

Young people's knowledge of the health risks associated with tobacco consumption. The study carried out in the town of Kenge, Kwango, DRC

MALU JOSEPH MAYITUKA NEWA^{1,2}, MICHAEL NZUNDU MAHUND^{3,4}, JEAN-ROBERT IBEFO NDONGI⁵, FABIEN FULA MUTUMUBI⁶, ET JOËL KAFUMBI KATSIATSIA⁷

1. Assistant at the Institut Supérieur des Techniques Médicales Marie Reine de la Paix in Kenge
2. Medical Director, Bukanga-Lonzo Secondary Hospital, Boko Health Zone, Kwango Provincial Health Division
3. Medical Director, Mosamba Secondary Hospital, Kimbau Health Zone, Kwango Provincial Health Division
4. Assistant, Institut Supérieur Pédagogique et Technique de Kindi
5. Assistant, Institut Supérieur d'Etudes Agronomiques de Kimbau,
6. Nurse, Assistant at Institut Supérieur des Techniques Médicales de Bandundu
7. Nurse, Chef de Travaux at Institut Supérieur des Techniques Médicales Marie Reine de la Paix, Kenge

joelkafumbi@gmail.com

Abstract— Tobacco consumption, in all its forms, is harmful to health. This study aimed to determine young people's level of knowledge about the health risks associated with tobacco consumption. The sampling used in this research was non-probabilistic for convenience. Young people encountered in pubs where tobacco was consumed were interviewed using a structured interview guide, resulting in a sample of 100 subjects. Data analysis was descriptive, based on the calculation of frequencies and proportions. Of the participants, 96% were male and 4% were female; 39% were aged between 15 and 18, followed by those aged between 23 and 26, who accounted for 28%; 50% had completed secondary school, 20% primary school and 18% higher education, while 12% had no education. Concerning the knowledge of the young people questioned, 65% cirrhosis of the liver as a major risk. In terms of strategies to combat tobacco consumption among young people, 29% advocated a total ban on tobacco production, while 20% felt that young people should be prevented from smoking, and 21% suggested halting the activities of vendors and smokers. The conclusions of this study convincingly demonstrate that tobacco consumption mainly affects the youngest individuals, a deeply worrying finding and a major source of concern. Despite adequate awareness among young people of the health risks associated with tobacco consumption, it is clear that they continue to use it.

Keywords— Knowledge, health risks, tobacco, consumption, drug, smoker

Introduction

Tobacco consumption, in all its forms, is damaging to health. According to estimates by the World Health Organization (WHO), around 6 million people lose their lives each year as a result of tobacco use, a figure that could rise to 8 million by 2030. Ironically, smoking is recognized as the leading cause of preventable death worldwide. In Belgium, an estimated 31% of male deaths

and 8% of female deaths are associated with smoking. The average age of first contact with cigarettes is around 16, yet a quarter of people become regular smokers from this age. What's more, it has been found that young people who start smoking before the age of 18 are more likely to develop nicotine dependence than those who take up the habit later in their adult lives. It is therefore imperative to educate and raise awareness among both present and future generations of the health, social, environmental and economic repercussions of smoking.¹ Tobacco consumption among young people is a crucial indicator for assessing the extent of the smoking epidemic, which causes millions of deaths worldwide every year.² The problem of smoking is thus an under-researched subject in the social sciences despite its major status as a public health issue. It should also be noted that sub-Saharan Africa currently has the largest cohort of young people in the world, almost half of whom are aged between 5 and 24. For declining tobacco companies in northern regions, emerging youth represents an untapped market to exploit. Despite the use of graphic warnings and messages disseminated through various media, it seems that these initiatives are proving ineffective in curbing the growing number of consumer's worldwide.³ Smoking remains the leading preventable cause of death and disease worldwide. Projections estimate that in the 21st century, smoking will cause the deaths of one billion people worldwide. Around 80% of the world's smokers live in low- and middle-income nations, where the health impact of smoking is particularly acute. A 2017 study found that 11% of deaths from ischemic heart disease and 70% of deaths from lung, bronchus and trachea cancer were attributable to tobacco use. Smoking among young people is a major public health issue because of the immediate and long-term impact on their well-being, including asthma, cancer and cardiovascular disease. What's more, smoking among teenagers is correlated with other risky health behaviors such as road accidents, violent acts, mental disorders and suicide. In addition, some research indicates that tobacco consumption may act as a 'gateway' to the use of illicit drugs. It is estimated that, in the absence of preventive measures, half of the 250 million children and adolescents who currently smoke will succumb to tobacco-related diseases in adulthood. Adolescents are undoubtedly a key factor in anticipating future trends in smoking and the associated risks. It is widely acknowledged that half of all smokers in adolescence become regular tobacco users in adulthood. Chicha is a method of tobacco consumption that is now widespread in Mali's capital. Young people under the age of 25 are particularly fond of it, with more than 25 places dedicated exclusively to the practice. A complex scourge and a major factor in premature mortality, smoking is currently ranked by the World Health Organization as one of the six leading persistent causes of death in the world. It has multiple impacts, with interconnected effects on health, socio-economic and environmental levels. In Algeria, the seriousness of the cases of morbidity and mortality attributable to smoking underlines the fact that it constitutes a serious public health problem: 30% of cancers diagnosed each year are linked to smoking, while 90% of cases of lung cancer occur in smokers (with 15,000 deaths a year due to smoking). In the light of this problem, it is vital to examine the various approaches to preventing and combating smoking among young people. In the Democratic Republic of Congo (DRC), statistics show that smoking is more prevalent among men than women. The overall

prevalence of tobacco consumption was 26.5% among men and 4.1% among women in 2014. Overall, tobacco consumption is more marked among older people, although the types of products used vary according to gender. Congolese people living in rural areas consume more tobacco than those living in urban areas, with rates of 29% and 20% respectively in 2014. Ninety-six percent (96%) of women surveyed said they did not use tobacco products. Of the remaining 4% who reported using tobacco in 2014, almost all said they hardly ever used cigarettes as their main product. Snuff was the most commonly used type of tobacco among women, at 3%, followed by hand-rolled tobacco at 0.6%. Among men, cigarettes were the dominant product with a consumption rate of 18.9% in 2014, followed by snuff at 7.8% and hand-rolled tobacco at 4.4%. It should also be noted that smoking rates in the DRC increase proportionately with age.⁴ A study conducted in Kabinda revealed a prevalence of smoking among minors of 20.2%. The profile of the smoker turned out to be that of an individual aged between 12 and 17, with an average age of 14.3 ± 1.5 years, predominantly male (37.8% vs. 0.8%), with a primary or secondary education, living in a stimulating environment but with little anti-smoking awareness in the face of ever-increasing pro-tobacco advertising. The age of first initiation to smoking ranged from 10 to 17 years, peaking at age 15 at an average of 14.1 ± 1 years. Variables such as age from 13 to 17 ($p < 0.0001$), male sex ($p < 0.0001$) and primary or secondary education were significant factors.⁵

Tobacco consumption among young people is reaching worrying proportions in the town of Kenge. The uncontrolled growth of alcoholic beverage outlets and the uncontrolled sale of alcohol systematically combined with the marketing of tobacco, as well as the increase in juvenile delinquency, are among the factors exacerbating the situation among young residents of Kenge. Despite adequate awareness of the health risks associated with smoking among young people, these warnings do not appear to be sufficient to deter their behavior. The overall aim of this study was to assess young people's level of knowledge about the health risks associated with smoking by focusing on two specific objectives: (i) to identify the age groups most affected; (ii) to assess their knowledge about the diseases caused by smoking in order to formulate appropriate recommendations to address this problem.

Materials and methods

A. Presentation of the study environment

The city of Kenge, capital of Kwango province in DR Congo, is located at a latitude of 5° south and a longitude of 17° East, with an average altitude of 555 meters above sea level (CENI, 2014). It lies in the AW3 wet tropical zone or tropical savannah according to Köppen's classification. Kenge lies on plateaux intersected by steep valleys and occasional hills, characterized by sandy soil in a predominantly savannic configuration crossed by forest galleries along watercourses. It has a population of 153,290 spread over 15 separate districts (Ville de Kenge, 2023).

B. Sampling method

The sampling for this study was non-probability convenience sampling, selected from smokers encountered in various drinking establishments during the celebration of World No Tobacco Day from 31 May to 30 April 2023. The target population was young people aged 15 to 30, from whom a sample of 100 subjects was selected.

C. Data collection methods and techniques

Data were collected using a questionnaire and semi-structured interviews based on an interview guide. The young tobacco users encountered in the drinking establishments were interviewed in accordance with the questions in the interview guide.

D. Data analysis techniques

Data analysis was mainly descriptive, based on the calculation of frequencies and proportions.

E. Ethical considerations

The study was conducted in compliance with ethical standards. Participation was free and voluntary, and free and informed consent was obtained from each participant after providing the necessary explanations about the study.

Results

A. Characteristics of respondents

Of the respondents to this study, 96% were male and 4% female (Figure 1).

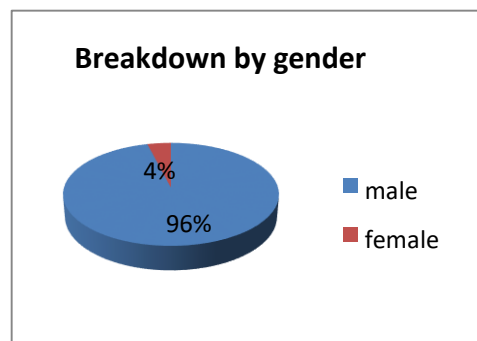


Figure 1 : Gender of respondents

The results on the age of respondents showed that 39% were aged between 15 and 18, followed by those aged between 23 and 26, who accounted for 28%. Those aged between 19 and 22 accounted for 22% and those aged between 27 and 30 came last with 10%. (Table 1).

I. TABLE 1: AGE OF RESPONDENTS

Age	Frequency	Percentage
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15-18 years	39	39
19-22 years old	23	23
23-26 years old	28	28
27-30 years old	10	10
Total	100	100

Source: Author, 2023

In terms of respondents' level of education, half of them (50%) had completed secondary school, 20% had completed primary school, 18% had completed higher education and 12% had no education at all. (Table 2).

II. TABLE 2: LEVEL OF EDUCATION OF RESPONDENTS

Level	Frequency	Percentage
Illiterate	12	12
Primary	20	20
Secondary	50	50
University	18	18
Total	100	100

Source: Author, 2023

B. Knowledge of the health risks associated with tobacco consumption

Among the young people questioned, 65% knew that smoking has consequences for health, compared with 35% who did not (Table 3).

III. TABLE 3: KNOWLEDGE OF THE HEALTH RISKS OF SMOKING

Knowledge	Frequency	Percentage
Yes	65	65
No	35	35
TOTAL	100	100

Source: Author, 2023

When asked about tobacco-related illnesses, 35% of young people knew of no disease; 28% cited lung cancer; 16% recognized cirrhosis of the liver; 12% cited lung disease with no further details; and 9% mentioned chronic tuberculosis (Table 4).

IV. TABLE 4: DISEASES CAUSED BY SMOKING

Knowledge	Frequency	Percentage
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Cirrhosis of the liver	16	16
Lung cancer	28	28
Lung diseases	12	12
Chronic tuberculosis	9	9
Don't know	35	35
Total	100	100

Source: Author, 2023

The young people proposed strategies to combat tobacco consumption among young people, among which 29% asked for a ban on tobacco production; 20% thought that young people should be banned from smoking; 21% asked for vendors and smokers to be arrested; 13% proposed banning the sale of tobacco to young people; 9% had no strategy to propose; and finally 8% proposed to

Increase the price of tobacco to prevent young people from buying it (Table 5).

V. TABLE 5: STRATEGIES TO REDUCE TOBACCO CONSUMPTION

Strategies	Frequency	Percentage
Banning young people from smoking	20	20
Banning tobacco production	29	29
Increase the cost	8	8
Banning tobacco sales to young people	13	13
Stop sellers and smokers	21	21
No idea	9	9
TOTAL	100	100

Source: Author, 2023

Discussion of Results

A. Characteristics of respondents

Of the participants in this study, 96% were male, while 4% were female. Age data revealed that 39% of respondents were in the 15-18 age group, followed by those aged 23-26, who accounted for 28%. Young people aged 19 to 22 made up 22%, and those aged 27 to 30 accounted for 10%. As for the participants' level of education, half of them (50%) had completed secondary school; 20% had completed primary school; 18% had obtained a higher education diploma; and 12% had no formal education at all. The results of a study carried out in Kabinda revealed a prevalence of smoking among minors of around 20.2%. The typical smoker was very young, aged between 12 and 17, with an average age of 14.3 ± 1.5 , and was predominantly male (37.8% vs. 0.8%). These individuals were either illiterate or had completed secondary education. They lived in an environment that encouraged few anti-smoking efforts in the face of growing tobacco

advertising. The average age of first contact with cigarettes was between 10 and 17 years, with a peak at 15 years and an average of 14.1 ± 1 year.⁵

According to the results of Bessai⁶, individuals aged between 18 and 25 who are not enrolled in an educational establishment represent the most preponderant category when it comes to smoking. On the other hand, young people attending school or studying have the lowest rate of regular tobacco consumption (23.2%). It should also be noted that unemployment seems to encourage smoking, with 57.5% of young non-students smoking compared with 42.5% of their student counterparts. It should also be pointed out that the prevalence and intensity of smoking are closely linked to the age at which individuals started: among young non-students who started smoking before the age of 14, 65.7% smoke daily, while 34.3% of young students smoke occasionally.

B. Knowledge of the health risks associated with tobacco consumption

Although our results reveal a high level of knowledge among young people about the risks associated with smoking (65%), other studies have shown higher percentages, such as the study conducted by Bessai⁶, confirming that smoking remains the area of health where the perception of being well informed about the dangers of smoking is most marked. A significant percentage of young smokers, both students and non-students, claim to be 'well' informed about the dangers of smoking (70%), while 30% say they are poorly informed. This indicates that despite their level of awareness of the risks of smoking, young people continue to take risks. What's more, young people who are unemployed are more likely than students or workers to say they are 'poorly informed' about smoking.

In a study of the factors influencing knowledge of the risks and perceptions associated with tobacco consumption among students at Assane Seck University in Ziguinchor, it was found that the vast majority of student smokers (96.3%) were aware of the harmful effects of tobacco on health³, a figure significantly higher than our own results, where only 65% were aware of the health risks associated with tobacco consumption.

A study into chicha consumption revealed that a majority of respondents believe that the water in the tank filters out toxic substances, ignoring the fact that chicha is more harmful than cigarettes⁷.

With regard to smoking-related illnesses, 35% of young people were unable to name a single one; 28% mentioned lung cancer; 16% recognized cirrhosis of the liver; 12% mentioned a lung disease without further specification and finally 9% referred to chronic tuberculosis. In a survey on smoking in schools, 91.1% of pupils identified cancer as the main risk associated with smoking.² Similarly, Sané and his colleagues³ found that tobacco users identified lung cancer, coughing, respiratory diseases and sexual impotence as conditions to which tobacco users are exposed, as well as other consequences such as black teeth. A study conducted in Bamako highlighted the limited knowledge of young people in Commune IV about chicha and the

appearance of acute symptoms following its consumption. No measures are taken to replace the mouthpieces, and most of them smoke in enclosed, unventilated areas, further encouraging the emergence of respiratory diseases.⁷ Fear of tobacco-related illness is a significant indicator of smoking behavior: almost three quarters (73%) of young smokers do not fear tobacco-related illnesses at all for their own health, while only 27% express such fears.⁶ Among the strategies suggested by young people to combat tobacco consumption, 29% suggested banning tobacco production; 20% felt that young people should be banned from smoking; 21% called for vendors and smokers to be arrested; 13% suggested banning the sale of tobacco to young people; 9% had no strategy to put forward; and finally 8% suggested increasing the price of tobacco to discourage young people from taking up the habit.

For Belgacemi, Benagrouba and Mahboubi⁸, smoking must be combated by every means possible to reduce its spread, by raising awareness among students of the dangers to their health. It is also important to increase the tax on tobacco sales and to encourage the media to contribute to the fight against smoking by ensuring that programs on the dangers of smoking are widely broadcast on television and radio. For Degroot, Martin¹, evidence-based tobacco control measures must target the population as a whole. In order to maximize their effectiveness, it is imperative to take into account the needs and specificities of the target populations. In the fight against smoking, awareness-raising campaigns highlighting the dangers of tobacco are only one of the levers of public policy in this area. Legislative and regulatory measures such as higher taxes on tobacco, bans on smoking in public places and graphic health warnings on cigarette packets all contribute to the stigmatization of smoking. In the long term, these measures could encourage behavioral change, both in terms of personal consumption and the perception of the risks associated with smoking. It is therefore imperative to focus prevention efforts on the vulnerable young population, who are reluctant to consider the risks to their health, which they perceive as remote at best. It is crucial to intervene early, before dependency sets in. In addition, various legislative and regulatory measures have been introduced to step up the fight against smoking among young people: significant and repeated price increases for tobacco products, new health warnings on packaging, a ban on packs containing fewer than twenty cigarettes, a total ban on smoking in public places, including schools, and a ban on the sale of tobacco products to under-16s. In addition, several laws have been passed to reinforce the ban on setting up tobacco sales outlets in 'protected' areas, such as schools, health centers and sports facilities.⁶

Conclusion and recommendations

A. Conclusion

The results of this study demonstrate conclusively that the prevalence of tobacco consumption is particularly marked among the youngest individuals, a situation that is alarming and of great concern. Despite adequate awareness among young people of the health risks associated with tobacco use, they persist in their practice. They remain aware of the dangers involved and are putting forward ways of reducing the frequency of smoking.

B. Recommendations

It is more than urgent for the Congolese government to strengthen regulations on the sale and consumption of tobacco and to ensure that they are monitored. Researchers need to think about effective methods of raising awareness with a view to bringing about a change in behavior, because it is clear today that despite the fact that cigarette packaging widely carries the words smoking is harmful to health for some and tobacco seriously harms your health for others, the population, particularly young people, are not worried about consuming it.

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