

## Journey to the Center of the Earth: The Future of Human Health

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"The solution to many of today's medical problems will not be found in the research laboratories of our hospitals but in our Parliaments"
- Sir George Young, 1981.

Julio Verne was a brilliant writer able to recreate in his novels events that had not happened until that moment, many of them were achieved years later but surprisingly "Journey to the Center of the Earth" is one of the few that has not been able to be carried out. It took up Medicine, as a science, up to ten years to engage with the other sciences like Mathematics, Physics, Aeronautical and Civil Engineering, among others. The necessity to carry out studies in animal models explains in great measure this handicap, even though we can frequently find investigations that provide us with valuable information they are not applied or they are simply ignores by the human being. Why?

There is a huge available information since Framingham Heart Study that demonstrates the harmful effects of tobacco use in cardiovascular and respiratory systems [1,2]. By many accounts, tobacco use is the most preventable cause of death in the world. Over 1.3 billion people use tobacco worldwide, more than 1 billion of whom smoke; the rest use oral or nasal tobacco. According to WHO (World Health Organization) tobacco kills more than 8 million people each year, 30% of which are due to cancer. More than 7 million of those deaths are the result of direct tobacco use while around 1.2 million are the result of non-smokers being exposed to secondhand smoke. Around 80% of the world's smokers live in Low and Middle Income Countries (LMICs), where the burden of tobacco related illness and death is heaviest [3].

The negative health consequences of smoking currently represent one of the greatest global public health challenges and if current trends continue unabated, tobacco will cause more than 1 billion deaths during the 21<sup>st</sup> century. Leading cause of death, illness and impoverishment. *EC Pulmonology and Respiratory Medicine* published along 2019 three editorial articles related with the present issue and due to its relevance they go for it [4-6].

Secondhand smoke also deserves attention as it is another well established cause of cardiovascular and respiratory disease. In adults, secondhand smoke causes serious cardiovascular and respiratory diseases, including coronary artery disease and lung cancer. In infants, it raises the risk of sudden infant death syndrome. In pregnant women, it causes pregnancy complications and low birth weight [7].

Secondhand smoke causes more than 1.2 million premature deaths per year and 65 000 children die each year from illness attributable to this effect [3].

The economic costs of tobacco use are substantial and include significant health care costs for treating the disease caused by tobacco use as well as the lost of human capital that results from attributable morbidity and mortality. For instance, at about 1436 billion of USD was the cost in global health expenditures and productivity loses in 2012 and 9 billion of USD was also the cost in lost productivity in Bra-

zil, China and South Africa in 2012 too. At National levels, costs range from USD 4665 in annual per respondent health expenses (Germany 2006 - 2008) to USD 289-332.5 billion in medical expenses (United States 1964 - 2014) [8].

In spite of the campaigns against the habit of smoking, approximately one of each seven people smoke and they incorporate more youth and women. The big tobacco companies have modified their "commercial language" with new presentations like those e-cigarettes, heated tobacco or nicotine salts, while governments debate to legalize or not such artifices considered as "less harmful" [9-11].

How to achieve patients to stop smoking at individual level if in a general way we are not aware of global warming, environmental pollution, weakness of the ozone layer and the increase of the level of the sea that threatens to disappear islands which constitute independent nations. Humanity is in danger and it is not enough to publish at social network hashtags like #EnvironmentalPollution, #Global-Warming or #AvoidSmoking [12].

Likewise, it has not been enough to place health messages during decades in the pack of cigarettes. This message is still manipulated by big Tobacco's companies. Marlboro was positioned as the mark leader in the 2018 selling a total of 361,4 million packs and generating 1785,2 million Euro [13]. Nevertheless, the warning health message is placed to one side of the current Marlboro red pack in USA, hardly occupying 5% of the surface of the box. The above mentioned constitutes a violation of the 11<sup>th</sup> article of the WHO Framework Convention on Tobacco Control (FCTC) [14].

Health warnings on packages are among the most direct and prominent means of communicating with smokers. Larger warnings with pictures are significantly more effective than smaller. In response to the globalization of tobacco epidemic, the WHO FCTC was adopted by the World Health Assembly in 2003 and entered into force in 2005. The FCTC is one of the most widely adopted United Nations Treaties, with 181 Parties as of May 2018 covering more than 90% of world's population [15,16].

We need to do more and it is not to carry out new investigations or to convince by means of scientific arguments. We need to modify the current teaching methods and travel to the center of the earth, the human being itself; there is no mystery about it. It is evident we should implement new strategies of prevention and a useful tool constitutes to introduce lifestyle education programs from early ages of school life. The actual father of the medicine, Hippocrates of Cos (460 - 370 BC), frequently remark that what he explained to an adult patient later on would not be completed.

Furthermore, if we foment healthy lifestyles from early ages we will have more success in the near future moving away youths from smoking. Reformations are needed in the school education to prepare integrally the students, including new subjects that allow them to relate correctly with the society and the environment. Therefore we should visit colleges and teach them as their teachers do...more work with no pay, but more health!!!

The exiting journey of Julio Verne towards the center of the earth (health) drives us into the human childhood, maybe this is the clue for respiratory and cardiovascular health of the next generations. Pay it forward!!!

## **Conflict of Interest**

The author states that he has no conflict of interest (COI).

## **Bibliography**

- 1. Dawber TR., *et al.* "Epidemiological approaches to heart disease: The Framingham Study". *American Journal of Public Health* 41 (1951): 279-286.
- 2. O' Donell CJ and Elousa R. "Cardiovascular risk factors. Insights from Framingham Heart Study". *Revista Española de Cardiología* 61.3 (2008): 299-310.

- 3. Las consecuencias del tabaquismo en la salud: 50 años de progreso (2019).
- 4. Agrawal A. "E-Cigarette: "Harm reduction tool" or "fascinating killer device". *EC Pulmonology and Respiratory Medicine* 8.2 (2019): 99-111.
- 5. Mier Odriozola JM. "New smoking devices...with reduce harm?" EC Pulmonology and Respiratory Medicine 8.6 (2019): 459-461.
- 6. Agrawal A. "Global warming: a vicious predator of lung health". EC Pulmonology and Respiratory Medicine 8.11 (2019): 1-2.
- 7. Tobacco (2019).
- 8. Makate M., et al. "Tobacco cost of illness studies: a systemic review". Nicotine and Tobacco Research (2019).
- 9. Farrely MC., et al. "Youth tobacco prevention mass media campaigns: past, present and future directions". *Tobacco Control* 12.1 (2003): i35-i47.
- 10. Arrazola RA., *et al.* "Percentage of current tobacco smoking students receiving help or advice to quit: Evidence from Global Youth Tobacco Survey, 56 countries, 2012-2015". *Tobacco Prevention and Cessation* (2019).
- 11. Zhang G., et al. "Safety assessment of electronic cigarette and their relationship with cardiovascular disease". *International Journal of Environmental Research and Public Health* 15.1 (2018): E75.
- 12. Hopkinson NS., et al. "Climate change and lung health: the challenge for a new president". Thorax 72.4 (2017): 294-295.
- 13. Marlboro, marca líder en ventas del sector del tabaco (2018).
- 14. Chung-Hall J., *et al.* "Impacto of WHO FCTC over the first decade: a global evidence review prepared for the Impact Assessment Expert Group". *Tobacco Control* 28 (2019): s119-s128.
- 15. Hammond D. "Health warning messages on tobacco products: a review". Tobacco Control 20.5 (2011): 327-337.
- 16. Warnisher MT., et al. "Tobacco use worldwide: Legislative efforts to curb consumption". Annals of Global Health 85.1 (2019): 1-9.

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