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GUTKA-A MALIGNANT ENTITY SEEKS BENIGN EXIT IN INDIA

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ABSTRACT: Tobacco and its products have been a household entity since a long time specially in Indian houses either as a pride to be snuffed through the pipes or the traditional hookahs by the rajas maharajas, or if not through the smoke it took place in many untowardly customs and rituals associated. It has spread through the subcontinent, and even to the other countries. Promoted by a slick and many- tentacled advertising campaign, gutka, an indigenous form of smokeless tobacco, has become a fixture in the mouths of millions of Indians over the last two decades. But what has prompted particular concern here is the way that in the last 10 years, gutka as portable as chewing gum and sometimes as sweet as candy has found its way into the mouths of Indian children. Out of fad and style quotient, it made its way in exchange of mere money in pockets of many turning into one of the major concerns for health problems particularly in India. Various social workers and health professionals have urged for ban of tobacco products, especially the gutka as it is the need of the hour to stop chewing to avoid future regret of oral health. In that context, government too is starting a ban of sale and supply of such products considering the youth in terms of its addiction and child labour associated. However, with the increasing awareness regarding its pros and cons, alarming many of this fad, it's slowly and gradually making its way to exit to create smiles with disease and addiction free life to many.

KEY WORDS: gutka, OSMF, tobacco, ban, cancer, quit-line

INTRODUCTION: GUTKA: Gutka, a new age fad mostly seen among the youth and uneducated, low socio-economic group; is basically a preparation of crushed areca nut (also called betel nut), tobacco, catechu, paraffin, slaked lime and sweet or savoury flavorings.^{1, 2} it is manufactured in India and exported to a few other countries. A mild stimulant, it is sold across India in small, individual sized packets at affordable cost. It is consumed much like chewing tobacco, it is considered responsible for oral cancer and other severe negative health effects.^{1, 2, 3} It is also known in different parts by different names by Gutka, Pan Masala, Mawa, Kharra and so on with eye-catching coloured packets and various feel good tag-lines.

The chemical structure of gutka basically consists of tobacco which contains nicotine, tobacco specific nitrosamines, benzopyrene, heavy metals (cadmium, lead, nickel, arsenic)⁴. It comprises of tobacco and areca nut which increases its addictiveness and makes it highly alkaline with pH 8.5-9.

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The form of gutka specially originates from species of tobacco in the genus of herbs *Nicotiana*. It belongs to nightshade family (Solanaceae) indigenous to North and South America, Australia, South West Africa and the South Pacific.

Nicotine, a powerful neurotoxin to insects is present in most plants. However, tobaccos contain a higher concentration of nicotine than most other plants. Unlike many other Solanaceae, they do not contain tropane alkaloids, which are often poisonous to humans and other animals.

Along with nicotine, other compounds such as germacrene and anabasine and other piperidine alkaloids (varying between species) seem to deter most herbivores,⁵ a number of such animals have evolved the ability to feed on *Nicotiana* species without being harmed. Nonetheless, tobacco is unpalatable to many species, and accordingly some tobacco plants (chiefly tree tobacco, *N. glauca*) have become established as invasive weeds in some places. Thus plantation of tobacco has become a source of employment as well as trade for most of the rural farmers and traders as well. Various techniques and forms of this produced tobacco include ,Beedi, Cigars, Cigarettes, Creamy snuffs, Dipping tobaccos, Gutka, Hookah, Kreteks, Roll-Your-Own, Pipe, smoking, Snuff, Snus .

Prolonged use of these forms possesses a health hazard. Various changes are seen in the oral as well as in the biologic process of the body. The strong aroma and 'kick' of the taste along with the added flavours makes it addictive than the normal tobacco chewing. In one of the questionnaire conducted, it revealed that the youth consumed gutka on casual reasons that seem to have turned into habit, settling down as an indispensable part of their routine. The lesion start to inflame the tissues gradually, initially with no specific sensation resulting into one of the most commonest and painful precancerous condition known Oral Submucous Fibrosis (OSMF) specially seen in the age group of 13-28years, mostly due gutka use.^{5,6} Oral Submucous Fibrosis (OSMF) is a chronic disease of oral mucosa characterized by inflammation and progressive fibrosis followed by stiffening of otherwise yielding mucosa resulting in difficulty in opening the mouth. It is generally accepted today that areca nut quid plays a major role in the etiology. Gutka leads to the condition in the oral cavity OSMF which further advances to oral cancerous lesions^{7,8}. Prevalence of OSMF seems to be on a quick rise. Likewise the teeth stain dark, gingiva appears inflamed which is susceptible to bleeding and pain, usually in moderate-severe cases and a pungent odour seems to linger around such people. The initial tingling sensation thus seems to be highly sensitive to spicy food products. There is a marked reduction in mouth opening as well. Other diseases, besides those in the oral cavity, caused by tobacco products like gutka include the heart diseases and stroke. Gutka contains heavy amounts of magnesium as well as calcium carbonate which are very toxic chemicals. High amounts of magnesium carbonate in the human body can cause respiratory and cardiac depression, while calcium carbonate or lime damages the mucosa, causes chronic mucosal injuries and ulcers in the mouth. Apart from this, gutka can also cause hypertension and cause reproductive health dysfunction. Also seen are, Sub-clinical Ischemic Heart Disease (IHD) in diabetic patients, hypertension nervous system disorders- epilepsy metabolic dysfunctions like hyperglycaemia and reproductive dysfunctions such as premature birth, low birth weight in babies, as well as infertility are also seen. This combination of areca nut along with tobacco makes it highly carcinogenic⁹. Thus one addiction leads to the next resulting in smoking.

COMMON CAUSE: It is unfortunate to see that the common age group prevalent is the children and teenagers in India. It is a common casual fad or a lame reason of pride to pose it as status

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symbol. Some out of peer stress and pressure or advertisements end up with such addiction. The flavouring agents and sweeteners add to this addiction. Most of the people working at odd work station like those in driving or people working on night shift-watchmen, peons, ward boys in hospitals, labourers, etc., take it as an alternative to meals, or as an aid to stay alert through the peak hours due to its mild stimulation. With televisions being an instant eye-catcher, stylish icons promote these products with misguiding taglines, likewise advertisements in newspapers and the sale at local vendors is on a quick rise. Often these products are sold as mouth fresheners. Different hoardings, pamphlets or even public places seem to advertise such products. Children and youths from low socio-economic societies and those in company of wrong elders like the street children usually fall prey to gutka products.

MANUFACTURING/TAXING/PRICING: In India the tobacco products are easily available over the counter as cheap as Rs.1/- for 2g packet and Rs.2-5/- for 10g packet. It, thus woees the common masses which conversely tempts them to purchase such products at low prices. However under the optimal compounding scheme, the pan masala and gutka manufacturers can pay taxes on the basis of the number of packing machines installed on the industrial premises. No doubt warnings are present on the packets but these are the “tiny” warnings “in English” which must be hardly read by people. Gutka packets do mention about “chewing of tobacco is injurious. Not for minors” but not legible enough. However, it is likely for these warnings written in text to go un-noticed by illiterate masses that are devoid of reading skills, especially in rural parts of India like the senior citizens, farmers, labourers etc., or for that matter any individual having lack of knowledge or awareness. Thus a need arises for having a big warning that can be understood either through the eligible and bold text or crossed pictures

PREVALENCE OF GUTKA IN INDIA: Gutka is banned under the Prevention of Food Adulteration (PFA) act. However, at present, there are no regulatory standards in place for ingredients of cigarettes in our country. The Regulation 2.11.5 of Food Safety and Standards (Food Product Standards and Food Additives), 2011; and those issued under the Food Safety and Standards Act, 2006 prescribes the standards for Pan Masala. While, the Food Safety and Standards (Prohibition and Restrictions on Sales) Regulations, 2011; dated 1st August 2011, issued under the Food Safety and Standards Act, 2006, lays down that tobacco and nicotine containing products shall not be used as ingredients in any food products. The Hon`ble Supreme Court in Godawat Pan Masala Vs UOI, 2004 (7) SCC 68 stated that “Since pan masala, gutka or supari are eaten for taste and nourishment, they are all food within the meaning of Section 2(v) of the (Prevention of Food Adulteration) Act.” This created mixed feelings over the sale and production; but, the regulation dated 1st August 2011 issued under the Food Safety and Standards Act, 2006, read with the judgement of the Hon`ble Supreme Court on the issue, Gutkha products are food products containing tobacco and nicotine and their manufacture, sale or storage is not permitted under law^{10,11}. By virtue of the same regulation, Pan Masala, if it contains tobacco and nicotine, cannot be manufactured or sold. Since it is consumed orally the urgent need for a ban has raised thumbs for its approval considering its carcinogenicity and the high levels of chemical additives present. Thus the states of Kerala, Bihar, Madhya Pradesh, Maharashtra, Rajasthan, Jharkhand, Haryana, Delhi, Goa, Gujarat, Himachal Pradesh, Rajasthan, Punjab, Mizoram¹²⁻²⁹ have already stopped its sale, production and supply. The remaining states too are in the process like Andhra Pradesh, Assam, Chandigarh, Tamil Nadu, and Orissa³⁰⁻³⁴. However that being said, the ongoing process of thinking about gutka and the immediate need

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to ban, doesn't retard the eradication processes in the biology of the tobacco consumer. So the implementation processes need to be fast and quick. However, India's "gutka" ban will save millions but may anger more.

THE QUICK MEASURES NEEDED: It is necessary to educate the public about the side effects of gutka. The newer products of smokeless tobacco are still worse. Raising the prices of the prevalent gutka products could minimize the purchase. A total ban is the best solution. Discouraging illegal sale, prohibiting the use/sale near educational institutes, enforcing the tobacco control laws like advocating warnings and ending the surrogating Advertisements of this slow poisonous product could be of help in creating a healthy mouth and a healthy society³⁵. However these tasks are difficult but not impossible as it is a responsibility of every individual to keep himself and his fellow mates away from such health damaging carcinogens. There are Nicotine Replacement Therapies (NRT). NRT products cover various forms of alternate nicotine delivery methods into the body intended to replace the nicotine obtained from smoking or other tobacco usage. They provide a small dose of therapeutic clean nicotine to the body which is sufficient to help control cravings for cigarettes and other withdrawal symptoms that smokers experience when they quit. These are available in various forms like Nicotine gum, Nicotine patch, Nicotine Inhaler, Nasal spray, Sublingual tablet, Lozenges. Depending on the addiction and the intake of nicotine products, the dose is decided, starting with meager quantity for therapy acclimatization³⁶. Another easy to remember therapy is 5-A's and 5-R's. It states the 5-Essential A'- Steps to Intervention -The five major steps (the 5 As) to intervene with tobacco users that are willing to quit are to **ask** the patient if he or she uses tobacco, **advise** him or her to quit, **assess** willingness to make a quit attempt, **assist** him or her in making a quit attempt, and **arrange** for follow up contacts to prevent relapse. This should take at less than five minutes of direct clinician time. The patient willing to quit should also receive pharmacotherapy in addition to the counseling. Five Major R's-Steps to Intervention for Patients Not Ready to Make a Quit Attempt include **Relevance, risks, rewards, roadblocks and repetition** are the 5R's of the motivation intervention that provides the clinician an opportunity to educate, reassure, and motivate. Motivational interventions (5 R's) are most likely to be successful when the clinician is empathic, promotes patient autonomy, avoids arguments, and supports the patient's self-efficacy.³⁷ Recently another rescue measure, for those willing to quit such addiction is-'Quitline'. The quitline is designed to help tobacco users by answering their queries, formulating a personalized quit plan depending on their tobacco consumption pattern (cigarettes, beedis and other forms of chewing tobacco like gutka) and supporting them through the entire 12 week journey of quitting tobacco through a combination of phone calls, SMSs, emails and educational material. Tobacco users wanting to consult a local doctor can be referred to a local TII centre through the Quitline. Currently, there are 560 TII centers across India. The national quitline is a dedicated toll-free telephone line that can be reached at 1800 227787 which is more accessible, operating daily from 9am to 9pm. Counselors trained in tobacco cessation answer queries in English, Hindi, Marathi, Kannada and Bengali and several other regional languages³⁸. Thus the unanimous effort to eradicate such addiction is another help to the addicts.

DISCUSSION: Gutka is popular with the young and old alike, many of whom are blasé about the nation's leading cause of oral cancer. More Indians, including children, chew gutka than smoke, making the trend of outlawing the cheap, colourful packets a more effective health policy in the

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world's second most populous nation. Some of the chemicals in some brands of gutka are also used in tile cleaners and battery acids. Now this keeps us wondering about what we intake just for fun could leave just toxic scars within. It is necessary to eradicate the use of these products which not only pose a health hazard to an individual but the entire society as a whole. There have been some attempts to curb and regulate promotion and use of gutka products. In one such attempt, public interest litigation to ban the substance was filed in a state high court. The high court's judgment directed the central government to find out whether gutka was a dangerous product. The Central Committee on Food Standards duly conducted hearings and investigations and concluded that it was a dangerous food product. The committee recommended an outright ban. According to Global Adult Tobacco Survey (GATS) India, there are an estimated 275 million tobacco users in India, of whom 25.9% are smokeless tobacco users, while 5.7% smoke cigarettes and 9.2% smoke beedis.³⁹ likewise after imposing a strict ban, it's true that the tobacco cultivators and tradesman are bound to incur losses along with daily income based small scale industry labourers but it is indeed a need of the hour to curb the sale, supply and use of any form of these carcinogens since a casual intake opens the door for unbelievable un-restorable, irreversible changes by opening alternative options and avenues to those dependent. Importantly, just as a compensation to serve stomach, either as a substitute for food or means of income let's not encourage this malignant entity to drive away smiles from our lives. Let us unanimously strive hard in creating a healthy disease free environment spreading awareness and smiles to one and all.

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