COMMENT on Global Prevalence and Incidence of Tinnitus: A Systematic Review and Meta-analysis Carlotta M. Jarach et al. published in JAMA Neurology

It is a paper that raises the question of the epidemiology of tinnitus after a number of years. The great work and effort of the author confirms the necessity to approach this problem and all further research with defined methodological principles so that in the future a critical assessment of the researcher's results will be valid and possible.[1]

This work fulfilled the goal - it promotes and initiates debate and discussion among experts on theoretical and methodological aspects of tinnitus epidemiology. Also, I see the work as an incentive for researchers to join forces and strictly define the design of future research. Collected epidemiological data with clinical research series can improve and develop new methods of diagnosis, risk assessment, prognosis and clinical treatment of tinnitus. In this field, there is certainly a lack of a defined research platform, which, with the validation of highly evaluated instruments, can enable the collection of scientific evidence that will lead to the adoption of guidelines for the treatment of patients with tinnitus.

Based on my clinical experience, work and commitment to patients with tinnitus, where I carry out a personally designed treatment, I believe that future research should be enriched with meaningful data. It is necessary to investigate the spectrum of pathological and functional health conditions (CVD, diabetes, chronic diseases, obesity, mental and cognitive health, physical activities, exposure to defined risk factors from the living and working environment, stress...).

The essence of epidemiological research should be a combination of biological aspects and more specific aspects of the environment. As a member of the BIOGEN Citizens' Association from Belgrade, a doctor of medical sciences in the field of neuroscience, an otolaryngologist and an audiologist who has been actively dealing with tinnitus for 15 years, I believe that we have accidentally or intentionally closed our eyes to environmental factors and their negative effects on human health as well as tinnitus.[2,3]

I would emphasize, first of all, air pollution, exposure to radio frequency waves and electromagnetic radiation that lead to nerve damage, as reported by the WHO.[4]

Common toxic agents include certain heavy metals, drugs, organophosphates, bacterial and animal neurotoxins.[5] Each toxic agent leads to a unique presentation, depending on which neurophysiological changes occur after exposure, distinguishing between acute exposure and chronic exposure, with each type additionally influencing symptom presentation and outcome.[6]

The enigma of HAARP! Former CIA employee Edward Snowden released classified government files in 2013, some of which reveal a number of HAARP's global surveillance systems. Natural geomagnetic waves are said to be replaced by artificial VLF (very low frequency) ground waves that match the frequency of human brain waves, thus influencing human behavior.[7]

Stress is a trigger for many mental and physical conditions[8,9] as well as tinnitus. In the first year of the COVID-19 pandemic, the global prevalence of anxiety and depression increased by a whopping 25%, according to a scientific report published by the World Health Organization (WHO). Loneliness, fear of infection, suffering and death for oneself and loved ones, grief after the loss of loved ones and financial worries are also listed as stressors that lead to anxiety and depression.[10] In clinical work, we noticed an increased number of patients with tinnitus whose cause was stress, virus infection, vaccine…

An increasing number of people report subjective symptoms and hypersensitivity to a wide range of electromagnetic radiation emitted by power lines, radio and TV stations, mobile phones and computer equipment.[11] Computer users are exposed to electromagnetic fields (EMF), visible and ultraviolet light,

radio-band waves and extremely low frequency (50 Hz) (ELF) fields.[12] Preliminary experiments have shown that monitor radiation can produce potentially dangerous biological effects[12], and there is increasing interest in the potential health risks and biological effects associated with ELF-EMF exposure.[13, 14]

Good guidelines for researchers, valid tools and a unified attitude are the only way to look at the problem of tinnitus, which significantly affects the life and work of people who struggle with it. Current treatments with more or less success help patients, however, we have a long way to go, but if we successfully look at risk factors in rural and urban areas, cause-effect relationships, prevalence and incidence of tinnitus, I am sure that the results will not be lacking.

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