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Smoking in Pakistan: More Than Cancer and Heart Disease

Pages with reference to book, From 77 To 79

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The British ambassador at the court of the Moghul emperor Akbar (1542-1605) introduced the emperor to smoking tobacco. The emperor, taking no heed to his physician's warnings of its health hazards, started smoking and soon the habit spread among the people¹. The Pakistan Health Education Survey 1992-93 estimated that there were about 22,000,000 smokers (every third adult) in the country at the time of the survey². In 1983 almost 50,000 acres of fertile land were used for tobacco cultivation in Pakistan^{1,3}. Most of the tobacco grown in Pakistan is consumed within the country, and most of it is smoked in the form of cigarettes¹. The tobacco industry in Pakistan is expanding at a rate of 5% per year², a rate higher than Pakistan's alarming annual population growth rate of 3%⁴. The number of smokers in the country is probably rising. Moreover, Pakistani cigarettes contain amongst the highest levels of tar and nicotine in the world⁵. The tobacco industry in Pakistan has also been associated with damage to the environment. In Pakistan 1.5 million cubic meters of wood are used annually for tobacco curing, leading to deforestation³. Soil depletion occurs rapidly on land where tobacco is cultivated, leading to further cutting down of woodlands.

The adverse health effects of smoking are well documented. The WHO estimated that worldwide about 90% of all lung cancer deaths, 75% of chronic bronchitis and emphysema, and 25% of ischemic heart disease in men under 65 years of age was due to smoking⁶. Lung cancer is the leading malignancy among Pakistani males⁷. The proportion of smokers among men with ischemic heart disease is also high⁸.

The Ministry of Health, Government of Pakistan conducted the Pakistan Health Education Survey between October, 1991 and November 1993, taking a representative sample from all the households in the country². The primary source of information was mothers with at least one child aged two years or younger. In this survey, approximately 55% of Pakistani families reported that a minimum of one member smoked². Families living in rural areas were twice as likely to report have a smoker amidst them as compared to families in urban areas. Individuals with no education were three times as likely to report to having a smoking family member as compared to individuals with at least a secondary school education. Smoking steadily decreased with increasing income².

While the effect of smoking and cancer and heart disease are well known, there is little information on the effect of money spent on cigarettes in poor communities. The proportion of family income in poor families with marginal incomes that can barely feed the household, may be substantial. In Pakistan, 46% of children under five years of age are stunted (chronic malnutrition) and 15% are wasted (acute malnutrition)⁹. Families that are poor, illiterate and live in rural areas are more likely to have malnourished children; these families are also more likely to have a smoker amidst them. A study from Bangladesh reports that smoking 5 cigarettes daily may on average, in a poor household, lead to a monthly dietary deficit of 8000 calories per month in the family. This may be enough to push an undernourished child into the vicious cycle of malnutrition, illness and death^{11,12}. The costs associated with smoking are high. In Connecticut, where about 22% adults smoked in 1992 smoking related costs were estimated to be US \$287 for each man, woman and child in the state¹⁴. There are no such estimates for Pakistan, but given the high prevalence of smoking they will be large. These will probably further rise because smoking, while declining in rich countries, is rising in poor countries¹⁵.

The decline in smoking in the rich countries has been due to legislation and aggressive, sustained, nationally led, anti-smoking programs and policies. There is ineffective legislation and little political will to control smoking in Pakistan¹. Moreover, most anti-smoking efforts are directed towards highlighting the ill effects of smoking. Most smokers know that smoking is bad for health, yet they continued with the habit, showing that knowledge of ill effects of smoking alone are not sufficient to restrain the habit¹⁶. Cigarettes, apart from being physically addictive, have deeply rooted conditioned and learnt behaviors¹⁷. To quit, smokers need, apart from heightened awareness of the issue, continuous motivational messages, enhanced social skills and specific smoking-cessation skills¹⁸. While it is best not to start smoking, there is evidence that quitting smoking at any age is beneficial for health^{19,20}.

Social and behavioral determinants of disease, when integrated into community based programs, have shown to be effective in preventing people from becoming smokers and helping smokers quit²¹⁻²⁴. Primary health care programs in Pakistan have concentrated on traditional maternal and child health care - like immunization, antenatal care, family planning, breast feeding, weaning²⁵ and not addressed smoking as a public health issue. There is evidence pointing to a relationship between smoking and malnourishment in children. The mechanisms through which this occurs are first, that infants of mothers smoking during pregnancy are more likely to be born low birth weight than infants of non-smoking mothers^{26,27}. Non-smoking pregnant mothers exposed to tobacco smoke in the house (passive smoking) are more likely to have low birth weight babies than mothers in a smoke free environment²⁸ and low birth weight babies are more likely to suffer from malnutrition²⁹. A second way in which smoking affects malnutrition is by consuming scarce resources that could have been spent on food¹⁰. Tobacco, because it is addicting, is relatively price inelastic that is people tend to pay for it even if its cost is quite high^{3,10}. Consumers tend to equate tobacco expenditure with essentials like food and shelter rather than with luxury items. Smoking is common in urban squatter settlements in Pakistan. Parental smoking and its relationship with malnutrition in children under five is not well documented or publicized, though there is evidence that it has a contribution^{10,26-29}. We propose that primary health care programs consider smoking prevention and cessation as community based interventions. Moreover, they should be wary of smoking cessation programs just increasing knowledge. Successful programs concentrate on behavioral factors, developing specific social and cigarette quitting skills, creating a conducive social and cultural environment, and addressing environmental factors, in addition to raising consciousness.

References

1. Ball, K. Pakistan: Attempts to control damage by tobacco smoking. LANCET, 1983;2:1413.
2. Pakistan Health Education Survey 1991-92. Islamabad, Ministry of Health, Government of Pakistan., 1993, pp. 115.122.
3. World Bank Tobacco Financing: The Environmental/Health Case: Background for Policy Formulation. Office of environmental and scientific affairs, Project Policy Department, 1984;W0020/0087W/C2404: 1-26:
4. Pakistan Demographic and Health Survey, 1990/1991, Islamabad, 1992.
5. Asghar, M. Jan, Z.A. Monitoring of harmful constituents of cigarettes and tobacco in Pakistan, J. Pak. Med. Assoc., 1989;39:66-68.
6. Nath, U.R. Smoking in the third world. World Health, 1986,6:6-7.
7. Jafarey, N.A. and Zaidi, S.H. Carcinoma of the oral cavity and oropharynx in Karachi (Pakistan). An appraisal. Trop. Doct., 1976;6:63-67.

8. Ishaq, M., Rasheed, S.Z., Khan, B. et al. Risk factor characteristics and the extent of coronary atherosclerosis in patients undergoing coronary artery bypass graft surgery. *Pak. J. Cardiol.*, 1992;6: 15-25.
9. National Nutrition Survey 1985-87. Nutrition Division, Islamabad, National Institute of Health, Government of Pakistan, 1988.
10. Cohen, N. Smoking, health and survival: Prospects in Bangladesh. *LANCET*, 1981 ;i:1090-92.
11. Pelletier, DL., Frongillo, E.A. and Habicht, J.P. Epidemiologic evidence for a potentiating effect of malnutrition on child mortality. *Am. J. Public Health*, 1993;83:1 130-1133.
12. Information systems unit, Karachi, Department of Community Health Sciences, Aga Khan University, 1995.
13. Giovino, GA., Schooley, A.W., Zhu, B. et al. Surveillance for selected Tobacco -Use behaviors - United States. 1900-1994. *MMWR* 1994,43:1-13.
14. Adams, ML. The public health impact and economic cost of smoking in Connecticut- 1989. *Conn. Med.*, 1994;58:195-198.
15. Macakay, J.L. The light against tobacco in developing countries. *Tubercle. Lung. Dis.*, 1994;75:8-24.
16. Denny, U., Demir, G. and Akan, P. Is awareness of its risk enough to stop people from smoking? *J. Cancer Educ.*, 1995; 10:68-70.
17. Carmody, T.P. Preventing relapse in the treatment of nicotine addiction: Current issues and future directions. *J. Psychoactive drugs.*, 1990;22:2 11-238.
18. Duffy, J. and Coates, T.J. Reducing smoking among pregnant adolescents. *Adolescence*, 1989;24:29-37.
19. Doll, R., Peto, R., Wheatley, K. et al. Mortality in relation to smoking: 40 years observations on male British doctors (comments). *Br. Med. J.*, 1994;309:901-911 .
20. LaCorix, AZ. and Omenn, G.S. Older adults and smoking. *Clin. Geriatr. Med.*, 1992;8 :69-87.
21. Swaddiwudhipong, W., Chaovakiratipong, C., Nguntra, P. et al. A Thai monk: An agent for smoking reduction in a rural population, *Int. J. Epidemiol*, 1993;22:660-665.
22. Leinweber, C.E., Macdonald, J.M. and Campbell, H.S. Community smoking cessation contests: An effective public health strategy. *Can. J. Public Health*, 1994;85 :95-98.
23. Utz, SW., Shuster, OF., Merwin, E. et al. A community-based smoking -cessation program: Self-care behaviors and success. *Public Health Nurs.*, 1994;11:291-299.
24. Mayer, J.P., Hawkins, B. and Todd, R. A randomized evaluation of smoking cessation interventions for pregnant woman at a WIC clinic. *Am. J. Public Health*, 1990;80:8-9.
25. Bryant, J.H., Marsh, D.R., Khan, K.S. et al. A developing country's university oriented toward strengthening health systems: Challenges and results (comments). *Am. J. Public Health*, 1993;83:1537-1 543.
26. Foy, A. Cigarette smoking in pregnancy. *Med. J. Aust.*, 1988; 1 48(8):377-378.
27. Cole, H. Studying reproductive risks, smoking. *JAMA* 1986;255(1)22-23.
28. Chen, Y, Pederson, L.L., Lefoe, N.M Passive smoking and low birthweight (Letter). *LANCET* 1989;2(8653):54-55.
29. Kebede, A. and Larson, C. The health consequences of intrauterine growth retardation in southwestern Ethiopia. *Trop. Doct.*, 1994;24:64-69.