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Viewpoint

Addressing tobacco use & dependence in primary care: A priority for tobacco control in the country

There are 27.5 crores adult tobacco users (rural-21.6 crores, urban-5.9 crores) in India and this is a major public health challenge[1]. In India, about a quarter of deaths among middle-aged men are caused by smoking[2,3]. Additionally, tobacco use causes huge economic loss to the tune of ₹ 6011 crores (1 billion USDs)[4]. Tobacco cessation leads to short-term health benefits and curbs the tobacco death burden in the long term[5,6]. Tobacco cessation has immediate health benefit and can reduce tobacco-related mortality in short term in comparison to other preventive measures for tobacco control[7,8]. A wide range of pharmacologic and non-pharmacologic treatments have been successfully used to assist patients in quitting tobacco, the most effective approach to tobacco cessation appears to result from a combination of these modalities[9,10]. Physicians, nurses, pharmacists, and other healthcare providers all have the potential to lead successful tobacco cessation interventions[11]. It is without doubt now that the most effective preventive intervention that a clinician can provide for tobacco using patients against heart disease, cancer, cerebrovascular disease, chronic obstructive pulmonary disease and tuberculosis is an empathic tobacco cessation intervention[1]. Nicotine replacement therapies (NRT) have been shown to further double the chances of successfully quitting smoking when used in conjunction with physician's advice[12]. The cost-effectiveness of NRT in low and middle income countries was estimated to be ₹ 16600 (USD 276) per disability-adjusted life year saved[13]. Keeping this in mind the Government of India and World Health Organization (WHO) had started tobacco cessation services as early as in 2002. Currently 19 Tobacco Cessation Centers (TCC) are functional in the country[14]. A study conducted by Kumar *et al*[15] in Delhi compared the effect of counselling alone with counselling and medication (bupropion) on abstinence rates. Findings of the study suggested that continuous abstinence rate in the counselling group at 1, 3, 6, and 12 months was 17, 17, 16, and 15 per cent, respectively, whereas in the counselling + medication group the rates were 60, 58, 54, and 53, respectively ($P<0.001$ for all comparisons). The abstinence was validated by breathe carbon monoxide (CO) level measured during each visit[15]. These results also suggested the usefulness of both behavioural counselling as well as medication led cessation approaches in specialized tobacco cessation centers in India. However, these centers which are co-located within tertiary care health facilities have access to the tobacco users who are predominantly males, relatively older age group (mean age 37) and urban residents[16]. Thus, these centers do not meet the criteria for an appropriate public health response to cessation. These interventions now need to be scaled up at a population level so that there it can reach to a large number of tobacco users. The health ministry should look for effective ways in which successful and low cost tobacco cessation services can be a routine part of service delivery. Primary health care holds the promise of the delivery of low cost cessation service reaching large numbers of tobacco users especially in rural/semi-urban areas. However, the effectiveness of cessation services in primary care is yet to be tested. While primary health care does hold some promise for the delivery of cessation services, there are several structural problems which plague primary care including the shortage of trained human resources and qualified counsellors. There are other concerns of the extrapolation of the TCC models in primary health care settings. The TCC models are "top heavy" models, have never been evaluated for cost-effectiveness and operate in a controlled environment. These conditions cannot be replicated at the primary care level and thus severely limit their expansion for wider coverage.

Why primary health care?

There are many advantages of delivery of tobacco cessation services through designated primary care physicians. This will reduce the cost of long term care and patient will get help in determining the need for avoidable expensive treatment. Primary care practitioners are ideally positioned to intervene with their patients who smoke and use smokeless tobacco, and the Revised National Guidelines for Primary Health Care (2010) strongly support such action[17]. For cessation to succeed, tobacco use must be recast from a disorder which is typically treated acutely to a chronic, relapsing condition that is likely to require long-term patient management. In India as in most developing countries, primary health care still serves large number of patients particularly in rural areas[18]. Most tobacco users try to quit multiple times, and repeated intervention is necessary to support this iterative process[19] it is also important that interventions must take into account the patient's readiness to change and the fact that the patient will determine whether or not change occurs. While the provision of adequate support for tobacco users who are motivated to quit is essential, it is equally important to continue to follow up throughout the process in order to maintain successful abstinence[20]. There is also a need to determine the levels of nicotine dependence among smokers and smokeless tobacco users using standardized and validated scales so that appropriate intervention can be delivered. This can only be done through repeated opportunistic interventions by health care providers in primary health care where the patient has a long term relationship with the doctor. In recent years, there has been a renewed thrust for the improvements and redesigning of the primary health care units[21]. The approach paper for the 12th Plan advocating for universal health care recommends a renewed thrust at strengthening primary care for all service deliveries including non-communicable diseases (NCDs)[22]. In the coming years this will translate into better managed primary health care through both improvements in infrastructure as well as human resources. Tobacco use as a risk factor for many NCDs should be prioritized for appropriate interventions through the primary health care model.

Way forward

There is a considerable body of evidence on the real world effectiveness of specific interventions in health care settings for cessation in the developed countries but very limited evidence in developing countries like India. There are no large-scale studies testing the whole range of interventions currently recommended for helping people to give up tobacco use specifically those interventions that include motivational interviews for individuals who are not interested in quitting smoking in the immediate to short term. Given the diverse epidemiology of tobacco use in India, there is also a lack of basic research and efficacy trials testing the effectiveness of different interventions in tobacco control. Thus, the first step is to have trials for testing effectiveness of different packages of tobacco control interventions provided by different health care providers in primary health care settings in India. These interventions could range from screening and brief advice to intensive counselling with or without pharmacotherapy. The evidence generated from testing these different packages trial can be used for scaling up of feasible and appropriate low cost tobacco cessation models that will reach to a large number of tobacco users in India.

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