

# Assessing the Level of Preparedness of Private Health Providers for Clinical Management of HIV/AIDS Epidemic in Nassarawa State, Nigeria

Adeniyi O. Olaleye<sup>1</sup>, Lawrence A. Adeokun<sup>2</sup>, Frank Oronsaye<sup>3</sup>, Oladapo A. Ladipo<sup>4</sup>, Grace E. Delano<sup>5</sup>

## ABSTRACT

Very little information is available on the extent to which the private health sector is involved in clinical management of HIV/AIDS in Nigeria. This study assessed the potentials and existing capacity of 15 private health facilities in Nassarawa state for clinical management of HIV/AIDS. Information was obtained from 25 staff (15 proprietors and 10 professionals) of the randomly selected health facilities in the state using structured questionnaire. Of the 15 health facilities, three provided voluntary counselling and testing (VCT), seven had never admitted persons living with HIV/AIDS (PLWHA), two provided laboratory services, none provided home-based care for PLWHAs, two had anti-retro-viral drugs in stock, two had rooms for counselling, three had full-time doctors, and six had registered nurses. Of the 25 health workers, 5 had skills/training in conducting VCT, 15 had skills in the treatment of opportunistic infections, 14 were aware of anti-retro-viral drugs and 13 did not feel comfortable attending to PLWHAs. The study recommended capacity building on HIV/AIDS related services for the private health-workers. (*Afr J Reprod Health* 2006; 10[3]:90-97)

## RÉSUMÉ

**Évaluation du niveau de préparation des dispensateurs privés de la santé en rue du traitement clinique de l'épidémie du VIH/SIDA dans l'État de Nassarawa, Nigéria.** Nous n'avons que très peu de renseignement sur l'étendue de l'implication du secteur de la santé privé dans le traitement du VIH/SIDA au Nigéria. Cette étude a évalué le potentiel et la capacité actuelle des 15 centres médicaux dans l'état de Nassarawa pour le traitement clinique du VIH/SIDA. Les renseignements ont été recueillis au sein des 25 membres de personnel (15 propriétaires et 10 professionnels) de ces centres médicaux dans l'état sélectionnés au hasard à l'aide des questionnaires structurés. De 15 établissements de santé, 3 assuraient les services de conseil et de test volontaires (CTV), 7 n'ont jamais admis les personnes vivant avec le VIH/SIDA (PVVS), 2 assuraient des services de laboratoire, aucun n'assurait pas de services à la maison pour les PVVS, 2 avaient en stock les médicaments antirétroviraux, 2 disposaient de salles de conseil, 3 avaient des médecins à plein temps et 6 avaient des infirmières qualifiées. De 25 membres du personnel médical, 5 avaient le savoir-faire en matière de CTV, 15 étaient habilités par rapport au traitement des infections opportunistes, 14 étaient au courant de l'existence des médicaments antirétroviraux et 13 ne sentaient pas à l'aise en s'occupant des PVVS. L'étude a préconisé le renforcement de la capacité à l'égard des services liés au VIH/SIDA pour le personnel de la santé privée. (*Rev Afr Santé Reprod* 2006; 10[3]:90-97)

---

**KEY WORDS:** *HIV/AIDS; clinical management; health workers; Nigeria*

---

Correspondence: *Association for Reproductive and family Health (ARFH), Quarters 815A, Army Officers' mess Road, Ibadan, Oyo State.*

## **Introduction**

Since the first cases of HIV/AIDS were reported in Nigeria in 1986, the prevalence of infection has shown a steady increase in all groups that have been monitored. The national prevalence rate increased from 1.8% in 1991 to 5.0% in 2003<sup>1</sup>. The actual numbers of persons infected was put at 3.3 million based on the country's estimated population of 126 millions<sup>2</sup>, making Nigeria the country with the third largest burden of HIV and AIDS in the world- right behind South Africa and India<sup>3</sup>. If the trend continues unchecked, the number of people infected will triple by 2015<sup>4</sup>. The epidemic has also reached a point, where it is estimated that 800 Nigerians die of AIDS every day (i.e one person dies every 2 minutes). As at the end of 2002, about 1.3 million Nigerians had died of AIDS and by 2005 an additional 1 million would die if nothing was done<sup>4</sup>. Hitherto, the emphasis has been on preventive measures, but with the current realities, efforts should be geared towards a comprehensive strategy that include prevention, clinical management (diagnosis, treatment and prevention of opportunistic infections, ARV therapy and follow-up care), palliative care, home-based care, counselling and social supports for infected persons<sup>5</sup>.

In Nigeria, the health care delivery system consists of both public and private sectors. Many communities remain under served by the public health care system while private health facilities are more accessible. Even in settings where public health facilities are available, people often prefer private health care providers as the first and sometimes the only port of call for health care needs, particularly for outpatient treatment, because of prompt and personal attention they give to their clients. Consequently, private health-care workers are well placed to provide basic care and treatment, counselling and information as well as referral to secondary or tertiary institutions for services that cannot be provided by them. People also tend to have confidence in

private health providers because they provide a level of anonymity preferred by clients who are reluctant to seek care in public health sector where they may be stigmatised. The degree, to which people rely on private health care providers, and their relatively easy access, adequately positioned them to play a critical role in prevention and management of HIV/AIDS.

### *Profile of the Study Site*

Nassarawa is one of the 36 states in Nigeria, located in the north central region of the country. The state had a total population of 1,287,876 as at the 1991 head counts which was projected to 1,494,190 by 1996. As at 2005, the population of the state was estimated to be 1.8 millions. The state has numerous ethnic groups, which are thoroughly intermingled. In terms of geographical location of these ethnic groups, there are no distinct boundary demarcations, to the extent that the areas of dominance of each group cannot be easily separated. The major ethnic groups include Eggon, Tiv, Alago, Hausa, Fulani, Mada, Rindre, Gwandara, Koro, Gbagyi, Ebira, Agatu, Bassa, Aho, Ake, Mama, Arum and Kanuri. While English and Hausa are widely spoken in the state, all the ethnic groups indicated above also have their own languages. Islam, Christianity and Traditional religions are widespread in the state, but the dominant religion of the people is Islam. The majority of the people are engaged agriculture.

Nassarawa is one of the most HIV/AIDS endemic states in Nigeria. In 1999, the state was ranked fourth (after Benue, Akwa Ibom and Kaduna states) with 10.8% prevalence rate. Although the 2003 survey indicated that the state prevalence rate has dropped to 5.5%, it is still among the worst hit states and also above the national average of 5.0%<sup>1</sup>. Considering the fact that HIV infection sometimes takes up to 10 years before developing into full-blown AIDS, the number of infected persons in the state is increasing in absolute numbers, even though the

new infection rate is decreasing. Consequently, the number of people requiring clinical services and social support continue to increase. This is coupled with the fact that persons living with HIV/AIDS (PLWHAs) fall sick and require medical attention more often than uninfected persons<sup>6</sup>.

As at 2004, there were 14 government-owned secondary level hospitals in Nassarawa state. There were also about 497 primary health centres in the state, 8 of which were comprehensive health centres while the remaining 489 were drug-dispensing centres for minor illnesses. There was no tertiary hospital in the state. This showed that government owned hospitals were grossly inadequate to cope with the upsurge in number of PLWHAs who will require medical attention in the state. The involvement of private health providers in management of HIV/AIDS therefore becomes very necessary. Their preparedness to assume this role and meet the impending demand for services by the thousands of HIV-infected people in the state who will require treatment, care and support needs to be investigated.

### *Objective of the Study*

This study examines the level of preparedness of private health care providers playing significant roles in clinical management of HIV/AIDS epidemic in Nassarawa state of Nigeria. The specific objectives are to assess the potentials and existing capacity of the private health providers in terms of their level of knowledge, skills, attitudes, practice and equipment to provide HIV/AIDS preventive education, voluntary counselling and testing, ARV therapy, treatment of opportunistic infections, as well as management of sexually transmitted infections (STIs).

### **Methods**

Data for the study were collected in August 2003 as part of the needs assessment and baseline survey for a project titled "Involving the Private Health Sector in HIV/AIDS Prevention and

Management". A total of 15 registered private health facilities were randomly selected from 5 local government areas (Lafia, Toto, Keffi, Doma and Akwanga) in Nassarawa state. The sampling design was to select two professional staff in each facility (the proprietor and one other staff). However, no other professional staff was available (apart from the proprietors) in five out of the 15 facilities. In all, data were collected from 25 respondents (15 proprietors and 10 other staff) using a structured questionnaire. The questionnaire was divided into two modules. All respondents provided information to questions in module one, which included demographic characteristics of respondents, knowledge of family planning and contraception, knowledge, attitude and practices related to HIV/AIDS. In addition, the 15 proprietors answered questions in module two on issues related to personnel, equipment, stock, infrastructure, services being provided in the facility and referral system. The completed questionnaires were collated and entered into the computer. The data were analysed with the Statistical Package for Social Scientists (SPSS) version 10.0 and results were presented in simple percentages.

### **Findings**

#### *Demographic Characteristics of the Respondents*

More than half (14/25) of the respondents were males while 44% (11/25) were females. Majority (19/25) of the respondents were married, 21/25 were Christians while four were Muslims. The distribution of respondents by professional status is as follows: six physicians, eight nurses/midwives, two auxiliary nurses, seven health technicians/community health workers, and two laboratory technologists.

#### *Knowledge about Family Planning and Safe Sex*

The study examined the knowledge of the respondents on family planning, dual protection and safe sex. The data showed that, although

almost all respondents (92%) knew at least five modern family planning methods, less than half (12/25) of them understood what “safe sex” entails. About 88% (22/25) of the respondents were not familiar with the concept of “dual protection”, 28% (7/25) knew about female condom, and two had ever prescribed it. However, 88% (22 respondents) knew that the use of condoms (female or male) during sexual intercourse reduces the risk of HIV infection. One out of the 15 health facilities had organized enlightenment campaigns on HIV/AIDS in the community in the last one year preceding the survey.

#### *Voluntary Counselling and Testing*

Although, 76% (19/25) of the respondents reported that they possessed interpersonal communication skills, 20% (5 respondents) had skills to conduct voluntary counselling and testing (VCT). None of the respondents had ever received any formal training on VCT. Seventeen of the respondents had ever seen HIV screening kits, while 67% (10/15) of the sampled facilities currently provided HIV screening services. Two of the facilities provided voluntary confidential counselling and testing to their clients. However, none of the facilities had referral arrangement with any other facilities for VCT services.

#### *Treatment of HIV/AIDS and Opportunistic Infections*

Less than 60% (14/25) of the respondents knew of anti-retro-viral drugs, 15 (60%) had knowledge of syndromes management and treatment of opportunistic infections. None of the respondents had ever received formal training on treatment of HIV/AIDS. The results further showed that less than half (12/25) of the respondents understood what care, support and treatment of PLWHAs entails, while a little above half (13/25) knew what social and peer support meant. One of the respondents knew of support

groups that cared for PLWHAs in the community. Two-third (10/15) of the facilities made follow-up visits to clients in their homes but, none provided home-based care for PLWHAs. Although, majority (23/25) of the respondents knew someone who tested positive to HIV, 13 respondents did not feel comfortable treating or attending to HIV/AIDS cases. However, 18/25 of the respondents had never been tested for HIV. Of the 15 facilities, eight had ever admitted PLWHAs. Five out of the seven facilities that had never admitted a PLWHA indicated lack of adequate skills and materials/drugs to manage the infection as the major reasons for not doing so, while the other two facilities did not admit PLWHAs for fear of losing clients because other patients would not feel comfortable if they knew that a PLWHA was in the ward.

#### *Laboratory and Blood Transfusion Services*

Two of the sampled facilities currently provided laboratory services while one had referral arrangement with the government hospitals in the area for laboratory service. Nearly all (14/15) of the facilities provided blood transfusion service, out of which four usually obtained blood from the blood bank of federal medical centre, and one obtained blood from other private laboratories. The remaining nine facilities got blood from relatives of the patients, after screening.

#### *Clinical Infection Prevention Practices*

The study also investigated the infection prevention practices of the private health providers. The findings revealed that majority of the facilities (14/15) practised high-level disinfections of equipment either by boiling or use of autoclave. However, less than half (11/25) of the respondents knew what universal precaution entailed, about a quarter (6/25) reused gloves, while one respondent reported that reused injection needles. More than two thirds (17/25)

of the respondents were aware of issues relating to management of HIV positive pregnant women and infant feeding options.

#### *Availability of Personnel, Equipment and Drugs*

An assessment of the availability of personnel, equipment, materials and drugs for treatment of opportunistic infections and clinical management of HIV/AIDS in the sampled facilities revealed the following: Two out of the 15 facilities had anti-retro-viral drugs in stock, three facilities had drugs for treatment of tuberculosis, eight facilities had antibiotics for treatment of diarrhoea and seven facilities had drugs for treatment of skin infections. A third of the facilities (5/15) did not have condoms (either male or females'). Almost all the facilities (14/15) had waiting rooms/reception halls and all of the facilities had consulting room where privacy could be assured during physical examination. Majority (13/15) of the facilities had examination couches, 10 facilities had complete sets of diagnostic instruments and two facilities had rooms for counselling. In terms of personnel, 3/15 (20%) of the facilities had full time doctors, 6/15 (40%) had part-time doctors, 6/15 (40%) had registered nurses and seven facilities had auxiliary nurses. Almost half (7/15) of the facilities had community health extension workers while two facilities had laboratory technologists/technicians.

## **Discussions**

Although sexual intercourse is not the only means of contracting HIV infection, heterosexual transmission accounts for as much as 95% of HIV infections in Nigeria<sup>7</sup>. Hence, the starting point in preventing the spread of HIV should be safe sex campaign. Before health workers can adequately enlighten or educate the public on HIV/AIDS, they should have adequate knowledge about issues surrounding safe sex. The ability of the sampled private health workers to educate the public on the double-advantages of using condoms (to prevent unplanned pregnancy

and to prevent STIs, including HIV) was limited, considering the fact that only 12% of the them knew about the concept of dual protection. Many studies<sup>8,9</sup> have also identified gaps in knowledge of HIV related issues by health workers. The opportunity of empowering women in safe sex negotiation that use of female condom offers can hardly be known to the public when a significant proportion of the persons expected to educate them are not aware of its existence. High level of knowledge about modern family planning methods, but low level of knowledge on dual protection among the respondents was a pointer to the fact that more than three decades of family planning campaign in Nigeria focused primarily on population control and on the most effective hormonal contraceptives, of which condom use was the least favoured<sup>10</sup>. It showed that the shift in emphasis from effective hormonal methods to dual protection and safe sex was not yet popular among the private health workers in Nassarawa state. The low level of knowledge about the female condom may be due to its recent introduction and limited distribution in the country.

Testing people for HIV and informing them of their HIV status are very sensitive procedures and require special skills. The fact that only a small fraction of the respondents had skills/training on how to conduct VCT posed a big challenge to private health workers involvement in prevention and management of HIV/AIDS in the state. The importance of VCT in HIV/AIDS prevention and management cannot be over emphasized. It enables individuals to know their HIV status, it empowers those who are tested HIV-positive with coping strategies and links them up to care and treatment. The low level of VCT also makes mother-to-child transmission of HIV an inevitable element of the epidemic. Health workers should be trained to maintain confidentiality, respect individual's rights and provide useful advice to their clients when conducting VCT.

There is no cure for AIDS itself, but many of the opportunistic infections with which it is associated can be treated. Also, anti-retro-viral drugs can be used to reduce the viral load in HIV infected persons. Limited experience of private health workers in the treatment of opportunistic infections and administration of anti-retro-viral drugs was noted in the findings of this study. Low awareness of anti-retro-viral drugs might not be unconnected with its limited availability and distribution in the country. It might also be as a result of the apathy of some private health workers towards involvement in HIV/AIDS management. The fact that only negligible proportions of the respondents had ever received formal training on clinical management of HIV/AIDS pointed to the urgent need of capacity building for the private health workers in the state on clinical management of HIV/AIDS.

Private health facilities are in position to provide (as well as train family members of PLWHAs to provide) care and support to people living with HIV, but the negative attitudes of some of the private health workers to PLWHAs as noted in the study create a barrier to admitting, attending and giving care and support to PLWHAs. The negative attitude may be as a result of their low level of knowledge and training on issues related to HIV/AIDS. Studies have found that stigmatising attitudes are strongly correlated with misunderstanding the mechanism of HIV transmission and overestimating the risk of casual contacts<sup>12</sup>. Other studies have also noted that many health worker have negative attitudes towards HIV-positive patients<sup>6,8,9</sup>. In addition, health workers have been indicted in many instances<sup>13,14,15</sup> for their lack of preparedness to deal with an increased workload that clinical management of HIV/AIDS entails. The probability of private health workers playing a major role in HIV treatment and care depends, to a large extent, on their attitudes towards PLWHAs.

Private health facilities are usually the first port of call for people's health care needs. However,

not all private facilities have capacity (skills and equipment, including drugs) to manage HIV/AIDS cases. They are therefore expected to refer people to higher facilities for services they cannot provide. Low referral practice, despite inability to provide such services, was noted in the study. Access to and appropriate utilization of secondary and tertiary levels of care is affected by ineffective referral systems<sup>16</sup>. Consequently, there is need for improvement in networking and referral system among health facilities in Nassarawa state, in order to ensure effective management of HIV/AIDS.

Medical treatment is intended to save lives and improve health. However, if adequate infection prevention procedure is not followed, both the patients and health-care workers may be at the risk of infections, including HIV. With the current level of HIV/AIDS epidemic in Nassarawa state, the need for health-care workers to consider ALL patients as potentially infected with HIV and to adhere rigorously to infection-control precautions for minimizing the risk of exposure to blood and body fluids of all patients cannot be over emphasized. Cases of reuse of gloves and injection needles must be addressed promptly. The WHO<sup>17</sup> estimated that reuse of injection devices accounted for about 260,000 new HIV infections in developing and transitional countries each year.

## **Recommendations and Conclusion**

The findings of this study clearly showed gaps in knowledge and skills of the private health workers on HIV/AIDS related issues and services. This revelation calls for interventions from government, donor agencies and NGOs in capacity building and provision of equipment, if private health providers are to play a significant role in clinical management of HIV/AIDS in the state. Hence, it is recommended that every health worker (whether a fully trained clinical staff, a trainee nurse, or a volunteer community health worker) should be trained to possess adequate knowledge and

skills to educate patients and their families about HIV/AIDS. They also need to acquire new attitudes and skills as they become immersed in the multi-disciplinary problems of HIV/AIDS care and prevention. There is an urgent need for periodic educational programmes, which should be target specific to improve knowledge of private health workers on HIV/AIDS related issues.

Since HIV is already widespread in Nassarawa state, health workers in all departments are bound to come into contact with HIV/AIDS patients in the course of their normal duties. Adequate training on universal precautions and infection prevention procedure for the private health workers is very important and urgent. The need to enhance the capability of private health providers to offer quality treatment and care to PLWHAs and change their negative attitudes towards PLWHAs is very urgent. This can be achieved through training and capacity building programme for private health care providers and provision of necessary equipment and drugs (at subsidized rates) for the management of HIV/AIDS in these facilities. Interventions should also address their concerns and barriers to HIV/AIDS prevention and management practices.

### Acknowledgments

The Association for Reproductive and Family Health (ARFH), Ibadan collected the data used for this paper as part of the needs assessment and baseline survey for the project titled "Involving the Private health Sector in HIV/AIDS Prevention and Management" with support from National Action Committee on AIDS (NACA), Nigeria. We are grateful for the permission to use the data. We also appreciate the comments and editorial advice of Mrs Grace Sadiq.

### REFERENCES

1. Federal Ministry of Health (FMOH). *Technical Report on the National HIV Sentinel Survey among Pregnant Women Attending Antenatal Clinics in Nigeria*. Abuja. Ministry of Health, 1999 and 2003.
2. Federal Ministry of Health. (FMOH). *HIV/AIDS: The Nigeria Situation 2003. Implications of the Epidemic*. Abuja. National AIDS/STD Control Programme, Federal Ministry of Health, 2004.
3. Joint United Nations Programme on HIV/AIDS (UNAIDS). *2004 Report on the Global AIDS Epidemic*. Geneva. UNAIDS, 2005.
4. Federal Ministry of Health. (FMOH). *HIV/AIDS in Nigeria: Overview of the Epidemic*. Abuja, National AIDS and STD Control Programme, Federal Ministry of Health, 2002.
5. Joint United Nations Programme on HIV/AIDS (UNAIDS). *Improving Access to Care in Developing Countries: Lessons from Practices, Research, Resources and Partnerships*. Geneva. UNAIDS, 2002.
6. Shisana, O. The Impact of HIV/AIDS on the Health Sector. *Human Sciences Research Council Review*, March, 2004; 2(1).
7. Adeokun L. Social and Cultural Factors affecting the HIV Epidemic. In: Adeyi O, Kanki P.J, Odutolu O, and Idoko J.A (eds). *AIDS in Nigeria: A Nation on the Threshold*. Cambridge, MA USA, Harvard Centre for Population and Development studies, 2006.
8. Mahfouz, A.A and Others. Knowledge and Attitudes Towards AIDS Among Primary Health Care Physicians in the Asir Region, Saudi Arabia. *Journal of Reproductive and Social Health*. Feb. 1995; 115(1):23-25.
9. Hentgen, V. and Others. Knowledge, Attitude and Practices of Health Personnel With Regard to HIV/AIDS in Tamatave, Madagascar. *Bull Soc Pathol Exot*. June 2002; 95(2):103-108.
10. Adeokun, LA; Ladipo, OA; Odutola, O; Okwonkwo, P; Olaley, D; Kanki, P and Delano, G. Bridging the Knowledge-Behaviour Gap Through HIV/AIDS Surveillance in Four Markets in Ogbomoso and Ibadan, Nigeria. *Archives of Ibadan Medicine* 2004; 5(1&2): 59-65.
11. Adelekan, M. L et al. Caring for People with AIDS in a Nigerian Teaching Hospital: Staff Attitudes and Knowledge. *AIDS Care*, 1995; 7 Suppl. 1:S63-72.
12. Herek G.M and Captanio J.P. AIDS Stigma and Contact with Persons with AIDS: Effects of Direct

- and Vicarious Contacts". *Journal of Applied Social psychology*, 1997; 27(1):1-36
13. Human Sciences Research Council (HSRC) and Medical University of South Africa. *The Impact of HIV/AIDS on the Health Sector. National Survey of Health Personnel, Ambulatory and Hospitalised Patients and Health Facilities*, 2002.
  14. Kitaoura, H and Others. Knowledge and Attitudes of Japanese Dental Health Care Workers Towards HIV-related Disease. *Journal of Dentistry*. May-July, 1997; 25(3-4): 279-83.
  15. Mungherera, M and Others. HIV/AIDS-Related Attitudes and Practices of Hospital-Based Health Workers in Kampala, Uganda. *AIDS*, Sept. 1997; 11 Suppl.1:S79-85.
  16. Ramanathan K, Tarantola D, and Marlink R.G. Access to HIV and AIDS Care. In Essex M, Mboup S, Kanki P.J, Marlink R.G, and Tlou S.D (eds). *AIDS in Africa*. New York. Kluwer Academic/Plenum Publishers, 2002.
  17. World Health Organisation. WHO. *Prevention of Health Care-Associated HIV Infection*. Department of Essential Health Technologies. Geneva. [www.who.int/ehc](http://www.who.int/ehc).