

Letter from Waterpipe Researcher Dr. Fadi Hammal

October 16, 2019

Attn: Standing Policy Committee on Community and Protective Services

RE: Cultural Practices and Health Impacts of Waterpipe

Background

In the early 1990s, Waterpipe (WP) started to be more visible and its use was spreading to new population. This trend was reflected in a paper published in 2004 by *Rastam et al.*ⁱ. The paper revealed that men and women from different age cohorts started smoking WP in early 90s and attributed this increase in smoking initiation to the introduction of flavoured tobacco which happened in the late 80s. It seems that history has repeated again, adding flavour to tobacco to make it more appealing to youth and women.

Waterpipe as a Cultural Practice

WP marketing strategies benefited from the introduction of the internet and social media platforms, and from changes that were happening in Middle Eastern (ME) societies to promote WP as an expression of refusal of the traditional rules, liberalization, and female empowerment.ⁱⁱ By contrast, in western multi-cultural societies marketing strategies promoted WP smoking as a cultural practice that is deeply rooted in the collective consciousness of ME societies. These marketing strategies played upon the western multi-cultural societies' respect for cultural practices and the careful consideration of such practices when formulating new policy or regulation. **These marketing strategies led to a false perception, among many in the western societies including Canada, that WP smoking has significant meanings and values in ME cultures system of shared beliefs, values, and customs.**

Fortunately, evidence does not support this perception. WP users from different cultural backgrounds gave similar explanations for their motivations for initiation including, not cultural practice, but access, flavor, trend, and curiosity.^{iii,iv} Evidence has revealed that this behavior was linked by some to impropriety and indignity especially among women, and it was described as a shameful and disrespectful to the society.^{ii,v} Those terms were voiced by a participant, in a qualitative study conducted in Calgary, that has cultural ties to that region indicating that her parents were embarrassed when her relatives in the country of origin knew about her smoking the WP.^{vi}

In a study conducted in USA among students who smoke WP and that have cultural ties to ME countries, only 4% of participants described WP smoking as an important part of their culture.^{vii}

In another study conducted in Calgary, community workers who have cultural ties to countries in ME did not think that WP spread has any connection with cultural practice.^{viii} Furthermore, religion which is a

factor that plays an important role in the cultural identity, especially in that part of the world, doesn't seem to support the use of WP. Participants in a qualitative study from ME saw the increase in the WP prevalence as a consequence of decreasing religious beliefs.^v A study conducted in rural Egypt assessing the impact of a Fatwa (religious ruling) on smoking that was issued by the grand Mufti of Egypt found that of WP cafés patrons, 81% thought that smoking the WP is a sin i.e., "Haram".^{ix} This attitude motivated World Health Organization (WHO-EMRO) to emphasize its role in encouraging tobacco users to stop.^{x,xi}

The higher tendency among some ethnic groups in North America to smoke WP does not necessarily reflect any cultural significance of this practice in their system of shared beliefs, values, and customs that is transmitted from generation to generation. Instead, it could be a result of 'cultural predisposition' due to normalization of this behavior subsequent to the endemic increase in the prevalence of this practice in their countries of origin. This expression of WP users' commitment to their perceived hallmarks (or identifiers?) of ethnicity or their ethnic pride^{xii} may be a mechanism of retention of ethnic identity to cope with impact of the process of acculturation in the new environment.^{xiii,xiv}

Health Effects of Waterpipe

The argument about water filtering effect and the herbal vs tobacco or the charcoal quality still being widely used without any scientific merit or support. *Shihadeh A.* revealed more than 15 years ago in a laboratory study that water only filters the nicotine without any significant impact on the other harmful chemicals.^{xv} Several laboratory studies showed that switching to herbal products has no significant impact on harmful content of both mainstream and sidestream smoke.^{xvi,xvii} Studies on the air quality in WP smoking venues in Canada and USA (where only herbal products were supposed to be smoked) showed that, in addition to the existence of nicotine vapour in some of those venues, the air quality was far from been healthy and represents public health risk for WP smokers and non-smokers, and occupational hazards for employees.^{xvi,xviii,xix,xx,xxi,xxii,xxiii}

Although some newer arguments tried to link those risks with the ignition sources promoting electronic heating sources as a healthy alternative, recently published studies does not seem to agree with this. A study conducted in Germany on electronically heated steam stone in WP showed that electronic WP released various harmful substances that significantly impact the indoor air quality.^{xxiv} In a study conducted in USA and recently published studying the impact of waterpipe smoke on alveolar cells, showed that electronically-heated shisha smoke caused significant alveolar cell damage and death. The author concluded that **"neither tobacco nor charcoal are needed for those cytotoxic effects to occur"**.^{xxv}

The increased interest in and knowledge about WP and its health effects led to a ban on WP smoking in public places in some countries, such as Syria, Lebanon and Turkey.^{xxvi,xxvii,xxviii} However, the public health response in Canada has been almost absent. **From a public health perspective, allowing a device that within 45 minutes of a smoking session, can produce about (50 L) of smoke, with poorly characterized**

chemical constituents may be very problematic and potentially illegal in relation to clean air and occupational health and safety legislation.

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