

THE RISKS AND TOXICANTS OF SMOKELESS TOBACCO, ARECA NUT AND KHAT PRODUCTS AVAILABLE IN KENYA

Kariuki Michael¹, Kayiza Allan¹, Nick Kioko Mutisya¹

¹ University of Nairobi, Faculty of Health Sciences

Introduction: Chewing tobacco, snuff, areca nut products and khat are the major legal Smokeless Psychopharmacologically-active Products (SPPs) used in Kenya. The majority of SPPs consumed in Kenya are locally produced, unregulated, and unbranded with little or no quality control in terms of levels of toxicants or psychoactive ingredients. This report aimed to consolidate the limited information available on the types of SPPs used in Kenya and make recommendations for future work to clarify the toxicant levels and, hence, the health risks of Kenyan SPPs.

Methods: A systematic review of monographs issued by the International Agency for Research on Cancer, various individual scientific papers and Global Adult Tobacco Surveys for Kenya, India and Pakistan.



Results: The use of SPPs has potentially a high cancer risk on its consumers.

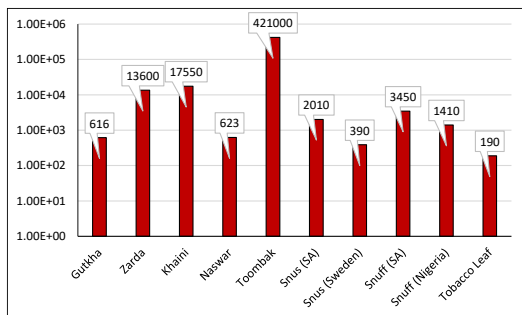


Figure 1. Showing the average NNN+NNK levels (ng/g ww) in some STPs from Asia, Africa and Sweden.

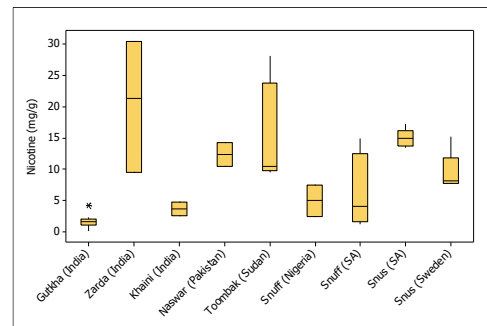


Figure 2. Showing the Nicotine levels in STPs from Asia, Africa and Sweden.

Discussion: Globally, risks for cancer vary from the use of different STPs. These risks correlate approximately with the levels of carcinogens, particularly the Tobacco Specific Nitrosamines in the product. The risk will also be dependant on how the product is used, e.g., frequency of use, amount of product in each dose, and the length of time held in the mouth.

Conclusion: SPPs and STPs are not one product but many different products with different ingredients, chemistries and health risks.

Recommendations:

1. Carry an in-depth review of quantities and types of imported and locally produced STPs.
2. Studying the ingredients in STPs.
3. Performing toxicant and alkaloid analyses for all types of STP on the market.
4. Initiating case-control studies to determine the health risks of using different types of STPs.
5. Monitoring for other drugs in local products to confirm anecdotal reports of STPs that have been spiked with illegal drugs.
6. Lobby for the government to regulate all SPPs