Awareness, perceived treatment needs of oral manifestation of HIV AIDS and access to dental care among people living with HIV/AIDS at Rorya, Mara Tanzania

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Abstract

Aim: : To assess awareness of oral manifestations of HIV/ AIDS , perceived treatment needs and access to dental care among people living with HIV/AIDS (PLWHA) in Rorya, Mara Tanzania.
Design: A cross sectional study.
Materials/Study subjects: Rorya district in Mara region was conveniently selected as study area. Three hundred and ten (310) people living with HIV/ AIDS who attended Care and treatment clinics (CTCs) between August and October 2012 were invited to participate in this study. A pre tested self-administered questionnaire enquiring on socio-demographic characteristics, awareness of oral manifestations and their management, self perceived treatment needs and access to dental care was used in this study. Data processing and analysis was carried out using statistical package for social services (SPSS 16 version). Chi square was used to test for statistical significant differences between subgroups and the difference was assumed when p value was less than 0.05.
Results
More females (63.8%) than males participated in the study. In the young age group there were 8 times females than males . More than half of the study participants (54.4%) were married. Awareness on oral manifestation of HIV/ AIDS was high (79%) with no statistically significant difference between males and females.
Care and treatment centre's (61.8%) was the main source of information on oral manifestation of HIV/ AIDS. More than half (57.3%) of the participants reported to have self perceived oral treatment needs within the past 6 months, out of them (73.4%) did not seek treatment. Thirty seven percent of those who sought treatment did not receive treatment due to lack of money (50%) and unavailable dental services (50%).
Conclusion
Awareness of participants on oral manifestations of HIV /AIDS was high and greater proportion of males were aware than females with the difference being not statistically significant. More than half of the participants reported perceived dental treatment need in past six month but interestingly approximately three quarters did not seek treatment. The main reported reasons for not seeking treatment were lack of funds and unavailable dental services.

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Introduction and literature review

Acquired Immune Deficiency Syndrome (HIV/ AIDS) is the major cause of death in Africa, and is estimated that over 33.3 million people live with HIV/ AIDS (PLWHA) worldwide (1). In Tanzania around 1.2 million people which is over 5 percent of the adult population, are living with HIV (2). Studies show a close association between HIV/AIDS infection and a variety of oral and peri-oral lesions (3). Between 60% and 90% of PLWHA will have at least one oral condition at sometime of the course of the disease (4, 5). The common oral manifestation includes candidiasis, hairy leukoplakia, necrotizing periodontal disease, Kaposi's sarcoma, long-standing herpes infection, and major apthous ulcers (6). These oral manifestations are important due to the following reasons; are among the first symptoms of HIV/AIDS; are important markers in the clinical spectrum of HIV/AIDS and indicating clinical disease progression/marking immune suppression in HIV infected individuals (7)

Assessment of oral health awareness is of paramount importance as it affects treatment seeking behavior (8). Lack of awareness has been shown to be related with delayed treatment seeking behavior as result, increased morbidities of oral

diseases associated with HIV/ AIDS (9).Therefore this study is aimed at assessing awareness of oral manifestations of HIV/ AIDS , perceived treatment needs and access to dental care among PLWHA at Lorya Mara region Tanzania.

Literature shows varying levels of awareness among people living with HIV AIDS worldwide. A study in Nigeria found, that majority (69%) of the participants exhibited poor awareness of the oral manifestations of HIV/AIDS (10). Studies in Tanzania have shown high awareness of oral manifestations among PLWHA (11, 6). Awareness has been shown to be influenced by level of education (11).

In addition assessment of perceived treatment needs is important particularly in countries where resources are meager and have a number of health priorities. This will help in identifying health needs and hence improve planning of resources (12).

Since the onset of HIV/AIDS pandemic there has been an increase in seeking and obtaining care among PLWHA. The needs of PLWHA are more numerous as this group has more unmet needs than general population (12-14). Understanding the structural and personal barriers to oral health care for people living with HIV is the key to finding interventions that reduce suffering among this group (10). These include financial and structural barriers, such as provider availability, discrimination, fear of dental treatment, and low patient interest in seeking care, inability to attend clinics due to advanced level of sickness and lack of a care giver (10). Literature reports perceived unmet need for oral health care among persons living with HIV/AIDS range from 5% to 52% (15-19) and no published data on access to oral health care among HIV/ AIDS patients in Tanzania has been retrieved.

The objective of this is to assess awareness, perceived treatment needs of oral manifestation, and access to dental care among people living with HIV/AIDS (PLWHA) in Rorya, Mara Tanzania.

Study subjects and methods

Study population

This was a cross sectional study which was conducted in Rorya district, Mara region. Rorya district was conveniently selected and all the three care and treatment centers (CTCs) in the district namely Shirati district hospital, Nyamagalo and Baraki dispensaries took part in the study. All adult people living with HIV /AIDS aged 18 years and above who were attending at the three CTSc between August and October 2012 were invited to participate in the study. A total of 309 consented and were enrolled.

Materials and methods

Methodology was adopted from a previous study by Kahabuka et al done in Tanzania in 2007(Kahabuka et al 2007). A pre-tested self-administered questionnaire with four parts was used to obtain data. The first part was designed to obtain information pertaining to demographic details of respondents. The second part had 10 questions enquiring awareness on oral manifestations e.g. oral candidiasis, oral tumours, oral ulcers, dry mouth and periodontal disease) symptoms of specific conditions, and treatment and their management. Those who scored more than half of the questions were considered to be aware. The third part of the questionnaire obtained information about self perceived treatment needs in the past six months. The fourth part asked questions about access to dental care for the patients who reported to have perceived treatment needs in past six month. Data processing and analysis was carried out using statistical package for social services (SPSS 16 version). Chi square was used to test for various statistical significant differences between subgroups. Statistical significance differences were assumed when p value was less than 0.05.

Ethical issues

Ethical clearance was sought from the MUHAS ethical committee and the district secretary and hospital administrations gave permission to conduct the study. An informed consent was obtained from each participant before being enrolled.

Results

A total of 310 PLWHA were invited to participate in this study, one did not respond giving a response rate of 99.7%. A greater proportion of females (63.8%) than males participated in the study. More than half (62.8%) of the participants were aged between 25 and 40 years as shown on table 1. The age group of 18-24 years constituted a greater proportion of females (5times) than males. About half (54.4%) of the study participants were married and majority (68.0%) had completed primary education. Peasants (88.3%) constituted more than three quarters of the participants. More than three quarters (79.0%) of the PLWHAs were aware of different oral manifestations. A greater proportion of males (73.2) were more aware of oral manifestations than females with the difference being not statistically significant (table 3). Awareness with specific conditions was 73.8%, 67.9%, and 61.1% for and oral ulcers, periodontal disease and oral candidiasis respectively. Awareness on treatment of oral manifestations was

low (52.1%). Of all respondents (57.3%) had self perceived treatment needs within the past 6 months, and (73.4%) did not seek treatment. A quarter (15%) of the participants reported to have sought dental treatment and only 8.7% were treated. Lack of money and inaccessible dental services were the most reported reasons. Dental clinics (4.2%) was the least reported source of information on oral manifestations with majority (61.8%) reporting CTC's clinics as the source of information**.**

Discussion

The study was limited to people living with HIV/AIDS attending CTCs in one of the districts in Tanzania. Although the results cannot be generalized for the whole country, this district represents the most HIV/AIDS affected areas in Tanzania. The response rate was high (99.7%) with the sample comprising diversity in terms of age, education and occupation.

The proportion of female in younger age group of 18-24 (5.5%) was about 5 times that of males. Plausible explanation may be females reach sexual maturity earlier than males and therefore start sexual activities earlier than males increasing their risk for HIV /AIDS at early age. Alternative explanation is women often tend to declare their serostatus easily and to join volunteer groups for sympathy and assistance. More than half (54.4%) of the participants were married and the highest education attained by majority was primary education (68%).

Table1. Distribution of participants by age and sex (n=309, percentage in parenthesis)

	Sex				Total	
	Male		Female			
Age groups	N	(%)	N	(%)	N	(%)
18-24	2	0.7	17	5.5	19	6.2
25-44	69	22.3	125	40.5	194	62.8
45-64	39	12.6	51	16.5	90	29.1
65+	2	0.6	4	1.3	6	1.9
Total	112	36.2	197	63.8	309	100
Education						
Informal	20	6.5	66	21.4	86	27.8
primary	81	26.2	129	41.7	210	68.0
Secondary	11	3.6	1	0.3	12	3.9
College/univ	0	0	1	0.3	1	0.3
Total	112	36.2	197	63.8	309	100
Occupation						
Peasants	96	31.4	172	56.2	268	87.6
Fishermen	6	2	1	3	7	2.3
Civil servants	6	2	4	1.3	10	3.3
Business	2	0.6	19	6.2	21	6.8
Total	112	36.2	197	63.8	309	100

The demographic characteristics of the respondents including age sex and marital status distribution were similar to those described by the TACAIDS reports (2). The level of awareness on oral manifestations of HIV/AIDS revealed high levels of awareness (79%) among the participants. Awareness with specific conditions was 73.8%, 67.9%, and 61.1% for oral candidiasis, periodontal diseases, and oral ulcers respectively. Knowledge on treatment of oral manifestations was relatively low (52%). This finding is in agreement with other studies done in Tanzania on the awareness of oral manifestations. Ibrahim & Majenge, 2011 (11). reported that 89.5% of the PLWHAs had sound awareness on clinical oral manifestations. Kahabuka et al, 2007 found that 86.6% of the participants were aware of the oral manifestations of HIV/AIDS (e.g. oral ulcers 87%, oral candidiasis 84%) however their knowledge on management was relatively low (6). The high level of awareness may be explained by the fact that all subjects were sero-positive and thus likely to have learned about the condition affecting them at CTC's.

Table 2. Distribution of study participants according to awareness on oral manifestations of HIV AIDS by sex,

Sex	Awareness				total	
	Aware		Not aware			
	N	(%)	N	(%)	N	(%)
Males	30	26.8	82	73.2	112	100
Females	74	37.6	123	62.4	197	100
Total	104	33.7	205	66.3	309	100

Chi squire =3.715 p= 0.0539

Our findings were contrary to Nigerian study where majority of the participants exhibited low awareness of the oral manifestations of HIV/AIDS. (*10*).

This study also found that (57.3%) of the participants perceived treatment needs for dental care in the previous six months and out these (42%) did not seek treatment. The reasons for not seeking treatment were lack of money, no dental services, lack of interest, advanced level of illness, fear of discrimination, fear of dental treatment, lack of interest and no escort.

Table 3. Awareness of oral manifestations of HIV AIDS and their treatment among the participants.

	Awareness			
	Not aware		Aware	
	N	(%)	N	(%)
General Awareness	104	33.7	205	66.3
Specific conditions				
Oral thrush	114	36.9	195	63.1
Oral ulcers	81	26.2	228	73.8
Cancer	181	58.6	128	41.4
Dry mouth	140	45.3	169	54.7
Periodontal diseases	100	32.2	209	67.9
Awareness on treatment	148	47.9	161	52.1

A small percentage of participants (8.7%) had received dental treatment, a finding similar to other studies done in developed countries which show that oral health for PLWHA has been consistently one of their top unmet needs. Likewise, in America, inaccessible oral health care among PLWHA was reported to range from 5% to 52% (15-19).

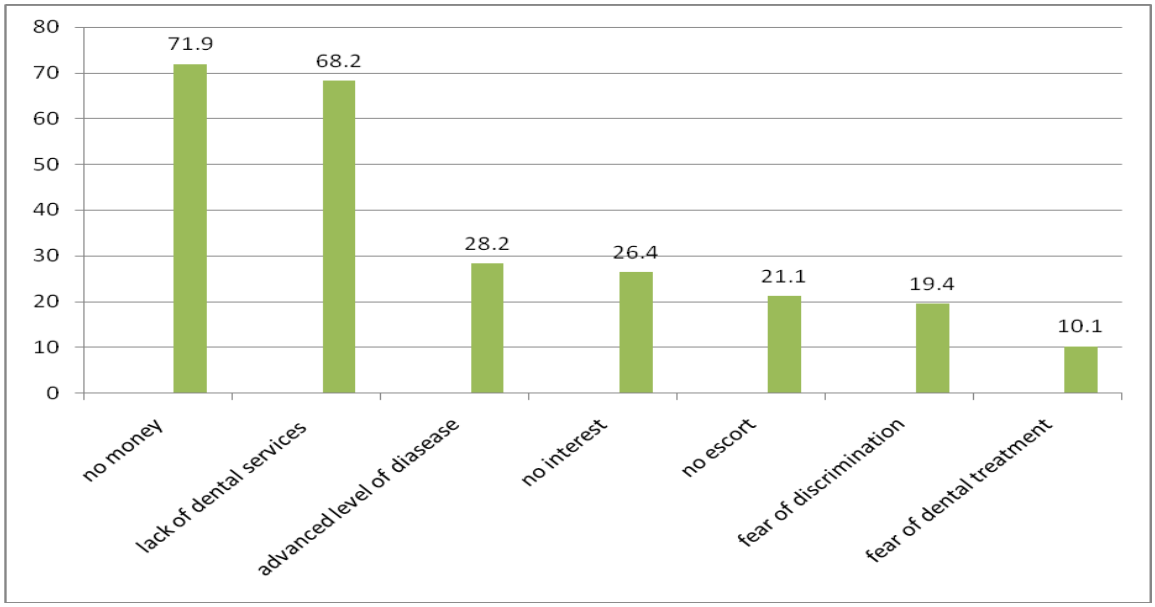

Figure 1. Percentage distribution of participants' reasons for not seeking treatment.

Conclusion and recommendations

From the results of this study it is concluded that PLWHA's awareness on oral manifestation of HIV AIDS is high, the PLWHA have low access to dental care and oral health is one of the top unmet health care needs of PLWHA. It is recommended to develop oral-health-related educational materials for PLWHA and to train Medical practitioners working at CTCs to recognize common oral manifestations of HIV/AIDS, since most patients reported CTCs as their major source of information on oral manifestations of HIV/AIDS

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