



"Herbal Smoke Deception: Hidden Dangers Among Youth and the Urgent Call for Regulation"

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ABSTRACT:

The persistent public health threat of the tobacco epidemic has spurred continuous efforts to address the issue. While anti-tobacco campaigns strive to increase awareness, alternative smoking products, notably herbal smoking products (HSPs), have become increasingly popular among both addicted smokers and informed youth seeking alternatives. In the absence of robust regulations, HSPs, often marketed as healthy alternatives, pose serious health risks. This article explores the ill effects of HSPs, emphasizing their impact on adolescents and youth. Despite India's stringent tobacco regulations, HSPs fall outside the regulatory framework, demanding urgent attention. The article discusses the implications for rules and policies, advocating for comprehensive regulation to safeguard public health, especially among the youth. It concludes by stressing the need for collaborative efforts among policymakers and health professionals to address this emerging public health concern effectively.

1. Introduction

In the realm of public health, the tobacco epidemic stands as one of the most formidable threats. Ongoing efforts in anti-tobacco campaigns to raise awareness have been somewhat successful¹. Chronic tobacco users and educated youth looking for an alternative to tobacco products ranging from Nicotine Replacement therapy (NRTs) and e-cigarettes to waterpipe cigs and herbal smoking products². Given the synthetic age we live in it is not difficult to associate words like herbal organic and natural with the promise of good health. This pursuit is often driven by a perception among addicted smokers that these alternatives bring benefits.

In September 2019 Government of India imposed a ban on the manufacturing, import, transport, advertising, sale and distribution of e-cigarettes. Hence another alternative is herbal cigarettes, herbal hookahs and other herbal smoking products, which witnessed a bloom in the business after e-cigarette banning³. The global herbal cigarette market has exhibited consistent linear growth in recent years, a trend anticipated to continue. This rise is influenced by misleading claims from major manufacturers, targeting youth with labels like "healthy alternatives" and "smoke smart" in their health communications, contributing to increased sales⁴. HSPs are marketed online as a healthy alternative to tobacco. The content available online is huge and is mostly posted without any scientific rationale the attractive packaging and clever marketing strategies



attract the users. These herbal smoking products are known to be nicotine-free and is composed of various mixtures of herbs.

Ill effects of HSPs on health

Herbal smoking products are indeed tobacco-free and nicotine-free, but these are NOT risk-free.

Scientific studies have shown that Herbal cigarettes are not considered safe, as they can deliver higher levels of tar, nicotine, and carbon monoxide. There is always a risk that it may later lead to tobacco smoking and addiction. Smoking tobacco-free cigarettes can be more dangerous than tobacco-containing cigarettes. Herbal cigarettes are crafted to be devoid of both nicotine and tobacco, but they do generate considerable amounts of total particulate matter (TPM, commonly known as “tar”) when smoked. Herbal cigarettes contained, 30.9 mg of TPM per cigarette, on average, whereas tobacco-containing cigarettes generated on average, 8.9 mg TPM per cigarette⁵. Even, the DNA damage caused by smoking HSPs was similar to that of conventional smoking products, which proves their hazardous carcinogenic potential⁴.

Herbal hookahs are equally dangerous. And are again in vogue amongst youngsters. During a standard 1-hour hookah session, individuals inhale a volume of smoke equivalent to 100–200 times that of a single cigarette⁶. Although nicotine is not present, the smoke of flavoured hookah contains various toxic materials such as carbon monoxide (CO), polycyclic aromatic hydrocarbons (PAH), volatile aldehydes and heavy metals, which increase the risks for smoking-related cancers, heart disease, and lung disease⁷. studies have established a correlation between smoking herbal smoking products (HSP) and an increased risk of developing lung, oral, oesophageal, stomach, bladder, colorectal, and nasopharyngeal cancers⁸.

Therefore, these products are a real peril to public health as smokers might tend to smoke these tobacco-free HSPs with more frequency considering them to be safe. But these might in turn pose various potential health hazards like notable metabolic problems, and increased risk of various chronic diseases. Numerous studies have demonstrated that the concentration of harmful substances such as carbon monoxide, polyaromatic hydrocarbons, and volatile aldehydes in the smoke emitted from “tobacco-free” herbal smoking products is

comparable to or even higher than that from tobacco-based products.^{2, 8,9,10}.

Due to the scarcity of data available on the safety and efficacy of herbal smoking products (HSP) in the literature, it is imperative to implement regulatory measures to restrict market access, aiming to protect the younger population from potential long-term addiction.

Effect on adolescents and youth

Today educated youth consider smoking as cool and a fashion statement. Most smokers start smoking in their adolescent days due to peer pressure¹⁰. Hence adolescents are more vulnerable to the risks of herbal smoking products (HSP) due to their age, sensitivity to addictive substances, susceptibility to peer influence, and a tendency for experimentation. Even the youth aware of the ill effects of tobacco may smoke herbal products falling prey to false marketing of HSP as being a healthy alternative. Exposure to HSPs at an early age will not only cause health but also behavioural issues among adolescents.

Mostly because it provides a gateway to start tobacco use because adolescents using HSP may view smoking as socially acceptable. The use of HSPs, especially in social settings, can contribute to the normalization of smoking behaviour among adolescents, influencing their perceptions of smoking as a social activity. Increasing the likelihood of transitioning to traditional tobacco products. Due to the misconception of HSPs being healthy Adolescents might perceive HSP as a safe alternative due to the absence of nicotine, but the smoke still contains harmful components. This misconception can lead to regular use and potential addiction.

HSP also has adverse effects on the health of adolescents ranging from respiratory issues to affecting the have cognitive and behavioural implications, potentially affecting academic and social functioning due to the addictive nature of HSPs. The ill effects of HSPs on the health of adolescents can be more or equal to but no less than tobacco-containing products.

Regulation

India has been at the forefront of global tobacco control efforts, enacting laws like the Cigarettes and Other Tobacco Products Act, 2003 (COTPA). However Herbal



Smoking Products (HSPs) are not considered under these regulations. COTPA's Section 4 prohibits smoking in public places¹², but Herbal Hookahs are been sold in public bars and restaurants without any restrictions and regulations.

As HSPs do not come under the preview of COTPA section 5 (Related to Prohibition of Advertisement of Cigarettes and Other Tobacco Products) regulation¹², they are falsely advertised as being healthy alternatives. There are around 174 stills and 94 videos on the internet that promote herbal smoking products. Out of which 35.6% still records were posted by manufacturers or suppliers but only 12.1% were of scientific origin. The general public has posted 83% of non-scientific videos. About 90% of the records are devoid of information regarding age restrictions. The use of HSP was promoted by 67.8% of the still records and 87.2% of the video records¹².

Similarly, without regulation of COTPA, section 7 (Related to Packaging and Labelling Rules)¹² HSPs are sold with misleading packaging of being healthy. Hence the youth get trapped in the packaging and develop the dangerous habit of smoking herbal products¹³. Consumers have the right to make a well-informed decision hence health warnings about smoking should be presented even on HSP packages

Smoking herbal hookahs has become a trend among adolescents, emphasizing the need for comprehensive regulation, including health warnings on HSP packages, to mitigate associated risks.

Implication for rules and newer policies

The implications for rules and newer policies are profound. Existing regulations, such as those outlined in the COTPA, need expansion to cover herbal smoking products (HSP). This includes extending smoking bans in public places to encompass HSP, regulating online advertising, enforcing age restrictions, and implementing stringent packaging and labelling rules. Additionally, there is a need for targeted policies specifically addressing HSP to safeguard public health, especially among the youth. The government might take inspiration from the countries Quebec and Nunavut and expand the regulatory scope to incorporate HSPs within the existing framework for tobacco product regulations.

Policymakers should collaborate to create comprehensive measures that address the unique risks posed by HSP, aligning regulations with emerging health concerns.

Conclusion

HSPs, marked by inadequate regulation, effortless accessibility, and the release of harmful toxins, demand immediate attention. Collecting epidemiological data is crucial to comprehensively gauge youth involvement. Public health professionals and paediatricians should also start advocating against HSP. Because HSPs have several human carcinogens and other toxic products that might affect the oral and upper aero-digestive tract, and lead to cancer. If HSP's awareness against HSPs is not created at the earliest it will soon become a major public health problem. Collaborative efforts among policymakers and health professionals are urgently needed to address this emerging concern and formulate effective strategies for regulation and awareness.

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