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SMOKING WATER PIPES (SHISHA) IN SAUDI ARABIA

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ABSTRACT

All in all, there is a need to address the issue of shisha smoking as it is becoming a disturbing habit among the younger generation. This means this generation is faced with one more health threat on top of those already arising due to stressful lifestyles. Ultimately, shisha smoking poses a great risk to all those who partake, but the younger generation are most affected as it is their lives that will be cut short, dramatically affecting the demographics of Saudi Arabia, which is an issue that requires urgent attention due to its impact on various aspects of Saudi society and the economy.

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INTRODUCTION

Water pipes are known by different names in different parts of the world, such as shisha, narghile, hookah and even hubble bubble. However, the concept of a water pipe is the same all over the world. This practice began in the Middle East around 400 years ago, and it is still very popular there, especially in the Arabian Peninsula. In the Eastern Province of Saudi Arabia alone, out of a sample of 196,268, it was found that 33,084 were shisha smokers, which equates to 16.9%. Of these smokers, the prevalence rate among women was calculated at 4.5%, while that of men was 28.7%. Young men between 30 and 40 years of age recorded the highest prevalence (32.5%). However, for women, the highest prevalence (8.5%) was among older women aged over 70 years (Al-Turki *et al.*, 2010). In other research, people below the age of 30 also showed a high prevalence of shisha smoking, especially those in high school. This research was a cross-sectional study that was conducted in the region of Riyadh. It used a random sampling technique on 255 students. This study determined that out of these, 28.6% were already shisha smokers and that 42.2% of them intended to start smoking. The study also revealed that 89% of the students took up the habit well before the age of 15 (Al-Nohair, 2011).

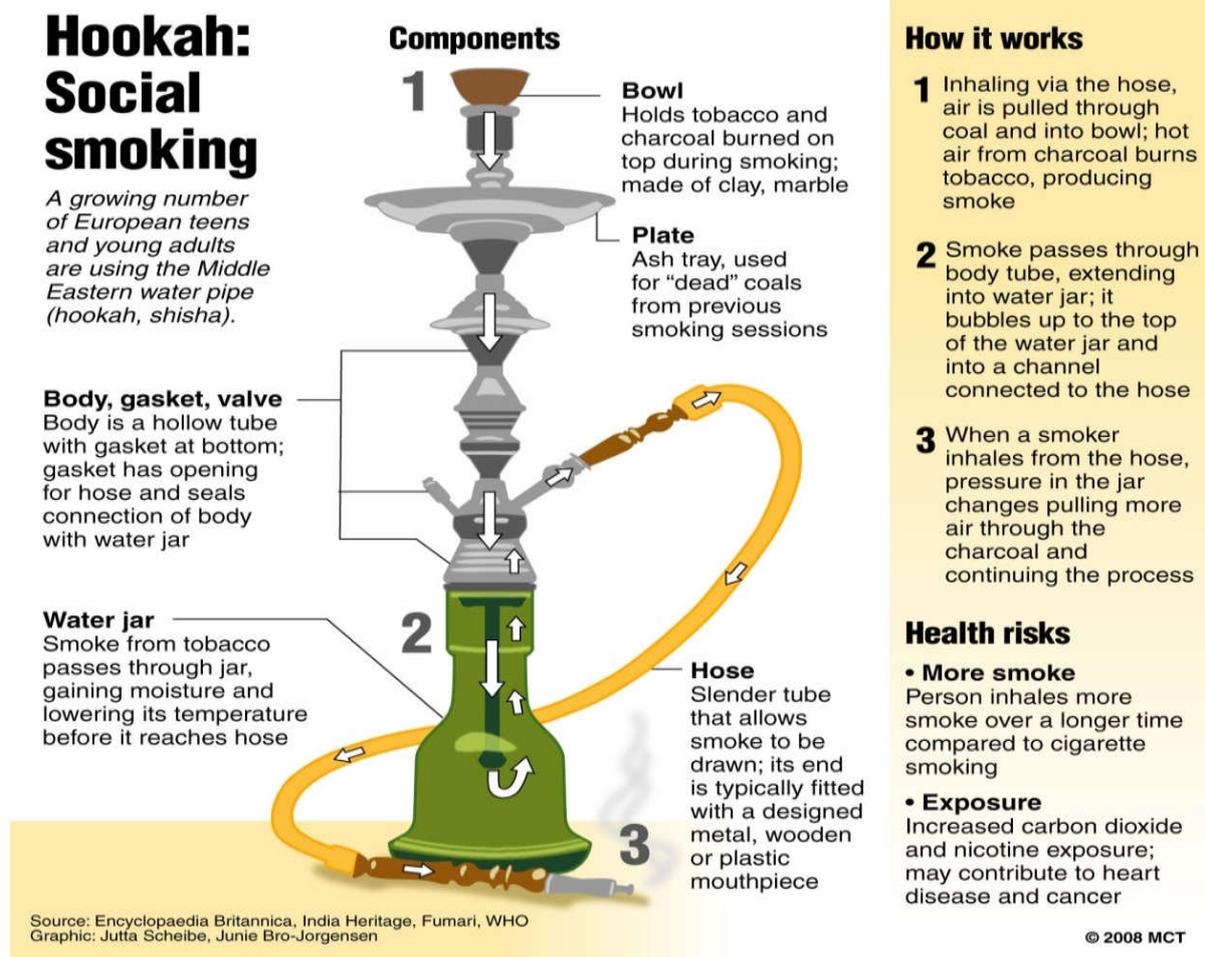
Water pipe smoking involves smoking the tobacco through water in a pipe. This tobacco is often flavoured with fruit and other flavours, such as chocolate mint, orange, honey and white grape (Al-Naggar and Bobryshev, 2012). Water pipe smoking is a very common practice in cafes, bars and restaurants as well as in private homes. It is a social practice and hence a single water pipe is often shared by two or more people. This practice is common amongst young people, both men and women. They actually prefer smoking through water pipes to smoking cigarettes. This is because they believe that water pipe smoking is less harmful than cigarette smoking. However, this perception is completely false, as will be illustrated in this essay (Al-Naggar and Bobryshev, 2012). This essay sets out to evaluate and review the evidence surrounding the smoking of water pipes in Saudi Arabia. This evaluation should help inform the planning of potential intervention programmes aimed at managing this health problem. It will also help to establish effective ways of managing the issue of water pipe smoking and the health problems it leads to. This essay will look at the basic causes of the health problems and the evidence available on these. It will also identify the people involved in water pipe smoking and in the prevention of the same.

Water Pipe Smoking and Health Problems: There is one major misconception surrounding water pipe smoking, which is that water pipe smoking is far less harmful than cigarette

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smoking. This misconception came about due to the fact that the tobacco smoke is first filtered through the water before it gets to the smoker and passing tobacco smoke through water is perceived to purify it, hence making it better and less harmful than cigarette smoke.

smokers are exposed to benzene, carbon monoxide, tar and tobacco and therefore both incur these risks. Benzene exposure is unsafe at any level, and the best way to prevent exposure to benzene is to abolish shisha smoking altogether. Shisha



Source: Mohamud (2014).

This may be true to some small extent because the temperature of the smoke is cooled by the water. However, a person smoking a cigarette will inhale a maximum of 12 puffs, whilst a person smoking through water pipes will inhale a maximum of 200 puffs in a session that last from 20 minutes to one hour. Compared to the cigarette smoker, the water pipe smoker is more like a chain smoker and will therefore take in up to 200% more smoke (Agnihotri and Gaur, 2014). Aside from the amount of smoke that a person inhales from water pipes, there is also another risk from the charcoal used to heat the tobacco. Perforated aluminium foil is placed at the top with the charcoal and is heated, and this heated air goes to the tobacco mixture below the foil. It is this mixture of air, filled with toxic substances from the charcoal, such as tar and carbon monoxide, that is passed through the water and into the smoker. This increases the risk to the individual's health massively (Agnihotri and Gaur, 2014). The health problems associated with smoking shisha are much greater than those brought about by cigarette smoking. The former is far more dangerous than the latter. Tobacco smoking causes various health problems, including high blood cholesterol, diabetes and high blood pressure. It also decreases physical activity and can lead to strokes. Aside from these risks, the inhalation of benzene by water pipe smokers increases the risk of contracting leukaemia. Both smokers and second hand

exposes smokers and non-smokers to numerous health risks, such as dependence on the nicotine in the tobacco, leukaemia from the benzene, cardiovascular disease from carbon monoxide and lung cancer from the other toxic substances (Al-Naggar and Saghir, 2011). Carbon monoxide causes cardiovascular disease by attacking the blood vessels and the blood, reducing the oxygen content that is delivered to the body. As a result, the muscles do not receive enough oxygen to work properly, and this can lead to strokes. Water pipe smokers inhale much more carbon monoxide than cigarette smokers (Bhatti, 2011). The risk of strokes as well as heart disease is thus much higher. According to the World Health Organization (2005), 17.5 million people died of heart disease in 2005. This was an increase from 14.4 million recorded in 1990. Out of this number, 5.7 million were caused by strokes. The high incidence of smoking-related diseases was proved in research on the prevalence of shisha smoking. This survey studied smokers, both men and women, between the ages of 30 and 70 over a five-year period. The sample was drawn from the entire Kingdom of Saudi Arabia. This study determined that the men were more ardent smokers than the women. It also provided evidence that smokers were more likely to develop coronary diseases and other health problems than non-smokers. There was a direct link between the likelihood of developing heart diseases and shisha and cigarette smoking

(Al-Nozha *et al.*, 2009). Another disease associated with water pipe smoking is periodontal disease, which attacks the gums as well as the bones that the teeth are set in. This results in a weak jawbone and eventual loss of the jawbone. This affects cigarette smokers, but water pipe smokers are more severely affected due to the long hours spent smoking. There is also a risk that the use of water pipes by women can lead to premature or still births and to physical and mental impairments in children, in particular hyperactivity-inattention (Cnatingius, 2004; NHS, 2009). Giving birth to physically impaired children. The children born to women who use water pipes are also vulnerable to health problems. AlSwuailam, AlShehri and Al-Sadhan, 2014 state that these children are at an even higher risk of suffering from respiratory diseases and eventually premature death. Second-hand smoke can also bring about asthma conditions for the exposed children. Other diseases associated with water pipe smoking arise from the sharing of the water pipe. These diseases include tuberculosis, hepatitis and viral diseases. However, there is no research evidence on the number of people who contract diseases caused by sharing (AlSwuailam, AlShehri and Al-Sadhan, 2014). Water pipe users are susceptible to nicotine addiction. According to a report by the Smoking Advisory Group at the Royal College of Physicians of London (2000), addiction to nicotine is no different to addiction to heroin and cocaine. However, in 1997, 195,000 people died from smoking related diseases in the UK, while only 255 died as a result of a heroin overdose. Hence, it could be argued that whilst the addiction is the same, the outcomes of tobacco addiction are worse than those of heroin addiction due to the high number of tobacco smokers in the population. There is a widely held belief that the flavours introduced in the tobacco in the shisha cause the nicotine levels to drop due to the smoker inhaling the flavour with the nicotine. However, this has not been scientifically proven. In addition, water pipe users spend close to an hour smoking tobacco. Therefore, the total amount of nicotine they inhale is ten times that contained in a single cigarette. Even if the nicotine levels are lower for water pipe users, the amount of nicotine that they eventually inhale is high enough to cause addiction (Bhatti, 2011).

Second hand smokers are also subject to a range of health problems. This is because they inhale tobacco smoke mixed with the smoke from the burning charcoal. The levels they are exposed to can be even higher than those of the first hand smokers. Water pipe smoking is mostly done in groups. Therefore, the amount of pollution in the air is much more than that in the air of a cigarette smoker. Second hand smokers are usually present in the cafes where others are indulging in shisha smoking. These include the workers at these establishments and the friends who tag along but will not partake in the smoking. Shisha smoking is also done in homes among families. The toxic particles that are present in the charcoal and in the tobacco fill the air and accumulate during the one hour of water pipe smoking. This exposes the second-hand smokers to around four times the toxins and up to thirty times more carbon monoxide than the amount created by a cigarette (Bhatti, 2011). In addition to all the health problems caused by water pipe smoking, there are also a lot of deaths. It is estimated that annually, approximately 30,000 people die in Saudi Arabia due to diseases associated with smoking. Globally, this figure is an astounding 5 million or more. The following data on smoking comes from the World Health Organisation (2013): 50% of cancer in those under the age of 65 years is caused by smoking; 36% of deaths among 35-65

year olds are caused by smoking; the health of 40% of babies of smokers is affected by their parents smoking around them; the number of those who died in the twentieth century due to smoking was 100,000,000, one hundred million more than the number killed during the two world wars; and the number of annual deaths from smoking is in total four million, 3,500,000 men and 500,000 women (500,000). It is expected that this figure will rise to ten million people by the year 2025.

Banning shisha smoking: Getting rid of water pipes and cigarettes altogether would be an effective way of dealing with this problem. This would mean that smokers are not exposed to the harmful substances that they inhale. It would also mean that the levels of pollution would be drastically reduced, down to zero. This would also prevent health problems in second hand smokers. Some second hand smokers are not even willing participants in the water pipe cafes or bars. They may be passers-by, or work in the area where the smokers are. But because of the pollution to the air, they too are affected. Were there no water pipe bars and cafes where people can smoke freely, then the air around would be much safer to inhale (Bhatti, 2011). The Islamic religion is keen on keeping the soul and the body pure and is against the squandering of money. Clerics have seen the many risks associated with smoking shisha and have thus forbidden it (Ali, 1946).

Water pipe smoking can be stopped by banning the practice and enforcing the legislation as far as possible. This legislation would ban any advertisements that encouraged the use of water pipes as well as any sponsoring of water pipe smoking. It would also ban all the water pipe cafes that are found all over the Kingdom of Saudi Arabia. For this legislation to work, it should be strict, with harsh penalties for any person found violating it. It should also be implemented with utmost efficiency to ensure that people follow it to the letter (Haroon *et al.*, 2014). However, this problem cannot be solved entirely by abolishing water pipes. First, many smokers are already dependent on the tobacco. They would suffer from tremendous withdrawal symptoms and may never get over their addiction at all. Second, removing all water pipes and making it illegal would not necessarily alleviate the problem. It would only make the smoking of water pipes illegal and would not necessarily mean that water pipes would never be used (Haroon *et al.*, 2014). Stopping the use of water pipes is not merely a case of getting rid of them. The cause of this problem needs to be addressed. Since the main reason that people use water pipes is to relax, to socialize and to alleviate boredom, then alternatives with far less harmful side effects to the smoking should be provided. To stop the use of water pipes effectively, alternative social activities need to be available. Different options for alleviating boredom could be provided, and alternative places for friends to socialise could be introduced (Amin *et al.*, 2010).

The already dependent users of water pipes would be put on a programme that enables them to quit gradually. Such programmes include rehabilitation that teaches them how to reduce the intake gradually to stop the dependency. Nicotine nasal sprays, patches and gum may also be useful to those trying to quit. These three contain very small doses of nicotine that help reduce the withdrawal symptoms and eventually lead to complete independence from nicotine. Some of those trying to quit have found other methods, such as acupuncture and hypnosis, useful (Jawaid *et al.*, 2008). Quitting smoking takes a great deal of willpower, and the person must be willing and

serious. The following are ideas on how to go about it: do not keep the matter secret, but rather discuss your decision with your parents and friends, asking for their support; try to completely forget everything related to smoking as thinking about it may lead to wanting it and then acquiring it; avoid places where smokers congregate and try to breathe clean air as much as possible; consider changing your daily habits, perhaps altering your social life. Community awareness needs to be enhanced through campaigns and de-sensitization activities that would educate people regarding the dangers of water pipe smoking. These campaigns would help to dispel the myth that water pipe smoking is not harmful or at least not as harmful as cigarettes. People would be made aware of the fact that water pipe smoking is even more dangerous than cigarette smoking (Jawaid *et al.*, 2008).

Many stakeholders are involved in the use of water pipes. The first are the smokers themselves. These are young people, family members and older people in the community. The Saudi Arabian authorities are also involved in the water pipe smoking business. Their role is to try to prevent people from being exposed to the habit that is costing the lives of many citizens each year. In 2013, they enforced a ban on all water pipe smoking and made all public areas smoke-free (Eman, 2013). However, the banning of shisha smoking and shisha cafes was not well received by the local people. Banning smoking in cafes only prompted the adults and adolescents to buy the product and smoke it in their homes. The effects remain the same or may even be worse than when they smoked in cafes. The authorities should therefore look for ways in which they can cut the problem off at its root. They should deal with the suppliers of the product and enforce laws against them to stop the production and distribution of tobacco and water pipes (Payne, Hahn and Mauer, 2013). Bans and regulations are prompting youngsters and other shisha addicts to devise new ways to circumvent the laws put in place in order that they can continue smoking. These include renting beach houses and other houses for the sole purpose of smoking shisha. Business people are also making a lot of money by selling the shisha directly to the customers who can no longer smoke in cafes. These business people are buying the products from elsewhere and selling them to their customers for double the price. The customers will still buy because they want to smoke and they have no alternatives (Rima, 2013).

Proposed solutions: Numerous studies have been conducted in relation to shisha smoking and the diseases related to it. These studies have various limitations. For instance, researchers in this field of work receive little encouragement. Aside from this, the research conducted so far is not exhaustive. There is a dearth of research on the effects of water pipe smoking on the elderly people engaged in the practice. Furthermore, little to no research has been done on the long-term effects of smoking shisha, whilst cigarette smoking has been subjected to extensive research regarding its long term effects. However, researchers agree that shisha smokers are at a far higher long term risk of tobacco smoking related health problems than cigarette smokers (Mizushima, Ootani and SentaiFilmworks, 2013). Attempts to prevent shisha smoking in Saudi Arabia are currently encountering various obstacles. These include the general acceptability of the practice by the general public and the minimal research done in the field. Aside from these, a few organizations that are profiting from tobacco distribution are opposed to a ban. The country also lacks a national plan to curb the use of shisha and the smoking of tobacco (Rima,

2013). In order to come up with an intervention strategy for stopping the use of shisha in Saudi Arabia, several factors need to be considered. First of all, the aforementioned limitations should be addressed and strategies to overcome them should be developed. This would ensure that whatever strategies are employed hereafter are not impeded by any current limitations. The first step to creating a suitable management plan would be to address the issues that have arisen from the steps taken so far (Maziak, Ward and Eissenberg, 2007). Consideration needs to be given to the suppliers of tobacco and how to deal with them. Tobacco in Saudi Arabia is not grown at all. It is imported from abroad in crude form and then refined in the country to make the tobacco that is consumed by smokers. The government authorities would begin the intervention process by looking for ways to stop the entry of tobacco in whatever form into the country. These measures could take the form of import bans or very high import taxes on imported tobacco. Consumers could also be banned from using tobacco. These bans once enforced would make it very hard for the suppliers to acquire the product and consequently the consumers would also find it difficult to possess tobacco (Ministry of Finance and National Economy, 1996). Moreover, the intervention plan should take into consideration the involvement of researchers. These researchers would be in a position to provide insights into the situation as it is and as it would be after the implementation of the intervention strategies. Aside from the researchers, the non-governmental organizations in Saudi Arabia could be involved in implementing a ban and eventually in tobacco control. This would ensure that there is enough information to work with in relation to the issue of shisha smoking (Maziak, Ward and Eissenberg, 2007).

As mentioned earlier, alternatives to shisha smoking as a social activity need to be provided once it disappears. There are many ways people can have fun and enjoy the company of friends and family that do not involve shisha smoking. The alternatives to shisha smoking could be physical and involve others. Any social activities should serve the purpose of unwinding, socializing and alleviating boredom and also be entertaining enough for both youngsters and the elder population (Sherman and Primack, 2009). As these steps are being put in place, there would be an ongoing community awareness programme to educate the population. This myth that shisha smoking is not harmful as cigarette smoking should be addressed so that the public is completely aware of the kind of risks they are exposing themselves to. Many know the harm that water pipes cause but still engage in the practice. These people should be re-educated and given reasons to stop smoking shisha. Re-education and community awareness campaigns would be spearheaded by health care professionals, who would have already collected enough information regarding the effects of water pipe smoking and come up with a comprehensive report and common findings (York and Prevost, 2012). Shisha smoking has been quantified by experts and professionals in the field because water pipe smoking has posed such a massive health threat. However, there is a need for the threat to be quantified using terms that are easily recognizable and understood by the general public, for instance, by using quantification terms for cigarettes such as 'pack years'. Based on the duration spent water pipe smoking, researchers can equate one water pipe smoking session to a certain number of cigarettes. They have so far established that one session corresponds to 10 cigarettes. However, there is a need for more research to be done to enable more accurate quantification of water pipe use (Pipe, 2010).

Conclusion

All in all, there is a need to address the issue of shisha smoking as it is becoming a disturbing habit among the younger generation. This means this generation is faced with one more health threat on top of those already arising due to stressful lifestyles. Ultimately, shisha smoking poses a great risk to all those who partake, but the younger generation are most affected as it is their lives that will be cut short, dramatically affecting the demographics of Saudi Arabia, which is an issue that requires urgent attention due to its impact on various aspects of Saudi society and the economy.

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