



Knowledge and Practice of Smoking Cessation Services among Health Care Workers in Abuja, Federal Capital Territory, Nigeria

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KEYWORDS

Cigarette Smoking;

Health care workers;

knowledge;

perception;

attitude;

smoking cessation;

Abuja;

Nigeria

ABSTRACT

Cigarette smoking cost the global economy billions of dollars and results in the death of millions of people yearly. Despite efforts at national, regional and global levels to control cigarette smoking, there is still much yet to be achieved. Brief intervention by health care workers to their smoking patients is one strategy that could be conducted anywhere, if the health care workers are trained and positively disposed towards smoking cessation. Thus, this study was designed to assess the knowledge, attitude and delivery of smoking cessation services among health care workers in Abuja.

A cross sectional descriptive study design was used. Questionnaire was used to collect required information. Stata statistical software version 11 was used to describe the data and determine associations between knowledge, perception, delivery of smoking cessation services and socio-demographic characteristics using chi-square test.

Only 5% of respondents ever received training on tobacco control. Awareness of interventions that enhance smoking cessation was: telephone quit lines (11%), pharmacotherapy (30.5%), behaviour therapy (34.2%) and brief intervention (51%). Only 4.3% of the respondents were not willing to support clients with tobacco cessation services. Being a physician and male were associated with higher knowledge of smoking cessation among the respondents ($p < 0.05$).

In conclusion, there was poor perception and low capacity to provide smoking cessation services among the respondents. There is need to improve the perception and capacity of health care workers to provide smoking cessation services.

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Introduction

Cigarette smoking is a global pandemic and cost the global economy US\$200 billion in 2008.¹ Approximately 5.4 million people die each year due to tobacco-related illnesses—a figure expected to increase to more than 8 million a year by 2030.² Tobacco is a risk factor for six of the eight leading causes of death globally, (Ischaemic heart diseases, cerebrovascular diseases, lower respiratory tract infections, chronic obstructive pulmonary diseases, tuberculosis and respiratory tract cancers) the other two being

HIV/AIDs and diarrhoeal diseases.³ In the 20th century, there were 100 million tobacco related deaths. If unchecked, this figure will be up to 1 billion in the 21st century, 80% of which will be in the developing world.⁴

To address this pandemic, the World Health Organization (WHO) at World Health Assembly of 21st May 2003 adopted the Framework Convention on Tobacco Control (FCTC), which presently has 177 parties⁵ and covering more than 86% of the world's population. Tobacco control measures put in place by the FCTC between 2007 and 2010 in 41 countries will

prevent 7.4 million deaths by 2050.⁶ This framework addresses different components of tobacco control at the same time. One of such component is that each party of the FCTC, of which Nigeria is one,⁷ should have national tobacco cessation programs. Although the Nigerian legislature had passed a National Tobacco Control Bill in March 2012,⁸ it is yet to become a law, since it has not been assented to by the President as required by the Nigerian constitution. Thus the country is still in the process of passing a law that will control tobacco use. The bill under consideration is to regulate tobacco use in Nigeria by banning sales to persons below the age of 21 years; prohibit smoking in public places; regulate advertising, manufacturing and distribution of tobacco products and make printing health warnings on tobacco products mandatory, in addition to a framework to establish tobacco cessation programmes.⁸

There are various options of smoking cessation available with varying effectiveness. These include unassisted (going cold turkey and gradual reduction); health care provider and system interventions; medications; community interventions; competitions and incentives; psychosocial; self-help groups; telephone counselling or quit lines; mass media campaigns; use of cigarette (nicotine) substitutes and alternative approaches like acupuncture, aromatherapy, hypnosis and herbs.⁹⁻¹² Often times, combinations of methods are used. It has been shown that health practitioners have a unique role in the initiation and supporting clients through smoking cessation. These roles range from identifying smokers for initiation of (brief)

intervention, psychosocial support and provision of medications. It has also been documented that the perception of health care workers on smoking and smoking cessation services influences the quality of care they provide. These affect the willingness or otherwise of health care workers to provide smoking cessation services, where available.^{2,6,11}

There is paucity of data on smoking cessation practices in Nigeria. Likewise there is no record of multi-facility study among different cadres of health care workers conducted in the Federal Capital Territory (FCT), even though cigarette smoking has been banned in public places years back by an act of the Territory. The few previous studies conducted were in single health facilities and only among physicians.¹³

This study was therefore conducted among different cadres of health care workers (nurses, physicians and pharmacists); and at secondary and tertiary health facilities in the FCT, to provide opportunity for comparison. The study was thus set to assess provision of health facility based smoking cessation services and competency of the health care workers to provide these services in the FCT.

Materials and Methods

Study was conducted in three government owned health facilities – one tertiary and three of the six secondary health facilities in the FCT. Information was collected on socio-demographic characteristics of respondents, knowledge and attitude of the health care workers about smoking cessation and provision of smoking cessation services using a pre-tested, semi-structured interviewer administered questionnaire.

A minimum sample size of 108 was calculated

using desired precision of 5% and standard normal deviate of 5%.¹⁴

Multistage sampling technique was used. In the first stage, three secondary and one tertiary health facilities were randomly selected out of the available in the FCT. In the second stage, the selection of health care workers was by proportionate sampling technique among the selected health facilities. Variables knowledge, attitude and practice were generated from a combination of other

variables that collected information on knowledge, attitude and practice respectively. Ethical approval was obtained from the ethical review board of the health facilities involved in the study, and informed consent was gotten from the respondents after explaining to them the objectives and methodology of the survey. Assurance was given to the respondents that utmost confidentiality shall be maintained of information volunteered in addition to abiding by other ethical guidelines/principles.

Table I: Socio-demographic characteristics of respondents

Characteristic		Frequency	Percentage
Sex	Male	115	49.8
	Female	116	50.2
Age group	20-29	51	22.9
	30 – 39	82	36.8
	40-56	90	40.4
Marital status	Married	149	64.2
	Single	77	33.2
	Widowed	6	2.6
Religion	Islam	60	26.1
	Christianity	179	73.9
Cadre	Nurse/Midwife	66	28.3
	Pharmacist	54	23.2
	Physician	111	47.6
Facility level	Secondary	148	63.5
	Tertiary	85	36.5

One hundred and sixteen (50.2%) respondents were females, one hundred and forty nine (64.2%) were married, 77 (33.2%) single and 6 (2.6%) were widowed. One hundred and seventy (73.9%) of the respondents were Christians while the rest were Muslims. Eighty-five (36.5%) respondents work in tertiary health centre while one hundred and forty-eight (63.5%) in secondary health centres (Table I).

The mean age of the respondents was 36.65 (8.6) years.

Knowledge of smoking cessation services

Only twelve respondents (5.2%) attended training on tobacco control within six months preceding the survey; the remaining 221 (94.9%) did not. Only two of the respondents who were trained had a training for two weeks

duration, but the rest had a training that lasted one or two days. Twenty-one (18.9%) respondents were aware of modes of medical intervention / assistance to achieve tobacco cessation.

The cumulative interventions mentioned included telephone counselling/quit lines 12 (11%), pharmacotherapy 33 (30.5%), counselling / behaviour therapy 37 (34.2%), 8 brief intervention 55 (51%) and going “cold Turkey” 40 (37%). About medical assistance to quit smoking, 61 (56%) respondents reported that it is always needed while 38 (35%) reported that medical assistance is needed sometimes only.

Attitudes towards smoking cessation services provision

Only thirty-six (15.5%) of the respondents were willing to support clients with tobacco cessation. The respondents reported feeling empathetic 58(24.9%), indifferent 52 (22.3%), angry or irritated 113 (48.5%) when they encounter smokers as patients, while 8 (3.4%) did not respond to the question. Ninety two (39.5%) of respondents felt smokers should always be blamed for any health complications developed related to smoking, while seventeen (7.3%) reported that they should never be blamed. Seventy-seven (34.1%) of respondents felt that failed attempt at quitting smoking was always due to lack of commitment.

Table II: Relationship between Knowledge and selected socio-demographic characteristics

Characteristic		Knowledge		P – value	Remarks
		Low	High		
Gender	Male	52 (46.0)	61 (54.0)	0.0001	Significant
	Female	82 (73.2)	30 (26.8)		
	Total	134 (59.6)	91 (40.4)		
Age group (years)	<30	21 (41.2)	30 (58.8)	0.0001	Significant
	30 – 39	42 (54.6)	35 (45.5)		
	> 40	67 (74.4)	23 (25.6)		
	Total	130 (59.6)	88 (40.3)		
Marital Status	Married	96 (67.1)	47 (32.9)	0.002	Significant
	Single	33 (42.9)	44 (57.1)		
	Widowed	4 (66.7)	2 (33.3)		
	Total	133 (58.9)	93 (41.2)		
Cadre	Nurse	58 (87.9)	8 (12.1)	0.0001	Significant
	Pharmacist	24 (50.0)	24 (50.0)		
	Physician	52 (46.9)	59 (53.2)		
	Total	134 (59.6)	91 (40.4)		
Facility level	Secondary	83 (56.9)	63 (43.1)	0.805	Not significant
	Tertiary	51 (63.0)	30(37.0)		
	Total	134 (59.0)	93 (41.0)		
Training	Trained	4 (6)	2 (4)	0.58	Not significant
	Not trained	126 (58.6)	89 (41.4)		
	Total	134 (59.0)	93 (41.0)		
Religion	Islam	39 (65.0)	21 (35.0)	0.3	Not significant
	Christian	94 (57.3)	70 (42.7)		
	Total	133 (59.4)	91 (40.6)		

Practice of smoking cessation services

Only twenty-four (10.3%) of respondents had anti-smoking posters in their offices. Of those that responded to this question, the reasons offered for not having posters were: unavailability 148 (75.9%); “did not think of it” 19 (9.7%); “not a priority” 13 (6.7%). Ninety-two (40.2%) of the respondents (health care workers) ask all patients about smoking status.

In summary, 134 (59.1%) respondents had low level of knowledge while 93 (40.0%) had high knowledge of tobacco use and cessation services. One hundred and forty six (76.4%) had negative attitudes towards clients that

smoke (involved in tobacco use) while 45 (23.6%) had positive attitude. Two hundred and three (92.3%) had poor practice towards tobacco cessation services and 17 (7.7%) had good practice of tobacco cessation services.

Table II shows the relationship between socio demographic variables and knowledge of smoking cessation. Being single (57.1%), male (54.0%), less than 30 years (58.8%) and a physician (53.2%) was significantly associated with higher knowledge of smoking cessation with p values of 0.002, 0.0001, 0.0001 and 0.0001 respectively. There was no statistically significant association between knowledge of smoking cessation and training, level of health facility and religion.

Table III: Relationship between Attitude and selected socio-demographic characteristics of respondents

Characteristic		Attitude		P – value	Remarks
		Negative (%)	Positive (%)		
Gender	Male	74 (72.6)	28 (61)	1.84	Not significant
	Female	72 (80.9)	17 (19.1)		
	Total	146 (76.4)	45(23.6)		
Age group (years)	< 30	28 (60.9)	18 (39.1)	0.005	Significant
	30 – 39	60 (87.0)	9 (13.0)		
	> 40	52 (77.6)	15 (22.4)		
	Total	140 (76.9)	42 (23.1)		
Marital Status	Married	96 (80)	24 (20)	0.026	Significant
	Single	47 (73.4)	17 (26.6)		
	Widowed	2 (33.3)	4(66.7)		
	Total	145 (76.3)	45 (23.7)		
Cadre	Nurse	39 (79.6)	10 (20.4)	0.113	Not significant
	Pharmacist	42 (85.7)	7 (14.3)		
	Physician	65 (70.6)	27 (29.4)		
	Total	146 (76.8)	44 (23.1)		
Facility level	Secondary	91 (76.5)	28 (23.5)	0.0002	Significant
	Tertiary	55 (76.4)	17(23.6)		
	Total	146 (76.4)	45(23.6)		
Training	Trained	6 (60.0)	4 (40.0)	0.208	Not significant
	Not trained	140 (77.3)	41 (22.6)		
	Total	146 (76.4)	45 (23.6)		
Religion	Islam	41 (70.5)	43 (29.5)	0.001	Significant
	Christian	103 (72)	30 (79)		
	Total	144 (76.2)	45 (23.8)		

Table III shows the relationship between socio demographic variables and attitude of health workers towards smoking cessation. Being widowed (66.7%), less than 30 years

(39.1%), Christian (79%) and being in the tertiary health facility was significantly associated with positive attitude with p values of 0.026, 0.005, 0.001 and 0.0002 respectively.

Table IV: Relationship between practice and selected socio-demographic characteristics of respondents

Characteristic		Practice		P-value	Remarks
		Poor (%)	Good (%)		
Gender	Male	97 (89.0)	12 (11.0)	0.077	Not significant
	Female	104 (95.4)	5 (4.6)		
	Total	201(92.2)	17 (7.8)		
Agegroup (years)	<30	43 (91.5)	4 (8.5)	0.257	Not significant
	30 – 39	68 (88.3)	9 (11.7)		
	> 40	82 (93.4)	4 (4.6)		
	Total	193 (91.9)	17 (8.1)		
Marital Status	Married	133(93.7)	9 (6.3)	0.345	Not significant
	Single	63 (88.7)	8 (11.3)		
	Widowed	6 (100.0)	0 (0.0)		
	Total	200 (92.2)	17 (7.8)		
Cadre	Nurse	57 (91.9)	5 (8.1)	0.192	Not significant
	Pharmacist	41 (87.2)	6 (12.8)		
	Physician	104 (95.4)	5 (4.6)		
	Total	202 (92.7)	16 (7.3)		
Facility level	Secondary	129 (92.8)	10 (7.2)	0.1504	Not significant
	Tertiary	74 (91.4)	7 (8.6)		
	Total	203 (92.3)	17 (7.7)		
Training	Trained	10 (83.3)	2 (16.7)	0.233	Not significant
	Not trained	193 (92.8)	15 (7.2)		
	Total	203 (92.3)	17 (7.8)		
Religion	Islam	49 (84.5)	9 (15.5)	0.011	Significant
	Christianity	151 (95.0)	8 (5.0)		
	Total	200 (92.2)	17 (7.8)		

Table IV above revealed that there was a statistically significant difference in practice of smoking cessation services and religion. It was higher in Muslims (15.5%) with a p value of 0.011.

Discussion

The results from this study revealed that the smoking cessation support services rendered by health workers in the FCT, and probably in other Nigerian facilities are generally low. This might be because only a very small percentage of them are trained (5.2%), only 18.9% of them knew the smoking cessation options. Certainly, with low level of knowledge, there is little that they can offer in terms of smoking cessation services to their patients

This study revealed that only 18.9 % of the respondents were aware of the different modes of smoking cessation intervention. Specifically, in this study, 34.4% knew counselling was a mode of smoking cessation intervention compared to 66.7% of dentists and dental students surveyed in Lagos by Omolara and colleagues¹⁵

Although 24.9% of respondents were empathetic with smokers, only 15.5% were willing to support their clients to quit smoking. Further more, only 39.24% of these respondents asked their patients about smoking, in an earlier Nigerian study¹² 86.2% of health workers asked. This might be because in the latter study, the respondents were doctors while in this study, other cadres of health workers were also included in the sample, and they do not have a structured interaction with clients / patients that requires asking about cigarette smoking. However, physicians are required to ask smoking status of patients during history taking while clerking patients. It has however shown that in as little as 30 seconds, health workers can help their patients quit smoking.¹⁰ Asking all patients about smoking status and encouraging smokers to quit can double or

even triple quit rate.¹⁰

This study revealed that knowledge of smoking cessation did not translate to positive attitude or good practice. While single, male, physicians, persons less than 30 years had significantly high knowledge; positive attitude was exhibited by widowed, Christian health workers less than 30 years and good practice by Muslim respondents.

Therefore, to improve the support services, not just training but reorientation of the health workers will be needed, to make the health practitioners realize the important role they can play in saving the lives of Nigerian smokers and those that affected by the second hand smoke. Furthermore, training had no influence on knowledge and practice of smoking cessation. Therefore to maximise the provision of smoking cessation services some strategies can be applied. Smoking cessation services should be made to be part of in-school curriculum^{15,16} Posters and other Information, Education and Communication IEC materials should be provided as 76% of respondents said posters were not available. Smoking cessation should be integrated into other health programs like training on women's health and non-communicable diseases.¹⁶ Funding for research should be increased to find more culturally acceptable options and collaborations should be encouraged to link clients to appropriate treatment outside the health facility (where available). Lastly, the present curriculum being offered should be re-evaluated so that it will not only increase the knowledge of the health workers but influence their attitude and practice.

The limitations for this study include the fact that health workers in primary health care facilities were not included so it would be difficult to generalise this to all health workers in FCT. In

addition, the smoking status of respondents was not evaluated. Being a cross sectional survey, it is not free from recall and reporting bias.

Conclusion:

Health facility based support services for tobacco control including smoking cessation is at very rudimentary level in Nigeria. Thus to reduce the morbidity and mortality attributable to smoking in Nigeria, health workers must be trained and reoriented on how to identify and initiate smoking cessation interventions among their clients that smoke. Posters, flyers and other self-help materials should be made available in consultation rooms, clinics and the wards. For Nigeria to win the fight against smoking and its harmful effects, health workers have to be equipped with the requisite knowledge and skills and also implement this knowledge to enable them take their rightful place in rendering smoking cessation services.

REFERENCES

1. World Health Organisation. Tobacco Control. 2013 [cited 2013 23/07]; Available from : http://new.paho.org/hq/index.php?option=com_content&task=blogcategory&id=1281&Itemid=1187&lang=en.
2. Centers for Disease Control and Prevention. Global TobaccoControl. 2013 [cited 2013 23/07]; Available from: <http://www.cdc.gov/tobacco/global/>.
3. World Health Organisation. Report on Global Tobacco Pandemic 2008. 2008 [cited 2010 06/02]; Available from: <http://www.who.int/tobacco/mpower/graphs/en/>.
4. World Health Organisation. Tobacco Free initiative (TFI) Tobacco facts. 2013 [cited 2013 23/07]; Available from: http://www.who.int/tobacco/mpower/tobacco_facts/en/.
5. World Health Organisation Framework on Tobacco Convention. Parties to the WHO Framework Convention on Tobacco Control [online] 2013 [cited 2013 01/09]; Available from http://www.who.int/fctc/signatories_parties/en/index.html
6. World Health Organisation. July 2013: Tobacco control policies stop people smoking and save lives. 2013 [cited 2013 23/07].
7. World Health Organization Nigeria: Health Profile [online] 2010 [cited 2010 09/6]. Available at <http://www.who.int/gho/countries/nga.pdf>
8. World Health Organisation. Nigeria-a National Tobacco Bill was passed by the senate. 2011 [cited 2011 29/06]. Available from: <http://www.who.int/fctc/implementation/news/nig/en/index.html>
9. Hopkins, D.P., et al., Smokefree Policies to Reduce Tobacco Use: A Systematic Review. American Journal of Preventive Medicine, 2010. 38(2, Supplement 1): p. S275-S289.
10. Cahill K, Perera R. Competitions and

- incentives for smoking. *Cochrane Database Syst Rev*, 2011. 13(4): Cd004307
11. McIvor A, Kayser J, AssaadJM, Brosky G, Demarest P, Desmarais P, Hampson C, KharaM, Pathammavong R and Weinberg R. Best practices for smoking cessation interventions in primary care. *Can Respir J*, 2009. 16(4): 129-134.
 12. National Institute for Health and Clinical Excellence. Smoking cessation services in primary care, pharmacies, local authorities and work places, particularly for manual working groups, pregnant women and hard to reach communities. 2012 [cited 2012 16 / 0 1]. Available from <http://www.nice.org.uk/PH010>
 13. DesaluOO, Adekoya AO, Elegbede AO, Dosumu A, KolawoleTF, Nwogu KC. Knowledge of and smoking cessation practices among physicians in Nigeria. *JBasPneumol*, 2009. 35(12): 1198-203
 14. Lwanga SK and Lemeshow S (1991). *Sample Size Determination in Health Studies: A Practical Manual*. Geneva: World Health Organization.
 15. Omolara GU and Oyinkansola OS. Smoking cessation counselling in Dentistry: Attitudes of dental students. *Journal of Dental Education*. 2011. 75(3): 406-412
 16. World Health Organisation. Policy recommendations for smoking cessation and treatment of tobacco dependence 2003[cited 6/8/2014]; Available from: http://www.who.int/tobacco/resources/publications/tobacco_dependence/en