

7.11

Individual Interventions: Promoting Tobacco Cessation

Why cessation?

Tobacco cessation is essential to reduce the mortality and morbidity related to tobacco use. It has been projected that by 2050, if the focus is only on prevention of initiation and not cessation, the result will be an additional 160 million deaths among smokers. The majority of tobacco-related deaths that can be prevented over the next 40 years will be among current smokers who can be persuaded to quit, according to projections by the WHO (Fig. 7.15).¹⁹⁰

Tobacco cessation as a strategy is available in western societies and in Thailand among the South-East Asian countries. The smoking cessation guidelines developed in the UK have

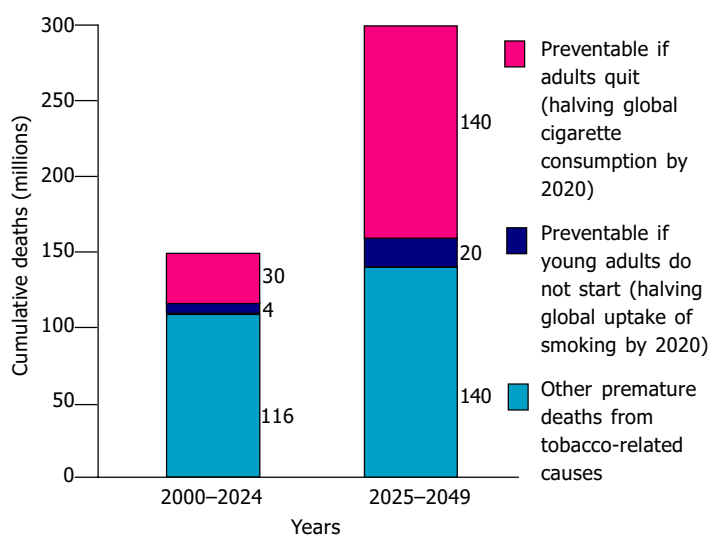


Fig. 7.15 Premature deaths from tobacco use, projections for 2000-2024 and 2025-2049

Source: World Health Report, 1999

evaluated such programmes and have found that smoking cessation interventions are effective.^{191,192}

They are guaranteed to bring health gains for the population for a relatively modest expenditure, and in the long term they reduce smoking-related health care costs, thereby releasing resources for other needs.

Tobacco cessation interventions are clinically effective and cost-effective, relative to other commonly used disease prevention interventions and medical treatments. Cost-effectiveness analyses have shown that smoking cessation treatment compares favourably with routine medical interventions such as the treatment of hypertension or hypercholesterolaemia or preventive interventions such as Papanicolaou smears.¹⁹³

A recent international review found the median societal cost of over 310 medical interventions to be £17,000 per life-year gained discounted at 5% (standard economic practice which weights immediately saved life-years as more 'valuable', and life-years saved in the future as less valuable).¹⁹⁴ Discounted results for smoking cessation interventions in the UK range from £212 to £873.¹⁹⁵ Based on these figures, even with conservative assumptions, smoking cessation interventions are considerably more cost-effective than many medical interventions.

A representative national sample of 893 smokers in the UK shows that most are disenchanted with smoking and claim that they would not smoke if they had their time again.¹⁹⁶ The widespread disaffection with smoking among smokers, combined with their tendency to be deluded about how easy and quick it will be to stop, justifies extra urgency in promoting chances to stop.¹⁹⁷

Tobacco cessation will provide the most immediate benefits of tobacco control and maximize the advantage for a habituee who quits the habit. It is also established that a majority of smokers (as many as 70%) desire to quit, but only 30% actually try each year, and only 3%-5% actually succeed in quitting.¹⁹⁸

Therapy

The first treatment approaches to smoking cessation that emerged in the 1950s and 1960s were based principally on behaviour modification. The 1970s saw a greater emphasis on cognitive treatments, which achieved greater momentum in the 1980s. The 1990s witnessed the introduction of several pharmacological strategies for nicotine cessation and the emergence of guidelines for tobacco cessation from various organizations.

There is a general consensus that behavioural methods and pharmacotherapy can contribute substantially to improved health by enabling cessation of tobacco use.¹⁹⁹ Standard treatment outcomes include measures such as 7-day point prevalence smoking abstinence at the end of the treatment trial with confirmation of surrogate measures of smoking such as concentrations of carbon monoxide in the breath and cotinine in the plasma, continuous abstinence from the target quit date (TQD) and prolonged abstinence after a grace period. Long-term abstinence is typically evaluated either at 6 or 12 months.

Tobacco (nicotine) dependence treatment involves a mix of pharmacological and non-pharmacological interventions. *Smoking cessation clinical practice guidelines* was originally published by the Agency for Healthcare Research and Quality (AHRQ) in 1999 and was updated in 2000 by AHRQ and a consortium of 7 government and non-profit organizations. The 2000 *Guidelines* urged clinicians to treat tobacco use disorder as a chronic disease similar in many respects to other diseases such as hypertension, diabetes and hyperlipidaemia, and to provide patients with appropriate advice and pharmacotherapy.²⁰⁰

A tobacco cessation intervention at an individual level is usually undertaken after a thorough assessment of the intensity of use. The Fagerstrom Test of Nicotine Dependence is a commonly used instrument for this purpose.²⁰¹ Depending on these variables, intervention programmes can be individually tailored. It has

Box 7.11 Effects of quitting tobacco smoking

Within 8 hours: Carbon monoxide level drops in the body.
 Within 48 hours: Chances of having a heart attack start to decrease, sense of smell and taste begin to improve.
 Within 72 hours: Bronchial tubes relax, making breathing easier and increasing lung capacity.
 Within 2 weeks to 3 months: Circulation improves and lung functions increase by up to 30%.
 Within 6 months: Coughing, sinus congestion, tiredness and shortness of breath improve.
 Within 1 year: Risk of smoking-related heart attack is cut in half.
 Within 3 to 4 years: Risk of heart attack is close to that of non-smokers.
 Within 10 years: Risk of dying from lung cancer is cut in half.
 Within 15 years: Risk of dying from a heart attack is equal to that of a person who has never smoked.

been estimated that less intensive interventions such as simple advice by a concerned physician can produce quit rates of 5%–10% per year in some individuals. A recent meta-analysis of 7 studies by the Clinical Practice Guideline Panel reported an abstinence rate of 8% when no cessation advice was given, compared with 10% with cessation advice.²⁰² In some more severely dependent individuals, pharmacological interventions may have to be used. When used alone, they can produce quit rates of about 25% but when combined with behavioural interventions the quit rates can go up to 35%.

5‘A’s approach to tobacco cessation (modified from the United States National Cancer Institute’s 4‘A’s strategy)²⁰³

- Ask every patient about tobacco use status. It is recommended that this become a part of the elicitation of vital signs.
- Assess the person’s motivation or willingness to change. Prochaska and DiClemente offer a theoretical model of readiness to change.²⁰⁴ Tobacco users in the pre-contemplation phase do not consider tobacco use a problem and are unwilling to address it. Those in the contemplation phase may be weighing the pros and cons but have not made any firm commitment to change. In the determination

(preparation) phase, the person is firmly committed to stop tobacco use. In the action phase, the person actually demonstrates commitment to change and if this is maintained steadily for a period of time, he or she is in the maintenance phase. The model is circular and the person may move from one phase to another. At any phase, the person may relapse and re-enter the cycle.

Assessment also needs to evaluate patient preferences for behavioural and pharmacological interventions. Measurement of nicotine and carbon monoxide levels can reflect smoking over the past few hours. Measurement of cotinine, a metabolite of nicotine, can reflect smoking in the past 7 days.²⁰⁵

- Advice to every user must be clear, strong and personalized. Tobacco users may be helped in making the transition from a non-committed phase to a phase of commitment by increasing their motivation to change. Strategies for motivation to change include listing the pros and cons of tobacco use, assessing the person's self-efficacy in being able to stop, information on tobacco-cessation strategies and identification of a relevant goal. As alcohol is a risk factor for tobacco relapse, advice to reduce the alcohol intake or abstain from alcohol is recommended.²⁰⁶
- Assist a person committed to change by reinforcing the person's decision, helping the person make a plan, including a strategy to

manage withdrawal and triggers for relapse, exploring the possibility of adding pharmacotherapy to behavioural strategies, helping the person set a quit date, making necessary arrangements for the quit date (informing the family about the decision to quit, getting rid of all forms of tobacco and paraphernalia such as lighters or matchboxes, anticipating and preparing to handle withdrawal and craving) and identifying social supports within and outside the family to assist the person in his or her tobacco-cessation attempts. Both intra-treatment support (support provided by the physician or caregiver) and extra-treatment support (provided by family, friends, employer, etc.) appear to be critical to the success of a cessation attempt.

Support within the treatment includes encouragement to quit tobacco use, communicating care and concern, encouraging the patient to talk about the quitting process, which includes reasons for quitting, concerns and worries about quitting, and successes as well as difficulties encountered while quitting. Assisting can be done as part of a brief or intensive intervention programme.

- Arrange a specific follow up in the couple of weeks following the decision to quit to reinforce the person's goal, reinforce support, and intervene in case the person slips and is unable to achieve the desired goal. Most studies suggest that frequent, brief follow up, including telephone calls to provide support to the user, increase quit rates.^{211,212}

Box 7.12 Common questions about tobacco cessation

Abrupt versus gradual cessation: Most patients use and most clinicians recommend abrupt cessation, but most scientific data suggest no difference, so the clinician may be guided by the patient's preferences.^{207,208}

Fears of weight gain following cessation: On an average, the weight gain is 2–3 kg. A large majority of smokers gain weight over the first few months post-cessation, but many lose much or all of this weight later.²⁰⁹ Physical exercise would prevent weight gain and is part of a 'healthy living' pattern that the smoker should be encouraged to adopt. Indeed, exercise has been shown to improve tobacco quit rates.²¹⁰

Interventions to promote tobacco cessation

Studies on the efficacy of interventions to promote and maintain tobacco cessation have mostly been conducted on smoking forms of tobacco, especially cigarettes. This is because much of this research has been conducted in developed countries. The results of several studies on different types of interventions are summarized in Table 7.11.

Psychosocial interventions

The initial goal of psychosocial intervention is to increase motivation, initiate a quit attempt and help the patient quit for a short period. The main goal of psychosocial intervention in tobacco cessation is sustained abstinence, change of lifestyle and improved quality of life.

There is a strong dose–response relationship between the intensity of counselling for tobacco dependence and its effectiveness. Treatments involving person-to-person interactions (via individual, group or proactive telephone counselling) are consistently effective, and their effectiveness increases with the intensity of

Table 7.11 Incremental effects of smoking cessation interventions on abstinence for six months or longer²¹³

Intervention	Target population	Effect size ^a (%)	95% confidence interval ^b
Brief opportunistic advice from a physician to stop	Smokers attending GP surgeries or outpatient clinics	2	1%–3%
Face-to-face intensive behavioural support from a specialist ^c	Moderate to heavy smokers seeking help with stopping	7	3%–10%
Face-to-face intensive behavioural support from a specialist	Pregnant smokers	7	5%–9%
Face-to-face intensive behavioural support from a specialist ^d	Smokers admitted to hospital	4	0%–8%
Proactive telephone counselling ^e	Smokers wanting help with stopping but not receiving face-to-face support	2	1%–4%
Written self-help materials	Smokers seeking help and not receiving other support	1	0%–2%
Nicotine gum	Moderate to heavy smokers receiving limited behavioural support ^f	5	4%–6%
Nicotine gum	Moderate to heavy smokers receiving intensive behavioural support	8	6%–10%
Nicotine transdermal patch	Moderate to heavy smokers receiving limited behavioural support	5	4%–7%
Nicotine transdermal patch	Moderate to heavy smokers receiving intensive behavioural support	6	5%–8%
Nicotine nasal spray	Moderate to heavy smokers receiving intensive behavioural support	12	7%–17%
Nicotine inhaler	Moderate to heavy smokers receiving intensive behavioural support	8	4%–12%
Nicotine sublingual tablet	Moderate to heavy smokers receiving intensive behavioural support	8	1%–14%
Bupropion (3000 mg/day sustained release)	Moderate to heavy smokers receiving intensive behavioural support	9	5%–14%
Intensive behavioural support plus NRT or bupropion ^g	Moderate to heavy smokers seeking help from a smokers' clinic	13–19	–

^a Difference in >6-month abstinence rate between intervention and control/placebo in the studies reported; data from Cochrane meta-analyses unless otherwise stated

^b The range within which one can be 95% confident that the true underlying value lies

^c Efficacy figures based on subset of studies from the general population with biochemical verification

^d No Cochrane review available, data from United States Department of Health and Human Services (USDHHS) meta-analysis

^e No Cochrane review available, data from USDHHS meta-analysis

^f The term 'limited behavioural support' refers to brief sessions required primarily for collecting data. Following the Cochrane definition, 'intensive' behavioural support was defined as an initial session of more than 30 minutes, or an initial session of less than 30 minutes plus more than two subsequent visits.

^g Expected effect combining effect of medication with effect of behavioural support

Complete information available from URL: www.thoraxjnl.com

treatment (e.g. minutes of interaction). Three types of counselling and behavioural therapies have been found to be especially effective, and are recommended for all patients who are attempting tobacco cessation:

- Providing practical counselling (problem-solving/skills training)
- Providing social support as part of the treatment (intra-treatment social support)
- Providing help in securing social support outside of treatment (extra-treatment social support).¹⁹⁸

Evidence related to specific psychological therapies are summarized in Table 7.12.

Relapse prevention

Attempts to prevent and manage relapse are based on a common understanding of the concept and mechanisms of relapse and lapse. Relapse may be defined as resumption of frequent, perhaps uncontrolled tobacco use after a period of non-use and lapse is considered a single incident of tobacco use. A lapse (slip) may not result in a relapse, depending on how the patient responds to the initial incident. There may be

various reasons for relapse such as withdrawal symptoms, high-risk situations such as stress, interpersonal conflict, social pressure and environmental cues.

The first specific measure in handling a relapse is to clearly delineate the contexts/causes for relapse in that particular case, keeping in view the common situations and reasons for relapse. Patients are enabled to anticipate a large number of situations or processes that are likely to lead to urges to smoke/chew tobacco or to prompt a slip. The second step is to reformulate the treatment plan by which the patients are helped in planning and developing strategies to cope with these situations. The patient may be taught coping skills for 'high-risk' situations, communication skills training, relaxation techniques, distraction techniques, assertive training, depending on the pertinent factors responsible for relapse.

Self-help approaches

The two basic modalities of psychosocial interventions, i.e. brief and extended, have the commonality of being therapist mediated. A third and novel approach in psychosocial intervention is self-help approaches. These

Table 7.12 Specific psychological therapies

Technique	Evidence
Skills training/relapse prevention helps patients identify high-risk situations or processes that are likely to lead to an urge to use tobacco. Behavioural coping (learning to anticipate and avoid temptation, refusal skills, assertiveness and time management) and cognitive skills (challenging thought processes and strategies to reduce negative moods), accomplishing lifestyle changes that reduce stress and improve the quality of life and pleasure are the techniques used.	Recent meta-analytical studies suggest increased cessation rates. ^{192,214} Individual counselling is more effective than control. The odds ratio for successful smoking cessation was 1.62 (95% confidence interval: 1.35–1.94). Failed to detect a greater effect of intensive counselling compared to brief counselling (odds ratio 0.98: 95% confidence interval: 0.61–1.56) ²¹⁵
Aversive therapy: The rationale is to make tobacco use more aversive and less reinforcing by inducing mild symptoms of tobacco intoxication (used in smokers).	Shown to be effective, but not used by most therapists because of health and compliance concerns ²¹⁶
Contingency management (reward for not smoking, loss of reward for smoking)	Lacks sufficient evidence ^{192,217}
Cue exposure (repeated exposure of the patient to real or imaginary situations that evoke the urge to smoke)	Lacks sufficient evidence ^{192,217}
Nicotine fading (gradual reduction in the nicotine yield of the cigarette)	Lacks sufficient evidence ^{192,217}
Relaxation and physiological feedback	Lacks sufficient evidence ^{192,217}

include self-help material and self-help groups.

Self-help material: Written manuals are the most common forms of self-help material, although computer and video versions are also available. The major goals of self-help materials are to increase motivation and impart cessation. Self-help materials are effective in patients who are less nicotine dependent and more motivated. However, without additional contact or support, the impact of these materials is debatable and their use is advised as part of a behavioural therapy programme.^{216,218}

Self-help groups: These mostly operate on the principles laid down by the world's largest self-help group, i.e. the Alcoholics Anonymous (AA). Several organizations such as Nicotine Anonymous have outlined how to apply the 12-step model to smoking. The aim is to have the smoker accept that he or she is powerless to stop smoking and work through 12 goals (or steps) that help break denial. Though there are no scientific tests for the 12-step programme for smoking cessation, it can be a useful adjunct to other psychosocial treatments.

Other non-pharmacological therapies

Hypnotherapy has been used for tobacco cessation but reports on its efficacy are conflicting, mainly because of methodological issues. It is still under evaluation as a promising therapy.²¹⁶

High-intensity exercise regimens seem to be helpful in tobacco cessation by increasing self-esteem, relieving stress, managing weight gain and improving health. Recent findings on high-intensity exercise regimens suggest positive outcomes, but these still need to be evaluated for sufficient evidence.^{210,219,220}

Pharmacotherapy

Current recommended pharmacotherapy for nicotine cessation consists of nicotine replacement therapy (NRT) and the use of the atypical antidepressant bupropion. These

treatments emerged primarily for smoking cessation, but are now also being used for smokeless tobacco cessation.

Extensive randomized, double-blind, placebo-controlled clinical trials have established the efficacy and safety of NRTs and bupropion in the treatment of nicotine dependence, by increasing the quit rates by approximately 1.5–2-fold, irrespective of the setting.²²¹ The effectiveness of NRTs appears to be largely independent of the intensity of additional support provided to the smoker. Since all the trials of NRT reported so far have included at least some form of brief advice to the smoker, this represents the minimum which should be offered to ensure its effectiveness. Provision of more intense levels of support, although beneficial in facilitating the likelihood of quitting, is not essential to the success of NRT. There is promising evidence that bupropion may be more effective than NRT (either alone or in combination).

Nicotine replacement therapies

These are the most commonly used agents for quitting tobacco use. Products include nicotine gums, nicotine patches, nicotine nasal spray, nicotine inhalers and nicotine lozenges. Details of the dosages are summarized in Table 7.13. Nicotine gum is an over-the-counter replacement product and is available in a strength of 2 mg. The dose of gum depends upon the smoking intensity of the quitter. It is associated with a quit rate of about 23% as against 13% with placebo. In one randomized controlled trial, compliance was highest for the patch (82%) compared with the gum (38%), the spray (15%) and the inhaler (11%).²²² Nicotine patches and nicotine-containing chewing gums are not available as licenced NRT products in India.

One important guideline is to advise the patient to set the TQD before starting NRT. All NRT formulations have demonstrated superior efficacy in placebo-controlled clinical trials, with an odds ratio of 1.5–2.5 at both end-of-trial and long-term (6- and 12-month) assessments.^{223,224}

Non-nicotine pharmacotherapy

Bupropion, the phenylaminoketone atypical antidepressant in the sustained-release form, was the first agent used in non-nicotine pharmacotherapy for tobacco cessation, and is now considered a first-line treatment for nicotine dependence. A meta-analysis of two placebo trials of bupropion demonstrated its superiority over placebo, with the estimated odds ratio of 2.1 (95% confidence interval).²⁰² Nortriptyline, a tricyclic antidepressant, has also been used and found to have similar quit rates as bupropion.

Clonidine, an alpha-2 adrenoceptor antagonist used in opiate and alcohol withdrawal, has also been shown to diminish some of the tobacco withdrawal symptoms. The pooled odds ratio for success in six trials with oral or transdermal clonidine versus placebo was 1.89 (95% confidence interval: 1.30–2.74).²²⁵

Other pharmacological agents used in nicotine cessation programmes include doxepin, the reversible monoamine oxidase (MAO)-A inhibitor moclobemide, the selective MAO-B inhibitor and indirect dopamine (DA) agonist selegiline hydrochloride, 5-HT selective reuptake inhibitors (specific serotonin reuptake

inhibitors [SSRIs]) such as fluoxetine and the 5-HT-1a partial agonist buspirone.²²⁶ The opiate antagonist naltrexone has also been used in some settings. Mecamylamine, a nicotine receptor antagonist, has been tried as an aid to assist smoking cessation, with early trials not showing a positive outcome when used alone, and later studies suggesting a positive outcome on combining it with NRT.²²⁶ Lobeline, a non-tobacco drug that shares tolerance with nicotine on several measures, is available in over-the-counter anti-smoking medications in the US.²²⁶ The definite role of these drugs in tobacco cessation treatments remains to be established.

The future holds other promising agents such as the gamma aminobutyric acid (GABA)-B agonist baclofen, cannabinoid receptor antagonists, glutamate receptor agonists, as well as vaccines. Vaccines, which involve the injection of a nicotine-like hapten conjugated to a strong immunogen, and lead to the production of anti-nicotine antibodies and sequestration of intravascular nicotine after cigarette smoking, are being developed and phase I studies are in progress. These novel treatments may be effective options in both initiating smoking abstinence and preventing relapse.²²⁶

Table 7.13 Pharmacological agents used for tobacco cessation

Agent	Route and dose	Duration	Side-effects	Precautions
Nicotine gum	Buccal route 2 to 4 mg pieces up to 10 times/day	12–16 weeks	Sore mouth	NRT to be used only after TQD
Nicotine patch	Transdermal route 7–22 mg/day	6–12 weeks	Local skin irritation	NRT to be used only after TQD
Nicotine nasal spray	Intranasally 16–32 mg/day	12–24 weeks	Local irritation	NRT to be used only after TQD
Nicotine inhaler	Intranasal or buccal 6–16 mg/day	Up to 24 weeks	Local irritation	NRT to be used only after TQD
Bupropion SR (sustained release)	150 mg o.d. X 3 days, increased to b.d., to begin 1–2 weeks before TQD	7–12 weeks maintaining up to 24 weeks	Insomnia, dry mouth, jitteriness	Contraindications: seizures, eating disorders

NRT: nicotine replacement therapy; TQD: target quit date

Source: Adapted from APA 2004; George and O'Malley 2004^{216,226}

Strategies for effective tobacco control

Various guidelines all emphasize the need for making tobacco cessation services widely accessible to tobacco users.^{191,194,199,227,228} This has several implications for a developing country such as India, where identification rates in clinical settings are low, a negligibly small number of health professionals have received training in these areas, availability and affordability of pharmacotherapy are practical constraints, a sizeable clientele is likely to be rural and, as seen from the experience of the tobacco cessation clinics (TCCs), the acceptance of pharmacotherapy is low. Several urgent steps need to be taken to make tobacco cessation facilities widely available.

Since the problem of tobacco in India is complex, in view of the varied nature of tobacco use, the government has realized that the control of tobacco can effectively be carried out only with a multisectoral approach, involving the various concerned sectors. Strategies for different sectors are being identified for effective tobacco control in the community, which would help in planning the national strategy for tobacco control in India.

Tobacco cessation cannot succeed as an isolated programme. It has to be designed and implemented as part of a comprehensive tobacco control strategy. This must include the preventive, curative and rehabilitative aspects of care. A bold step in this regard is the setting up of TCC but this endeavour must be extended. Capacity-building strategies for the identification and management of tobacco use and disorders related to its use must be made available through the existing health care facilities. There must be a provision for adequate therapeutic interventions, including the availability of replacement therapies for tobacco dependence.

Health care delivery systems

Training medical and other health professionals in tobacco cessation is critical to expand tobacco

cessation activities in the country. In the medical sector, from general practitioners to specialists in different areas, training must address the attitudes to tobacco use, impart the knowledge and skills required for intervention, address the therapeutic nihilism that often surrounds tobacco cessation interventions and provide updates on emerging approaches to tobacco cessation.

Training of health professionals is an essential part of a cost-effective, evidence-based strategy for smoking cessation and treatment of tobacco dependence because of their interaction with smokers and other tobacco consumers as care providers and their role as health communicators in societies.²²⁹ However, health care providers and professionals often lack sufficient motivation to undertake smoking cessation as a means of prevention. Misinformation about effective interventions, inadequate training in all health care settings, lack of support for routine assessment, and lack of resources and government funding are a few of the many factors that impede health care professionals from taking action.

In addition, professional organizations, such as medical organizations and those involving pharmacists, nurses, midwives and dentists, among others, should become involved in the training process at the international, regional, national and local levels. This could include organizing lectures at workshops and publishing articles on smoking cessation in bulletins and journals. They could thus provide basic interventions as well as background materials on smoking cessation relevant to the specific professional groups.

Interventions in diverse settings and for diverse populations

The workplace has a captive population where both tobacco prevention and cessation activities can be undertaken, and better monitoring of the effects of intervention is possible. Tobacco is one of the 'psychosocial' problems (along with stress, alcohol and drugs, violence and HIV/

AIDS) that is comprehensively addressed by the International Labour Organization in the SOLVE (stress, tobacco, alcohol/drugs, violence and HIV/AIDS prevention) programme for workplaces.²³⁰

More often than not, tobacco interventions address mainly men who are smokers. It is important that cessation activities also address chewers, both men and women, as well as women smokers. Other groups such as the elderly, adolescents and patients with psychiatric illness may require special interventions.

Youth tobacco cessation collaboratives for children and teenagers begin with intervention through education. Counselling centres have become important prerequisites in schools and colleges. Education regarding tobacco awareness and cessation should be imparted first to educators for effective prevention of tobacco initiation. School and college science exhibitions today impart knowledge on tobacco along with subjects such as cancer, for the benefit of both the thousands of visitors and the students themselves.

An important strategy for tobacco prevention is an initiative among the students, such as the Students Working Against Tobacco (SWAT) in the US. Student leaders in this group, particularly ex-smokers, are perfect guides for teenagers addicted to tobacco.

Community

Tobacco cessation at the community level is mandatory. Community participation should be fortified through the frequency of public involvement through meetings. Leaders should not only be popular, committed and convincing, but should be able to harness the might of the community members effectively. A counselling centre in every slum is an achievable goal.²³¹

Community awareness and education should be enhanced through the role of public and private agencies, NGOs, the National Service Scheme and National Cadet Corps, and spiritual leaders. As in any other important issue, the cessation

strategy can be implemented in a cross-section of society through a variety of sources. NGOs are a committed force and empowering them for tobacco cessation, even in a limited way, has worked wonders. With the expanding network of NGOs at every district level, the cessation movement should be able to take giant strides.

Quit lines and websites

A toll-free telephone number forms a single access point to the national network of quit lines. Of equal importance in tobacco control is the establishment of quit lines at the national-, state- and local levels. In the US, counsellors have proved more effective than self-help material.

An online guide to tobacco cessation is available through websites such as www.smokefree.gov. Instant messaging with the cessation expert is made available. Cessation guides that can be downloaded should also be of great use to the tobacco user. These websites and guides have been shown to increase the cessation rates by 40%. Similar use of information technology is likely to help at least some sections of tobacco users in India.

Expanding the available approaches

Although nicotine patches were introduced in different parts of India, the exorbitant costs limited the acceptance of this form of treatment. Some pharmaceutical companies introduced bupropion, but withdrew the product because of low demand.

Considerable progress has been made in the provision of effective treatments, both behavioural and pharmacological, for tobacco dependence. It is critically important that a wide range of interventions be used both in general to support tobacco cessation and specifically to support those who wish to quit tobacco use even when medication is not available.²³¹ Social support for quitting should be possible in all countries, even those with extremely limited

resources.²³¹ In the Indian context, research on the role of indigenous systems such as *yoga* and *ayurveda* as cessation therapies or facilitators should be systematically designed and conducted.

According to the United States *Clinical Practice Guidelines*, both social support as part of treatment (intra-treatment social support) and help in securing social support outside of treatment (extra-treatment social support) are especially effective in increasing the rate of quitting. All countries have laypersons who can provide informal social support for quitting and who can be trained to conduct more formal interventions.

In the background of diverse clinical recommendations advocating the combined use of behavioural counselling and pharmacotherapy for tobacco cessation, it is critical to develop systematic, large-scale studies in the Indian context to determine the additive effect

of pharmacotherapy. Alternative ways of using nicotine substitutes, e.g. a gum to handle craving instead of as a complete nicotine replacement strategy, need to be evaluated.

There would appear to be special challenges in countries where there are relatively few ex-smokers and where tobacco prevalence rates are high among health professionals.²³¹ Ex-smokers can serve as role models in encouraging quitting and can provide social support to individuals who are attempting to quit. They may also reflect an environment in which quitting is a greater priority. Attempts must be made to involve such advocates in cessation programmes in India.

The major challenge for India in the twenty-first century is to make early tobacco use cessation treatment available to all tobacco users, evolve treatments that are culturally relevant and appropriately tailored to individuals and the population, and view tobacco cessation in the wider picture of prevention activities.

7.11 INDIVIDUAL INTERVENTIONS: PROMOTING TOBACCO CESSATION

KEY MESSAGES

- Tobacco cessation is an essential component for reducing the mortality and morbidity related to tobacco use, as the lack of it may lead to an additional 160 million global deaths among smokers by 2050.
- Tobacco cessation provides the most immediate benefits of tobacco control and maximizes the advantages for a tobacco user who quits the habit.
- Tobacco cessation services should be made widely accessible to tobacco users and should cater to the wide range of products used in India.
- Capacity-building strategies for the identification and management of tobacco use and disorders related to its use must strengthen the services available through the existing health care facilities.
- Involvement of the community is an essential component of a tobacco cessation programme.

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