casual sex	80	66.7
		795*	

Table 6: Awareness of respondents	on	their	HIV	status	and	preventive	measures	for
HIV/AIDs in the study are:								

* = Multiple responses.

Source: Field Survey, 2019.

4.0 Conclusion

In this study, the awareness and perception of women farmers on HIV/AIDS were assessed in the study area. The study has shown that there was a high level of awareness among farmers on the existence, causes, and mode of transmission on the effect of the epidemic on farmers and agriculture in general. There were also misconceptions among farmers on the causes and mode of transmission of HIV. However, despite the high level of awareness, most farmers did not know their status presumably for fear of stigmatization. The study concluded that current research efforts directed towards minimizing the spread of HIV/AIDS should be directed towards minimizing the incidence of stigmatization of infected persons

5.0 Recommendation

The following recommendations were offered based on the findings of the research

(i) Adequate sensitization campaign should be carried out in the study area to correct the misconception among women farmers on the mode and causes of HIV/AIDS.

- (ii) Farmers should also be educated on the need to refrain from stigmatizing infected persons as this will go a long way to ensuring that people voluntarily subject themselves to free HIV test
- (iii) Adequate law should be put in place to prevent the stigmatization of infected people by members of the public

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