A qualitative study exploring the views on tobacco use and cessation support among patients in Kenya

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Abstract

Tobacco use adversely affects the health of users, making hospitals a good place to introduce tobacco cessation efforts. However, most healthcare providers do not offer cessation support. This study sought to explore the views on tobacco use and cessation support among patients in Kenya. A qualitative approach was used. 19 patients were selected from various health facilities in Nairobi and Kisumu using purposive and snowball sampling. Semi-structured in-depth interviews were conducted by staff trained in qualitative interviewing between May 2017 and October 2017. The interviews were recorded and transcribed in their respective languages. Data management was done using Vivo version 10 software and analysed using content analysis method. Findings from this study revealed the following: Awareness regarding harmful effects: Participants were of view that tobacco use causes cancer, respiratory problems, impotence, lack of sleep and appetite and discoloration of the teeth. Lack of awareness regarding tobacco cessation clinics and lack of tobacco cessation interventions: Participants mentioned lack of awareness about any institutions which provide tobacco cessation services. Others mentioned that they had not been offered any support to quit; very few had been asked about their tobacco use status. Quitting tobacco use challenges: Respiratory problems, headache, lack of sleep and appetite, urge to smoke and the smell of smoke were the key challenges. Motivating factors to quit: Religion, support from family and friends, poor health condition, less availability of tobacco products and financial problems were the factors cited. Need for enhanced tobacco control: need for more awareness campaigns about harmful effects of tobacco use, provision of more tobacco cessation services, and implementing policies such as banning tobacco and increasing tax.

There is need for multi-disciplinary efforts in Kenya to enhance tobacco control through

awareness campaigns and integrating accessible and affordable tobacco cessation services within healthcare facilities.

Keywords: *Tobacco use, cessation barriers, healthcare workers, qualitative study, Kenya*

Introduction:

Tobacco has been shown to kill up to half of its users; with more than 7 million people dying each year as a result of direct tobacco use, while around 1.2 million deaths are the result of exposure to second-hand smoke. Over 80% of these deaths occur in low- and middle-income countries.[1, 2] Kenya has the highest recorded smoking prevalence in Sub-Saharan Africa,[3] with 11.6% of the adult population using tobacco products (19.1% men, 4.5% women) according to the Global Adults Tobacco Survey-Kenya (GATS) of 2014.[4] Similarly, 9.9% of school going children aged 13-15 years were using tobacco products (12.8% boys, 6.7% girls) according to the Kenya Global Youth Tobacco Survey (GYTS) of 2013.[5] Reports from Kenya have shown that 69 per 100,000 deaths for individuals aged 30 years and older are as a result of tobacco use related conditions, and 20% of all non-communicable disease-related deaths result from tobacco use.[6] According to the GATS-Kenya 2014 survey, 92.8% of the adults believed that smoking causes serious illness. Among adults who used tobacco, 52.4% had attempted to quit smoking in the past 12 months, while 55.9% had thought of quitting because of health warning labels on cigarette packages. Only about one in three persons (30%) who visited a health care provider in the past year were advised to quit smoking, whereas 70% had tried to quit without any assistance. The survey also showed that more than three fourths (77.4%) of current smokers planned to or were thinking about quitting, which is similar to the worldwide report that shows that approximately 70% of smokers report that they want to quit. Health care facilities have been identified as very important contact points to offer cessation support. This is because a great percentage of people will visit their physician at least once a year, offering the best opportunity for healthcare providers (HCPs) to provide cessation support. However, according to Ratschen et al., both patients and HCPs have limited knowledge and practice on how to treat tobacco dependence, although affordable and effective treatments for nicotine dependence exist.[8] A study by Olando et.al., exploring barriers and facilitators to successful cessation among tobacco using patients on outpatient follow up in Kenya with mental illness found results that were similar to experiences among the general population. The barriers experienced included: peer influence, withdrawal symptoms, fear of complete cessation, other substance use, and end-of-month disputes (difficulty meeting financial obligations). The facilitators that participants found worked for them in promoting successful cessation besides behavioral therapy were oral stimulation (eating or chewing things), and spousal and friend support.[9]

Most LMICs lack good quality qualitative data which provide an in-depth understanding of how the health systems in LMICs work, particularly with respect to tobacco cessation in terms of care pathways, referral, and coordination of services between health and social care professionals at different levels of care. Patients are important stakeholders in cessation support and their active participation in cessation support can only be achieved by understanding their views and bring in behavioural change interventions. This study thus sought to understand among adults visiting various health facilities of Kenya, the awareness regarding harmful effects of tobacco use, their perceptions, beliefs and suggestions related to tobacco use and its cessation, the challenges faced by patients in receiving cessation support,

their experiences during cessation attempts as well as the support they require in order to quit successfully.

Methodology

Study design

The study used a qualitative approach consisting of semi-structured in-depth interviews.

Study settings

Two study sites from Kenya were selected. The two sites in Kenya were Nairobi County (Capital city) and Nyanza County. Nairobi is the capital centre with the major base for policy makers and diverse health facility settings, while Kisumu is a growing city with the major referral hospital serving three regions (Nyanza, Western and North Rift Kenya), with a population in excess of five million. Hospitals in Kenya, apart from the main referral hospital (run by the national government), are run by the county government.

In both Nairobi and Kisumu, the study sampled participants from different hospitals within the cities i.e. both public and private. This ensured a good representation of the different socio-demographic characteristics of the patients. The main hospital in Nairobi was the Kenyatta National Hospital, which is a public, tertiary, referral hospital having over 6000 staff and has a bed capacity of 1800. This hospital served as the urban site for the present study. In Kisumu, Jaramogi Oginga Odinga referral hospital was the major referral hospital in Nyanza, serving a population in excess of 5 million; average annual out-patients' visits are 197,200 and in-patient admissions of about 21,000, with a bed capacity of 467. This hospital served as the main rural site for the study.

Study population: The study recruited patients who were seeking care from the two main hospitals and neighboring private hospitals.

The inclusion criteria for the study participation were: current or past tobacco user, receiving routine clinical care from at least one of the health care facilities in the selected study areas during the previous six months, and was willing to provide written informed consent for the study.

Sampling, recruitment and consenting process

Nineteen (19) participants were recruited from the different healthcare facilities in Nairobi and Kisumu between May 2017 and October 2017 using purposive sampling and snow balling (done particularly within Tuberculosis clinics). This number was arrived at after reaching data saturation. Purposive sampling for patients was done based on characteristics such as age, gender, residence [urban/rural with varying levels of socioeconomic status(SES)], the level and type of healthcare facility the patient usually receives care from, tobacco use status (current tobacco user/ past tobacco user and smoker/smokeless tobacco user), tobacco intervention status (those currently under pharmacological or non-pharmacological intervention / those who received and successfully completed interventions previously / those who started pharmacological or non-pharmacological interventions and did not complete them). After the initial eligibility assessment and obtaining the informed consent, participants were interviewed with the help of semi-structured interview guides. Face-to-face interviews were conducted by staff (YO, JK and JWM) trained in conducting qualitative interviews. The interviews explored the awareness of patients regarding harmful effects of tobacco use, their perceptions, beliefs, and suggestions related to tobacco

use and its cessation, along with the challenges faced by patients in receiving cessation support, their experiences during cessation attempts as well as the support they require to quit successfully. The interview guides were originally developed in English and translated to Swahili (national) language. All the interviews were audio-recorded using an audio voice recorder. Additional notes and non-verbal cues were recorded by the interviewers. The interviews lasted 40-45 minutes. Efforts were made to conduct the interviews in a private and comfortable space that was deemed suitable for the respondent. Consolidated criteria for reporting qualitative research (COREQ) guidelines were followed.

Ethical considerations

Written informed consent was taken, before enrolling the participants into the study. Ethical clearance was obtained from the KNH/ERC committee (P22/01/2017). This study was a part of a broader study on barriers and facilitators of tobacco cessation conducted in Kenya and India.

Qualitative data analysis

The interviews were recorded and transcribed in full. Following verbatim transcription in the local language, the transcriptions were translated to English. Nvivo v 10 qualitative data analysis software (QSR International, Melbourne, VIC, Australia) was used for qualitative data management. Content analysis method was used, where the content of text was analyzed in both inductive and deductive manner to generate codes and sub codes. Appropriate themes and subthemes were generated by grouping appropriate codes and sub codes. Coding was done by AM and RPK (Research Assistant). AM has experience of conducting qualitative analysis and had trained RPK. Any discrepancies were finalized in discussion with YO.

Results

Table 1 outlines the characteristics of the participants.

Characteristic		N=19
Age, mean (in years)		**40.2**
Gender		
	Male	14
	Female	5
Residence		
	Urban	10
	Rural	9
Socioeconomic status		
	High	5
	Low	14

Findings

Awareness regarding harmful effects of tobacco use

Most patients responded that tobacco has harmful effects on lungs, oral cavity (yellowing/browning of teeth, tooth cavity, tooth loss and affects the gums as well), skin and causes loss of appetite. With respect to lung problems, most mentioned cough, chest infections, and shortness of breath. Some of them mentioned cancer, and a few specifically mentioned lung cancer. Similarly, a few said that it can cause tuberculosis. Many of the participants also mentioned that it can lead to impotence. Some of them mentioned its effect on mental health because of its addictive nature and hallucinations. Other less common responses were that it makes the blood thin, causes throat cancer, deformity in babies, yellow fingers, and affects the work of other medications which are being taken for other conditions.

"lung cancer, impotence, mmm, it ruins your teeth, actually, mmm... I don't know what to call it, yellow fingers, mmm yeah, it ruins your fingers. Yeah." (22 yr old, Female, Urban, Current smoker, Low SES).

Lack of awareness regarding tobacco cessation clinics and lack of tobacco cessation interventions

Almost all participants mentioned that they are not aware about any institutions which provide tobacco cessation services outside the health system. They also mentioned that nobody had given them particular quitting skills, but they were just told to stop smoking. None of the participants was aware of nicotine replacement therapies.

"I have tried stopping smoking and it did not work.....the doctors just tell you to stop because it will hurt you. But they don't tell you how. Yeah...they just say stop. I have tried..... even gone to church, but I can't. I can't. They need to give us something to help us stop." (36 yr old, Male, Urban, Current smoker, High SES).

Unpleasant experiences among current and past tobacco users

The participants had varied experiences in terms of how it had affected their bodies, and their daily life, including societal dimension. Most of them had experienced chest related problems, mainly cough, cold and breathlessness. Some reported that they experienced easy tiredness on doing strenuous jobs like running and jogging, and some others reported headaches. Other less common responses were stomach aches, feeling uncomfortable, lack of appetite, bad smell, chest pains, hoarse voice, loose tooth and tooth loss, diarrhea, made them bored and lethargic with morale going down, that it made one thinner, and brought family problems.

"For all that time I have smoked, you can see that I am even coughing, I feel some chest pains. When I cough, there's sputum.....yeah, thick and heavy one, but I can't stop; it has a really bad taste.....I can't sleep without cigarette. When I just sleep in my bed, tiaah!, I will smoke, when I finish, I throw it away, and there I sleep! But sleeping just like that, I can't, those are some of the effects of tobacco." (43 yr old, Male, Rural, Current smoker, Low SES)

Motivation for quitting tobacco

More than half of the participants believed that self-talk and self-motivation is the key. Some participants also believed that religious places and institutions help provide the necessary motivation. However, one of them was of view that religious places cannot help those addicted to tobacco. A few participants got motivated to quit since their bodies had got affected by it or there was fear of being sick. Similarly, a few also

reported that non-availability of tobacco products also played a role in decreasing the urge and thus increased the motivation in them to quit. Some also pointed out that wastage of money was also a motivating factor.

"First I decided by myself, I was like I need to quit this. And then, like you should keep yourself away from an environment where people are smoking or people are doing Kuber. Yeah, just away from such people and yeah." (22 yr old, Female, Urban, Current smoker, Low SES)

Perceived social effects of tobacco use

In many cases, close family members were affected by tobacco use by the participants and this caused some issues in the family. Some even were fed up with the tobacco user.

"Yeah. And also my immediate family members. They didn't approve bad odor from my mouth. And it was also, okay, it was also affecting them." (33 yr old, Male, Urban, Current Smoker, High SES)

Participants experiences regarding help received from family and society in quitting tobacco use

Families played an important role and helped tobacco users in quitting tobacco. In one case, neighbors and relatives had helped.

"That's obvious like now your family should help also. To encourage you don't smoke, to remind you, don't forget to take this gum..... Family wise, people, neighbors you know..... try to organize. We don't need smoking area zone, they (family and neighbors) can do it, and we can do it. They should help, everybody should intervene about tobacco....." (65 yr old, Male, Rural, Current smoker, Low SES)

Challenges to quitting tobacco

Craving for tobacco by the users

"Apart from having the urge to smoke, for some, if they do not smoke, they cannot sleep, others, if they do not smoke, they get headaches, for others if they do not smoke, they cannot think clearly. So those are the major challenges smokers are facing here." (29 yr old, Male, Rural, Current tobacco user, Low SES)

Professional obligation and pressure to use tobacco was the reason in one case

"You know, a person like me, I am a sex worker and you might go with a client who wants you to smoke while he smokes. So it makes you smoke even when you have decided not to use today. Sometimes, you go with a client, let's say a European, and he tells you to do what he is doing." (40 yr old, Female, Urban, Current smoker, High SES)

Seeing others smoke was a challenge to control the urge in one case

"Mostly it's triggers. Yeah. When you see someone smoking, when you smell, like when you are outside, you smell the smoke, you feel like smoking. That's the main problem that we face." (26 yr old, Female, Urban, Current smoker, low SES)

Triggers for initiation and facilitators for continuation of tobacco use

Almost half of the participants agreed on the fact that peer pressure was the main trigger for initiation and continued use of tobacco.

"To me, myself, I would like to quit but in the society, see, in the society where I live, most of my friends are smokers, I have seen some of my friends who had quit cigarettes for may be two years, one year, three months, but when they come back to us, they find themselves back to.....to cigarettes."(42 yr old, Male, Urban, Current tobacco user, Low SES)

Participants' suggestions regarding what should be the steps towards tobacco control

Government Regulation

Completely banning tobacco products was one of the common suggestions given by the participants. Many of those who were in favor of banning considered the tobacco companies to be the main culprits and thought that they should be shut down, even if they were a source of employment to many. The reasons they gave were that if tobacco products were not available, people would not use them. A few also highlighted that prices of tobacco products should be increased so that people cannot use it, but a few others also were of the opinion that even if prices are increased (in form of added taxes or otherwise), tobacco users will continue to smoke. One participant was very negative regarding government regulation and was very sure that government won't be able to put complete ban since government collects taxes through tobacco products. One of them also suggested that nicotine gums should be more affordable as these are currently very pricey.

"Let the companies close, the people will get other work.....I do not know what else the government can do other than closing the companies..... they should ban it like changaa [local illicit alcohol]." (55 yr old, Male, Rural, Past smoker, Low SES)

"In my opinion on cigarettes, they should hike the price so that people cannot afford." (40 yr old, Female, Urban, Current smoker, Low SES)

Creating more awareness among people

Participants were of the view that it is important to spread awareness, and make people understand, especially the negative effects of tobacco use, else it is not going to be effective. Some also mentioned that in addition to health effects, teaching about financial costs of tobacco use and giving examples of people who have suffered should be done.

"I would love to see people being taught about tobacco, being counseled on tobacco because it is the cause of everything.....I would like the government to be told that cigarette is a bad disease it should look for something." (49 yr old, Male, Rural, Current smoker, Low SES)

Discussion:

Findings from this study revealed the following:

1) Awareness regarding harmful effects: Participants were of view that tobacco use causes cancer, respiratory problems, impotence, lack of sleep and appetite and discoloration of the teeth. '

2) Lack of awareness regarding tobacco cessation clinics and lack of tobacco cessation interventions: Participants mentioned that they are not aware about any institutions which provide tobacco cessation services. Others mentioned that they had not been offered any support to quit; very few had been asked about their tobacco use status.

3) Quitting tobacco use challenges: Respiratory problems, headache, lack of sleep and appetite, urge to smoke and the smell of smoke were the key challenges.

4) Motivating factors to quit: Religion, support from family and friends, poor health condition, less availability of tobacco products and financial problems were the factors cited.

5) Need for enhanced tobacco control: Participants perceived the need for more awareness campaigns about harmful effects of tobacco use, provision of more tobacco cessation services, and implementing policies

such as banning tobacco and increasing tax. Tobacco cessation interventions are already known to be among the most cost-effective interventions available in reducing the risk of mortality among tobacco users. To our knowledge, this is the first qualitative study from Kenya reporting the perceptions, experiences and challenges of patients with cessation interventions while seeking healthcare services. The current study highlighted that most of the participants know the impact of tobacco use on their lives and to their families, but they still struggle to quit successfully. This is not surprising as nicotine is very addictive, and quitting smoking has been compared to being as difficult or even more than quitting heroin use. In the present study, some participants had reported withdrawal symptoms as a challenge. Twyman et. al., also found that enjoyment (79%); cravings (75%); and stress management (36–63%) are the most frequently reported barriers. Irritability (39–42%); habit (39%); withdrawal symptoms (28–48%); fear of failure (17–32%); and concern about weight gain (27–34%) were also identified as barriers to cessation. Weight gain was however not identified as barrier to cessation among the study participants; this could be because, particularly in Nyanza region- culturally, big bodied women are seen as a sign of good health and found to be attractive. A study by Kim S-J et al; found an association between unsuccessful smoking cessation and higher stress levels [odds ratio (OR) 1.11, 95% confidence interval (CI) 1.09–1.14, $p < 0.001$]. These challenges reported by the participants are usually anticipated in those making tobacco cessation attempts, and therefore the tobacco cessation programs are able to address them. Healthcare facilities should be well equipped to attend to patients experiencing withdrawals and support their cessation efforts. Tobacco cessation pharmacotherapy and behavioral support have been identified to be evidence-based strategies. Another challenge highlighted was peer pressure. This is similar to other studies that have shown that smokers who reduced their number of smoking friends were more likely to quit smoking as compared to smokers who had no change in smoking friends. A smoker's perception of strong social support for quitting from family and friends is also associated with greater success in quitting. Some of the motivating factors reported by the participants included religious beliefs, family and friends support, poor health and financial problems. Similar to our findings, a study by Rosenthal et al; found that social support (from doctors, friends, and family), social norms, one's own health, and children/grandchildren's health were highly endorsed as motivators to cessation attempts. Echer IC and Barreto also found spirituality as a motivator to cessation. Their study reported the need for professional, family, social and spiritual support, conditions that worked as factors that motivated tobacco cessation. Unfortunately, almost all the participants mentioned that they were unaware of places where they could access tobacco cessation services. Most of the participants reported lack of access to smoking cessation support. One study had reported lack of training of healthcare providers in cessation interventions, they were not enquiring about history of smoking in the patients, along with pharmacotherapy like nicotine patches and nicotine gums not being readily available; and where available, not affordable, were the major challenges for cessation. Kenya ratified the framework convention tobacco control (FCTC) in 2004, after which it enacted the Tobacco control act 2007 as well as the tobacco control regulations 2008, which have guidelines on tobacco control and provision for tobacco cessation support. Unfortunately, these policies have not been effectively implemented. In 2018, the national tobacco cessation guidelines were launched and were expected to address this gap raised by the participants on access to

cessation support, and particularly provide accessible cessation support to patients as they attend healthcare facilities. Participants mentioned that creating more awareness about harmful effects of tobacco use, banning tobacco, increasing tax and availing services for tobacco cessation might increase tobacco cessation positive outcomes. Smoke-free laws and policies have been associated with a lower smoking prevalence by youth and young adults. Living in an area with 100% smoke-free laws in workplaces has been associated with lower odds of smoking initiation among adolescents and young adults (OR 0.66, 95% CI 0.44–0.99). Substantial evidence base supports the effectiveness of public policies to reduce tobacco use. Most tobacco control policies act by reducing the demand for tobacco products. Such measures include increasing the price of cigarettes by raising tobacco excise taxes, adopting smoke-free policies for indoor areas, mandating health warning labels on tobacco packages, and supporting mass media campaigns to educate the public and promote cessation. These policy restrictions are outlined in the Tobacco control act; but their implementation has been poor. Lack of resources and government funding gets in the way of implementing effective smoking cessation interventions. Lack of availability, accessibility and affordability of pharmacotherapy products puts them beyond the reach of the smokers.

Strengths and limitations

The study has key strengths, including focusing on identifying perceptions and experiences of the participants towards tobacco use in their local healthcare facilities using qualitative methods. Secondly, the study was performed in a novel setting, while attending to those in the urban, rural, low social economic status as well as high social economic status. However, our study also has a limitation. We targeted patients visiting healthcare facilities, thus, might have missed out on the view of tobacco users who did not suffer from any physical illness.

Conclusions

Healthcare workers need appropriate training in tobacco use screening; assessment and in providing evidence based interventions. Pharmacotherapy to provide support during the withdrawal period and to help sustain successful cessation should also be readily available in healthcare facilities. There are missed opportunities to promote smoking cessation for example whilst patients are in outpatient waiting areas and accident and emergency departments; as well as providing brief interventions during their clinical consultations. We found that most participants in our study did know that tobacco was harmful for their health. Most of the tobacco users had experienced unpleasant symptoms during tobacco use. The main challenges to quitting were addiction to nicotine and peer pressure. Self-talk and self-motivation were perceived as main source of motivation to quit. Religion, support from family and friends, poor health, low availability of tobacco products and financial problems were also the factors cited as motivating factors to quit. Creating more awareness, increased taxation and policies like banning tobacco products were the main suggestions. Health worker training, availability of cessation medications, health education and increased government support to enhance cessation support are the key steps towards success.

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Authors contributions:

All the authors designed the implementation, reviewed the manuscript, data collection tools and procedures. YO took part in the data collection. AM participated in data analysis. This manuscript was written by YO, with input of all co-authors who provided critical revisions. All authors have read and approved the final manuscript.

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