



Beliefs, Attitudes and Health-seeking behavior towards ocular cancers among adults in Abuja, Nigeria

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KEYWORDS

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ABSTRACT

Background

To assess the beliefs attitudes, and health seeking behaviors towards ocular cancers among adults in Abuja.

Methods

A descriptive cross-sectional survey of 1,887 Nigerians between June and September 2009 using interviewer-administered questionnaire.

Results

The respondents' reported refraining from interacting with persons afflicted with ocular cancers along these lines: eating together 261/669 (39%), hugging 149/668 (22%), shaking hands 106/561 (19%), laying on the same bed 328/560 (59%), and contracting marriage 462/558 (83%) with ocular cancer patients.

However, 416/486 (85.6%) respondents would support getting appropriate health interventions for ocular cancers.

Level of education was associated with positive attitudes towards ocular cancers patients ($P < 0.05$). The respondents' belief on characteristics of ocular cancers included "dangerous" 814/840 (96.6%), unknown nature 19/840 (2.3%); potential to cause blindness 849/882 (96.3%); potentially fatal 665/870 (76.4%), non-fatal 205/870 (23.6%). Also, the respondents believed treating ocular cancer is necessary 651/679 (95.9%) and unnecessary 28/679 (4.2%). About management of ocular cancers, 560/683 (82%) will consult eye doctors while 123/683 (18%) will seek other methods. Suggestions on how to improve management of ocular cancers were: improve public awareness 28.1%, train personnel 16.3%, provision of facilities 17.8%, establish national ocular cancer reference center 13.2% and free/subsidized treatment 13.2%.

Conclusion

Though significant proportion of respondents had the correct beliefs and attitudes towards ocular cancers, effective health education needs to be mounted to reinforce these positive beliefs and attitudes and also convert those with the wrong notions. This will in the long run improve health seeking behaviors.

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INTRODUCTION

Ocular (eye) cancers are dreaded and potentially life threatening as cancers that affect other parts of the body. Ocular cancer can be as aggressive as cancers in other parts of the body but in addition have cosmetic and visual implications.

Despite the importance of ocular cancer much is unknown about it, particularly among the general populace in resource-limited economies such as Nigeria. For instance the beliefs, attitudes and health seeking behavior towards ocular cancer among the population needed to be determined in resource-limited setting. This is to augment reports of wrong

beliefs, attitudes and health seeking behavior towards ocular cancer that include late presentation, self-medication and reliance on ineffective alternative/traditional treatment leading to avoidable mortality.¹⁻³ However, even the orthodox eye health care system needs improvement, as it has inadequate, poorly distributed/motivated manpower. There is no machinery in place for eye health education except in the tertiary health centres.

Most studies on ocular cancer in Nigeria are hospital based and mainly concerned with clinico-pathological reports of oculo-orbital tumors. Thus, most of these reports on ocular cancers captured the advanced stages that suggest poor prognosis.⁷⁻¹⁴

The need to improve the care of ocular cancer in resource-limited setting including Nigeria is long overdue. However, this would only be possible with availability of data on burden, and health seeking behaviors of the populace towards ocular cancer, among other information. The objective of this study was to determine the beliefs, attitudes and health seeking behaviors of adults towards ocular cancer in Abuja, Federal Capital Territory (FCT) Nigeria as a case study of resource limited settings. The findings from this study could serve as tools for advocacy programmes and public awareness campaigns to ultimately improve care for ocular cancer.

METHODOLOGY

This study was undertaken in Abuja, the FCT, Nigeria following the ethical guidelines in the declaration of Helsinki. Ethical approval for the study was obtained from the University of Abuja Teaching Hospital Health Research Ethics Committee and informed consent to participate was obtained from individual respondents.

A pre-tested semi-structured questionnaire was administered to determine the reported beliefs, attitudes and health seeking behaviors towards ocular cancer in the FCT. This manuscript focuses on beliefs, attitudes and health seeking behaviors towards ocular cancer and practices of ocular cancer in Nigeria. The awareness and knowledge are reported elsewhere. All respondents who participated in the pilot study were not included in this analysis.

A sample size of 1,536 respondents was determined using the equation $n = z^2pq/d^2$ where n is the desired sample size since the population of Nigerians living in Federal Capital Territory is more than 10,000 [15]. The expected prevalence of awareness of ocular cancer amongst Nigerians (p) was estimated to be 40% as extrapolated from a related study elsewhere.¹⁶ Other parameters were

standard normal deviation (z) of 1.96, a confidence level of 95% and desired precision due to random sampling error (d) of 2.5%.

The FCT is divided into six (6) administrative units called Area Councils. Using a multi-stage sampling technique, three Area Councils (Abuja Municipal, Kuje and Gwagwalada) were randomly selected in the first stage. In the second stage, three clusters were randomly selected from each of the selected area councils. A cluster for the purpose of this study was considered to be an electoral ward, which are of similar population sizes. Overall, 9 clusters of 220 respondents each were included in the study analysis. Trained field assistants administered the questionnaires for data collection. Inclusion criteria were being Nigerian, 18 years and older, and living in the FCT during the study period. The data was collated, entered and analyzed using SPSS 16 (SPSS Inc, USA). The Chi-square test was used to determine association between variables and the level of significance for statistical significance was set at $P < 0.05$.

RESULTS

Demographic characteristics

One thousand eight hundred and eighty seven (1,887) were used for analysis out of 1980 questionnaires issued giving a response of 95.3%. One thousand and fifty (55.6%) respondents were males and 837 (44.4%) were females (M: F=1.3:1). The age range was 18 to 80 years, with a mean of 30 years, SD 9.5. The respondents native origin cut across all the 36 states of the federation and the FCT, and represented over one hundred of the about 250 ethnic groups of Nigeria. All religious groupings were also represented. The respondents' demographic characteristics are as shown in Table I.

Table I: Socio-demographic characteristics of respondents (n = 1,887)

Variable	Frequency (n=1887)	Percentage
Age (years)		
≤ 20	306	16.2
21 - 40	1,343	71.2
41 - 60	222	11.8
≥ 61	16	0.8
Gender		
Male	1,050	55.6
Female	837	44.4
Marital status		
Married	877	46.5
Singe	925	49.0
Divorced/separated	31	1.6
Widowed	12	0.6
Educational status		
Tertiary	739	41.9
Secondary	632	35.9
Primary	226	12.8
No Formal Education	165	9.4

Attitudes towards ocular cancer patients

There were more respondents with high level of education willing to interact with ocular cancer patients, through hugging and shaking hands, compared to those with lower level of education. The difference was statistically significant [Table II]. However, there was no statistically significant

association between gender and marital status with respondents' willingness to hug and shake hands with ocular cancer patients ($P > 0.05$). Being single (unmarried) was statistically associated with positive attitudes such as willingness to eat and lay on the same bed with the ocular cancer patients ($P = 0.000$) [Table II].

Table II: Relationship between attitudes and education, marital status and gender

Respondents' attitudes towards patient with ocular cancer										
	Willing to eat together		Willing to hug		Willing to shake hands		Willing to lie on same bed		Willing to marry	
Education	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
‡NFE	8	24	31	1	28	2	5	25	1	29
Primary	10	31	37	4	28	1	3	26	0	29
Secondary	105	123	189	39	166	26	63	128	27	16
Tertiary	258	55	235	77	201	54	143	112	53	200
Total	381	233	492	121	423	83	214	291	81	422
P value	<0.05		0.003		0.012		<0.05		0.003	
Marital status										
Married	158	147	233	72	206	55	76	184	33	226
Single	225	101	257	68	220	45	143	122	54	210
Separated	4	4	6	2	6	0	3	3	1	5
Divorced	2	3	4	1	4	1	0	5	0	5
Widowed	3	1	4	0	3	0	1	2	1	2
Total	392	256	504	143	439	101	223	316	89	448
P value	<0.05		0.763		0.469		<0.05		0.124	
Gender										
Male	229	150	290	89	253	63	130	185	50	264
Female	179	111	229	60	202	43	102	143	46	198
Total	408	261	519	149	455	106	232	328	96	462
P value	0.732		0.403		0.474		0.931		0.363	

Key: ‡NFE = No Formal Education

Beliefs on ocular cancers

Incorrect beliefs about ocular cancer among respondents included not dangerous 7/840 (0.8%),

inability to cause blindness 33/882 (3.7%) and non-fatal 205/870 (23.6%) as shown in Table III. Others are; treatment is unnecessary 28/679 (4.2%) and 123/683 (18%) would seek non-orthodox eye care.

Table 3: Respondents beliefs on implication and management of OC

S / N	Variable	Belief	Frequency	Percentage
1	Hazard associated (n=840)	Very dangerous	604	71.9
		Dangerous	210	25
		Not dangerous	7	0.8
		Do not know	19	2.3
2	Blindness potential (n=882)	Can lead to blindness	849	96.3
		Cannot lead to blindness	33	3.7
3	Fatality potential (n=870)	Can lead to death	665	76.4
		Cannot lead to death	205	23.6
4	Treatment (n=679)	Very unnecessary	18	2.7
		Unnecessary	10	1.5
		Necessary	155	22.8
		Very necessary	496	73.1
5	Treatment options (n=683)	Traditional medicine	23	3.4
		No treatment	46	6.7
		Consult eye doctors	560	82
		Spiritual (prayer)	43	6.3
		Self-medication	11	1.6

Health seeking behavior towards ocular cancers

Two hundred and thirty one respondents reported willingness to seek care at the hospital for ocular cancer as shown in Figure 1.

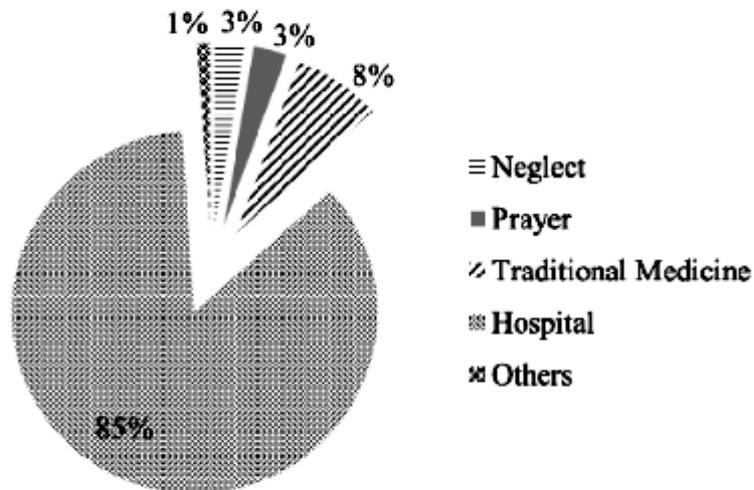


Figure 1: Treatment practice of ocular cancer patients, n=270

Suggestions to improve care of ocular cancers

The major suggestions by respondents on how to enhance management of ocular cancers was to increase public awareness and offer free/subsidized health care services to ocular cancers patients as reported by 235 and 206 respondents respectively as shown in Figure 2.

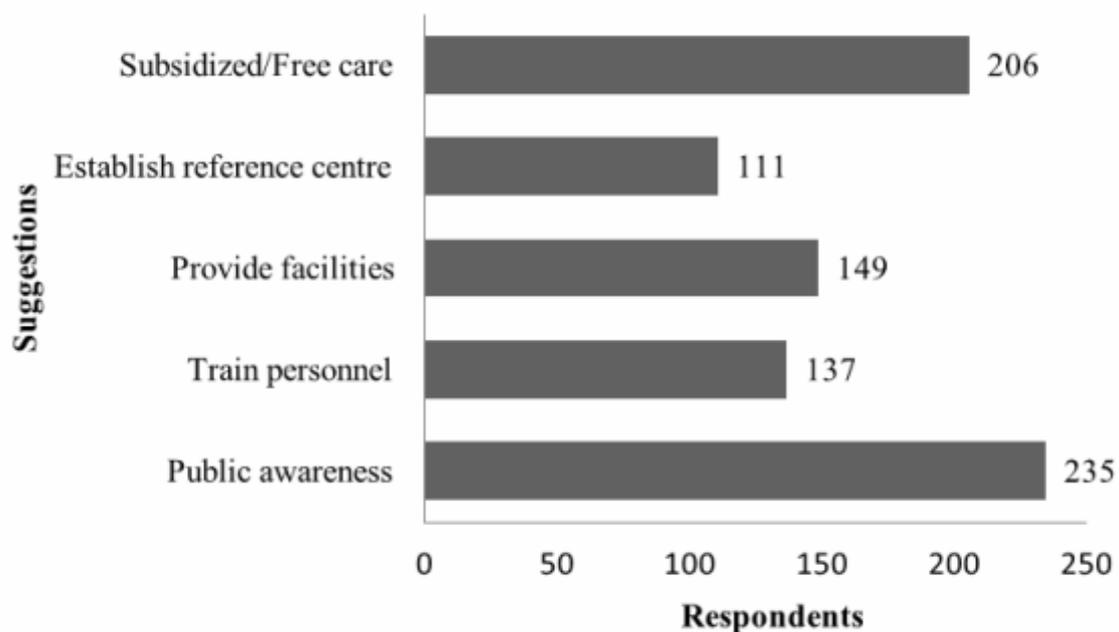


Figure 2: Suggestions for improve management of ocular cancers

DISCUSSION

This study was on beliefs, attitudes and health seeking behaviors on ocular cancers among Nigerians. Nigeria is a developing economy and the most populous black nation with over 140 million people.⁵ The Nigerian health indices suggest significant health care challenges⁶ including care of ocular cancers.

On attitudes towards ocular cancer patients, most of the respondents would eat in the same plate, hug and shake hands with the patients. Similarly, some respondents would lie on the same bed and marry ocular cancers patients. The respondents that reported positive attitudes towards ocular cancers patients were most likely better enlightened on ocular cancers recognizing it is a non-contagious disease. This may be connected to the finding that high level of education has positive influence on respondents' attitudes except marrying. Other studies have confirmed positive association of education with healthy behaviors.^{17,18} In this study, education appeared to have overriding positive influence on respondents' attitudes to ocular cancers patients ($P < 0.05$). This is reinforced by absent associations ($P > 0.05$) of attitude with other demographics including gender and marital status, which are possible confounders. Moreover, most likely education is a confounder in the observed positive attitudes of singles (unmarried) especially willingness to eat together and lying on the same bed with ocular cancers patients.

Further analysis indicates that respondents' education, gender and marital status have no significant ($P > 0.05$) positive influence on attitude to marrying ocular cancers patients; most respondents appeared unwilling to marry ocular cancers patients. The respondents' concerns might be borne out of the fact that ocular cancers have serious implications including disfigurement,^{3,19} vision loss,³ potential for transmission to offspring²⁰ and death⁹. The potential burden of the condition on those around the patients (cash and kind), social and cultural values might be other considerations. This should be of concern to all stakeholders in ocular cancers and it has underscored

the need for public ocular cancer enlightenment and advocacy.^{3,21,22}

The findings on respondents attitude has brought to fore the fact that ocular cancers patients can also suffer discrimination and stigmatization like PLWHA [People Living with HIV (Human Immunodeficiency Virus)/ AIDS (Acquired Immunodeficiency Syndrome)].²³⁻²⁷ However, while conditional exposure to body fluids of PLWHA can transmit HIV it is not so in the case of ocular cancers patients. Nevertheless, neither PLWHA nor ocular cancers patients should suffer discrimination and stigmatization, rather; both deserve support as well as empathetic and sympathetic care, which can elevate a depressed mood.

It is remarkable that most respondents knew that ocular cancer is at least dangerous (96.9%), could lead to blindness (96.3%) and could lead to death (76.4%). This shows that people are likely to make effort towards the prevention and /or management of ocular cancers. However, this study found negative perceptions among some respondents. For instance, (0.7%) respondents feel ocular cancer not dangerous and (2.3%) unaware of ocular cancers' dangerous nature. Moreover, it is of concern that (3.7%) respondents wrongly believe that ocular cancer could not lead to blindness and (23.6%) death. Wrong beliefs can have far reaching implications in terms of management, prognosis and mortality of ocular cancer. Such individuals may not access available health care services, present late^{3,9} or may not even comply with medication.³

Also of interest is the fact that most respondents have positive beliefs on ocular cancer including willingness to treat (75.9%), to consult eye doctors (82%) and to support the cause of ocular cancer (85.6%). Nevertheless, some respondents have negative beliefs on ocular cancer especially believing that ocular cancer treatment is unnecessary (4.2%). Furthermore, (6.7%) would rather neglect ocular cancer than treating it, (3.4%)

would use traditional medication, (6.3%) would seek spiritual healing (prayer) and (1.6%) would use drugs bought out of prescription (self-medication). The aforesaid treatment options aside consulting eye care specialists would complicate the ocular cancer and imparts adversely on the outcome. Finally, the cohorts of respondents who are unwilling to support the cause of ocular cancer are most likely ignorant of the implications of the condition. However, the use of alternatives to orthodox medical therapy in managing ocular cancer though, have no scientific basis, has been reported elsewhere.^{3,28}

It is also remarkable most respondents (85.6%) submit that ocular cancer patients seek hospital treatment. However, this study indicates about 15% of patients with ocular cancer used other non-orthodox options including neglect, prayer, traditional medication and other non-conventional treatment options of unproven efficacy. Record must, however; be set straight that ocular cancer patient who visits the hospital may not necessarily readily access the standard care for ocular cancer especially, in a resource-limited economy like Nigeria but, they could be appropriately referred to where they could be helped.

The suggestions by the respondents would assist the care of ocular cancer if implemented. The need for public awareness on ocular cancer cannot be overemphasized. Other suggestions including training of personnel who can manage ocular cancer, provision of the facilities for managing ocular cancer in the hospitals,^{7,9} establishing National ocular cancer reference center and free/subsidized treatment for ocular cancer³ are reflection of challenges confronting ocular cancer patient in a resource-limited economy.

In conclusion, most respondents have positive perceptions and correct assessment of the magnitude of been afflicted by ocular cancer. Nevertheless, negative perceptions by some respondents are of concern. Education modifies attitudes positively towards ocular cancer. Public health education on ocular cancer will enhance positive attitudes, beliefs

and practices by reducing wrong perceptions. The need to address the challenges to the care of ocular cancer in resource-limited communities underscored.

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