

ONCOLOGIST PERSPECTIVE ON TOBACCO CONTROL: HISTORICAL VIEW AND PRACTICAL GUIDELINES

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Abstract

Background: Tobacco use is a major risk factor for multiple health problems including many types of cancer. It is estimated that about third of the cancer cases are attributed to tobacco exposure.

Methods: Review of the literature about tobacco use and its associated risk in cancer development was conducted and summarized in addition to the local experience in tobacco control initiatives and program.

Results: Tobacco is a rising healthcare concern in the region that will lead to significant increase in cancer cases. Various smoking cessation program and interventions are identified in addition to potential roles of physician in combating these deadly habits. Recommendations to the practicing health provider in the region were suggested. Various recommendations about physician roles in this issue were also reviewed.

Conclusion: In spite of its known risk to health, tobacco use remains a growing health concerns. Individual health care providers, organizations, and government need to carry well orchestrated efforts to minimize tobacco associated risks.

Introduction and History

Smoking is a practice where the substance such tobacco is burned and its smoke inhaled, the composition releases the active ingredients such as nicotine making it available for absorption through the lungs.

Smoking evolved in association with a ritual ceremony 7000 years ago originated in Peruvian and Ecuadorian Andes and was found in several ancient civilizations such as Indian, Chinese, Babylonians, Greece, Shamans, Maya and Aztec tribes in South America (1)

Hashishah (cannabis) smoking was known in the Middle East for several hundred years before the arrival of tobacco.

Using water pipe called (hookah) in Urdu language was common practice in the Middle East and the water pipe (Shishah, Argelah) was a major part of wedding gifts in several parts of Middle East especially Iran and Turkey. This habit has spread to other areas during Othman empire.(2,3)

The European adopted the smoking habits subsequent to colonization of the Americas in the 16th century. Jean Nicot, a French diplomat, brought tobacco plant from Portugal to France and introduce it to the high class family of France whom call it Nicotiana plant after his name in 1560. From his name, the word nicotine was derived, tobacco smoking spread from France to England and to the rest of Europe.(4)

Inhalation of substances during the inspiration will deliver the active substances in the smoked materials into the circulation very effectively because the lung contains millions of alveoli and this

route of drug administration is commonly used in the treatment of bronchial asthma and in anesthesia that it is fast and effective but unfortunately this route had been abused by recreation drug abusers.

Tobacco is plant that its leaves processed for the production of smoked tobacco that is used for chewing or sniffing of cigarettes, cigar, pipe and hookah (Sheeshah).

Modern cigarette made of blended shredded tobacco leaf and tobacco dust processed in a steamer refining factories stuffed in side paper like material reconstituted from recycled of tobacco fines. It contains in addition to nicotine several additives such as ammonium, polystyrene foam, glycerol, cocoa, licorice, microorganism (bacteria and fungi from soil), pesticides, carbon dioxide and sugar.

Nicotine in tobacco stimulates chemical reaction in the brain that leads to light feeling of pleasure being similar to natural body substances such as endorphin and dopamine's, contrary to cocaine and heroin which induce deep temporary feeling of pleasure.(5)

Epidemiology of tobacco

More than one billion people smoke tobacco globally, smoking related diseases killed one in 10 adult, every 8 seconds someone dies from tobacco use.

15 billion cigarettes are sold daily that make 10 million cigarettes are sold every minute. Smoking habits is very common all over the world; in Cambodia, China, Korea 67% of men smoke, in Philippines 60% of men smoke, in Japan 51% of men smoke, half of all Malaysian are smokers.(6)

World Health Organization estimated tobacco smoking stratified by gender as depicted in Table 1.

Table 1: Smoking Prevalence by Gender (2000, World Health Organization estimates) (6)

Percent Smoking		
REGION	MEN	WOMEN
Africa	29	4
United States	35	22
Eastern Mediterranean	35	4
Europe	46	26
Southeast Asia	44	4
Western Pacific	60	8

In the United States, smoking rates have dropped from 42% to 20.8% between 1965 to 2006.(7)

Unfortunately, there are no authenticating statistics about tobacco smoking in the Arab world apart from estimated statistics published by a different anti smoking charity organization. United State Census Bureau, International Data Base, 2004, present one of the most valuable data that gave Extrapolated Statistics in absence of solid data in the Arab World about tobacco smoking Table 2.(8)

Table 2: Extrapolated Statistics of smoking in some Arab countries (8)

Country	Estimated Smoker
Egypt	16,974,184
Gaza strip - West Bank	295,472 - 515,398
Iraq	5,658,555
Jordan	1,251,298
Kuwait	503,433

Lebanon	842,319
Libya	1,255,843
Saudi Arabia	5,752,493
Sudan	8,730,039
Syria	4,017,762
United Arab Emirates	562,833
Yemen	4,465,545

The following data was collected from 5 different sources could give impression about the magnitude of smoking in the Islamic world (Table 3)

Table 3 : Smoking facts and figures in some Muslim countries

Country	Population Million	Adult >15%	Youth Prevalence of tobacco use	Adult Prevalence of tobacco smoking males %	Adult Prevalence of tobacco smoking females %	Adult Prevalence of tobacco smoking %	Cigarette consumption (million sticks) Estimation	Year of survey
Albania	3.6	77	NA	39.6	3.9	40.5	NA	2003
Algeria	34	75	13.8	29.9	NA	29.9	21500	2003
Bangladesh	141	64.5	5.8	48.6	25.4	36.8	23000	2004
Bahrain	0.727	74.1	19.9	26.2	2.7	26.1	796	2001
Egypt	83	69.7	12.6	59.3	2.7	29.9	61000	2005
Indonesia	240	72	13.5	63.2	4.5	34.5	185000	2006
Iran	66	79	13	24.1	4.3	14.2	48000	2005
Iraq	29	62	20.3	25.7	1.9	25.8	NA	2006
Jordan	6.3	69	17.2	61.7	7.9	62.7	NA	2002
Kuwait	2.6	74	20.9	30	1.5	15.6	3216	2004
Lebanon	4.01	74	28	29	6.9	29.1	6390	2002
Libya	6.3	67	11.1	55.5	2.5	NA	5560	2003
Malaysia	26	69	NA	43	1.6	26.4	22000	2003
Morocco	35	70	14.5	29.5	0.3	29.5	14700	2006
Oman	3.4	57	15.2	24.8	1	24.7	1776	2000
Pakistan	176	63	10.1	32.4	5.7	19.1	59000	2003
Palastine	3.9	56	39.9	NA	NA	35.4	NA	2005
Qatar	0.83	79	17.9	37	0.5	18.8	864	2005
Saudi Arabia	22	62	15.9	25.6	3.2	25.6	14431	2006
Sudan	41	60	14	23.5	1.5	12.9	1475	2003
Syria	20	64	35.5	50.6	9.9	44	10270	1999
Tunisia	10	78	18.3	61.9	7.7	34.8	11498	2004
Turkey	79	73	8.4	52	17.3	34.6	125000	2003
UAE	4.7	80	24.9	27.2	2.4	26.1	3627	2003
Yemen	24	54	21	77	29	44.5	5040	2006

Sources :

CIA the 2008 world fact book 40

WHO - Global Youth Tobacco Survey (GYTS) 41

Country & Regional Profiles and Economics of Tobacco Briefs 42

WHO Statistical Information System (WHOSIS) 43

Nation Master 44

In Saudi Arabia there are no national data about smoking habits apart from dozens of studies describing smoking practice in universities and schools or smoking habits in health workers which might not describe the smoking problem in Saudi Arabia,

One of the studies based on questionnaires distributed among primary care clinic attendants that showed of 634 subjects, 34.4% (218) were current smokers, 16.4% (104) were ex-smokers, and 49.2% (312) were nonsmokers (10)

Saudi anti smoking charity organization reported that six million smoker smoke 15,000,000 000 cigarette annually costing more than one 1,000,000,000 Saudi Riyal based on import /export customs report, 23,000 person die annually as a direct result of cigarette smoking which means 63 person die on daily basis. Saudi Cancer Registry estimates that one third of cancer patient in Saudi Arabia has smoking as causative agent.(11)

Smoking Risk

(Have you not reason then to be ashamed, and to forbear this filthy noveltie, so basely grounded, so foolishly received and so grossly mistaken in the right use thereof? In your abuse thereof sinning against God, harming your selves both in persons and goods, and raking also thereby the marks and notes of vanity upon you: by the custom thereof making your selves to be wondered at by all foreign civil nations, and by all strangers that come among you, to be scorned and contemned. A custom loathsome to the eye, hateful to the nose, harmful to the brain, dangerous to the lungs, and in the black stinking fume thereof, nearest resembling the horrible Stigian smoke of the pit that is bottomless).

The above quotation had been written more than 400 years ago by King James I of England in counter blasé to tobacco treaties in 1604. (12, 13)

Tobacco smoking is one of the most common preventable health hazards that kill millions of peoples every year more than death caused by AIDS, suicide, murder, fires, accidental poisoning and traffic accidents combined.

There are hundreds of studies correlate tobacco smokings to certain diseases which circulating around three major health problems: cardiovascular diseases, respiratory system diseases and cancer.

The small fine particles that sneak through alveolar wall and exert their effects on the heart and blood vessels. Carbon Monoxide (CO) in tobacco impairs the hemoglobin ability to carry oxygen and the heart compensates for the low oxygen content by pumping more blood which is evident by increasing the heart rate by at least 30 % during smoking.(12)

Smoking increases the platelet production, blood pressure (13), cholesterol and fibrinogen which together increase the risk of thrombi formation, arteriosclerosis and ischemia which could be fatal.

Chronic obstructive pulmonary disease (COPD), defined as the ratio of forced expiratory volume in 1 second (FEV1) to the forced vital capacity (FVC) being <

0.7 and the FEV1 being 50-80% of the expected value, caused mainly by smoking and it is a common cause of death in smokers.(14)

Burning of organic compounds that occur during smoking releases several carcinogenic agents that damage the DNA causing several mutations. These agents contain hydrocarbons and acrolein which are potent carcinogens and as a result of that, smoking is linked to 15 different cancers and causes 30% of cancer related death.

Cancer of lips, oral cavity, larynx, pharynx, lung, pleura, esophagus, breast, stomach, kidney, pancreas, colon, cervix, acute myeloid leukemia and cancer of bladder are well linked to tobacco smoking.

Tobacco smoking contributes to other diseases such as cataracts, gum disease, aortic aneurism, and sudden infant death. It worsens diabetes complications and delay the wound healing.(15)

Second Hand Smoking

Many of 3800 compounds in tobacco smoke are known carcinogens. These compounds unfortunately do not just affect the smoker only but everyone around him who inhale this smoke.

The passive smoker exposed to the side stream smoke emitted from the burning tip of the cigarette. Side stream smoke is hazardous because it contains high concentrations of ammonia, benzene, nicotine, carbon monoxide, and many carcinogens. Nonsmokers chronically exposed to side stream are believed to assume health risks similar to those of a light smoker. Children of parents who smoke have more respiratory infections, more hospitalizations for bronchitis and pneumonia, and a smaller rate of increase in lung function compared to children of parents who do not smoke, particularly during the first year of life. (16)

Secondhand smoking or passive smoking or what is called “environmental tobacco exposure (ETS)” can cause the same problems as direct smoking. It is well known that non-smokers exposed to cigarette smoke in the workplace have an increased lung cancer risk that shown by the meta-analyses published by a Sasco AJ et al where lifelong non smokers with partners who smoke at home have a 20 to 30% greater risk of lung cancer than non-smokers who live with non-smokers.(17)

Boyl P et al published data about non-smokers exposed to cigarette smoke in the workplace that showed increased lung cancer risk of 16 to 19% among non smokers. (18)

Having a spouse who currently smokes was associated with an increased risk of first stroke among never-smokers (hazard ratio=1.42, 95% CI=1.05, 1.93) and former smokers (hazard ratio=1.72, 95% CI=1.33, 2.22). Former smokers married to current smokers had a stroke risk similar to respondents who themselves smoked.(19)

A recent paper from China estimated the burden of diseases in adults from passive tobacco smoking for two major diseases: lung cancer and ischemic heart disease (IHD). It showed that passive smoking caused more than 22,000 lung cancer deaths in 2002 and when the toll of disability is added to that of mortality, passive smoking was responsible for the loss of nearly 230,000 years of healthy life from lung cancer. They estimated approximately 33,800 IHD deaths could be attributable to passive smoking in China in 2002. Passive smoking is also responsible for the loss of more than one quarter of a million years of healthy life from IHD.(20)

These data encouraged the health authority in many countries to implement smoking ban policy

Smoking Cessation Benefits

Smoking cessation is associated with important benefits such as improved lung function and a better general health and performance status. It might lead to longer survival and reduced complications of radiation therapy in lung cancer patient.(21)

Costa F. et al tried to answer the question whether smoking cessation is worthwhile in patients with lung cancer as a common theme among patients that it “may be it is not worthwhile” given the bad prognosis. However, Costa found that: “it is worthwhile”.(22)

(Smoking can influence lung cancer in several ways such as promoting relapse and the development of other types of cancer, smoking increases the growth and aggressiveness of tumors, nicotine interacts with the non-neuronal nicotinic-acetylcholine receptors, leading to an increase in VEGF, nitric oxide and prostacyclin, inducing an increase in tumor growth, complicating surgery because smoking increases the surgical risk and postoperative complications, slows wound healing and reduces survival after surgery, interfering with radiotherapy hence the hypoxia induced by carbon monoxide may be responsible for a worse

response to radiotherapy. Smoking also increases the risk of radiation pneumonitis by promoting inflammation and diminishing the mucociliary clearance. As for chemotherapy, smoking interferes with cytochrome P450, accelerating the metabolism of several drugs including some chemotherapeutic agents (taxans, vinorelbine, etoposide, doxorubicin, gefitinib), diminishing their serum levels and their efficacy. It seems by this group of evidence that smoking cessation in lung cancer patients is in fact worthwhile.(22)

Smoking cessation was associated with a decrease in the risks of ischemic stroke, subarachnoid hemorrhage, and MI.(23)

Quitting smoking is associated with a substantial reduction in risk of all-cause mortality among patients with CHD, 36% reduction in crude relative risk (RR) of mortality for patients with CHD who quit compared with those who continued smoking. This risk reduction appears to be consistent regardless of age, sex, index cardiac event, country, and year of study commencement.(24)

Smoking reduction was associated with a significant decrease in the risk of lung cancer. (25)

Song YM, et al reported recently that smoking cessation substantially reduces the risk of smoking-related cancers of the lung, larynx, esophagus, and pancreas, and is the most effective method for reducing the risk of cancer among smokers.(25)

Oral health usually improved after two weeks of tobacco cessation with resolution of smoking related oral lesion with overall improvement of periodontal and oral health.(26)

Smoking Bans and Public Policies

Smoking ban aims at protecting people from the harmful effects of second-hand smoke. Smoking ban policy is important tools in lowering smoking rates and promoting public health in addition lowering health service cost and improves morale and productivity and lower the overall cost of labor in a community.

Effective tobacco control policies include law issuing, bans/restrictions on smoking in public areas and workplaces, increasing taxes on tobacco products, bans on advertising of tobacco products, and warning labels on cigarette boxes.

The World Health Organization had published several policies and laws that helps health authority to implement cigarette smoking ban that helps many country to control the smoking habit and smoking becomes more difficult.

Admissions for heart attacks dropped by 27% in Colorado after 18 months of implementation. Similar results were seen in Ireland, Scotland, UK and Sweden. These results support the smoking ban fans.

The European Union (EU) has been active in tobacco control policy since 1985 when the Milan Council announced its intention to establish a Europe Against Cancer (EAC) Programme. Shortly after the establishment of the EAC, first action plan the European Commission presented its first legislative proposals on tobacco control. Three of these proposals on labeling and maximum tar yields became Directives by 1992. The fourth on tobacco advertising finally became law in 1998 and is currently being transposed into national law in the 15 EU Member States. In 1996 the Commission published a Communication on the future of EU tobacco control and in 1999 at the 2nd European Conference on Tobacco and Health, the Social Affairs Commissioner announced his intention to bring forward further legislative proposals to amend and consolidate existing EU legislation in this sector. This article is intended to present an overview of EU tobacco control legislation from 1970 until 1998 and to look at future options post year 2000.(27)

The smoking ban policies announced in Saudi Arabia on the year 1984 with Royal order banning smoking in all governmental buildings. Unfortunately the implementation of this policy was very weak and people continue smoking breaking the royal order. More than 43 charity organizations started to be active in smoking ban campaign that result of increasing the taxation of cigarettes twice in the last tow decade and community based clinics started to receive smokers seeking help for smoking cessation maneuvers.

Impact of religious rulings (Fatwa) on smoking:

The Qur'an, The holy book of Islam, does not specifically prohibit or denounce smoking directly, but gives behavioral guidance:

“Don't throw yourself into danger by your own hands...” (Surat Al-Bakara 2/195)

“You may eat, drink, but not waste” (Surat Al-A'raf 7/31)

Several Fatwa issued in most of Islamic countries announcing that tobacco smoking is unlawful activity “Haram” (sin) based on understanding of The Holy Quran that stated in Surat Al Araf : (The Prophet) who will enjoin upon them the doing of what is right, forbid them the doing of what is wrong, make lawful to them the good things of life, prohibit for them the evil things, and lift from them their burdens and the shackles that were (previously) upon them.(28)

Smoking spoils a person's acts of worship and reduces their rewards, it spoils the prayer, which is the pillar of Islam. Allah's Messenger said: Whoever eats garlic or onion let him avoid us and our masjid, and stay in his home. The angels are surely hurt by things that hurt the human beings.(29)

But although claimed that Islamic rules helped in smoking cessation program especially in Ramadan where the smoking is unlawful during the day time during fasting but few medical studies addressed this issue. One study conducted in University of Southern California, Los Angeles, California, USA. examines religious and cultural influences with adolescents' susceptibility to smoking among Muslim Arab-American adolescents and found religious influence and perceived negative consequences of smoking were protective against ever smoking for both genders (OR=0.7, 95% CI=0.5-0.9; OR=0.8, 95% CI=0.7-0.9, respectively). (30)

Egyptian Smoking Prevention Research Institute conducted a survey in a rural village and two nearby schools in Qalyubia Governorate to assess the knowledge about religious ruling (Fatwa) and its impact on the quit attempts. The results showed that the majority of respondents (81 %) knew about the Fatwa on smoking. 97.3% of all participants thought that smoking is a sin. This indicates a successful outreach program targeting mainly men through mosques.

Radwan et al concluded that knowledge about the Fatwa on smoking or belief that smoking. is a sin had no significant effect on quit attempts (31) but that definitely depends on personal believes and religious practice and obedience that varies from person to person and from society to other,

In Pakistan, a study tried to see the effect of Islamic practice status of person and correlate that with their smoking habits to see the rule of Islam on prevention of smoking and they found out of the study group 325 (32.5%) were found to be indulged in different kinds of smoking and concluded that Islam has a positive effect on smoking prevention.(32)

Lung cancer prevention programs

Lung cancer prevention programs depend on smoking avoidance. It is well known that cigarette smoking causes lung cancer and therefore smoking avoidance should result in decreased mortality from primary lung cancer.

Nicotine replacement therapies in a form of gum, batch, spray, lozenge help to some extent in smoking-cessation programs and same apply to antidepressant therapy. The choice of therapy should be individualized based on the patient experience, preference and the agent side effects.

The available data indicate that the intervention didn't work for heavy-smokers where the quit rates was not significantly improved but it had improved among light-to-moderate smokers.

Chemoprevention trial did not show promising result and is not yet established in standard clinical practice.

Lung cancer screening for heavy-smokers is not yet established as standard clinical practice because no major benefits of cancer screening in lowering the morbidity or mortality of lung cancer in most of published screening program data.

Smoking cessation programs

Nancy Rigotti had published a practical guidelines for smoking cessation depending on pharmacotherapy and counseling which are the two approaches showing good result. Each is effective by itself, but the two in combination achieve the highest rates of smoking cessation.(33)

Counseling

Counseling about smoking cessation can be delivered effectively in person or by telephone. Group or individual counseling is effective when it is provided by trained counselors and includes repeated contacts over a period of at least four weeks. The efficacy of this approach increases as the amount of time spent with the patient increases. Cognitive behavioral methods form the core of most counseling programs. Typically, smokers learn to identify smoking cues, then use cognitive and behavioral methods to break the link between the cues and smoking. They also learn strategies for coping with stress, managing symptoms of nicotine withdrawal, and once they quit, preventing relapse, such as anticipating tempting situations and rehearsing coping strategies. (33-35)

Smoking-counseling strategies are also summarized in pamphlets and booklets, audiotapes, videotapes, and computer programs. Written self-help material has negligible efficacy when used alone but may augment other interventions. Self-help material is more effective when its content is tailored to an individual patient's specific concerns or readiness to change(33-35)

Table 4: Mechanism of action, common adverse effects, and efficacy in meta-analyses of pharmacotherapy's of current or future use for treating tobacco smoking dependence

Pharmacotherapy	Mechanism of action	Daily Dose	Common adverse Effects	Efficacy
Nicotine patch	Nicotine replacement therapy	14-25 mg , One patch daily for 4 weeks , decreased by 7 mg every 2 weeks for 8 weeks	skin irritation insomnia, vivid dreams Nausea, vomiting, headache, dizziness, cold sweat, pallor, and weakness are all symptoms of an overdose	Almost twice as effective as placebo when used 6-14 weeks at a dose of 14-25 mg (Fiore et al., 2008). ³⁹
Nicotine gum	Nicotine replacement therapy	4-mg gum for 25 or more cigarettes per day and 2-mg gum for less than 25 cigarettes per day. Use should not exceed 24 pieces per day	Burning taste Hiccups Gastrointestinal symptoms, nausea Temporomandibular tenderness Tachycardia	Long-term abstinence rates are increased approximately 50% over placebo (Fiore et al., 2008). ³⁹
Nicotine lozenge	Nicotine replacement therapy	4 mg for those who have their first cigarette within 30 minutes of waking 2 mg for those who have their first cigarette later than 30 minutes after waking.	Mouth pain Hiccups Coughing Heartburn Sore throat Headache	The continuous abstinence rates at 6 months compared to placebo are approximately double (24.2 vs. 14.4 for 2

		1 lozenge every 1 to 2 hours for 6 weeks ; no fewer than 9 per day but no more than 20 per day. Use up to 12 weeks.	Indigestion Nausea Insomnia Irregular heartbeat Nausea, vomiting, headache, dizziness, cold sweat, pallor, and weakness are all symptoms of an overdose.	mg dose and 23.6 vs. 10.2 for 4 mg (Fiore et al, 2008) ³⁹
Nicotine inhaler	Nicotine replacement therapy	1-2 doses per hour increasing as needed. Minimum recommended dosage is 8 doses per day; maximum is 40. (approximately 100 doses per bottle) 3 to 6 months with Gradual reduction	Nasal airway reactions Dyspepsia Nausea, vomiting, headache, dizziness, cold sweat, pallor, and weakness are all symptoms of an overdose. Dependency - 15-20% use longer than recommended; 5% use at a higher dose than recommended	Long-term abstinence rates more approximately doubled when compared to placebo. ³⁹
Nicotine nasal spray	Nicotine replacement therapy	One spray in each nostril (0.5 mg) 1-2 doses /hr , Max 40/day for 3-6 months with gradual reduction.	Nasal irritation, Sneezing ,cough, teary eyes	double the likelihood of long-term quitting than those on placebo (Fiore et al., 2008). ³⁹

Incentives for Smoking Cessation

In recent randomized clinical trial, K Volpp et al found that financial incentives for smoking cessation significantly increased the rates of smoking cessation among 2 matching smoker working in the same company in US where they randomly assigned 878 employees of a multinational company based in the United States to receive information about smoking-cessation programs (442 employees) or to receive information about programs plus financial incentives (436 employees). The financial incentives were \$100 for completion of a smoking-cessation program, \$250 for cessation of smoking within 6 months after study enrollment, as confirmed by a biochemical test, and \$400 for abstinence for an additional 6 months after the initial cessation, as confirmed by a biochemical test.

The incentive group had significantly higher rates of smoking cessation than did the information-only group 9 or 12 months after enrollment (14.7% vs. 5.0%, $P < 0.001$) and 15 or 18 months after enrollment (9.4% vs. 3.6%, $P < 0.001$).⁽³⁷⁾

Role of physicians and health care professionals

Randomized controlled trials conducted in primary care practices demonstrate that a physician's advice to stop smoking increases the rates of smoking cessation among patients by approximately 30 percent.⁽³⁸⁾

Physicians taking care for smokers should document the tobacco-use status of every patient and every patient using tobacco should be offered one or more of the effective smoking cessation treatments that are available. Smokers should be provided with at least one of the effective brief cessation interventions that are available. Strong collaboration with smoking ban charity organizations should be established because they play a major part in the intervention procedures for smoking cessation programs.

Recommendations and Guidelines

Tobacco dependence is a chronic disease requires repeated intervention and multiple attempts to quit. Effective treatments do exist, however, that can significantly increase rates of long-term abstinence.

Fiore M et al had published Updated American Clinical Practice Guidelines that helps physicians dealing with smokers to implement smoking cessation intervention. (39)

- Physicians should document smoking behavior of their patients.
- Clinicians should offer every patient a brief treatment shown to be effective.
- If a smoker is unwilling to make a quit attempt, clinicians should use the motivational treatments to be effective in increasing future quit attempts.
- Clinicians should encourage every patient willing to make a quit attempt to use the counseling treatments and recommended medications.
- Physicians should advise smokers to enroll in cessation programs.
- Counseling and medication are effective when used by themselves for treating tobacco dependence. The combination of counseling and medication are more effective than either alone.
- Two components of counseling are especially effective, practical counseling (problem-solving/skills training); and social support delivered as part of treatment. The clinicians should use these when counseling patients making a quit attempt.
- Smoker should be informed about available pharmaceutical treatment that he can get without a prescription.
- Numerous effective medications are available for tobacco dependence (five nicotine and two non-nicotine) reliably increase long-term smoking abstinence rates: (bupropion SR, nicotine gum, nicotine inhaler, nicotine lozenge, nicotine nasal spray, nicotine patch, varenicline). The clinicians should encourage their use by all patients attempting to quit smoking.
- All health care personnel should be smoking ban advocates.
- Smoking ban policy should be implemented in all health cares facilities.
- Passive smoker should be encouraged to participate in smoking ban campaign.
- Strong relations should be established between healthcare personnel and smoking ban charity organization and they should be supported.

Table 6 summarizes the physician’s roles in combating these deadly habits.

Target	Actions / Recommendations
All patients All smokers	- Inquire about smoking status - Advise about smoking cessation - Assess willingness to quit
Smokers unwilling to quit Smokers willing to quit	- Address the issue with each visit - Counsel about practical steps - Behavior modification - Pharmacotherapy - Referral to smoking cessation program - Arrange follow-up
Office and healthcare organization and personnel	- Declare smoke-free facility - Personnel especially physician should quit smoking and be smoking ban advocates - Make resources and helpful materials available to patients and staff
Society	- Participate in anti-tobacco campaigns and activities - Liaise, cooperate and support anti-tobacco charitable organization - Be an advocate to eliminate tobacco at all possible levels

In Summary

Smoking is a major health problem that cause serious health problems that are potentially preventable. Individual approach to help smoker kick the habits should be coupled with societal efforts to make large scale intervention for tobacco control. Joined efforts among health care professionals, health advocates, public and charitable organization, professional association are needed to combat this deadly habit.

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