

Tobacco use and quitting behaviour during COVID-19 lockdown.

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Dear Editor,

In response to the global COVID-19 pandemic, India implemented a stringent nation-wide lockdown. There was a complete shutdown of almost all economic activity from 23 March 2020 onwards, including school and office closures, border closure and travel bans.¹ A country of 1.3 billion people was forced to stay at home to be safe. Because tobacco usage is primarily associated with lifestyle factors and psychological health, we wanted to understand the effect of this lockdown – and the restricted availability of tobacco products – on tobacco use and quitting behaviour. In order to answer these questions, we performed a cross-sectional assessment among current tobacco users enrolled at the Tobacco Cessation Clinic (TCC) at the Cancer Institute (WIA), Chennai. Due to resource limitations in reaching out to tobacco users, and the health hazards of conducting face-face-interviews during this pandemic, we used telephone surveys. The study aimed at assessing tobacco use, accessibility of tobacco products and quitting behaviour (intention to quit and quit attempt) among tobacco users during the lockdown in the state of Tamil Nadu, India.

A cross-sectional telephone survey was carried out using a structured questionnaire

throughout April–May 2020. The study population included tobacco users aged >15 years enrolled with the TCC from January 2018 to December 2019. Cancer patients were excluded from the study. The clinic offered free cessation services to tobacco users based on their dependency and patterns of use, usually a combination of behavioural and pharmacological therapies. Sociodemographic information and previous tobacco use-related variables were extracted from the TCC database. A structured questionnaire was used to collect information regarding current tobacco use, quit attempt(s) and intention to quit. The telephone surveys were conducted by trained project staff at the institute following a standard operating procedure. Each tobacco user was contacted for a maximum of three times every 30 minutes. After two calls, a standardised text message was sent stating the details of the call and the recipient called again 30 minutes later. This process was repeated again after 7 days, and if there was no response the person classified as an unsuccessful contact. Calls were not recorded, but were monitored by an individual not associated with the current research. A “quit attempt” was defined as any attempt at tobacco cessation lasting 1 day or more, including both self-attempts, as well as attempts with the help of a professional. Ethics approval was obtained from the Institutional Ethics Committee, Cancer Institute (WIA), Chennai, India. Verbal consent from the participants was obtained by phone.

Of 1501 tobacco users who attended the TCC during the study period, 991 were cancer patients and were excluded from the study. Of the remaining 510 tobacco users, 281 (55.1%) could be contacted by phone and 251 (89.3%) consented to the interview. Of those who could not be contacted ($n = 229$, 44.9%), the reasons for failing to contact were as follows: phone number not recorded ($n = 40$, 17.5%), no response ($n = 50$, 21.9%), died ($n = 11$, 4.8%), not reachable ($n = 17$, 7.4%), or other reasons (phone switched off, incorrect number, invalid number; $n = 111$, 48.2%) (Figure). The sociodemographic characteristics of those who were contacted vs. those who could not be contacted by phone were similar, except for level of education ($P = 0.05$).

Among those contacted ($n = 251$), mean age was 42.5 years (standard deviation: 14; range: 15–76); the majority were males ($n = 243$, 97%), and 105 (41.9%) were educated to higher secondary level and above. A total of 101 (40%) were current tobacco users, of whom 62 (61%) were smokers, 35 (35%) were smokeless tobacco users and 4 (04%) used both. More than half ($n = 57$, 56%) reported easy availability of tobacco products. Nearly two thirds ($n = 67$, 66%) purchased tobacco products daily from shops during the lockdown, 28 (27%) had stocks of tobacco and the remaining 6 (6%) obtained tobacco from peers. A total of 65 (64%) tobacco users reported reduction of tobacco use during lockdown, use remained the same in 20 (20%) and it was increased in 16 (16%). Nearly two thirds ($n = 64$, 63%) of

the tobacco users reported intention to quit during lockdown, of whom 4 (6%) sought any help/consultation; 38 (38%) actually made a quit attempt during the lockdown. Only 15% ($n = 15$) had the urge to increase tobacco use during the lockdown (Figure). Reduced tobacco use during lockdown was associated with quit intention ($P = 0.02$) and quit attempt ($P = 0.01$).

This is the first study in India reporting tobacco use and quit behaviour among current tobacco users during the COVID-19 lockdown. Because of the pandemic lockdown, we used a phone survey to reach out to tobacco users. Despite concerns around poor response rate, about half of the tobacco users could be contacted. This is higher than the response rates reported by other community-based telephone surveys, which range from 17% to 37%.²⁻⁴

Most of the tobacco users reported easy availability of tobacco products and nearly two thirds could purchase tobacco products daily from shops during the lockdown. This points to gross violations of lockdown regulations in the face of a strict ban on the sale of tobacco products in the city.

The most encouraging fact that emerged was that nearly two thirds of tobacco users reported a reduction in tobacco use and an equal number of users reported an intention to quit during lockdown. The Global Adult Tobacco Survey (GATS 2), which is a nationally representative survey conducted in 2016–2017 in India reported that only 18% of smokers had an intention to quit in the next 12 months, and one third of the smokers had tried to stop smoking in the last 12 months.⁵ A recent study by Elling et al. showed that a third of the smokers were more motivated to quit due to the higher risk of contracting COVID-19 as a smoker and greater social support to quit.⁶ This is an opportune moment to capitalise on this motivation to quit by offering online support services such as cessation helplines and quitlines. In the context of evidence highlighting the role of smoking in the severity of disease and death among hospitalised COVID-19 patients, tobacco cessation would benefit patient outcomes and reduce overall mortality due to COVID-19.⁷ Quit intentions and the odds of making a quit attempt were higher in people who reported reducing their tobacco use, which is in line with the “vulnerability hypothesis”.^{8,9} It is well known that as individuals feel more vulnerable to the health effects of smoking, they are more likely to intend to quit smoking and make quit attempts.^{8,9} This is more relevant in the context of the global COVID-19 pandemic, when individuals have a perceived risk of contracting COVID-19 due to tobacco use, especially smoking.⁶ More than a third of the tobacco users made unsuccessful quit attempts during the lockdown as very few of them could get help, or consultations. This was probably due to the lack of cessation services during lockdown when people were advised to stay home to reduce the risk of transmission. We strongly recommend evidence-

based digital health smoking cessation interventions to reach smokers who may be attempting to quit.¹⁰

A major limitation of the study was the poor response rate of the telephone survey. Nevertheless, respondents who were contacted vs. those who could not be contacted were similar in terms of their sociodemographic characteristics, except for educational status. Second, we relied on the self-reported responses of the participants, which might suffer from social desirability bias, although telephone interviews might have offset this bias to some extent due to the absence of face-to-face interactions. Also, the reasons for tobacco use and quit behaviour during the COVID-19 lockdown could not be explored, as this requires in-depth qualitative exploration.

To conclude, nearly two thirds of tobacco users reported a reduction in tobacco use and intention to quit. This is therefore an opportune moment to develop digital tobacco cessation services to reach out to smokers who may be considering quitting in direct response to the COVID-19 pandemic, or because of increased awareness of the harm smoking does.

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Conflicts of interest: none declared.

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Figure. Flow diagram depicting the flow of tobacco users enrolled in the Tobacco Cessation Clinic, Chennai, India, 2018–2019 and their tobacco use pattern during the COVID-19 lockdown

