Smoking Cessation and Waterpipe

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Waterpipe or Arghileh is a water-based instrument used to smoke flavored tobacco(moassal) or tumbac(ajami) tobacco. Before inhalation, the smoke passes through a water chamber. Because of this water basin, smokers perceived it as being less harmful than cigarette smoking. However, waterpipe smoking has the same health risks as cigarette tobacco smoking.
Waterpipe smoking is prevalent in Lebanon and has become widely popular lately. Of concern is that studies have shown that waterpipe use by youth and adolescents is increasing in the past few years and 65.9% among secondary school and university students in Lebanon are occasional waterpipe smokers.

The health effects of waterpipe smoking

Even though the smoke passes through water, the inhaled smoke contains high levels of toxic chemicals and carcinogenic materials.
One hour of waterpipe smoking involves around 200 puffs, whereas it takes 20 puffs to smoke a cigarette. Moreover, the quantity of smoke during the one-hour session is equivalent to the smoke of 100 cigarettes.
Waterpipe smoking causes serious health consequences:
• Cancer: increased risk of lung, bladder, esophageal, stomach and oral cavity
• Cardiovascular disease: increased risk of heart disease and stroke
• Lung diseases: decreased lung functions secondary to chronic airway obstruction
• Reproductive and developmental: low birth weight, increased risk of newborn respiratory diseases, and decreased fertility
• Infections: sharing Arghileh increases the risk of transmitting tuberculosis, herpes, and liver viruses
• Acute Carbon monoxide intoxication and syncope
Second-hand smoke released directly from waterpipes also contains toxicants and smoking waterpipe indoors causes hazardous levels of home air pollution in rooms where it is being smoked as well as in adjacent rooms.
Second-hand smoking causes heart, lung diseases, and predisposes exposed people who never smoke to cancer. Studies have shown that there is no safe level of second-hand smoke exposure. Therefore, waterpipe smoking should not happen indoors.

Waterpipe Smoking Cessation

Scientific studies have shown that waterpipe smoking supports nicotine/tobacco dependence, and smokers have difficulty quitting on their own.
Since Nicotine is a mood-altering substance that releases dopamine from the brain, smokers consider waterpipe smoking as a stress reliever because dopamine causes an initial sense of calm. However, the brain will crave later for more and more that can put more stress on the body, especially that the initial feelings of anxiety are still present.
Waterpipe smoking also has been deeply embedded in the life of smokers, especially in social gatherings. Smoking sessions last for one hour, and it involves sharing it with friends and family members.
Moreover, waterpipe smokers often perceive themselves as not smokers, so they don't seek smoking cessation services.
These unique features of waterpipe smoking cause physical, emotional, and social addiction, and influence the development of effective smoking cessation interventions.
Up to date research studying the most effective waterpipe smoking cessation interventions is still scarce, although smoking cessation and its associated health benefits are crucial in treating tobacco dependence.

Waterpipe smoking cessation interventions that were studied are pharmacological and behavioral approaches.

Behavioral counseling Sessions:

Behavioral interventions were found to be effective in decreasing waterpipe smoking habits.
Effective behavioral counseling includes in-person behavioral support and advice, telephone counseling, and self-help materials.
To have an effective behavioral intervention for smoking cessation, the sessions should be minimal (<30 minutes/session) and intensive. Since there's a dose-response relationship between the intensity of counseling and cessation rates (more or longer sessions improve
cessation rates), patients should receive ≥ four in-person counseling sessions.
Behavioral interventions can be delivered by physicians, nurses, psychologists, social workers, and cessation counselors, and they can be delivered individually or in group.
Moreover, the counseling interventions should provide social support and problem-solving skills to help smokers to recognize the situations that increase their risk for smoking, develop coping skills to overcome common barriers to quitting, and develop a plan to quit.

Pharmacotherapy:

There is insufficient evidence regarding the use of medications in waterpipe smoking cessation.
The only medicine that was studied is Bupropion (Zyban, Wellbutrin), which is an antidepressant that was approved to be used in cigarette smoking cessation.
The study showed low-quality evidence that it may be useful if used in combination with behavioral counseling.
Future studies should address nicotine replacement therapy and varenicline as possible waterpipe smoking cessation medications.

In conclusion, there's a lack of evidence on waterpipe smoking cessation interventions. Until we have high-quality research, tobacco policies should be implemented urgently to prevent its further global spread.

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