## From smoke to smokeless; killing the switch

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obacco is the only legal product that harms its users if used in a way the manufacturer intended,1 a blanket statement that succinctly covers the whole spectrum of tobacco-based products, and renders them harmful to the users. Unfortunately, tobacco control programs, the public health community, and clinicians have mainly focused on curbing the smoking epidemic, while largely ignoring other forms of tobacco use such as smokeless tobacco (SLT).2 SLT is a form of tobacco that is used without burning the product. There is a variety of SLT products used in South Asia, where in some regions it has become a cultural norm.3 The SLT used in South Asian countries consist of more than 30 carcinogens and has been associated with an increased risk of oropharyngeal cancers and a plethora of other oral and digestive tract conditions. 4-7 An estimated 300 million users of smokeless tobacco users hail from South Asia, constituting 90% of the total smokeless tobacco users in the world.7 The World Tobacco Atlas implies that a staggering 13.3% of the Pakistani population uses smokeless tobacco in some form.8 The absence of robust SLT uptake prevention and cessation programs, and a partial focus on smoking tobacco control resulting in higher prices for cigarettes may further increase this figure, especially when SLT products can be found at a 10th of the prices of cigarettes.9

While the general public may still not be aware of the harmful effects of SLT use, there is plenty of evidence about the harmful effects of SLT use for policymakers to devise SLT control policies. Recent reviews of tobacco control policies in South Asia have shown various gaps with regards to SLT control.<sup>2,10</sup> The situation is further worsened by some quarters of the scientific community, usually backed by the tobacco industry, advocating SLT as a smoking harm reduction

strategy,<sup>11,13</sup> and beliefs whereby use of smokeless tobacco is considered a remedy for different oral conditions.<sup>3</sup> All these have resulted in a documented "switch" from smoking to SLT use in countries like Sweden, India, and Bangladesh.<sup>14</sup> A switch that has been championed as a "success story" in tobacco control by proponents of "harm reduction".<sup>15</sup>

While tobacco harm reduction through the use of smokeless tobacco in Sweden may present as a success story, the medical community must be aware of the fact that there are stark differences between the types of smokeless tobacco products used across the world. These products also have variable carcinogenic potential, mostly associated with the method of tobacco curing.16 The Swedish "Snus" at the very bottom of the list, as far as cancer risk is concerned. The Swedish smokeless tobacco industry is backed by decades of research aimed at decreasing the "Tobacco Specific Nitros Amines" in the tobacco used in Swedish SLT by special curing methods. Conversely, the SLT products found in South Asia are largely unregulated and their manufacture is dependent on the maker's choice rather than set standards, resulting in products that carry one of the highest cancer risks among all tobacco products used across the world.17-19 Additionally there are also some advocates of the use of SLT products as a cheaper alternative to nicotine replacement therapy in smoking cessation, an assertion that is based on the chemical properties of the products without taking into consideration the health consequences that are related to SLT use.20 It is therefore of utmost importance that the general public and the medical fraternity is mindful of these differences, as SLT companies often cite research carried out in Sweden to build their case for harm reduction.

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On the surface, it might seem that the practice of pulmonology has little to do with smokeless tobacco, for the jury is still out on the association of lung disease and SLT, but the irrevocable evidence against SLT being associated with other health conditions cannot be ignored. A great chunk of the pulmonology practice is devoted to the counselling of patients who smoke tobacco and while we may succeed in getting our patients off the smoking habit, there is a chance that these patients may switch to the use of other (apparently less harmful) forms of tobacco, as has been evidenced in other parts of the world. 4,15 So on one hand while we are helping curb the smoking epidemic, we might be inadvertently ignoring the spread of another one i.e. SLT. The "Pulmonology" community must start advocating against SLT use and focus on actively preventing the "switch" from smoking to SLT use. As health professionals, it is high time that we start promoting "tobacco free" instead of just "smoke free".

## **REFERENCES**

- 1. Walton J, Barondess JA, Lock S. The Oxford medical companion 1994.
- Khan Z. A gaping gap (smokeless tobacco control in Pakistan). Tobacco induced diseases 2016;14 (1):36.
- Gupta PC, Ray CS. Smokeless tobacco and health in India and south Asia. Respirology 2003;8(4):419-431.
- Boffetta P, Hecht S, Gray N, Gupta P, Straif K. Smokeless tobacco and cancer. Lancet Oncology 2008;9(7):667-675.
- Khan Z, Tonnies J, Muller S. Smokeless tobacco and oral cancer in South Asia: a systematic review with meta-analysis. J Cancer Epidemiol. 2014; 2014;394696.
- 6. Critchley JA, Unal B. Health effects associated with smokeless tobacco: a systematic review. Thorax 2003;58(5):435-443.
- Siddiqi K, Shah S, Abbas SM, Vidyasagaran A, Jawad M, Dogar O, Sheikh A. Global burden of disease due to smokeless tobacco consumption in adults: analysis of data from 113 countries. Bmc Medicine 2015;13:194.
- 8. Eriksen M, Mackay J, Ross H. The tobacco atlas. American Cancer Society 2013.
- Khan Z, Dreger S, Shah SMH, Pohlabeln H, Khan S, Ullah Z, Rehman B, Zeeb H. Oral cancer via the bargain bin: The risk of oral cancer associated with a smokeless tobacco product (Naswar).

- PLoS One 2017;12(7):e0180445.
- Khan A, Huque R, Shah SK, Kaur J, Baral S, Gupta PC, Cherukupalli R, Sheikh A, Selvaraj S, Nargis N, Cameron I, Siddiqi K. Smokeless tobacco control policies in South Asia: a gap analysis and recommendations. Nicotine Tob Res 2014;16(6): 890-4.
- O'Connor RJ. Non-cigarette tobacco products: what have we learnt and where are we headed? Tob Control 2012;21(2):181-90.
- Mejia AB, Ling PM, Glantz SA. Quantifying the effects of promoting smokeless tobacco as a harm reduction strategy in the USA. Tob Control 2010;19(4):297-305.
- 13. Rodu B, Godshall WT. Tobacco harm reduction: an alternative cessation strategy for inveterate smokers. Harm Reduction Journal 2006;3(1):1.
- 14. Suliankatchi RA, Sinha DN, Rath R, Aryal KK, Zaman MM, Gupta PC, Karki KB, Venugopal D. Smokeless Tobacco Use is "Replacing" the Smoking Epidemic in the South-East Asia Region. Nicotine Tobacco Res 2017;1:6.
- Ramström L, Borland R, Wikmans T. Patterns of smoking and snus use in Sweden: implications for public health. International journal of environmental research and public health 2016;13(11): 1110.
- Cogliano V, Straif K, Baan R, Grosse Y, Secretan B, El Ghissassi F, WHO International Agency for Research on Cancer. Smokeless tobacco and tobacco-related nitrosamines. Lancet Oncol 2004;5(12):708.
- Guha N, Warnakulasuriya S, Vlaanderen J, Straif K. Betel quid chewing and the risk of oral and oropharyngeal cancers: A meta-analysis with implications for cancer control. International Journal of Cancer 2014;135(6):1433-43.
- Zakiullah, Saeed M, Muhammad N, Khan SA, Gul F, Khuda F, Humayun M, Khan H. Assessment of potential toxicity of a smokeless tobacco product (naswar) available on the Pakistani market. Tob Control 2012;21(4):396-401.
- 19. Hoffmann D, Djordjevic MV.Chemical composition and carcinogenicity of smokeless tobacco. Adv Dent Res. 1997;11(3):322-329.
- Ullah N, Asif AH, Khan MA, Ahmad W, Ali N, Khan T, Shah AA.Chemical analysis of naswar and cigarettes; a comparative study.Int J BCR 2011;1(2):13-5.

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