

## SMOKING: HEALTH EDUCATION AND PROMOTION IN THE KINGDOM OF SAUDI ARABIA

GAZALA KHAN<sup>1</sup>, ZUBER M, SHAIKH<sup>2</sup> & SOLEIMAN AL-TOWYAN<sup>3</sup>

<sup>1</sup>Associate professor, Indira Institute of Management Science, Nanded, Maharashtra State, India

<sup>2</sup>Research Scholar, Corporate Quality Improvement Manager, Dr. Sulaiman Al-Habib Medical Services Holding Company, Riyadh, Saudi Arabia

<sup>3</sup>Vice President, Hospital Affairs and Quality Assurance, Dr. Sulaiman Al-Habib Medical Services Holding Company, Riyadh, Saudi Arabia

### ABSTRACT

The Kingdom of Saudi Arabia is the birthplace of Islam and Islam prohibits the use of any substance which might harm health. On the basis of number of studies conducted in the Kingdom, the proportion of smokers in Saudi Arabia is nearly 35 to 45% among adult males, 24 % in preparatory schools' male students and 8 % in female students. The social, health and economic burden of tobacco use, costs the Kingdom up to 5 billion Riyals per year (1.3 billion US\$).<sup>1</sup> The Kingdom is the top Arabian tobacco importer with Iran in second place, Jordan third, Turkey fourth, Morocco fifth and Egypt in sixth place, also the Kingdom pays more than 1.7 billion Riyals (453 million US \$) to import tobacco per year. Saudi Arabia is the world's 23<sup>rd</sup> leading consumer of cigarettes despite its small population.<sup>2</sup> More than 15 billion cigarettes worth US \$ 1.3 billion are smoked by Saudis per year,<sup>3</sup> and estimated 23,000 deaths per year in the Kingdom due to smoking. Apart from these huge deaths related to smoking, the major population of the Kingdom is suffering from the consequences of smoking or smoking related diseases like cancers, cardiac illnesses, bronchitis, and lung diseases.

### Objective

To study the need and urgency of health education, promotion and awareness among both the genders to reduce the smoking habits in the Kingdom of Saudi Arabia.

### Methodology

It is an observation and review of literature method, in which the primary data was collected by direct observations and secondary data, was collected from the MOH statistical year books, all papers published in english language in national and international relevant journals. The World Health Organization (WHO) and the Center for Disease Control and Prevention (CDC) reports, related government articles, MOH reports on smoking policy, production, trade, industry, and consumption, health promotion, awareness, and education are also reviewed.

### Results

There is lack of health education, awareness and promotion on smoking in the Kingdom of Saudi Arabia.

### Conclusion

Cigarette smoking is an important public health problem in Saudi Arabia. A more intense and comprehensive

tobacco control effort is needed including the health education, promotion and awareness on smoking by the public, private and other sectors, and to reduce the extra burden of cost to treat the smoking related diseases in the Kingdom.

**KEYWORDS:** Kingdom of Saudi Arabia (KSA), Ministry of Health (MOH), Smoking, Tobacco, Health Education, Health Promotion

## **INTRODUCTION**

### **Kingdom of Saudi Arabia**

Saudi Arabia is the birthplace of Islam and home to Islam's two holiest shrines in Mecca and Medina. The modern Saudi state was founded in 1932 by Abd Al-Aziz bin Abd al-Rahman Al Saud (Ibn Saud) after a 30-year campaign to unify most of the Arabian Peninsula. A male descendent of Ibn Saud, his son Abdallah bin Abd al-Aziz, rules the country today as required by the country's 1992 Basic Law. The total area of the Kingdom is 2,149,690 sq km with 4,431 km land boundaries and 2,640 km coastline. The estimated population of the Kingdom was 25,731,776 (includes 5,576,076 non-nationals) in July 2010, with the literacy rate (age 15 years and over can read and write) of total population- 78.8%, male: 84.7% and female: 70.8% (2003 est.). The broadcast media are state-controlled; state-run TV operates 4 networks; Saudi Arabia is a major market for pan-Arab satellite TV broadcasters; state-run radio operates several networks; multiple international broadcasters are available (2007).

### **Definition- Smoking**

Smoking is the inhalation of the smoke of burning tobacco encased in cigarettes, pipes, and cigars. Casual smoking is the act of smoking only occasionally, usually in a social situation or to relieve stress. A smoking habit is a physical addiction to tobacco products. Many health experts now regard habitual smoking as a psychological addiction, too, and one with serious health consequences.

### **Smoking or Tobacco Use**

It is a practice in which a substance, most commonly tobacco or cannabis, is burned and the smoke is tasted or inhaled. This is primarily practiced as a route of administration for recreational drug use, as combustion releases the active substance in drugs such as nicotine and makes them available for absorption through the lungs. It can also be done as a part of rituals, to induce trances and spiritual enlightenment.

The most common method of smoking today is through cigarettes, primarily industrially manufactured but also hand-rolled from loose tobacco and rolling paper. Other smoking implements include pipes, cigars, bidis, hookahs, vaporizers and bongs. A 2007 report states that about 4.9 million people worldwide each year die as a result of smoking.<sup>5</sup>

### **Smoking - Global View**

Cigarette smoking is a major health problem that is responsible for a wide range of preventable health problems throughout the world.<sup>6-10</sup> It is estimated that over the next 20 to 30 years, cigarette smoking will result in 10 million deaths annually on a worldwide basis, of which 70% will occur in developing countries.<sup>11</sup>

### **Smoking Statistics, WHO**

About a third of the male adult global population smokes, smoking related-diseases kill one in 10 adults globally,

or cause four million deaths. By 2030, if current trends continue, smoking will kill one in six people, every eight seconds, someone dies from tobacco use. Smoking is on the rise in the developing world but falling in developed nations. Among Americans, smoking rates shrunk by nearly half in three decades (from the mid-1960s to mid-1990s), falling to 23% of adults by 1997. In the developing world, tobacco consumption is rising by 3.4% per year. About 15 billion cigarettes are sold daily - or 10 million every minute. About 12 times more British people have died from smoking than from World War II.

### **Youth**

Among young teens (aged 13 to 15), about one in five smokes worldwide. Between 80,000 and 100,000 children worldwide start smoking every day - roughly half of whom live in Asia.

### **Health**

Smoking is the single largest preventable cause of disease and premature death. It is a prime factor in heart disease, stroke and chronic lung disease. It can cause cancer of the lungs, larynx, oesophagus, mouth, and bladder, and contributes to cancer of the cervix, pancreas, and kidneys. More than 4,000 toxic or carcinogenic chemicals have been found in tobacco smoke. At least a quarter of all deaths from heart diseases and about three-quarters of world's chronic bronchitis are related to smoking. Smoking-related diseases cost the United States more than \$150 billion a year.

### **Advertising**

The tobacco industry has changed the way it advertises in the last 30 years. Now, only 10% of advertising expenditure goes to print and outdoor advertisements, while more than half goes to promotional allowances and items, such as t-shirts for young people or lighters and key rings. After the entry of foreign multinational tobacco firms into Japan, the Republic of Korea and Thailand, youth and female smoking rose significantly.

### **Women and Tobacco- Women are at Great risk**

Tobacco companies are spending heavily on alluring marketing campaigns that target women. Women are gaining spending power and independence. Therefore, they are more able to afford cigarettes and feel freer to use them.

### **Tobacco Use and Premature Deaths of Women**

Women comprise 20% of the world's 1 billion smokers. Of the more than 5 million people who die each year from tobacco use, approximately 1.5 million are women. If current conditions continue, tobacco use will kill 8 million people each year by 2030, of whom 2.5 million will be women. Three quarters of these deaths would be women in low- and middle- income countries. Each of these deaths would have been avoidable.

### **The Epidemic of Tobacco Use Manifests Itself Differently in Women than in Men**

The tobacco industry dupes many women into believing that smoking is a sign of liberation, and many women wrongly view smoking as a good way of keeping slim. Women who smoke are more likely to experience infertility and delays in conceiving than those who do not. Maternal smoking during pregnancy increases the risks of premature delivery, stillbirth and newborn death and may cause a reduction in breast milk. Evidence shows that women develop lung cancer with lower levels of smoking compared to men, and are more at risk of contracting the (more aggressive) small cell lung

cancer. Women who smoke are at increased risk of developing potentially fatal chronic obstructive pulmonary disease, which includes chronic bronchitis and emphysema. Smoking increases women's risks for many cancers, including cancers of the mouth, pharynx, oesophagus, larynx, bladder, pancreas, kidney and cervix, as well as for acute myeloid leukaemia. There is a possible link between active smoking and premenopausal breast cancer.

### **Smoking: In the Kingdom of Saudi Arabia**

There is lack of data available on smoking in the Kingdom of Saudi Arabia; however few studies had been conducted earlier on smoking and tobacco consumption. Being an Islamic country Kingdom follows all the principles of Islam, and Islam prohibits the use of any substance, which might harm health. This is the reason behind total prohibition of smoking by King Abdul-Aziz in 1926 as being an -Islamic.<sup>14</sup>

There were 34 studies published between 1987 and 2008, which investigated the epidemiology of tobacco use in school students (adolescents), university students (young adults), adults and other population groups in Saudi Arabia.<sup>15-48</sup>

The Kingdom imports around 45,000 tons of tobacco to the value of SR1.7 billion for local consumption. More than 600,000 school students in the Kingdom under the age of 22 smoke. It was also found that the majority of students who smoke do so due to peer pressure, seeing fathers smoke, and frustration on account of parental neglect. The Kingdom joined the anti-tobacco agreement in May 2005. Saudi Arabia ranks fourth among world countries in tobacco imports and consumption.<sup>49</sup>

### **Types of Tobacco**

Tobacco is used in many ways. It can be measured in terms of the weight of imports. The most important tobacco types are jirak (for the hookah or shisha), cigarettes, and shag (for roll-your-own cigarettes). According to the GYTS (The Global Youth Tobacco Survey) in Saudi Arabia, 11% of adolescents currently smoke cigarettes, and 13% currently use some forms of tobacco.<sup>50</sup>

*The Global Youth Tobacco Survey (GYTS), is a school survey* which was initiated by the WHO, CDC, and the Canadian public health association in 1999. The survey includes questions related to prevalence of current smoking, use of other tobacco products, attitudes of students to smoking, passive smoking, and school curricula on prevention and treatment of smoking. The GYTS in Saudi Arabia was conducted on male students in standards 7 and 8 in 2001. According to the GYTS, 34.5% of students had, at sometime smoked cigarettes, but only 20% were using a tobacco product. These findings are in keeping with the worldwide data, which indicate that nearly 2 of every 10 students reported currently using a tobacco product. Also, according to the GYTS in Saudi Arabia, 11% of adolescents currently smoke cigarettes, and 13% currently use some forms of tobacco.<sup>50</sup>

In a recent study among female university students in Jeddah, the prevalence of cigarettes smoking was 5% while 8.7% were users of water pipe (Shisha) and other tobacco products.<sup>51</sup> Another recent study in Riyadh found that 70% of female medical students were smoking shisha.<sup>52</sup> While in male medical students, 44% were smoking shisha, and 24% were smoking both shisha and cigarettes.<sup>53</sup> Many people believe that shisha is less harmful than cigarettes, although accumulating evidence suggests that shisha smoking may be as addictive as other forms of tobacco use, and may carry similar or greater risks to health.<sup>54</sup> These findings suggest that tobacco-control programs must address all forms of tobacco use, not just cigarettes.

### **Tobacco Control Program**

In 2005, Saudi Arabia ratified the world health organization's Framework Convention on Tobacco Control, the 65th country to do so. As a ratifying nation it will ban tobacco advertising, take measures to protect nonsmokers from second hand smoke, increase the cost of tobacco products, and make efforts to stop tobacco smuggling. The framework aims at preventing children from smoking and to help adults to stop the habit. The Gulf Cooperation Council proposed certain measures in 1987 to be implemented by all Gulf States. These measures include limits on tar and nicotine levels and a health warning that smoking is the main cause of lung and heart diseases to be printed on cigarette packets. It also proposed that import duties on cigarettes be increased from 30-50%, that the import of chewing tobacco be banned, and the imposition of curbs on the advertisement and promotion of cigarettes. In addition, designing sweets to look like cigarettes or cigarette packets to promote smoking is banned.<sup>55</sup> The Saudi national multi-sectoral committee adopted a national tobacco control program. This program includes estimating the epidemiology of smoking (prevalence, consumption, economy, and morbidity) and the primary and secondary prevention. With respect to legislation, there are many policies of banning smoking in health and educational facilities and public transportation, of banning media advertisement, of banning sponsorship of sports events and of raising taxes and cost of tobacco products.<sup>56</sup>

### **Tobacco Control Program-Limitations and Obstacles**

The limitations include the lack of research encouragement, lack of protection of passive smoking rights, lack of banning sales to minors, and lack of smoking bans in closed places, lack of health education, lack of awareness. The obstacles include the lack of human resources experienced in tobacco control, lack of financial resources, lack of a comprehensive national plan, and absence of Non- Government Organizations and civil society groups interested in tobacco control.<sup>56</sup>

### **Health Education and Awareness**

Primary and secondary prevention programs are applied in Saudi Arabia through schools and media. According to the GYTS in Saudi Arabia, 7 of 10 students saw anti-smoking media messages in the past 30 days. Students had been taught in class, during the past year, of the dangers of smoking (54%), reasons why people their age smoke (47%), and the effects of tobacco use (49.5%).<sup>57</sup> However, there is a lack of a comprehensive national prevention program.

The MOH had launched a nationwide anti-smoking campaign in 2010 Ramadan to control the smoking in the holy month of Islam.<sup>58</sup> In the King Saud University, a International Symposium was organized on "Women and Smoking" with the aim King Saud University- Smoke –Free by the year 1432 project and calls for the ban on smoking in the Arab World.<sup>59</sup> Along with 140 countries, Saudi Arabia had a meeting in Bangkok, Thailand in 2007 to discuss the tobacco regulations in the member countries and to strengthen their tobacco control programs and practices through indoor smoking bans, comprehensive tobacco advertising bans and strict regulations of tobacco products.<sup>60</sup>

Saudi Arabia bans smoking at all Airports, the ban will be enforced at other airports in the kingdom gradually, where culprits will pay a 200 Saudi riyal fine (around \$53), special rooms for smoking will be set up in airports. Local statistics showed that Saudi smokers spend 8 billion Saudi Riyals on Cigarettes every year (2009).<sup>61</sup>

### **Costs, Burdens and Economic Consequences of Tobacco Commerce in Kingdom of Saudi Arabia**

Although, the supporting procedures to stand against tobacco spread, including signing on the " FCTC" and

increasing custom costs and also building up Tobacco Control associations and others, but the Kingdom still in need to huge efforts to get near to what a lot of developed countries have done in achieving continuous yearly reduction in tobacco use inside their lands, and may also need Extraordinary efforts to stand against the yearly increasing demands on tobacco.

The Kingdom of Saudi Arabia has moved from position number 52 internationally to be one of the biggest 10 countries in the world in its expenditure on tobacco products, In last few years, the increment in tobacco use in Saudi Arabia has exceeded most of the world countries , in year 2004, the increment was 13 % and it was elevated in the previous year by 12 % and it reached unprecedented number in year 2002 with increment up to 33 % in comparison with the previous year, where the tobacco products use in Saudi Arabia for year 2004 exceeded 1.5 billion Riyal (400 million US\$), in spite of the contraband tobacco, that was estimated by FAO and other international organizations and the American ministry of agriculture to be about 30 % from the international tobacco trade.

### The Economic loses of Saudi Arabia

With the scarcity of studies and international specialized research, the economic loses and burdens resulted from tobacco, according to a study done by the Malaysian national toxicology centre, the economic loses of Saudi Arabia due to productivity waste and premature deaths due to tobacco from 1961 – 2004 nearly 83 billion Riyals (22.1 billion US\$), as well as 594000 premature death case due to disease due to smoking as Laryngeal and lung cancer, renal tumors, and cardiovascular diseases.

Lose in waste may increase to 104 billion Riyals (27.7 billion US\$), and 743000 deaths if we add to it the tobacco smuggled and exported to the Kingdom, according to global rates.

**Table 4: Estimates of the Saudi Economic Burden of Tobacco Use from Year 2005 To 2010**

Annual Increment With 10 %						
Year	Weight 1000 Ton	Losses In Billion Riyals	Imports Billion Riyals	Smuggling Billion Riyals	Total Billion Riyals	Death 1000 /Persons
2005	35	3194	1701	425	5321	23
2006	39	3514	1871	468	5853	25
2007	43	3865	2058	515	6438	28
2008	47	4252	2264	566	7082	30
2009	52	4677	2491	623	7790	33
<b>Total</b>	<b>57</b>	<b>5145</b>	<b>2740</b>	<b>685</b>	<b>8569</b>	<b>37</b>

**Table 4** depicts that in the period between 2005–2010, the estimated economic burden of the Kingdom due to productivity waste and premature deaths is nearly 25 billion Riyal, Also the official income from tobacco products is estimated to be about 13 billion Riyals, Also the Smuggling is estimated to be 3 billion Riyals, with total economic lose about 31 billion Riyal, And the premature deaths in the same period estimated to be 177000 deaths, this is on yearly increment of 10 %, noting that the historical increment exceeded this. On the personal level, the average expenditure of the smoker to buy tobacco in Saudi Arabia reached about 763 Riyal annually according to the equation of the International bank to estimate harms caused by smoking, while the personal average total expenditure burden yearly is about 1.505 Riyals.

## Infrastructure for Tobacco Control, National (KSA) Tobacco Control Provisions

Table 1: Tobacco Bans &amp; Restrictions

Tobacco Bans & Restrictions	Banned	Restricted	Not Regulated	Unknown
Advertising in certain media	X			
Advertising to certain audience	X			
Advertising in certain locations	X			
Advertisement content or design	N/A			
Sponsorship or promotion for certain audience	X			
Sponsorship advertising of events	X			
Brand stretching				X
Sales to minors			X	
Sales by minors				X
Place of sales				X
Vending machines				X
Free products	X			
Single cigarette sales				X
Misleading information on packaging				X
Smoking in government buildings (incl. worksites)	X			
Smoking in private worksites				X
Smoking in educational facilities	X			
Smoking in healthcare facilities	X			
Smoking on buses	X			
Smoking on trains	X			
Smoking in taxis	X			
Smoking on ferries	X			
Smoking on domestic flights	X			
Smoking on international flights				X
Smoking in restaurants				X
Smoking in nightclubs and bars				X
Smoking in other public places		X		

As per the table number -1, the MOH has banned the smoking in all government buildings, educational facilities, healthcare facilities, buses, trains, taxis, flights, airports, and ferries but we observed in our study that there is very poor

implementation, lack of monitoring, lack of awareness and lack of health education in all these areas.

**Table 2: Tobacco Requirements and Regulations**

<b>Tobacco Requirements And Regulations</b>	<b>Required</b>	<b>Regulated</b>	<b>Not Regulated</b>	<b>Unknown</b>
Advertising health warnings/ messages	N/A			
Age verification for sales				X
Manufacturing licenses				X
Packaging health warning/ message	X			
Label design on packaging		X		
Ingredient / constituent information on package label	X			
Amount of tar		X		
Amount of nicotine		X		
Amount of other ingredients/ constituents		X		
Product constituents as confidential information				X
Product constituents as public information				X
Constituent disclosure by brand				X
Constituent disclosure in the aggregate				X

Table 2 shows that there is no data available on Tobacco Requirements and Regulations in the Kingdom of Saudi Arabia.

**Table 3: Other Provisions**

<b>Other Provisions</b>	<b>Yes</b>	<b>No</b>	<b>Unknown</b>
National Tobacco Control Committee	X		
Tobacco control education/ promotion			X
Anti-smuggling provisions			X
Litigation enabling provisions			X

Table 3 depicts that there is no information on Tobacco control education/ promotion, anti-smuggling provisions and litigation enabling provisions.

## **DISCUSSIONS AND CONCLUSIONS**

Cigarette smoking is an important public health problem in Saudi Arabia. A more intense and comprehensive tobacco control effort is needed including the health education, promotion and awareness on smoking in both the genders by the public, private and other sectors, and to reduce the extra burden of cost to treat the smoking related diseases in the Kingdom of Saudi Arabia.

The MOH should increase the Smoking Clinics to cover the large smoking population of the Kingdom. The Smoking prevention programs should stress on health education, promotion, awareness and prohibition of smoking by Islam and modern medicine due to religious and health reasons, which are the most important protective factors and the

most important motivation for quitting smoking.

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