

SMOKELESS TOBACCO CONTROL IN PAKISTAN

Fayaz Ahmad¹, Arshad Javaid², Zohaib Khan³

¹Institute of Public Health and Social Sciences, Khyber Medical University, Peshawar - Pakistan.

²Prof. of Pulmonology, Ex- Vice Chacellor, Khyber Medical University Peshawar - Pakistan

³Office of Research, Innovation and Commercialization, Khyber Medical University, Peshawar - Pakistan.

Address for Correspondence:
Dr. Zohaib Khan

Director, Office of Research, Innovation and Commercialization, Adjunct Professor of Public Health, Khyber Medical University, Peshawar - Pakistan

Email: dr.zohaibkhan@kmu.edu.pk

ABSTRACT

Smokeless tobacco denotes tobacco-containing products that are consumed without combustion by different methods like inhaling through the nose, sucking, or chewing. It has been estimated that there are 17 million smokeless tobacco users in Pakistan and the most frequently used forms of smokeless tobacco are Paan, Naswar, and Gutka. Naswar accounts for 60% of the total tobacco consumed in Peshawar, the capital city of Khyber Pakhtunkhwa. The levels of carcinogenic tobacco-specific nitrosamines in Naswar are higher than several smokeless tobacco products in the world. Evidence indicates that both globally and in Pakistan, smokeless tobacco control has almost always remained a neglected area compared to smoking control. The authors recently conducted a mixed-methods research study on smokeless tobacco control in Pakistan (STOP), focusing on Naswar and its supply chain in the Khyber Pakhtunkhwa province of Pakistan. In this study, discussions with 38 points of sale and exclusive Naswar vendors, it was found that there was a clear agreement among the participants to support a ban on the sale of Naswar to minors, and similarly, they opposed illicit trade of these products. The participants partially agreed on the content disclosure of Naswar, its advertisement, and promotion. Mass media campaigns, group educations, and the use of special brochures or posters are recommended for the improvement of awareness and compliance among vendors.

Key Words: Tobacco, Smokeless, Nitrosamines

This editorial may be cited as: Ahmad F, Javaid A, Khan Z. A Smokeless tobacco control in Pakistan. *J Postgrad Med Inst* 2020; 34(3): 139-41.

The 2018 global report of the World Health Organization (WHO) on trends of tobacco consumption reported an alarming 23.6% current use of tobacco, in any form, among 15 years and older population of the world¹. The corresponding estimate for the Eastern Mediterranean region was 19.3%¹. The same report estimated a global prevalence of 5.6% for smokeless tobacco (SLT) whereas 3.1% among the Eastern Mediterranean population¹. SLT denotes tobacco-containing products that are consumed without combustion². The American Cancer Society mentions around 40 basic forms of SLT that are used around the world by different methods like inhaling through the nose, sucking, or chewing³. Among an estimated 351.9 million users of different forms of SLT around the globe, nearly 90% belong to South and South-East Asia, with an estimated 17 million SLT users in Pakistan^{4,5}. According to the 2014 global adult tobacco survey (GATS) of Pakistan, among the 19.1% adult tobacco users, 12.4% used smoked tobacco while 7.7% used SLT⁶. The preferred mode of SLT consumption in South-East Asia is oral use, alone or combined with ingredients like areca nut and slacked lime (calcium hydroxide)⁷. SLT products are considered highly carcinogenic and contain high amounts of can-

cer-causing Tobacco Specific Nitrosamines (TSNAs) and approximately 30 other carcinogens². SLT is associated with a range of different oral and systemic diseases such as cancers of head and neck, gastrointestinal, and cardiovascular diseases resulting in a loss of seven percent Disability Adjusted Life Years in Pakistan⁸.

In Pakistan, the most frequently used forms of SLT are Paan – a combination of betel quid and tobacco (7.4%), Naswar (7.2%), and Gutka (6.4%)⁹. Among these products, Naswar consumption is deemed a social norm in the predominantly Pashtun ethnic province of Khyber Pakhtunkhwa (KP). Naswar accounts for 60% of the total tobacco consumed in Peshawar, the capital city of KP¹⁰. Naswar is primarily a mixture of sun-dried tobacco, water, ash, and slacked lime (calcium hydroxide). Condiments like menthol, green cardamom, and indigo are also mixed into the mixture depending upon the choice and taste of the consumer¹¹. Naswar is a cheap source of nicotine addiction, with greater levels of nicotine (up to 26mg/g) compared to cigarettes (16.3 mg/g)⁷. Moreover, the levels of carcinogenic TSNAs in Naswar are also higher than several SLT products in the world and evidence shows an almost two-fold higher number of TSNAs in Naswar (1380 ng/g) compared to Swed-

ish Snus (723 ng/g)^{7,12}. Naswar is mostly manufactured by the local cottage industry of Pakistan and its supply chain is comprised of point of sale (POS) vendors—mainly the grocery stores, exclusive Naswar sellers—wholesale dealers, and manufacturers who are also involved in the direct sale of Naswar to customers, and farmers of tobacco—*nicotiana rustica*¹³.

In 2005, Pakistan ratified the framework convention on tobacco control (FCTC) of WHO¹⁴. The WHO FCTC is one of the most widely accepted public health treaties in the world, aiming to reduce tobacco consumption and improving the social, health, and environmental indicators of the world's population deranged by tobacco consumption^{15,16}. Articles 6-14 of FCTC focus on the reduction of tobacco demand through measures like price and taxation, tobacco products contents' regulation and their disclosure, packaging, and labeling of products, etc. Articles 15-17 of the FCTC deal with supply reduction measures such as controlling the illicit trade of tobacco products, prohibiting tobacco sales to and by minors, and supporting the tobacco supply chain through the provision of viable alternatives¹⁵. Evidence indicates that both globally and in Pakistan, SLT control has almost always remained a neglected area compared to smoking control^{14,17,18}. Regarding SLT in Pakistan, the tobacco control laws in Pakistan are unclear¹⁹. The laws in Pakistan are not concerned with the regulation and disclosure of contents of tobacco products. Moreover, tax is applied to raw tobacco but SLT products are exempted²⁰. Although the sale of tobacco products to minors is prohibited in Pakistan, printing a written and graphic health warnings on tobacco packages is implemented only for cigarettes and not SLT products, which is not in-line with article 11 of the FCTC, which requires these labels on all the tobacco products²⁰.

The prevailing gaps in national tobacco control laws of Pakistan about SLT products can result in poor implementation of and compliance with such laws. Therefore, Pakistan, as a signatory of FCTC, needs to transform the national tobacco control laws for alignment with the provisions of FCTC. Furthermore, tobacco control efforts often focus on the reduction of tobacco demand but the supply chain, and retail environment is mostly ignored. With this backdrop, the authors recently conducted a mixed-methods research study—smokeless tobacco control in Pakistan (STOP), focusing on Naswar and its supply chain (SC) in the KP province of Pakistan. The study aimed to a) explore the perceptions of Naswar SC actors about tobacco control laws, b) to assess the level of compliance among the Naswar SC actors with the national tobacco control laws and provisions of the FCTC, c) to explore the factors of compliance or noncompliance with tobacco control laws, and d) to explore the factors linked to the SC actors' perceptions of reduction in sales if they comply with tobacco control

laws.

In the qualitative study based on focus group discussions with 38 POS and exclusive Naswar vendors, we found a clear agreement among the participants to support a ban on the sale of SLT/Naswar to minors, and similarly, they opposed illicit trade of SLT products (13). The participants partially agreed on the content disclosure of Naswar, its advertisement, and promotion. Regarding taxation, and the health effects of Naswar the views of the participants were opposing¹³. From the survey of 286 shops and 182 Naswar brands in three districts of KP, we found that all observed Naswar packets were devoid of both written and graphic health warnings²¹. The FCTC's provision of printing ingredients' details on the packets was followed by only 2% of the Naswar brands. The products were readily visible to customers in around 93% of shops and overall the practices of advertisement and promotions inside the shops were more prominent than outside the shops²¹. Awareness of tobacco control laws among vendors was generally low. The vendors perceived the implementation of all the laws detrimental for business, particularly, tax escalations, pictorial health warnings, and prohibiting sale to minors. Nearly three-quarters of vendors were indulged in the sale of Naswar to minors and its promotion. Awareness about tobacco control laws was positively associated with a longer duration of business and higher education of vendors. The anticipation of a decline in business from the implementation of laws was positively associated with longer business duration and being an exclusive Naswar shop. Among the determinants of compliance with laws, area-type (urban/rural) of vendors and awareness of any tobacco control law was strongly associated with compliance. We found that exclusive Naswar vendors were less willing to stop Naswar's business compared to POS vendors. Moreover, the main reasons of continuing the business among exclusive Naswar vendors included good profit margin, family business, and non-availability of any other option. The odds of switching to another business were increased among vendors who were aware of tobacco-related health harms but decreased among those vendors who perceived a good profit margin from Naswar sales. From the in-depth interviews among the farmers of *nicotiana rustica*, the key reasons which farmers mentioned for growing tobacco included tobacco crop profitability, heritage of tobacco cultivation, and a believe that their land is only suitable for tobacco crop. Absence of an economically viable alternative to tobacco growing and lack of support from government were the main restraints in switching away from tobacco cultivation.

Naswar, being a culturally embedded product, coupled with a threat of public reaction if banned, is a challenge for legislation. For increasing adherence to SLT

related FCTC provisions in Pakistan, a focus on the Naswar supply chain is essential. We propose a gradual and phasic approach for the policy process by starting with the most acceptable policy options among vendors—a ban on sale to/by minors and a ban on promotion and advertisement. Interventions like; Mass media campaigns, group educations, and the use of special brochures or posters are recommended for the improvement of awareness and compliance among vendors. The identified urban-rural disparities in compliance with tobacco control laws and awareness of tobacco-related harm among vendors should interest both policymakers and public health practitioners in Pakistan for developing targeted interventions. Moreover, Pakistan needs to consider bringing SLT products under the taxnet to meet the WHO's recommendation of increasing taxes on tobacco products up to 70% of the retail price. Further research is warranted regarding compliance and implementation of POS laws and informing the policymakers to take robust policy actions regarding the provision of guidance to farmers in terms of crop diversification and improved marketing of alternate crops.

FUNDING NOTE

The research cited in this editorial was funded by the German Academic Exchange Service DAAD. FA and ZK are also funded by ASTRA Global Health Research Group, which is funded by the NIHR, using UK aid from the UK government to support global health research. The funding agencies have no role in any stage of the study. The authors are solely responsible for the content and views in this paper.

PREFERENCES

- World Health Organization. WHO global report on trends in prevalence of tobacco use. 2000-2025: 2019.
- Cancer IAFRo, Organization WH. Smokeless tobacco and some tobacco-specific N-nitrosamines: World Health Organization; 2007.
- The Tobacco Atlas. [Internet]. American Cancer Society and Vital Strategies. 2018 [cited 16th March 2020]. Available from: <https://tobaccoatlas.org/cite/>.
- "90% of smokeless tobacco users live in South-East Asia" [press release]. 2013.
- Sinha DN, Agarwal N, Gupta P. Prevalence of smokeless tobacco use and number of users in 121 countries. *Journal of Advances in Medicine and Medical Research*. 2015;1-20.
- Saqib MAN, Rafique I, Qureshi H, Munir MA, Bashir R, Arif BW, et al. Burden of tobacco in Pakistan: findings from global adult tobacco survey 2014. *Nicotine and Tobacco Research*. 2018;20(9):1138-43.
- Hatsukami D, Zeller M, Gupta P, Parascandola M, Asma S. Smokeless tobacco and public health: a global perspective. 2014.
- Siddiqi K, Husain S, Vidyasagaran A, Readshaw A, Mishu MP, Sheikh A. Global burden of disease due to smokeless tobacco consumption in adults: an updated analysis of data from 127 countries. *BMC medicine*. 2020;18:1-22.
- Gilani SI, Leon DA. Prevalence and sociodemographic determinants of tobacco use among adults in Pakistan: findings of a nationwide survey conducted in 2012. *Population Health Metrics*. 2013;11:16.
- Ali S, Wazir MARK, Qadir S. NASWAR. *The Professional Medical Journal*. 2017;24:386-91.
- Saeed M, Muhammad N, Khan SA, Gul F, Khuda F, Humayun M, et al. Assessment of potential toxicity of a smokeless tobacco product (naswar) available on the Pakistani market. *Tobacco control*. 2012;21:396-401.
- Siddiqi K, Shah S, Abbas SM, Vidyasagaran A, Jawad M, Dogar O, et al. Global burden of disease due to smokeless tobacco consumption in adults: analysis of data from 113 countries. *BMC medicine*. 2015;13:194.
- Ahmad F, Boeckmann M, Khan Z, Zeeb H, Khan MN, Ullah S, et al. Implementing smokeless tobacco control policy in Pakistan: a qualitative study among Naswar supply chain actors. *Tobacco Control*. 2020.
- Khan A, Huque R, Shah SK, Kaur J, Baral S, Gupta PC, et al. Smokeless tobacco control policies in South Asia: a gap analysis and recommendations. *nicotine & tobacco research*. 2014;16:890-4.
- Organization WH. WHO framework convention on tobacco control. WHO Regional Office for South-East Asia; 2004.
- World Health O. WHO report on the global tobacco epidemic, 2017: monitoring tobacco use and prevention policies: World Health Organization; 2017.
- Gupta PC, Ray CS. Smokeless tobacco and health in India and South Asia. *Respirology*. 2003;8:419-31.
- Khan Z. A gaping gap (smokeless tobacco control in Pakistan). *Tobacco induced diseases*. 2016;14:36.
- Siddiqi K, Islam Z, Khan Z, Siddiqui F, Mishu M, Dogar O, et al. Identification of policy priorities to address the burden of smokeless tobacco in pakistan: a multimethod analysis. *Nicotine & Tobacco Research*. 2019.
- CTFK. Pakistan details: tobacco control Laws; 2020 [updated April 17th 2020; cited 2020 July 14th]. Available from: <https://www.tobaccocontrollaws.org/legislation/country/pakistan/summary>.
- Ahmad F, Khan Z, Siddiqi K, Khan MN, Boeckman M, Dregger S, et al. Compliance of oral snuff (Naswar) packaging and sales practices with national tobacco control laws and the relevant articles of framework convention on tobacco control in Khyber Pakhtunkhwa Pakistan. *Nicotine & Tobacco Research*. 2020.