Global Adult Tobacco Survey in Nigeria: a success story in the African region

Context

Nigeria is the first country in the African Region that has successfully implemented the Global Adult Tobacco Survey (GATS).

The tobacco epidemic has impacted negatively on the public health of developing countries, including Nigeria. Tobacco use is becoming a major cause of preventable health problems in Nigeria, affecting Nigeria's economically productive population in both the urban and rural communities. Tobacco use will be a major cause of premature death and disability, unless strong policies are put in place to stop youth from starting use while encouraging current users to quit.

There has been lack of comprehensive population based data on tobacco use and exposure in Nigeria to show the magnitude of the tobacco epidemic. This means that there was no data from a tobacco surveillance system to document trends of tobacco use and the impact of tobacco control measures in Nigeria. This major gap is addressed for the first time by the GATS in Nigeria.

The GATS is the first nationally representative survey of adults in Nigeria for monitoring adult tobacco use and tracking key tobacco control indicators. This is the first time a large-scale survey using digital technology has been conducted in Nigeria. This has built capacity to undertake future surveys using this technology.

Figure 1: Data collection using electronic handheld devices in Nigeria

Implementing agency

The Federal Government of Nigeria is committed to preventing tobacco use and promoting tobacco control efforts. Country commitment was demonstrated through the signing and ratification of the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) in 2005. The GATS initiative fulfills Article 20 of the WHO FCTC in which countries are obligated to monitor tobacco use. Nigeria is the first country in the African region to implement GATS.

The GATS in Nigeria was conducted in 2012 by the National Bureau of Statistics (NBS), the national statistical agency; under the coordination of the Federal Ministry of Health (FMOH). Technical assistance was provided by the WHO Regional Office for Africa (AFRO), the WHO Country Office of Nigeria (WCO Nigeria), the Centers for Disease Control and Prevention (CDC) and the Research Triangle International (RTI). Financial support was provided by the Bloomberg Initiative to Reduce Tobacco Use, a program of Bloomberg Philanthropies through the CDC Foundation.

Figure 2: Nigeria GATS team and NBS Statistician-General

Questionnaire

The GATS questionnaire of Nigeria was made up of a household questionnaire and an individual questionnaire. The household questionnaire included questions about basic information on age, gender, current smoking status, and the respondent's relationship with the head of household, if not the same person. The individual questionnaire was administered to the randomly selected adult through a handheld device, and included nine sections: (i) background characteristics; (ii) tobacco smoking ; (iii) smokeless tobacco ; (iv)

cessation for smoked tobacco ; (v) cessation for smokeless tobacco; (vi) second-hand smoke (vii) economics (viii) media ; and (ix) knowledge, attitudes, and perceptions.

Nigeria carried out a pretest of the questionnaire in both urban and rural settings in June 2011 using a sample of 120 respondents who were equally distributed by gender and smoking status and were individuals 15 years and older. The pretest was conducted to ensure better understanding of the survey especially in terms of wording and comprehensibility; inconsistencies in skip patterns; sequencing of questions; completeness of response categories; workload; interview time; availability and callbacks. Other important objectives of the pretest were to test procedures for handheld data collection; assess problems in the process of data transfer and aggregation; and develop a data management system for implementation of GATS Nigeria.

Training

The field training and data collection took place in phases within 3 months from 11 June to 02 September, 2012. Two levels of training were conducted for enumeration area mapping and household listing. The first level of training was a training of trainers conducted for 37 state trainers/monitors; while the second level was for listers at state level.

The training for fieldwork and data collection was centralized and conducted in two phases; the first phase was for the 18 Southern States and the second phase for the 18 Northern States and the Federal Capital Territory. To standardize the survey procedures and minimize non-sampling errors, the GATS manuals were used for the trainings.

Figure 3: Training on GATS Nigeria fieldwork and data collection

Fieldwork

The fieldwork, which was conducted in two phases, took place from 02 July to 02 September, 2012. The first phase for the south region took place on 02-22 July, 2012 while the second phase for the north region was from 13 August to 02 September, 2012. The field interviewers and field supervisors who had participated in the training workshop were posted based on their region of assignment to carry out data collection. The field staff comprised field interviewers, field supervisors, state field supervisors, and zonal data managers.

The 2012 Nigerian GATS was a nationally representative household survey of non-institutionalized men and women aged 15 years or older. The survey was designed to produce internationally comparable data for the country as a whole and by gender and place of residence (urban/rural). The survey was also designed to compare estimates among the six geo-political regions of Nigeria; namely North Central, North East, North West, South East, South-South, and South West.

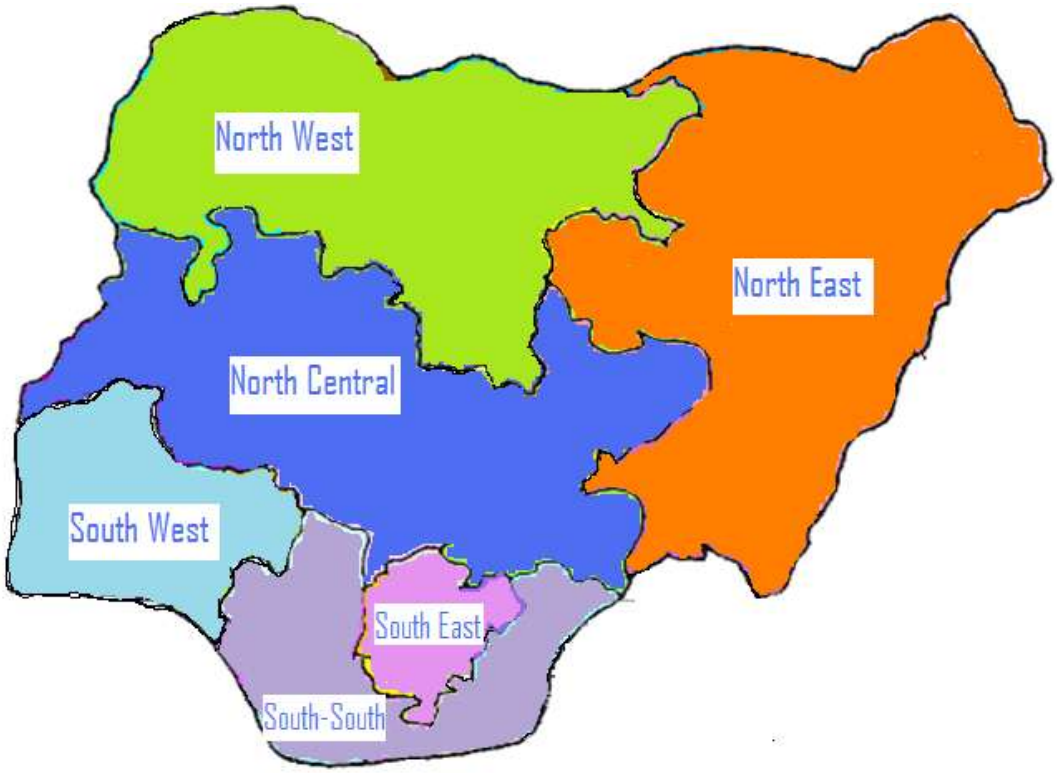

Figure 4: Six geo-political zones in Nigeria

GATS in Nigeria used a standardized questionnaire, sample design, data collection, and management procedures. A multi-stage, geographically clustered sample design was used to produce nationally representative data. Electronic handheld devices were used for data collection and management. A total of 11,107 households were sampled; 9,911 households completed screening and 9,765 individuals were successfully interviewed. One individual was randomly chosen from each selected household to participate in the survey.

The overall response rate for GATS Nigeria was 89.1%. The household response rate was 90.3% (86.8% urban, 94.1% rural), while the individual response rate was 98.6% (98.0% urban, 99.2% rural). The survey provided information on tobacco use (both smoked and smokeless), tobacco cessation, exposure to secondhand tobacco smoke, tobacco economics, media, and knowledge, attitudes, and perceptions toward tobacco among the study population in Nigeria. The survey therefore provided evidence for the Government and non-governmental tobacco control advocates and partners to improve tobacco control programmes.

The findings from GATS will assist Nigeria to enhance its capacity to design, implement, and evaluate the country's tobacco control programs and to fulfill its obligations under the WHO FCTC to generate comparable data within and across countries.

Despite some security challenges during the survey, the various stakeholders demonstrated courage and resilience; and also provided their maximum support and commitment during all phases of the survey that resulted in the huge success of the GATS in Nigeria. Nigeria GATS team members, field workers and their supervisors worked tirelessly to ensure that the GATS is a success.

Figure 5: GATS Nigeria fieldworkers facing transportation challenges

Key findings

As the most comprehensive survey on tobacco use and tobacco control ever conducted in Nigeria, GATS provides special insight into the country's tobacco use context. The results of GATS Nigeria therefore offer opportunities for appropriate actions to be taken in response to the issues reported.

In 2012, 5.6% (4.5 million) Nigerian adults aged 15 years or older currently used tobacco products with 10.0% of men and 1.1% of women. GATS Nigeria has therefore quantified the tobacco burden in the country, signaling a need for continuous, effective efforts to reduce the burden and combat the tobacco industry. Monitoring tobacco use is the foundation of tobacco control; therefore, it is important that GATS be carried out on a regular basis.

Services for cessation of tobacco use could be integrated into the health system, given that a large portion of smokers are ready to quit smoking. In Nigeria, 7 in 10 current smokers planned to or were thinking about quitting; and 6 in 10 male smokers who visited a health care provider in the previous 12 months were advised to quit.

The GATS data showed that exposure to secondhand smoke among those who visited public places is significant. An estimated 17.3% of adults (2.7 million) who worked indoors were exposed to tobacco smoke at their workplace; while 29.3% of adults (6.4 million) were exposed to tobacco smoke when visiting restaurants. The high rates in restaurants indicated a need for expanding smoke-free policies to currently unprotected public places. A majority of respondents that were in favor of not allowing smoking in restaurants may indicate that there is a high level of public support for implementing a more comprehensive smoke-free policy.

From GATS, it is known that the penetration of the electronic media campaign as well as pictorial health warnings on cigarette packs is very high, but the impact on levels of awareness, attitudes, and behavior change is not as high. In Nigeria, 4 in 10 adults noticed anti-cigarette smoking information on the television or radio but 48.6% of adults did not believe smoking causes stroke.

Way forward

GATS provides critical information on tobacco use and key indicators of tobacco control by important socio-demographic characteristics and creates an opportunity for policy makers and the tobacco control community to develop targeted interventions for effective tobacco control. The findings indicate there is a positive environment for tobacco control including:

- Tobacco control programs should be designed to cover all types of tobacco products and in such a way that all subpopulations have equal access to policy interventions and information ;
- Periodic monitoring of tobacco use should be conducted to track the implementation of tobacco control measures ;
- 100% smoke-free policies that cover all public places and workplaces should be implemented to fully protect non-smokers from exposure to second-hand smoke ;

- Effective media messages and pictorial health warnings on all tobacco products should be utilized to change social norms ;
- A comprehensive advertising ban with effective enforcement has been shown to have a positive impact on reducing tobacco use and should be implemented ;
- The price of tobacco products should be raised to make them less affordable for the majority of people, especially through tax increase ;
- Capacity among health-care providers for treatment of dependence to tobacco should be built and cessation facilities in health care settings and in local communities should be established.

Figure 6: Billboards on smoking ban in Nigeria

The experience from Nigeria of successfully implementing the GATS is an invitation to other countries in the Region to strengthen surveillance and monitoring for tobacco control.