

Tobacco Related Diseases—Can We Stop It?

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Discovery of America has given the old world two nasty presents—Syphilis and Tobacco, both brought by Columbus and his men and both have played and are still playing havoc with the health of people of the world. Tobacco was unknown to Southeast Asia until it was brought by Portuguese to durbar of Akbar in 17th Century. Akbar asked his Hakim ul Hukama Abdul Fatah Gilani to describe his impression about tobacco. His statement was categorical "Our books do not contain description of character and properties of tobacco". He however asked Akbar to smoke it only after the smoke has passed through water, thus discovering 'Hukka' which is seen in use even today (Attiba Aihad Mugalia 1960).

At present India is the third largest producer of tobacco and has a dubious distinction of consuming 80% of its tobacco product in the domestic market (Stanlay and Stzerward 1986). This had led to progressively increasing incidence to Tobacco Related Diseases (TRD) like Chronic Obstructive Lung Disease (COLD), Coronary Heart Disease (CHD), vascular diseases and Tobacco Related Cancer (TRC) or oral cavity, oropharynx, larynx respiratory and middle ear problems. Beside this evidence is mounting on the increasing incidence of low birth weight in small children and carcinoma of the breast in females due to passive smoking. The influence of smoking behaviour on total carboxy-haemoglobin level is similar in 'bidi' and cigarette smoker and there is weak association between self described inhaling habits and carboxy-haemoglobin (COHb) level. As such COHb level is 5-7 times higher than non smoker and there is no significant difference between COHb level

and number of cigarette smoked that day, number of puffs per cigarette or 'bidi' and the length of material (Behera and Dash 1991).

MAGNITUDE OF THE PROBLEM

It is estimated that about 8 lac people died in India due to TRD in the year 1993. In the year 1986 0.12 million persons developed TRD and is estimated that by 2001 AD this figure will mount to 0.23 million i.e. increase of 95% (ICMR Annual Report 1992-93). At present TRC in male varies from 42.5% to 69.8% and in females it varies from 14.2% to 36.6% (Murthy et al 1970). If the present trend of consumption of tobacco product continues then the number of TRC in female will also increase and it is projected that by 2001 the TRC in male and female will become equal (ICMR Annual Report 1992-93).

FACTORS LEADING TO INCREASE CONSUMPTION OF TOBACCO

a) Socioeconomic factors—A large cohort born in 1940 has reached cancer prone age. Added to this is the changing life style. Both qualitative and quantitative improvement in education of both male and female has generated double income no kid (DINK) and double income one kid (DINK) nuclear family with economic prosperity. Nuclear family life style also takes grandparents away thus removing social inhibition of smoking by the youngsters in the family. This is resulting in the increase in smoking habit not only by the master of the house but also by the lady of the house and among neglected or uncared young boys and girls, as well (b) Tobacco Institute in India – The aim of

this institute is to continue making effort to keep on increasing the domestic hooking 6000 children every day toward smoking who would in a way replace 2500 adult dying every day due to TRD. The increase consumption of tobacco is creating ecological problem as well because this volume of tobacco requires 6.80 tonnes of wood for curing of tobacco which has to met by felling 7-8 crores of trees every year which is ultimately resulting in 3 lac hectares deforestation every year in Andhra Pradesh and Karnataka alone (Vaidya chairman, National Organisation of Tobacco Eradication 1994).

five year plan which is Rs.14075.9 crore (Annual Report Ministry of H & FW 1990-91)

ACTION PLAN

The options available are i) legislation for prohibition against tobacco. In a response to WHO and Cancer Research Organisation 12 countries of European Nations has put a total ban on all form of tobacco. Obviously no Government can hope or expect to prosper by selling the health of their citizens. Can Government of India do it? The answer for the present seems to be 'No'. The main reasons for

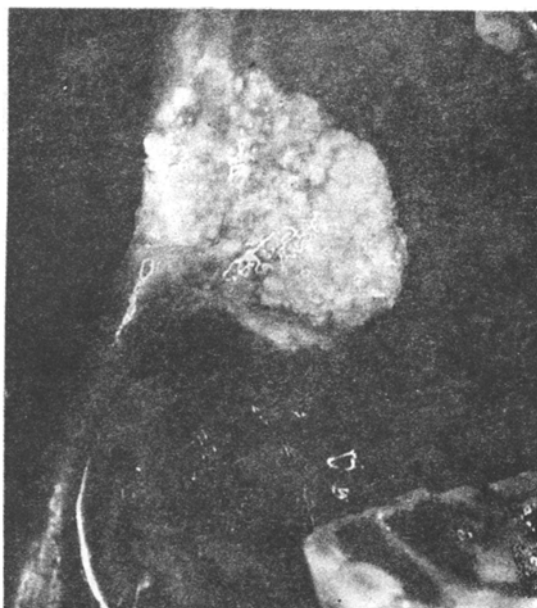


Fig.1

A nodular leukoplakia in the right commissure of a bidi smoker. The patient developed an exophytic growth (arrow) which was confirmed as a squamous cell carcinoma



Fig.2

An exophytic palatal cancer in a 45-year old female reverse chutta smoker. Note the deep ulceration in the center of the growth.

ECONOMICS OF TOBACCO

Tobacco provides a very important source of revenue and in fact 80% of central excise revenue is from tobacco alone. Government of India has 39% equity holding from its funds and financial institutions and 26% from public funds in Tobacco Industry amounting to a tune of Rs. 4798 crores (Mulgaonkar 1994) which is approximately one third of the total plan outlay for Ministry of Health and Family Welfare for VIII

the Government not to go in for this legislation are Socio-economic considerations. This prohibition will result in closure of tobacco industry leading to unemployment to a large number of population both directly and indirectly. As such our country is facing a major problem in the field of employment. Thus this option will not find favour with the government unless the public pressure mount significantly.

The in depth study of economic consideration gives a very different type of scenario. Preliminary report on the studies carried by ICMR on the economics of tobacco and medicine revealed that on an average a case of TRC spend Rs.4857.00 before diagnosis and around

Table No. I
Effect of antitobacco community campaign in India^{9b}

	GOA*		AGRA+	BANGALORE++	
	School Education	School Education + Health Infrastructure		Study group	Control Group (i) (ii)
Male	33.5%	32.6%	26.3%	5.7%	2.9% 3.8%
Female	45.3%	50.0%	10.5%	6.9%	4.6% 7.8%
Average	—	—	14.4%	6%	— —

(*School curriculum of 8 hrs. per year for 3 years; + community volunteer with one year intervention;
 ++ Radio Date programme)

Rs.7225.00 for treatment i.e. an average of Rs.11000.00. If the travel, loss of wages etc. are added then this figure comes to Rs.17799.00. The preliminary data have also suggested that government expenditure on radiotherapy of a TRC patient is Rs.7861 of which only Rs.750.00 is paid by the patient. Also the annual expenditure by the government for a case of CHD and COLD is Rs.5268.00 and Rs.2119.00 respectively (ICMR Annual Report 1991-92). TRC in our country is



Fig.3

A broad based and a large verrucous carcinoma in the left buccal mucosa of a male betelquid chewer.

the commonest cancer and accounts for one third of diseased load (ICMR annual Report 1991-92). During the three years period 1991-92-93 Government of India released Rs.46.52 crore for National Cancer Control Programme (NCCP). As

33% of these cancer are tobacco related thus government has spent Rs.5.18 crore annually to combat TRC. In the year 1994-95 Rs.18 crore was released for NCCP i.e. Rs.6 crore was released for TRC. However, this figure pales in comparison to the amount of Rs.1682 crore spent by the Government of India during the same period in the tobacco industry, (in the year 1991-92 Rs.391.0 crore; 1992-93 Rs 550 crore and in 1993-94 Rs.741.0 crore—Vaidya July 1994). Thus a doubt is raised about the seriousness on the part of Government of its efforts in eradicating TRD and TRC in our country. Another option available is ii) Public health education and creating awareness about TRD and TRC as they are self induced preventable diseases. For years to come this is going to be our main thrust area. Our own observation is that the awareness about TRC is present to a great extent even among rural population. This is born out of the fact as majority of cases of oral, oropharyngeal, laryngeal, laryngopharyngeal and oesophageal cancer on cursory questioning deny history of smoking. It is only on detailed probing that they come out with the history that though they have been smoking for last 25-30 years but since the onset of this disease and a likely fear that they might be developing cancer has led them to quit smoking. The studies carried out by ICMR on usefulness of Public Health Education programme by utilizing health workers, regular programme on All India Radio and by conducting

classes in school for children has given positive results in comparison to control group in 2 areas in Bangalore which did not have excess to Radio Date Programme revealed increase in the population of Tobacco user (Table-I) (ICMR Annual Report 1994-1995).

RECOMMENDATIONS

a) Legislation for prohibition on smoking : Government must start working on these line. This require training of the workers, engaged on Tobacco industry in alternative stream so that these workers can be provided useful employment. Also farmers and agriculturists should be informed in no uncertain term about the future plan of the government and they have to be educated for cultivation of equally lucrative and alternative crops or plantation.

b) Role of intellectuals : Philosophers and social activists to keep on writing in the print media against the use of tobacco so that public opinion can be formed which will ultimately lead to pressurising the government to enforce prohibition.

c) Myth of revenue source : The preliminary studies have revealed that government is spending more on the treatment of TRD and TRC and also indirectly loosing on valuable man hours. Thus tobacco industry infact is not economically helpful to the government or the nation. It is believed that further studies of ICMR will substantiate this fact and this information need to be widely published and discussed on T.V., All India Radio and other media.

d) Ban on shops or retail out-lets of tobacco product near the school, College, and places of workshops.

e) School curriculum : The 8 hrs. curriculum on the abuse of tobacco and a cause of TRD and

TRC must form a compulsory component of school curriculum with immediate effect as this has been found to be the most effective form of public awareness programme for antitobacco campaign.

f) Anti Tobacco community education : Community health workers, social health workers, village health guides should be involved in this campaign to propagate this message at the grass root level. Ultimate outcome of smoking should be shown through posters etc.

g) Introduction of telephone quit line as extra support is needed by the smokers for giving up smoking permanently.

h) Total ban on smoking or use of tobacco product in the offices, colleges and schools. Government owned T.V. Media and channel, should refrain from telecasting any serial or scene showing any person smoking or using tobacco product. Also it must be seen that no personality should be shown on TV while smoking during interview.

i) Observance of May 31 'World's No Tobacco Day' with all sincerity and participation by the medical professionals and social activists.

j) Government should put a total ban on all type of sponsorship which propagate tobacco products either directly or indirectly, as has been implemented by 12 European nations.

k) Prices of tobacco and its products should be raised by levying more taxes (20% in 1994).

The higher deterrent tax, effective public awareness programme about health risk of nicotine (tobacco) has, reduced the level of smoking in France to its lowest level in the year 1994, in 10 years (La Medicine En France 1996).

Time has come when we should catch the bull by the horn so that we can succeed in making our society free from TRD and TRC.

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WORKSHOP NEWS

Newly formed SUSHRUT ORL-CME, a Society at the level of ENT Practitioner at Lucknow organised a workshop on FESS from 31.1.98 to 2.2.98. Prof. M. V. Kirtane was the Course Director. Approximately 45 delegates from U. P. and Bihar attended the workshop.

On the first two days, a number of cases of different type of sinusitis and endoscopic DCR were operated by Prof. Kirtane, with the facility of two way audio-video communication. There were lectures and discussions on relevant anatomy, radiology, pathophysiology, treatment, and complications, with participation of renowned anatomist Prof. Mehdi Hassan.

Cadeveric dissection was arranged on the third day at dissection halls of upcoming private medical and dental colleges, where 15 delegates operated upon cadevers, with equipment supplied by M/s Ajmera Surgicals, Mumbai.

Further Sushrut ORL-CME shall organise 'Workshop on Micro Ear Surgery—Basics', on 29, 30 and 31 October, the course director being Dr. A. K. Lahiri, from Sir Ganga Ram Hospital, New Delhi. First two days will be devoted to temporal bone surgery demonstration by Dr. A. K. Lahiri (on screen), live demo of operations e.g. mastoidectomy, myringoplasty, tympanoplasty etc., with emphasis on basics, and panel discussions. Last day of the workshop would be for temporal bone dissection by the delegates (limited seats).

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