ORIGINAL ARTICLE

Factors Influencing the Onset of Cigarette Smoking among Adolescents in Konduga Local Government Area

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Abstract

Background: Tobacco is the leading preventable cause of death in the United States; responsible for more than 400,000 deaths annually. There have been few reports in the literature about the association between these diseases and cigarette smoking from African countries, which may indicate that these diseases are not common in Africans.

There is a dearth of knowledge about the smoking habit among adolescents and factors influencing it in Africa. This is a survey of the factors influencing the onset of cigarette smoking among adolescents in Konduga local government area.

Methods: A cross-sectional study involving 400 randomly selected subjects from the four districts of the local government who responded to a modified version of the standard WHO questionnaire (WHO/SMO, 1984) for surveying smoking habit.

Results: The study showed that friends/peers (57%) as the major factor for initiating the smoking habit in adolescents. Others were pleasure (24%), stress (13%), family members (4%) and cigarette adverts (1%). The study also revealed that the adolescents continued to smoke even though they were aware of the health consequences of smoking. The majority of the respondents (70%) advocated outright ban on tobacco sales by the government as the most effective way to check this world's major preventable health hazard.

Conclusion: The study showed that friends/peer groups were the dominant factor influencing the onset of cigarette smoking among adolescents. This underscores the need for targeting the group in behaviour change communication.

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Introduction

Tobacco is the leading preventable cause of death in the United States; responsible for more than 400,000 deaths annually ^{1,2} This represents one out of every five deaths in

the united states¹. Approximately 50% of cigarette smokers will die prematurely due to cigarette smoking related diseases unless they are able to quit early.

Diseases associated with cigarette smoking such as lung cancer, myocardial infarction and chronic bronchitis constitute challenging problems in the western world ^{3,4,5}. There have been few reports in the literature about the association between these diseases and cigarette smoking from African countries, which may indicate that these diseases are not common in Africans ^{6,7}.

There is a dearth of knowledge about the smoking habit among adolescents and factors influencing it in Africa. Although Elegbeleye and Femi-Pearse (1976)⁸ and Townsend and Flisher (2006)⁹, did similar but separate studies in Lagos Nigeria and Uganda respectively. More studies are necessary for epidemiological and comparative purposes and this has prompted us to undertake this study in Maiduguri Nigeria.

Methodology

The study was conducted in Konduga local government area (LGA) of Borno state. Areas covered were Konduga town, Kawuri, Jankana and Auno village units, over a period of eight weeks.

The local government area lies between latitudes 11°15′ north and 13°10′ east, covering an area of about 6000 square kilometers. It falls within the Sahel Savannah belt having a flat topography, consisting of firghi soil. The landscape is dotted with trees and thorn bushes. There are two seasons; dry and wet seasons. The hottest months are from March to June. The cold months of the harmattan season are from November to February. The rainy season lasts from June to October, with the area experiencing little rainfall. The average annual rainfall ranges from 60-95mm. Most of the year is dry, with a high temperature, ranging from 30-40° C, with low humidity²⁸.

Study Design

The study design was cross-sectional survey with the aim of assessing the prevalence and factors influencing the onset of cigarette smoking in adolescents. The tool for the study was the researcher-administered questionnaire which was pre-tested and validated. Responses from the adolescents were recorded by ticking the appropriate answers in the closed ended questionnaire

A total of 400 subjects were studied using a multistage sampling method. The data was obtained using a modified WHO questionnaire on smoking habit administered to the adolescent population in the local government.

Information obtainable through the questionnaire included, demographic information like age, sex, ethnic group, socio-economic status, educational level, occupation, religion and their responses to specific questions such as reasons for smoking, source of first cigarette and the effects and dangers of smoking. Their views and perceptions on how to quit smoking were also documented.

Results

Four hundred subjects were studied, majority of the respondents (63%) were from Konduga, the central district of the local government; about 20 per cent from Jakana, 14 per cent from Kawuri and 4 per cent from Auno districts. Other results obtained were classified, analyzed and presented in tables and charts.

Table I shows the demographic data of the respondents. More than half (58%) of the respondents fall within the age group of 18-20, followed closely by the 15-17 age group (33%).

Most of the respondents (84%) were male while the female population constitutes only about 16 per cent. The gender difference may be attributed to the cultural and religious norms of the people of the area of study. Almost all the respondents (98.8%) are Nigerians.

The majority of respondents (44%) belong to the Kanuri tribe, being the indigenous tribe of the area of study. Hausa closely follows with 16% respondents. Marghi, Fulani and Babur have 9%, 4%, and 3.5% respondents respectively. Other respondents from minority tribes constitute 23%.

Koranic education appears to be the dominant as the majority of both parents (about 37%) had only this form of education. Even though the highest level of education of respondents was the secondary school (33%), those with koranic education closely follows with about 32 per cent.

Half of the respondent's family income was low with about 42 and 8 per cent in the moderate and low categories respectively.

Figure 1 shows that over half of the respondents (57%) considered friends/peers as the major reason for starting cigarette smoking. Pleasure follows with 24 per cent; stress with 13 per cent; 4 per cent by family members, neighbours, colleagues or teachers; while cigarette adverts and availability of funds got 1 per cent response each.

In attempt to answer the question on reasons why adolescents continue to smoke cigarettes, the table shows that most respondents (44%) believe they smoke for pleasure, followed by stress (35%), peer group influences (14%), social acceptance (4%) and 2 per cent due to advertisement.

The figure shows that nearly all the respondents (92%) are aware of the hazard associated with smoking. Only 8 per cent appear to be ignorant. This clearly shows the level of awareness in the community.

Table I: the demographic characteristics of adolescents in Konduga 2006

CHARACTERISTIC	RESPONDENTS (n=400)	PERCENTAGE (100%)
Age (in years)		(,,)
Less than 12	2	0.50
12-14	33	8.25
15-17	133	33.25
18-20	232	58.0
Total	400	100
Sex		100
Male	335	83.75
Female	65	16.25
Total	400	100
Tribe	100	100
Kanuri	177	44.25
Hausa	64	16.00
Marghi	36	9.00
Fulani	16	4.00
Babur	14	3.50
Others	93	23.25
Total	400	100
Nationality		
Nigerian	395	98.75
Non Nigerian	5	1.25
Total	400	100
Highest level of education		
No school	33	8.25
Koranic	127	31.75
Primary	50	12.50
Secondary	133	33.25
Tertiary	57	14.25
Total	400	100
Father's educational level	445	20.05
Koranic	145	36.25
Primary	24	6.00
Secondary	53	13.25
Tertiary	85	21.25
None of the above	93	23.25
Total	400	100
Mother's educational level		
Koranic	148	37.0
Primary	28	7.0
Secondary	59	14.8
Tertiary	37	9.3
None of the above	128	32.0
Total	400	100
Family income		
Low	200	50.0
Moderate	169	42.3
High	31	7.8
Total	400	100

Table II: prevalence of cigarette smoking among adolescents

SMOKING HABIT	FREQUENCY	PERCENT (%)
Never smoked	264	66.0
Current smokers	85	21.3
Ex-smokers	51	12.7
Total	400	100

Table III: reasons for smoking

REASONS *	FREQUENCY	PERCENT (%)
Social acceptance	6	4.44
Stress	47	34.81
Peer group	19	14.07
Pleasure	60	44.44
Advertisement	3	2.22
TOTAL	135	100.0

^{*} Some respondents gave more than one reason

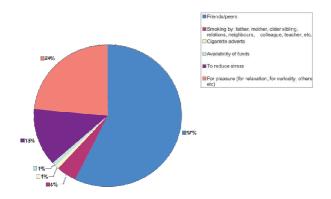


Figure 1:Perception of adolescents for initiating the smoking habit in Konduga LGA

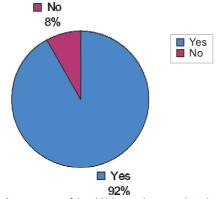


Figure 2: Awareness of health hazards associated with cigarette smoking

Discussion

Four hundred subjects were studied. The study revealed that more than half of the subjects were in the age-group of 18-20 years. This is followed by 15-17 years. This indicate that the habits are started about 15-17 years and by 18-20 years most adolescents who are prone to smoke would have joined and therefore the prevalence peak at this age. This finding is in agreement with previous report by Townsend et al⁹, that most smokers establish smoking habit before graduating from high school as well as surgeon general's report that adolescent smokers establish the smoking habit by the age of 20 years¹⁰.

It has also been found that about half of the subjects were from low socioeconomic class, while only a few in the middle socioeconomic class, this also agreed with the Surgeon general's finding that young people from low socioeconomic status are at an increased risk of initiating smoking ¹⁰. Poverty and lack of parental care are among the reasons why this group is more vulnerable to the smoking habit.

All the smokers were observed to be males in this study. This finding agrees with Bello et al¹¹ regarding smoking status of students of tertiary institutions in the area. This is not surprising considering the fact that women hardly smoke in the area due to the social and cultural beliefs strongly held by them. Any woman seen smoking is termed to be a deviant; this was corroborated by Emmanuel et al¹² in Addis Ababa with fewer female smokers. Most of the smoking done by the children is done outside the home and females are most of the time confined at home hence it is difficult for them to undertake this behaviour. However Rosaria et al13 in a Swedish cohort study of early gender difference in adolescent tobacco use found that females were more likely to continue smoking than males though males start smoking at an earlier age than females. The Centres for disease control and prevention (CDC &P)¹⁴ found that adolescent girls smoke more to loss weight and avoid eating than boys who smoke more for relaxation.

It was observed that over half of the subjects were initiated into the smoking habit by their peers; this was in agreement with Emmanuel et al¹², who observed that having a friend who smokes was strongly associated with cigarette smoking after controlling confounding factors in their study. Various reasons were given by the respondents in this study for initiating the smoking habit these include pleasure, to relieve stress, smoking by

parents /neighbours, teachers and cigarette adverts. Similar findings were also observed by Lisa et al¹⁵, Robert et al¹⁶ that pear effect has a high role in initiation of youth smoking habit. However parental smoking habit and cigarette adverts were observed to play a minor role as factors contributing to cigarette smoking in this study. This is in contrast to other studies by David et al¹⁷ and Falstewards et al.¹⁸ who found that parental smoking especially father's smoking habit has a high influence in the initiation of youth smoking habits.

The subjects' perception on the reason why they smoke revealed pleasure as the reason for smoking among 44% of the participants. This was closely followed by stress (34.8%). Other reasons given for smoking were peergroup influence, social acceptance and cigarette adverts.

This finding was corroborated by Philips et al¹⁹, Rhonda and Bonnie²⁰ and Diane and Sheryl²¹, who found that there is positive correlation between peer influence, pleasure seeking and tobacco smoking among their subjects.

Conclusion

A survey of the factors influencing the onset of cigarette smoking among adolescents was conducted. It was found that all the smokers were male. Low family income and pear group influence were among the factors influencing smoking initiation among the youths. This was significantly higher than other factors like cigarette advertisement and family influence. It was also noted that pleasure seeking and peer group influence were the main reasons why the youth smoke.

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