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# HIV/aids related home based care practices among primary health care workers in Ogun state, Nigeria

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## Abstract

**Background:** HIV/AIDS is fast becoming a chronic disease with the advent of antiretroviral drugs, therefore making home based care key in the management of chronically ill HIV/AIDS patient. The objective of this study was to determine the perception and practice of health care workers on HIV/AIDS related home based care in the health facilities in Ogun state, Nigeria.

**Methods:** This study is an analytical cross-sectional study. A multistage cluster sampling technique was used to obtain a representative sample of the primary health care workers in Ogun state. An interviewer administered structured questionnaire was administered by trained health workers to elicit the required information.

**Result:** A total of 350 health care workers were interviewed, 70% of the respondents could adequately describe the components of home based care. Only 38.7% were aware of the National guideline on home based care practices and 17.1% believe that home based care will not significantly improve the prognosis of PLWAs. Few 19.1% had ever been trained or ever involved 16.6% in home based care practices. Only 20 [5.7%] are involved on a weekly basis, 16 [4.6%] monthly and 22 [6.3%] quarterly. Reasons given for non implementation of home based care are inadequate number of healthcare workers 45%, lack of political will 24.4%, lack of implementation by facility managers 14% and inadequate funds 16.6%.

Factors that were significantly associated with the practice of home based care were perception of its relevance in improving prognosis [OR = 54.21, C.I = 23.22-129.52] and presence of a support group in the facility [OR = 4.80, C.I = 2.40-9.57]. There was however no statistically significant relationship between adequate knowledge of home based care [OR = 0.78, C.I = 0.39-1.54] and previous training on home based care (OR = 1.43, C.I = 0.66-3.06).

**Conclusion:** The practice of home based care for HIV/AIDS among the study population is low and it is greatly influenced by perception of its effectiveness and relevance. The study recommends that the health care workers should be adequately educated on the importance of home based care in the management of chronic illnesses in order to enhance its practice.

## Background

Living and dying with incurable illness in poverty and pain is all too common in sub-Saharan Africa [1,2]. With minimal resources and huge shortages of health workers, national health systems in a number of African countries have focussed primarily on preventive, curative and maternal health services thus responding to a set of

immediate health problems [1]. In many countries, minimal resources have been dedicated to supportive or palliative care [3]. However, the severity of the HIV and AIDS pandemic has triggered donor interest in palliative and home based care in Africa, an interest which has never been greater, as evidenced by multiple small projects [3,4] and promotion by various national and pan-African initiatives [5,6].

There is ample evidence that home based care services and practice is prominent especially among informal health care workers such as traditional birth attendants [TBAs], Voluntary health care workers etc. in Nigeria

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though the practice among the formal health care workers is rare [7-10]. This is done in spite of a relatively easy access to institutional maternity services in urban areas. Previous studies about home health care in urban and peri-urban areas have reported that the utilization of home based services is more closely related to the needs of caregivers than the care needs level of the users [2]. It is usually determined by multidimensional services indicators and care needs such as poor education, multiparity, and low socioeconomic status in rural areas in Africa [4,11-13]. Although there have been a few number of studies that focused on care at home, more information is needed about the range and severity of problems encountered by primary care professionals and the barriers that prevent optimal care in order to identify the educational and training needs of primary care teams.

The World Health Assembly in 2005 even declared supportive or palliative care as an urgent humanitarian responsibility [14]. Despite various palliative care programmes which have been developed, it is still only available to less than 5% of those in Africa who need it [14]. Assessment of the perception and practice of home based care by health care workers is vital to understanding the extent of practice among the study population and also to determine the factors that encourage its practice in an African population. This study was therefore designed to determine the perception and practice of health care workers on HIV/AIDS related home based care in the health facilities in Ogun state, Nigeria.

## Methods

### Study design

This study is an analytical cross-sectional study. The information was collected from health care workers in Abeokuta South local government area of Ogun State from February 10, 2008 to April 15, 2008.

### The study area

The study was conducted in Ogun State which is one of the 36 states in Nigeria and was created in February 1976 out of the old western state. It is located in the South West Zone (which is one of the 6 geo-political zones) of Nigeria with a total land area of 16,409.26 square kilometers and a population of 3,507,735 with growth rate of 2.83% per annum (2006 National Census). However, the estimated HIV/AIDS prevalence in Ogun state was 1.7% in 2008 [15]. The state has twenty (20) Local Government Areas, with each LGA headed by an executive chairman. It is divided into 3 senatorial districts and 26 state constituencies.

This study was conducted in Abeokuta South local government area of Ogun State from February 10, 2008 to April 15, 2008. All health workers in primary health

care facilities who consented to take part in the study were recruited.

### Sampling technique

A multistage cluster sampling technique was used to obtain a representative sample of all the primary health care workers in Ogun state.

Stage 1: The framework of all the local government in Ogun state was obtained from the National population commission. Abeokuta South local government area local government area was selected by balloting among all the 20 local government areas in Ogun state.

Stage 2: All health care workers in primary health care facilities in Abeokuta South local government area of Ogun State from February 10, 2008 to April 15, 2008 who consented to take part were enrolled in the study.

### Sampling size determination

The sample size was calculated using Epi-Info version 6.0 statistical software. The result of a previous study [4] that showed 17% prevalence of home care delivery was used.

The sample size used for this study was calculated with the formula

$$n = z^2 pq/d^2$$
$$n = 1.96^2 \times 0.17 \times 0.83$$
$$0.05^2 = 217$$

However a total of Three hundred and fifty participants [350] were recruited into the study.

### Study instrument

The factors examined in the study include socio-demographic characteristics (age, sex, income, education, religion, marital status, occupation, place of residence) and the knowledge of components of HIV/AIDS related home based care and factors associated with the practice of home based care.

Single multiple response choice questions were asked to determine the practice of home based care.

The Questionnaire was pre-tested on health workers in the Reproductive health unit of the Ogun State Ministry of Health, and necessary adjustments were made. Trained data collectors explained the aim of the study, obtained informed consent, and interviewed each respondent privately. All information was obtained under anonymity and the data was collected by trained personnel on clinic days.

### Ethical considerations

Ethical clearance: was obtained from the Ogun State Ministry of Health Ethics Board. Confidentiality on candidate's information was maintained. Permission of the

State Ministry of Health, HIV/AIDS Control Division were obtained before the commencement of the study.

#### Data analysis

To describe patient socio-demographic characteristics, we calculated proportions and medians. For categorical variables, we compared proportions using chi-square tests and, when appropriate, Fisher's exact test. For continuous variables, we compared medians using the Wilcoxon Rank-Sum Test. Chi-square was used to determine association between categorical variables and a p value of less than 0.05 was considered significant. The relationships between socio-demographic characteristics of the health care workers and their practice of Home based care services were examined through bivariate analysis, by computing odds ratio at 95% confidence level and chi square and t-tests where appropriate. Data were presented in tabular form.

### Results

#### Socio-demographic characteristics of respondents

A total of 350 health care workers were recruited into the study. The age of the respondents ranged from 21 to 59 years, (mean 39.42 ± 7.15 years). Majority [64.9%] of the respondents were married and 30.9% were never married. Most of the respondents 286 [81.7%] were Christians, 17.4% Muslims and 3[0.9%] were traditional worshippers. Three quarters 75.7% of the respondents were females. More than half 218 [63.6%] of the respondents were from the nursing profession, 50 [14.6%] were community health workers, 6.9% were Medical doctors and 58 [14.9%] were from other paramedical professions such as Laboratory scientists, Pharmacists, Medical records etc. Majority [71.4%] have been working for between 11-20 yrs, 80 [22.5] for less than 10 yrs and 20 [5.7%] for more than 20 yrs while 285 [%] have been working in public health field since employment. The prevalence of practice of home based care among these health workers was 58 [16.6%] (Table 1).

#### Perception of the health care workers about home based care

Two hundred and fifty [70%] of the respondents had adequate knowledge of all the elements of HIV/AIDS related home based care. 60 [17.1%] believed that home based care is not essential or relevant to the management of HIV/AIDS in their environment. Only 67 [19.1%] of the respondents have ever received any form of training on home based care. Only those 58 [16.6%] that practice home based care believed that its practice is feasible while 150 [42.9%] believed that it is an expensive venture and 142 [40.1%] believed that it is a cumbersome practice. Majority [55/58] of the respondents that practice home based care have support group in

**Table 1 The Socio-demographic characteristics of respondents**

	No of respondents	% of respondents
<b>Age</b>		
21-30 yrs	93	27.3
31-40 yrs	124	36.4
41-50 yrs	39	27.3
51-60 yrs	40	9.0
Total	350	100.0
<b>Sex</b>		
Male	85	24.3
Female	265	75.7
<b>Marital Status</b>		
Never married	108	30.9
Married	227	64.9
Seperated/Divorced	6	1.7
Widow/Widower	9	2.5
<b>Profession</b>		
Medical doctors	24	6.9
Nurses	218	63.6
Community Health Workers	50	14.6
Others	58	14.9
<b>Religion</b>		
Christainity	286	81.7
Islam	61	17.4
Traditional Religion	3	0.9
<b>Years of working experience</b>		
0-10 yrs	80	22.8
11-20 yrs	250	71.4
>20 yrs	20	5.7
<b>Working in Public Health field</b>		
Yes	285	81.4
No	65	18.6

their facility. Among those that practice home based care only 16 [5.7%] do home visit weekly, 4.6% monthly and 6.3% on a quarterly basis. Reasons given for non implementation of home based care are inadequate number of healthcare workers 45%, lack of political will 24.4%, lack of implementation by facility managers 14% and inadequate funds 16.6%.

Table 2 shows the perception and practice of home based care among the respondents.

#### Factors associated with the practice of HIV/AIDS related home based care

The practice of home based care was statistically significantly associated with perception of its relevance in the management of HIV/AIDS. Those who believe that it

**Table 2 Knowledge, perception and practice of home based care among HCW**

	No of respondents	% of respondents
<b>Knowledge of home based care</b>		
Adequate	245	70.0
Inadequate	105	30.0
<b>Relevance of Home based care</b>		
Relevant	290	82.9
Not relevant	60	17.1
<b>Trained on HBC</b>		
Trained	67	19.1
Not trained	283	80.9
<b>Practice HBC</b>		
Weekly	20	5.7
Monthly	16	4.6
Quarterly	22	6.3
Nil Practice	292	83.4
<b>Support group in your facility</b>		
Yes	55	15.7
No	295	84.3
<b>Opinion about HBC</b>		
Feasible	58	16.6
Expensive	150	42.9
Cumbersome	142	40.5

significantly improves prognosis reported home visits [OR = 54.21, C.I = 23.22-129.52]. More of those that have ever been trained for home based care practice it (OR = 1.43, C.I = 0.66-3.06] but it was not statistically significantly related to practice. Those from the facilities

that have support group were about 5 times more likely to report the practice of home based care when compared to those from facilities that do not have support group [OR = 4.80, C.I = 2.40-9.57]. There was however no statistically significant relationship between adequate knowledge of home based care and its practice [OR = 0.78, C.I = 0.39-1.54] Table 3 shows the influence of knowledge and perception of home based care on its practice.

## Discussion

The study shows that the prevalence of practice of home based care among these public health workers was low [16.6%]. The fact that home based care practices among health care workers was low has been widely reported by several studies especially in low socioeconomic settlements [7,11-13]. The practice of home based care among the study population was significantly associated with perception of its relevance in the management of HIV/AIDS. The study shows the need for community-based interventions to promote improved home based care practices in urban and rural areas. Implementation of an effective program for promotion of home based care practices requires understanding of the community and household traditional care practices. Such information will enable the development of programs to promote culturally sensitive and acceptable changes in practices.

The effectiveness of home care services on recipients is still controversial. It has been difficult to assure the quality of care research [16], and consequently there is inconsistent evidence in support of the effectiveness of home care

**Table 3 Factors associated with practice of HBC services**

	Total	Practices HBC	Do not practice HBC	$\chi^2$ [p-value]	Unadjusted odds ratio
<b>Knowledge of HBC</b>					
Adequate	245 [70.0]	43	202	0.5 [0.5]	0.78 [0.4-1.5]
Inadequate	105 [30.0]	15	90		1.00
Total	350 [100.0]	58	292		
<b>Perception about HBC</b>					
Relevant	60 [17.1]	44	16	168.3 [<0.001]	54.21 [23.2-129.5]
Not relevant	290 [82.9]	14	276		1.00
<b>Training</b>					
Trained	67 [19.1]	12	45	1.0 [0.3]	1.4 [0.7-3.1]
Not trained	283 [80.9]	46	247		1.00
<b>Availability of support group in facility</b>					
Yes	55 [15.7]	22	33	25.8 [<0.001]	4.8 [2.4-9.6]
No	295 [84.3]	36	259		1.00

services [17]. As a result, some studies have reported positive effects of home care services including reductions in functional decline [18-22], mortality rates [23-27], institutionalization rates [28-30] and costs of care [31]. Other studies, however, have reported that home care services are ineffective in reducing functional decline [20], mortality rates [17,19] and institutionalization rates [31,32] in community-dwelling elderly persons.

Only those that practice home based care believed that its practice is feasible while others believed that it is either an expensive venture or a cumbersome practice. This indicates that the practice of home based care is greatly influenced by cost. Several studies have reported similar findings [9,10] on issues pertaining to the development of home treatment services and on macro-level outcomes such as cost-effectiveness and admission rates, which have political, economic, and practical implications. However, there is a paucity of research regarding the structures and processes in actual operations over time, as well as a lack of research of service-user experiences and satisfaction on key areas of service provision [20,24,33]. Establishing performance indicators for assessing home based care is essential in identifying the effect of home care services and would contribute to standardization and improvement in the quality of home care services. This may be one strategy for addressing the shortage of resources and encouraging health care workers to practice quality home based care [1,3].

The study implies that neither the adequate knowledge of home based care nor its training significantly influenced its practice but those from the facilities that had support group were about 5 times more likely to practice home based care for people living with HIV/AIDS. This shows that practical information about the reasons for home based care is more important than theoretical knowledge. This may indicate a need for health care planners to design appropriate health care services especially in management of chronic diseases. Several studies have reported similar findings [24-26]. More information is needed about the range and severity of problems encountered by primary care professionals and the barriers that prevent optimal care in order to identify the educational and training needs of primary care teams.

Our study has certain limitations. The study findings are limited in terms of overall generalization and impact since the study might also have been faced with recall bias and it is not all health workers in Abeokuta south local government area that was recruited into the study. Despite these limitations, we believe that our data provide useful information for the assessment and implementation of home based care services in Nigeria and will also inform policy decision in Nigeria and other low income countries.

## Conclusion

The study concludes that the practice of home based care for people living with HIV/AIDS among the study

population is low and it is greatly influenced by cost and perception of its effectiveness and relevance. The study recommends that the health care workers should be adequately trained on the practice of home based care and its implementation in order to enhance its practice.

## Competing interests

The authors declare that they have no competing interests.

## Authors' contributions

AOE participated in the study design, conducted data collection and prepared the final manuscript. OEA conceived the study theme, participated in the study design and supervised data collection. CEA and AOK were involved in Data collection and analysis. All authors read and approved the final manuscript.

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