

E-Cigarettes: Clearing the Haze



Dr Ashok Zachariah Philip, President MMA on 13 November 2015, TV1

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The topic of E-cigarettes or vaping has been much in the news these days. Proponents of the practice say it is a safe and wholesome alternative to the noxious and deadly habit of tobacco smoking. Opponents denounce it as a sort of “gateway drug” and demand its ban. Finally, of course, ill-informed politicians jump in and try to make the whole thing all about race – par for the course in Malaysia.

The problem is that there have been very few studies of vaping, and results have been conflicting. It seems likely that if smokers use E-cigarettes containing nicotine, they are more successful at reducing or stopping cigarette use. This will help to reduce the harm caused by tobacco use. It is no argument against this use of E-cigarettes to say that some people fail to reduce or stop tobacco use by this method – no technique is 100% effective. However, there are other smoking cessation techniques, and studies should be done to compare the various methods to obtain firm scientific data about which methods are most effective. Furthermore, many smokers do not quit – either they continue to use E-cigarettes alone, or mix conventional and E-cigarettes. Thus one form of dependency is replaced by another.

The biggest worry for doctors stems from the fact that not all vape users are smokers trying to quit. There are many young people who see this as a cool thing to do, and due to the newness of vaping and the lack of hard data, they also believe that it is safe. Due to this misperception and the “cool” factor, more and more young people, including women, are vaping. Thus, though there may be harm reduction in smokers, this group of fresh vapers may be exposed to harm.

It is also worth mentioning that the E-cigarette device is generally not cheap. Young people who wish to start vaping may find it difficult to get enough money to buy a high quality device. They may need to buy cheaper devices, which may be more prone to malfunction.

Some pro-vape spokesmen claim that vaping is 95% safer than smoking. However, we need figures for how much more dangerous it is to vape as compared to not vaping. It is also worth noting that this 95% figure has been criticised as being based on poorly designed studies. Even if the 95% figure is correct, it makes no sense for someone to move from 0% (non-vaping and non-smoking) to a situation 5% as dangerous as smoking.

Another worry (and a major one) is that the liquids used are not all the same. At present, there is no regulation and different manufacturers have different recipes. Furthermore, even a rudimentary knowledge of chemistry (easily acquired via Google and YouTube) will suffice to allow people to make their own customised fluids by adding substances to the fluids they buy. Thus it would be possible to add illicit drugs to the fluid and get high in public! News reports suggest that this is happening in many parts of the world.

Of course, it is also possible for the vape devices themselves to malfunction, catching fire or exploding. This may not be a major problem, and I am sure that we would mostly greet such news with more than a touch of *schadenfreude*, but it does happen and may affect innocent bystanders. Recently, a device caught fire on a flight after the owner forgot to switch it off. Luckily, damage was minor and the flight was never in danger, but the next time could be worse.

An argument used by the pro-vape lobby is that many traders depend for a large part of their livelihood on vaping – selling the devices, fluids and associated paraphernalia. I was on a TV show lately where one of the (pro-vape) guests estimated the number of such traders as being around one thousand. While I sympathise with these people if their livelihoods are affected, I do not think that putting the financial interests of a thousand people ahead of the health of millions can be justified. I am sure that if vaping is banned or stringently regulated the Government can consider how to assist the affected vendors.

Some of the claims of the pro-vape lobby are based on conjecture. For instance, it is claimed that the colouring agents sometimes added to the fluids are safe because they are approved food colouring

agents. Some of you may have heard of the “cinnamon challenge”. Cinnamon is a commonly used spice, which is harmless when ingested and may have beneficial effects on sugar control in diabetics. The “cinnamon challenge” consists of filming oneself swallowing a tablespoonful of dry ground cinnamon powder in 60 seconds without drinking water, then uploading the video to the internet. In many cases, the desiccating effects of the powder cause the person undertaking the challenge to choke or inhale the powder, and this can cause severe pneumonitis. Thus a wholesome food may not be a safe inhalant.

It has also been claimed that formaldehyde is only produced if the liquid is heated at high temperatures. Some users do not push the heat settings to the maximum, so the vapours they inhale may not contain significant amounts of formaldehyde, but others, wanting maximal vapour output, have no qualms about pushing the heat up, and the vapour then may actually contain more formaldehyde than conventional cigarette smoke.

I think it is clear that even if E-cigarettes may have benefits for smokers trying to quit (which has yet to be proven), they have much more potential to harm non-smokers who take up this ostensibly harmless habit. Even if these novices stick to standard liquids, there are at present not enough studies to support the claim that vaping is as safe as breathing. Indeed, I am sure that if this claim were to be tested, it would prove to be false. What are the chances that inhaling a mix of vapourised chemicals will have the same effect on your lungs as breathing fresh air?

The question, then, is not WHETHER E-cigarette use should be regulated, but HOW? Many doctors and others are calling for a total ban, whereas the pro-vaping body are promoting self-regulation, “vaping etiquette” and age restrictions.

In my opinion, a ban would be the simplest option, with perhaps medically prescribed exceptions where needed for smoking cessation. However, a ban must be stringently enforced and maintained. This will call for greater resources, both financial and human. If there is any doubt about the efficacy of a ban, then perhaps regulating the whole industry, from devices to liquids to dealers, would be another option. Whichever route is taken, it needs to be taken soon and effectively. Waiting and hoping for the best merely allows more time for more novices to get hooked onto this habit. The MMA and its members must support measures the Ministry of Health takes to protect the health of the nation.