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Side Effects of Using Shisha on the Human's Health: A Systematic Review

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Abstract

Smoking has been a tradition in South Asia in the form of Hookah, which was invented during the reign of Akbar the Great. After that when the industries spread in all over the world the cigarettes were invented. The cigar and cigarettes were the most common methods of smoking in Caribbean, Mexico, South and Central America. In the American areas, various plant covers were used in cigarettes but in 17th century maize wrappers were introduced when it was brought back to Spain. By year 1830, the cigarette crossed into France while in 1845, the monopoly of French state started to manufacture the cigarettes. In the history of Pakistan, many brands of cigarettes were introduced and sold in the market. The *K2* and *Hathora* cigarettes remained very famous in the country and mostly used by the labourers. In British India, Imperial Tobacco Company was established in 1905 but it started its business as Pakistan Tobacco Company in 1947 just after the partition of united India. It was listed as public company in Karachi Stock Exchange in 1956. It is involved from cultivation of tobacco to producing and distribution of cigarettes. Now it is working in Jhelum and Akora Khattak near Nowshera. Now in Pakistan, 48 tobacco companies are working. On the other hand, our young generation has shifted from cigarette to shisha smoking that is many times more harmful for the human health. In this study, the authors have tried to review the available literature regarding the harmful impact of shisha smoking on the human health.

Keywords: Smoking, Shisha, Cigarette, Cancer, Addictive, Alcohol.

Introduction

Hookah is very old type of smoking and in older time hookah was not cause any kind of problem for the people. In 1980s, in north America and western Europe there was two different terms used for environmental tobacco smoke and second hand smoke, both terms contains same meanings. After many alternation hookah is becoming fashion nowadays (Chaouchi, 2009). Hookah has many names and types and more than one hundred million people use it in the world. Apart from this, nowadays it is become global wave. Nevertheless information about the consequences, shisha smoking as still debatable as well. Beginning of hookah is unexplained and notorious. Narghile framework and groundwork based on tobacco with some variations and modernization nowadays people used to make it and known it as shisha throughout the world. In hookah, shisha, and narghile composition is the same through pipe smoker sucked it and then bubble up through the water into the air of the smoke. Consequences of both sections are that shisha

effects human health as a whole and it is epidemic as well. Water pipe has toxic nature and really its toxicity effects human health (Saad, 2009).

The trend of shisha smoking has spread rapidly. Kumar and others (2016) conducted their research on the medical and pharmacy students and concluded that Shisha smoking is obtaining more and more attractiveness and reputation in Pakistan like other countries of the world. The main reason of choosing this method of smoking by the young generation is their wrong belief that shisha is not as harmful to health as cigarette smoking. In 2002, in Pakistan, the Ministry of Health issued an ordinance through which public smoking was totally banned. Unfortunately, the implementation of this law was not properly enforced. The common people continued to compromise to perform illegal activity by using shisha smoking as an activity for recreation. Shisha smoking campaigns remained continue at a national level with vigorous marketing at public places.

According to Shah and Siddiqui (2015) highlighted that smoking remains to be a major public health issue in Pakistan. The occurrence in teenagers and healthcare experts is alarming. Passable actions like anti-smoking training need to be in place to control this issue. Smoking remains a major actor in illness and death worldwide.

Method

The study is a systematic review regarding the side effects of using shisha on the human's health and the most relevant studies were selected in this regards. All the relevant studies published in national and international journals are included in this study by the authors.

Objectives

The objectives of the study are as under:

1. To find out the side effects of shisha smoking on human health
2. To find out the trend of shisha smoking habits among the young generation in Pakistan and recommend the solutions to control the issue.

Systematic Review

Rizvi, Naz, and Zehra (2019) described that over the years, smoking has become a serious issue all over the world. The habit of tobacco smoking in its various forms including cigarette etc. has become a public practice of people at every stage of the life. It is the matter of concern that the students nowadays are more inclined towards not only the smoking but also drug abuse. The intake of tobacco in Pakistan is high reaching up to 40.9 percent among middle-aged males of the society. Butt (2014) stated that it is believe of many people that shisha smoking is not an addictive to water usage in hookah or shisha and it can absorb the nicotine. The concept is imaginary and not scientific because only a small amount of nicotine may be absorbed in water while enough quantity of nicotine enters their blood that makes them addictive.

Shisha smoking also known as hookah smoking, started in the Far East and that spread throughout the world. The consequences of smoking shisha can be very dangerous and hazardous to the health of the user. A shisha is a water pipe filled with tobacco, but shisha is also the name of the fruity tobacco that is smoked. Smoking shisha is thought not as harmful as smoking a cigarette, but to the contrary, shisha smoking is more damaging to the human body than cigarettes. There are a full range of health risks connected with shisha smoking. A shisha is made up of four sectional parts. There is a base, which is in some measure filled with water, a bowl that holds the tobacco, and a hose and pipe used for inhaling the smoke. Shisha is very dangerous to the user, because it allows the smoker to inhale a much greater volume of smoke, much more than they could from cigarettes. Shisha smoke is filled with dangerous toxins like, carbon monoxide, tar, nicotine and other chemicals that are usually found in cigarettes. One of the most serious health concerns involved with smoking shisha is cancer. The chance of developing some form of cancer increases by 50% and the main cancers associated with smoking Shisha is lung, mouth, and throat cancers. Shisha smoking has also been linked to an increased chance of developing gum disease. Emphysema, asthma, lung disease, low sperm count and other health problems have been linked to smoking Shisha. Smokers of

Shisha have a 25% reduction in their lungs ability to absorb oxygen.

The action of smoking Shisha is profoundly detrimental. Shisha smokers have an increased chance of becoming addicts. Shisha smoking can which increases the chance of developing one of the above named diseases. The spread of communicable diseases is related with the sharing of hookah pipes. Saliva passed on from one infected individual, to a non-infected individual through an unwashed mouthpiece can spread common illnesses like the flu and cold virus. Children are especially vulnerable to the actions of those smoking shisha, and more apt to developed and suffer from asthma, and crib death. It has been reported that in the eastern countries children as young as seven have been observed smoking shisha.

Miller (2008) stated in his research that shisha smoking is increase among college students and other young people smoking from a hookah is raising public health concerns. The centuries-old tradition of smoking from a hookah, or water pipe, is widely perceived to be less harmful and addictive than smoking cigarettes or other forms of tobacco. Yet a number of studies suggest that hookah smoking may be just as addictive and perhaps even more harmful because of the way people smoke while using a water pipe. Researchers have found that hookah smokers inhale more often and for longer periods than typical cigarette smokers do. Scientists estimate that by puffing longer and in greater volume, a water pipe smoker inhales the equivalent of 100 cigarettes or more during a single water pipe session. Proponents of hookah smoking argue that it is not necessary to inhale the smoke into the lungs. Instead, they puff as if on a pipe and believe this reduces the health hazards. However, studies indicate that hookah smokers are absorbing high levels of toxins and carcinogens that may contribute to heart disease, lung cancer, and respiratory disease. Although some nicotine is filtered through the water contained at the base of the pipe, scientists conclude that water pipe smokers are still exposed to enough nicotine to become addicted., editor in chief of the *Harvard Mental Health Letter*, suggests that until more is known about how to help hookah smokers quit, clinicians and smokers should be aware of the potential dangers.

Winstanley (2013) has described that Smoking during pregnancy is harmful to the health of both the mother and the unborn child. The 2002 United States Linked Birth/Infant Death Data Set reveals that it remains one of the most prevalent preventable causes of infant death and illness. Women who smoke have a higher risk of spontaneous abortion or miscarriage (the involuntary termination of a pregnancy prior to 20 weeks of gestation). Because many miscarriages occur too early to be recognised and confirmed, and miscarriage can be caused by a number of pre-conditions, exposures or events, spontaneous abortions are difficult to study. However, there is evidence that smoking has a role in promoting miscarriage. Proposed mechanisms include placental insufficiency, chronic reduced oxygen to the fetus, and direct toxic effects of constituents of cigarette smoke. Smoking is associated with a greater likelihood of ectopic pregnancy (the implantation of a fertilised egg occurring outside the uterus, usually in the fallopian tubes). Nicotine slows down the movement of the fertilised ovum in the fallopian tubes, and impairment of oviduct function can lead to ectopic pregnancy. Smokers also have a higher risk of developing pelvic inflammatory disease, which is associated with ectopic pregnancy.

Murnaghan (2009) stated that early initiation of tobacco use is associated with a longer time spent smoking, thus increasing the risk of many tobacco-related diseases. Despite the overwhelming evidence of the harmful effects of smoking, youth smoking rates remain high in Canada. Most smokers (about 80 to 90%) start smoking while at school and rates of smoking increase from youth to young adulthood. According to the 2006 Canadian Tobacco Use Monitoring Survey, nationwide 15% of 15- to 19-year-olds and 27.3% of 20- to 24-year-olds were current smokers, while in the province of Prince Edward Island (PEI), 14% of 15- to 19-year-olds and 31% of 20- to 24-year-olds were current smokers⁷. Moreover, the increasing use of tobacco by youth in PEI schools was reported to range from a low of 3% of grade seven students to a high of 24% of grade students. This increase in the smoking behaviour of youth as they transition through high school represents a real

health concern. A strong body of literature supports the influence of family (parents and siblings), “popular kids”, close friends and the school environment on youth smoking behaviour. Previous studies have shown that, while school-based interventions may increase knowledge about the effects on health of tobacco, they have had limited impact on tobacco-control efforts with youth.¹⁶⁻¹⁹ School-based prevention programs can be improved when they are combined with intensive community-based interventions, and home supports such as parental supervision. School-level tobacco-control policies may contribute to youths’ decisions not to smoke.

Students spend about 25 hours each week in school during which time they could be continually exposed to programs, policies and peer group activities to reduce or prevent tobacco use. Understanding how these different social and school influences may either support or inhibit tobacco use may contribute to a better understanding of the roles of schools in tobacco control. This study was a part of a comprehensive tobacco preventive initiative called the Prince Edward Island Tobacco Reduction Alliance (PETRA) that was officially launched in the fall of 1998. Between 1999 and 2001, PEI introduced a province wide initiative to implement both school-based policies banning smoking on school grounds and school-based smoking prevention programming phased in over a three-year period in all schools. During this time, PETRA also continued to work towards enforcement of banning smoking in public places such as restaurants, bars, shopping centres and work places and enhancing tobacco control initiatives across the province.

Stevens (2003) stated that in addition to tobacco use among adolescents, a second critical problem is tobacco use among pregnant women. Cigarette smoking is associated with increased rates of infant mortality and puts infants at risk for sudden infant death syndrome (SIDS), poor lung function, asthma, and respiratory infections. As such, nearly every prenatal care program addresses the use of tobacco in pregnancy. While the number of women smoking during pregnancy has decreased, smoking prevalence among pregnant women still exceeds the Healthy People 2000

objective to reduce smoking by pregnant women to 10 percent. U.S. birth certificate data in 1997 show that 13.2 percent of women giving birth reported that they smoked during pregnancy. Of particular concern is evidence suggesting that smoking rates among rural pregnant women remains higher than smoking rates among urban pregnant women. For example, reports from the Arizona Department of Health indicate that, in 1999, rural mothers were more likely to smoke than urban mothers were. Disparities exist in progress against smoking as well. In Missouri, the greatest reductions in smoking during pregnancy and in heavy smoking during pregnancy occurred in women living in metropolitan statistical areas (MSAs) rather than in women living in rural settings. For pregnant women in urban areas, the rate of smoking was 20.5 percent in 1992 and dropped to 17.4 percent by 1997. During the same period, the rate of smoking among pregnant women in non-MSAs was less significant, dropping from 25.7 percent in 1992 to 25 percent in 1997.

Mackenzie (2008) stated in his report that shisha smoking has become popular in many places, from Pakistan to London. Smoking shisha involves inhaling the smoke of a fruit-scented tobacco mixture from a water pipe. Many people view it as an alternative to hard drugs and believe it is a harmless way to smoke and socialize, according to an article by the United Nations' Humanitarian News and Analysis (IRIN). Doctors warn, however, that shisha smoking is worse than smoking cigarettes. Typical shisha smoke from just a one pipe has the equivalent of 20 cigarettes' worth of tar and nicotine, according to physician and professor Javaid Khan at Aga Khan University in Pakistan. It also has high levels of carbon monoxide, which can cause people to lose consciousness or suffer brain damage. Participants exhale over twice as much carbon monoxide after a shisha session as cigarette smokers, according to a study by environmental health science chair, woman S. Katharine Hammond at the University of California, Berkeley. Shisha smoke is often laced with drugs, such as alcohol, narcotics and psychoactive drugs. Some of these drugs are more dangerous than the shisha smoke, and hookah lounge owners often ignore laced shisha in their cafes.

Davis (2008) explain that young people go to hookah bars to relax, to socialize with their friends, and to get a unique Middle Eastern cultural experience. Besides hookahs for smoking, hookah bars often sell Middle Eastern coffees, teas and other beverages. Much of the appeal of hookah smoking is the relaxed social atmosphere that accompanies it. Hookah bars provide a comfortable place to hang out for a few hours, and a mild high from the smoke ingested either first or second hand. Recognized as a milder form of smoking, hookah smoking is most commonly regarded as a social activity that lends well to talking, hanging out and relaxing. Hookah goes by a number of names including narghile, shisha, goza, and hubbly-bubbly. A hookah is simply a water pipe that is used to smoke shisha tobacco. It looks somewhat like a bong and consists of four parts: at the top a bowl is filled with tobacco and heated by coals, a pipe connects the bowl to the base which is a jar filled with water, and a hose with a mouthpiece draws smoke out of the hookah up through the water. The tobacco is soaked in molasses or honey and can come in a variety of flavors including apple, strawberry, mint, and cappuccino. Hookah bars may be the most popular public venue for smoking the hookah, but they are not the only scene providing this smoking trend. Hookahs are easily purchased online and hookah parties have become popular among hookah smokers. Hookah parties generally consist of a group of friends and a hookah. Smokers may gather in a home or outdoors and socialize while passing around the hose for a hit. While many hookah bars do not serve alcohol, privately owned hookahs may be filled with alcohol instead of water or may replace tobacco with hashish or marijuana for a stronger high.

It is misconception of the people that shisha is less harmful than the cigarettes. They start aromatic or scented smoking form of hookah or shisha. In America, a newly published journal by American association for cancer research named epidemiology, biomarkers and prevention, which proved that chemical inhaled by the shisha smoking has direct effects on blood and urine of human because it has mix poisonous and toxic materials. Some of the toxic and dangerous

chemicals which are inhaled by human through shisha smoking such as acryl amide damage nervous system, smoke irritant to nose, throat, eyes, benzene caused cancer, carbon monoxide fatigue, chest pain, dizziness, inhibited oxygen intake, blood cells damage by naphthalene (Norris, 2013).

In Kashmir, number of studies has found that there was female smokers of hookah and it was older trend there. Hookah was popular in female as compared to male members. The effects of shisha or hookah on human body is remain debatable issue among the researchers but effects are still common that harmful as cigarettes. Cigarettes and hookah are equally dangerous for human body (Parvaiz, 2011).

Today youth have no awareness and idea about venomous effects of new trend of smoking such as water pipe. Use of tobacco is not new in society but its progress and prosperity is also question mark for scientists and sociologists among youngsters. A biggest global public health threat is tobacco. There are many diseases which are caused by shisha smoking like pulmonary disease, coronary heart disease, and cause complications in pregnancy. In progressive countries, these diseases are common. Shisha smoking is becoming fashion. People of Pakistan adopt it from Middle East and continue it without any awareness and information. In Pakistan, there is dire need of health care professionals and policies and measurements in this regard (Rehman, 2012).

Lee (2011) reported in his magazine Hookah or water pipe smoking-also known as shisha or chicha in other countries is often considered a fun, harmless and lighter version of smoking without the dangers cigarettes pose. Add the inviting social element of going out with friends to charmingly decorated hookah lounges, filled with an array of sweet-smelling aromas, and it is not surprising that hookah smoking has become a rising trend in the U.S., especially among adolescents and the college student. An increasing number of young consumers have become drawn to hookah and have led to believe these misleading safety statements. On the other hand, minors or under 18 are prohibited from buying or smoking hookah, just like cigarettes, laws are not always heavily enforced. In the U.S., hookah typically

involves a water pipe system that uses wood charcoal to burn flavoured tobacco on a piece of foil. As the charcoal burns, smoke passes through the tobacco mixture, then cools as it bubbles through the water before being inhaled through the mouthpiece.

D.R Naq (2012) give details saying that it is the instrument used for smoking flavoured tobacco as an alternative to cigarettes. It is identified in different names with respect to different regions. It is popularly known as "water pipe" in western countries and "shisha" in some of the Asian countries. Hookah originated from India in the age of great Mughal emperor Akbar's rule. A Persian physician, Hakim Abu'l-Fath Gilani in the court of Emperor Akbar, invented it. He passed the smoke from burning tobacco over water to purify and hence cool the smoke generated. Smoking tobacco was famous among most of the noble men before the invention of hookah. Hakim Abu'l-Fath Gilani came from Iran as a physician in Akbar's court. Seeing the condition, he raised concerns on ill effects of smoking tobacco. This is how he invented this noble idea of passing the smoke from tobacco to water to purify. This invention spread like forest fire among most of the noble men of India. That is how hookah became popular. Later, hookah became popular in common people too. Smoking hookah in Arab has become a part of their tradition. It is more used in countries like Syria. It has become a part of one's everyday life. Even the women in Syria have a habit of smoking hookah.

In Pakistan, one can see people offering hookah to their guests. It has become a common thing in households for decoration purposes too. It is most seen in countries like Nepal, Bangladesh, Philippines, South Africa, United States of America and Canada. A session of hookah lasts for at least 40 minutes. A smoke in a session of 40 minutes consumes 150-250 times volume of one cigarette. The experts say the chemical components of smoke from hookah and cigarettes are very different. Moreover, it is no safer than cigarettes as the same tobacco is smoked with added flavours. Hookah smoker inhales more smoke than a cigarette smoker does. The smoke contains Carbon mono oxide (CO), tar, Cancer causing chemicals. A regular hookah smoker may end up suffering from lung or oral cancer and heart diseases.

Bardsley (2009) described that shisha smoking could be 400 to 450 times as harmful as cigarettes. Shisha also tended to increase blood pressure and could increase the risk of heart attacks, he said, as well as cancer. "By using this smoking method, you're inhaling through a pipe and it goes to the inner parts of your lungs," Dr Mahboub said. That would "most likely" expose the smoker to risks of cancer. Shisha smokers in the capital acknowledged there were health risks, but some felt that by limiting their time with the water pipe and even altering the way they used it, they could reduce the harmful effects. A shisha cafe owner in the capital said that while the habit might not be good for health, the same could be said for many daily activities, such as drinking tea or coffee. "If you look at 90 per cent of the products being sold here and consumed, they're bad," he said. "Some people wake up in the morning and have a cup of coffee, some have a cigarette, some a shisha. Shisha is a social activity, it is difficult to tell people they should stop, He said that if people did not over-indulge, they were unlikely to suffer major problems. "It goes through the water, it's a little bit less nicotine or carbon monoxide," he said, adding that he did not believe one shisha pipe was as harmful as five cigarettes., "It's not healthy at all. Like anything with nicotine, it is dangerous for the lungs, for the body, but only for heavy smokers.

WHO (2002) make it clear that smoking of tobacco is practiced worldwide by over one thousand million people. However, while smoking prevalence has declined in many developed countries, it remains high in others and is increasing among women and in developing countries. Between one-fifth and two-thirds of men in most populations smoke. Women's smoking rates vary more widely but rarely equal male rates. Tobacco is most commonly smoked as cigarettes, both manufactured-which are a highly sophisticated nicotine delivery system - and hand-rolled. Pipes, cigars, bidis and other products used to a lesser extent or predominantly in particular regions. Cigarettes are prepared from fine-cut tobaccos, which are wrapped in paper or a maize leaf. Cigars consist of cut tobacco filler formed in a binder leaf and with a wrapper leaf rolled spirally around the bunch. Bidis contain shredded tobacco

wrapped in non-tobacco leaves, usually dried temburni leaves. Lung cancer is the most common cause of death from cancer in the world. The total number of cases is now estimated to be 1.2 million annually and is still increasing. The major cause of lung cancer is tobacco smoking, primarily of cigarettes. In populations with prolonged cigarette use, the proportion of lung cancer cases attributable to cigarette smoking has reached 90%. The duration of smoking is the strongest determinant of lung cancer in smokers. Hence, the earlier the age of starting and the longer the continuation of smoking in adulthood, the greater the risk. Risk of lung cancer also increases in proportion to the numbers of cigarettes smoked.

Nakkash (2011) has described that WTS is not a safe alternative to cigarettes. Studies using a smoking machine to test toxicant yields in lab environments found that water pipe tobacco smoke contains carbon monoxide, polyhydric carbons, formaldehyde, nitrogen, nitric acid, nicotine and other toxicants such as arsenic, chromium, lead and volatile aldehydes. Health risks include in the short-term developing dependence and acute respiratory diseases and lung impairment. Other more serious negative health outcomes include risk of developing cancers, including lung cancer and other chronic diseases such as cardiovascular and respiratory diseases. During pregnancy, water pipe smoking can lead to low fatal birth weight. In addition, exposure to second hand smoke from water pipe smoke poses a serious health risk to non-smokers. Other health risks include the spread of infectious diseases, such as Tuberculosis, due to the sharing of the water pipe among smokers. Despite this knowledge, the health risks of WTS remain largely unrecognized by the lay public. For example, a qualitative study in Syria reported people's views of water pipe smoking as a pleasurable activity among friends with no regard to health consequences.

This research document was related to water pipe smokers as well as non-smokers explanations for the rise in WTS in Lebanon. They suggest motivations reminiscent of the lure of cigarette smoking, and driven by marketing of tobacco products. The increasing prevalence of WTS - particularly among youth have been

documented in countries of Europe and the US. Some of the same reasons stated in Lebanon for the rise of WTS could be playing out in other countries as well. Our results confirm the necessity of implementing the FCTC policies and strategies proposed by MPOWER across countries, and argue for strict inclusion of all tobacco products, including the water pipe. National and international advocacy efforts are clearly needed to stem the water pipe tobacco epidemic in Lebanon, the Arab region, and the world.

The Bacchus Survey (2007) has searched in their report As the smoker inhales, the tobacco smoke is sucked down from the bowl and then bubbles up through the water into the air of the smoke chamber and then through the hose to the smoker. The water in the vase cools the smoke and filters out some of its tar and particulates. At the end of a smoking session, the dirty water is thrown away and the hookah vase refilled for the next user or user's .Most smoking sessions last from 45 to 60 minutes but they can continue for several hours. During the past century hookah use declined as cigarettes became more widely available. Most hookah smokers were elderly and retired men who congregated in bazaar cafes in poor neighbourhoods. Since the 1990s, however, hookah use has rapidly expanded, spreading from the Middle East to other parts of the world including the United States. Major reasons for the growing popularity of hookah use worldwide since the 1990s include the introduction of a flavoured tobacco mix, the mushrooming of hookah establishments, aggressive marketing, and media hype about this new trend, "Introduction of Flavoured Tobacco". In the early 1990s, Egyptian tobacco companies introduced "Maassel", a specially prepared mixture containing sweetened fruit flavours and mild aromatic smoke which has helped to attract new hookah users worldwide.

Taylor (2012) reported that Tobacco has not always received such negative attention, rather its romantic image and economic potential for regulators (for example, taxation) located tobacco as a powerful revenue generator (Ford, 2005). The cultural standing of tobacco and cigarettes around the globe grew and its popularity pleased both governments and emerging tobacco corporations. In the mid-twentieth

century medical sciences raised some concerns over tobacco use and ill health, with conclusive evidence emerging of a link between smoking and lung cancer that was 'chiefly causal in character. The publishing of this evidence was immediately injurious to tobacco companies coupled with the beginning of a campaigning advertisement movement against this multi-million dollar industry since 1967. The response of the tobacco industry was to fund scientific work to refute claims that tobacco smoking was unsafe and more recently it has funded scientists in order to refute claims of the harms caused by 'second-hand' smoking. A plethora of strategies has been adopted over the latter half of the twentieth century and to the present. Smokers have benefitted from medical and psychological developments in the harm reduction agenda such as counselling, pharmaceuticals and nicotine replacement products. Globally, tobacco advertising has gradually been removed from public spaces and strict sanctions have been put in place over point of sale displays. Both deterrence and educational strategies have been adopted with examples such as health warnings on cigarette packaging, dedicated smoking cessation practitioners, a proliferation of nicotine replacement therapies (NRT) (for example, adhesive 'patches' and chewing gum), the development of pharmaceuticals such as Bupropion and more recently, legislative tobacco control.

Ismail (2013) reported that a hookah habit can harm your health, largely due to the many misconceptions about shisha. In worldwide, enthusiasts due to its sweet smell and smooth taste smoke the flavoured tobacco. An American Lung Association study in 2007 showed a worldwide increase in shisha use in recent years, mostly among youths and university students. "Teenagers think shisha is an herbal product, that when they smoke it, no tobacco is inhaled. This is wrong, because the herbal packaging has tobacco". In 2010, the Monitoring the Future survey found that 17% of high school seniors in the United States smoked shisha in the previous year. Studies by the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) to outline the dangers of shisha smoking, which include unclear levels of tobacco content in shisha itself. "By law, registered cigarette

products in Malaysia can only have a certain permissible level of nicotine and tar (Total Aerosol Residue). However, shisha comes in many different packaging, so most of the people know how much tobacco content varies between them.

Recommendations

There is a dire need to address the misunderstandings and false belief regarding the myths of shisha smoking. The young generation including boys and girls of colleges and universities are habitual of shisha smoking and they do it due to fashion. The government should implement the laws while the higher responsibility is of the parents to look after their offspring. On the other hand, the civil society of Pakistan should also perform its responsibility to create awareness among the youngsters. Promotion of healthy activities for our youth is also necessity of time.

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