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## Awareness of HIV/AIDS Pandemic in Selected Fishing Communities in North Central Nigeria

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**Abstract:** This study centers on the HIV/AIDS awareness investigation in two north central states (Kogi and Niger States) of Nigeria. A total of 100 respondents were investigated on their level of awareness of HIV/AIDS as it affects their fishing activities. It was discovered that a greater percentage (about 94%) of the respondents were aware of the disease but did not know their status. About 10% got their information from health workers while about 6% got their information from friends and relatives. Recommendations were given for better management of our fisher folks in respect of the dreaded disease HIV/AIDS for a good and balanced production.

**Key words:** HIV/AIDS, awareness, fishing communities, North central, Nigeria

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### INTRODUCTION

Like any other disease, HIV/AIDS tend to pose serious socio-economic threats to the economy of any population. Although the socio-economic effects of HIV/AIDS are now well recognized in other sectors and strategies for mitigating the impacts of the epidemic are now being developed, the implication of HIV/AIDS for the fisheries sector has been much slower in coming to the attention of fishery analysts. There are many glancing references in the media conference abstracts and elsewhere to high rates of HIV infection in fishing communities in East Africa but few published studies of sexual behaviour or HIV prevalence in the communities (Pickering *et al.*, 1997). The same is true of other areas with the most reliable data on prevalence coming from recent studies in Thailand and Cambodia where the large populations of the migrant deep sea fisher folks have come to the attention of policy makers, largely through their studies as illegal migrants. Prevalence rates of 15-20% among fishermen in the region mark them out as a very high risk group, comparable to other sentinel groups such as commercial sex workers, military recruits and long distance truck drivers (Entz *et al.*, 2000). In Africa, most studies on HIV/AIDS in fishing communities have clustered around Lake Victoria from where the epidemic was first identified. There are not available data on the prevalence among people engaged in fishing-related activities (most of whom are small scale fisher folks, making day or overnight trips on the Lake), but studies of high risk sexual behaviour in fishing communities and the experiences of medical research and health service project in the area add up to suggest that fisher folks are significantly more at risk from HIV/AIDS than other occupational groups such as the small scale farmers that make up the majority of the rural population (Allison and Ellis, 2000). Anecdotal evidence based on interviews with health workers in the past puts prevalence as high as 70% in lake-shore towns like Homa Bay Kenya (Seemungul, 2003). HIV/AIDS is identified as the leading cause of death in adults aged between 15 and 50 in lake-shore areas in Uganda (Anonymous, 2002) while in Kagara region, Tanzania, fisher folks are said to be five times more likely to die of AIDS-related illnesses than farmers (Ainsworth and Semai, 2000). National seroprevalence rates in the countries bordering Lake Victoria region are already high, being between 10 and 15% of the 15-50 age group through the 1990s (Sahn and Stifel, 2003). In this context, the relative estimates for fishing communities are devastating.

These high rates and the high incidences of death in fishing communities from AIDS-related diseases have begun to come to the notice of fisheries analysts around the world. The KLARM/World fish center Women in fisheries symposium held in 2001 (Williams *et al.*, 2002) was a key event in raising global consciousness about HIV/AIDS in fishing communities. In Nigeria, HIV/AIDS is spreading across all geo-political zones and among all segments of the society. AIDS is indeed devastating Nigeria communities and poses a threat to poverty reduction. That it presents a major challenge to human development and skill shortage in all sectors becomes apparent, wearing down the gains of economic growth and human development. The sensitization awareness and mobilization activities have concentrated in the cities and towns neglecting the many fisher folks, even small scale fisher folks doing day by day trips are geographically mobile over their lifetime and can often be classified as seasonal or long term migrants or even in some cases, as nomadic populations (Allison and Ellis, 2001; Overa, 2001). It is in the light of these that this study looked into the level of awareness of HIV/AIDS in some selected fishing communities in Niger and Kogi states in the North-central Nigeria with the objectives: to sensitize the fisher folks on HIV/AIDS; to determine the knowledge of the diseases in the fishing communities; to establish common diseases in the fishing communities; to ascertain the central measures put in place.

## **MATERIALS AND METHODS**

### **Area of Study**

The study was conducted in two states in Northern Nigeria. The area is made up of Niger and Kogi States. Geographically, the states are located in the North Central Nigeria.

The choice of the two states was due to the presence of Lake Kainji (Niger State) and the Niger-Benue confluence (Kogi State) where a lot of fishing activities are practiced. In addition, the study area is a typical of diverse social, economic, cultural, religious and rural setting found in fishing communities. Both Niger and Kogi States, located in the study area consist of predominantly fishing activities. In addition, little farming activities are found in the area.

### **Sampling Procedure and Sample Size**

A purposive sampling technique was used for the study in five major fishing communities in each State. Ten major fishing communities were selected in both States. On the whole, a total of 100 fisher folks were sampled from the selected communities in the study area. In Niger, 10 respondents per village were selected in the following fishing communities around Lake Kainji: Yuna, Anfani, Monai, Tada and Nasarawa, while in Kogi State, 10 respondents were selected in each of the following fishing communities in the Niger-Benue confluence: Ohono, Edaha, Lokoja, Angwa masara and Jamata. A total of 100 questionnaires were administered. The respondents chosen for the investigation were those known to be actively involved in fishing activities in the study area.

## **RESULTS AND DISCUSSION**

HIV/AIDS is said by experts, to be a disease of poverty and given the close association between fisheries and poverty in many parts of the developing world (e.g., fishing communities have been characterized as the poorest of the poor (Bailey, 1985) there must be the cause for concern for the fishing communities. Vulnerability of fisheries livelihood systems to HIV/AIDS stems from the socio-economic dynamics of the fisheries trade and lifestyle and in particular, the fishermen's high mobility, their long absence from home and their cash incomes which are often spent in the trading centers on casual sex and alcohol. Vulnerability extends to their (fishermen's) casual or semi casual sexual partners and to their wives at home (Henrich and Topouzis, 2000).

Table 1: Socio-economic characteristics of the respondents

Characteristics	Frequency	(%)
<b>Sex</b>		
Male	60	60
Female	40	40
Total	100	100
<b>Age</b>		
21-30	25	25
31-40	45	45
41-50	18	18
51-60	12	12
Total	100	100
<b>Marital status</b>		
Single	17	17
Married	63	63
Divorced	4	4
Widowed	16	16
Total	100	100

In order to understand the level of awareness of the disease of poverty among the fisher folk, the study revealed the socio-economic characteristics of the respondents in the study area. On the socio-economic characteristics as shown in Table 1, on sex, 60% of the respondents were males while 40% were females. The variation may be as a result of the fishermen's high mobility and their long absences from home, the statement corroborates the observation and findings of Henrich and Topouzis (2000) and in the study area, the women are restricted to their household that is, they are in Purdah, which buttresses the findings of gender studies carried out by Yahaya (1999). It can be assumed that the men are more likely to be aware of this deadly disease. The higher number of males in the study agrees with findings of experts that almost twice as many men as women were aware of HIV/AIDS (Anonymous, 1998).

Age is an important factor in production and productivity, from the study, 70% of the respondents were still in their active (reproductive) age, that is, 21-40 years. Thirty percent were between 41-60 years. These ages are the active and productive years in agricultural production and they are crucial to agricultural development. Thus, they are the very people who are vital to the economic future of the rural communities where poverty is dominant.

The respondents cut across various among marital statuses. Sixty three percent of the respondents were married while 37% were single, divorced and widowed. In this scenario, female subjugation and male authority over women sexuality is socially accepted in Nigeria and reflected in violent behaviour within marriage, women's mobility is restricted by purdah. Men are permitted to have more than one wife, men do not openly admit using sex workers, it is more acceptable for them to have multiple relationships than for women. Thirty seven percent of the respondents may not have a fixed sex partner and therefore the need to be sensitized and mobilized to fight against HIV/AIDS may be imperative. Majority of the respondents had no formal education, with this finding, the awareness, through campaign programmes, jingles and posters in the native language of the respondents is essential, so that the message will trickle down to the target group to bring desirable change and help in fighting the disease of poverty. The primary occupation of the respondents is fishing activities such as canoes and gear making, fishing, processing and marketing, while farming was secondary.

The understanding of the relation and interaction between work and health is very fundamental in agricultural development. Today, HIV/AIDS has become a generalized epidemic in Nigeria, spreading across all geo-political zones and all segments of the society. AIDS is indeed devastating Nigerian communities and pose a threat to poverty reduction. The major intervention programmes have been concentrated in the cities and state capitals, ignoring the rural areas, where about 70% of Nigerians are believed to settle and live below the poverty line. It is believed that health is wealth producing, therefore, in some of the selected fishing communities chosen for the study, the common diseases

**Table 2: Common diseases and knowledge of HIV/AIDS in the fishing communities**

Common diseases	Frequency	(%)
Malaria	80	80
River blindness	3	3
Guinea worm	7	7
Onchocerciasis	4	4
Others	6	6
Total	100	100
<b>Awareness of HIV/AIDS</b>		
Yes	94	94
No	6	6
Total	100	100
<b>Source of awareness</b>		
Radio transmission	80	80
Health workers	10	10
Friends	4	4
Family members	6	6
Total	100	100
<b>Mode of transmission</b>		
Sex	50	50
Blood	20	20
Shaking of hands	9	9
Using the same spoon and plates	15	15
I don't know	6	6
Total	100	100

prevalent (Table 2) are as follows: 80% of the respondents testified to the attack of malaria, 3% for river blindness, 7% for guinea worm infection, 4% for Onchocerciasis infection and 6% for other types of diseases. Various health programmes for the eradication of these diseases had not been well extended to fishing communities in the past, therefore, Nigeria supports the public private partnership in the fight against AIDS, the struggle is to meet the Millennium Development Goals (MDG) of reducing poverty and promoting human dignity by the year 2015, but the likelihood of Nigeria meeting the goal is doubtful (UNDP, 2004). Nigeria's experience in eradicating extreme poverty and hunger, achieving universal primary education, gender equality and empowerment of women, reducing childhood mortality, improving maternal health and combating HIV/AIDS, malaria and other diseases, shows that, going at its present pace, the country is not likely to meet the MDGs, particularly in the face of the AIDS onslaught.

On the awareness of HIV/AIDS, the study of Yahaya (2000) revealed that majority (83%) of the people of Bida Emirate of Niger State did not know what HIV/AIDS was all about and 12% could state means of transmission of sexually transmitted disease (STD) including HIV/AIDS. The findings from fishing communities followed the trend of the result obtained by Yahaya (2000). Ninety four percent of the respondents at one time or the other had heard about the disease but did not know what HIV/AIDS was all about. From this study, it was obtained that 80% was aware of HIV/AIDS through radio broadcast, although radio broadcast has wide coverage; there is tendency of misunderstanding the information due to different tribes and languages in the fishing communities. Again the irregularity of power supply hampers consistent flow of information through radio and television transmission. Consequently, relying on these two media as a way of creating awareness to fisher folks cannot therefore produce the desired results. A communication campaign programme should be organized and executed by the Center for Communication and Reproductive Health Services for reproductive health education of the inhabitants of the fishing communities using posters, handbills and stickers. In addition to these, jingles, drama, folk music performance and outreach programmes should be used in sensitizing in different communities. There should be replicate of Yahaya (2003), the Integrated Multi-media Campaign for HIV/AIDS awareness and Sexuality Information Education and Communication in Bida Emirate Council of Niger State revealed 100% awareness of HIV/AIDS epidemic as against 83% non awareness in the baseline data.

Table 3: Awareness and Seminar/Workshop programme attended in the past

Victims of the disease	Frequency	(%)
Infant	4	4
Adult	18	18
Old people	5	5
All of the above	70	70
I don't know	3	3
Total	100	100
<b>Attendance of organized workshop</b>		
Yes	5	5
No	95	95
Total	100	100
<b>Organised workshop in your locality</b>		
Yes	5	5
No	95	95
Total	100	100
<b>Control method</b>		
Use of Condom	10	10
Abstinence from extra marital sex	30	30
Prevent blood contamination	12	12
I don't know	48	48
Total	100	100

The critical nature of adolescent stage in the life of any individual and global concern regarding the recent scourge of HIV/AIDS have brought to the fore the urgent need to deal with adolescent without delay because of the migratory tendency of the fisher folks. On the mode of transmission, 50 and 20% of the respondents knew that the disease can be contacted through sex and blood transfusion respectively. Only 6% admitted they don't know the mode of transmission. The findings revealed the inherent in reckless social life in the face of unavailable socialization process which has taken various forms and dimension in most recent times. The earlier the people understood the mode of transmission, the better for the communities and it will go a long way to play safe since prevention is better than cure. In the most affected areas, HIV/AIDS is having severe negative impacts on food production system, the national economy and the structure of society (Barnett and Whiteside, 2002), thus the epidemic has had a profound effect on the so-called sexually active population, aged 15-50 years and active age for agricultural production. This result buttressed the above that all people are prone to the attack of the disease, 70% believed that victims could be infants, adults and old people (Table 3). Like any other disease, majority believed that the infection of any disease kills gradually and it may take longer time before the complete breakdown of the victims. It is the realization of the aforementioned that urgent mobilization, information and education be organized in the fishing communities to reduce the burden of HIV/AIDS on national economics, loss of labor has also been highlighted as one of the main economic impacts (Gillespie, 1989, Lisk, 2002) and guarding against the prediction of total number of lost workdays in the agricultural sector because of HIV/AIDS by year 2020 (FAO, 2002).

Almost all Nigerian cities have lectures, seminars and workshops on HIV/AIDS, the activities of John Hopkins University's center for Communication Programme (JHU/CCP) had consciously and intentionally educated Nigerians through music (Yahaya, 2003) unfortunately fishing communities have not benefited much. Ninety five percent of the sampled population had not attended any organized seminar/workshop on HIV/AIDS. Considering the alarming rate in which the disease is ravaging the people, advocacy workshops should be organized for District Heads, fisher folks and youths in the various fishing communities. The workshops should emphasize on the imperatives for HIV/AIDS prevention and the need to carry along the adolescent population in the struggle against the pandemic being the most vulnerable group given all sorts of experimentations (sexual, drug, gangsterism) inherent in that stage of human development (Table 3).

On the control of HIV/AIDS, 48% of the sampled population said they did not know. This could be attributed to the source of awareness of sexual menace. Bulyuguti *et al.* (1995) states the majority of HIV/AIDS-related projects targeted at fisher folks education and awareness raising, early HIV/AIDS prevention schemes in fishing villages were initiatives of health departments and were done independently of any fisheries planning, therefore, related health workers should be deployed to these areas to build knowledge and educate the people to have correct understanding in the fight against HIV/AIDS and also reduction in poverty in fishing communities especially in Nigeria.

## CONCLUSIONS

This study has highlighted some of the common diseases and also determined the level of awareness of HIV/AIDS pandemic in some selected fishing communities in the North Central zone of Nigeria. It is time to ensure that the impact of HIV/AIDS is properly taken into account in the attempts of government, donor organization and NGOs to manage fisheries and assist fisher folks to find ways out of poverty and vulnerability. It is time to help those in fishing communities who are already living with HIV/AIDS to continue to enjoy productive and dignified lives.

However, the following recommendations will assist the fishing communities to fight against health related problems, especially HIV/AIDS;

- Provision of health facilities and health personnel in fishing communities.
- The establishments of HIV/AIDS support Organization in enlightening the people on a broad-based community approach.
- Enlightenment campaigns on HIV/AIDS and education programme on safe sex and behavior change remain key responses to the epidemic.

## REFERENCES

- Ainsworth, M. and I. Semai, 2000. Who is most likely to die of AIDS? Socio-economic correlates of adult death in Kegara region, Tanzania. Paper Presented at the International Conference on HIV/AIDS 8-14 July, 2000, Durban, South Africa.
- Allison, E.H. and F. Ellis, 2000. The livelihoods approach and management of small scale fisheries. *Marine Policy*, 25: 377-388.
- Anonymous, 1998. Report on the Global HIV/AIDS epidemic June 1998. Global HIV/AIDS Surveillance. <http://www.unaids.org>.
- Anonymous, 2002. The Impact of HIV/AIDS on Agricultural Production and Mainstreaming HIV/AIDS Messages into Agricultural Extension in Uganda. Ministry of Agriculture, Animal Husbandry and Fisheries, Kampala, Uganda and FAO, Rome, pp: 24.
- Bailey, C., 1985. The blue revolution: The impact of technological innovation on third world fisheries. *The Rural Sociologist*, 5: 259-266.
- Barnett, T. and A. Whiteside, 2002. AIDS in the 21st Century; Disease and Globalisation. Pulgruve Mucmillian Baslingstoke Humpshire, UK., pp: 416.
- Bulyuguti, D., D. Luhumba, S. Nnko, V. Nyonyo and D. Schupink, 1995. HIV/AIDS and STD health promotion in Tanzania Fishing Villages. *AIDS-STD Health Promotion Exchange*, 2: 3-7.
- Entz, A.T., V.P. Ruffolo, V. Chinvschakitvanich and V. Soskolne, 2000. HIV-1 prevalence, HIV-1 subtypes and risk factors among fishermen in the Gulf of Thailand and Andaman Sea. *AIDS*, 14: 1027-1034.
- FAO, 2002. AIDS hitting African farm sector hard. World Food Summit Five Years Later 10-13 June 2002. Food and Agriculture Organization, Rome-[http://www.fao.org/world food summit/English/newsroom/focus/him](http://www.fao.org/world%20food%20summit/English/newsroom/focus/him) (accessed 9 December, 2003).

- Gillespie, S., 1989. Potential impact of AIDS on farming system. A study from Rwanda Land Use Policy, pp: 301-312.
- Henrich, G. and D. Topouzis, 2000. Multi-sectoral responses to HIV/AIDS: Constraints and opportunities for technical cooperation. *J. Int. Dev.*, 12: 85-99.
- Lisk, F., 2002. Labour market and employment implications of HIV/AIDS. Working Paper 1. ILO Programme on HIV/AIDS and the World of Work, International Labour Organisation. Geneva, pp: 15.
- Overa, R., 2001. Institutions mobility and residence in the Fante migratory fisheries of West Africa. CMI Working Paper 2001: 2 Chr. Micheisen Institute Bergen, Norway, pp: 38.
- Pickering, H., M. Okongo, A. Ojwiyu, D. Yirrel and J. Whitworth, 1997. Sexual network in Uganda mixing patterns between a trading town, its rural hinterland and nearby fishing villages. *Int. J. STD AIDS.*, 8: 495-500.
- Sahn, D.E. and D.C. Stifel, 2003. Progress toward the Millenneum Development Goals in Africa. *World Dev.*, 31: 23-52.
- Seemungul, M., 2003. AIDS in Africa. The National Cooperate Radio Canada. <http://www.che.uvu.national/news/aids> (accessed on 2nd October, 2003).
- UNDP, 2004. The Nigerian Millennium Development Goals 2004. Draft Report, pp: 26.
- Williams, M.J., N.H. Chao and P.S. Choo, 2002. Global Symposium on Women in Fisheries. 6th Asian Fisheries Forum 29 November, 2001. Kainslung, Taiwan. The World Fish Center Penang, Malaysia.
- Yahaya, M.K., 1999. Gender Consideration in Radio Option for Development Support Communication. Empirical Evidence from Northern Nigeria. In: *Communicating Development Purposes*. Soola, E.O. (Ed.).
- Yahaya, M.K., 2000. Indigenous Music and Entertainment-Education: Lessons from AIDS: *Batan na ewu zana in Bida Emirate Nigeria*. Stirling-Hardens Publishers, pp: 58.
- Yahaya, M.K., 2003. *Development Communication: Lesson from Change and Social Engineering Project*. Published by Corporate Graphic Ltd.