

MULTIPLE SCLEROSIS: CLOSING IN ON CAUSES AND RISKS

EMBARGOED UNTIL 12:01am Monday 15 August 2022

MULTIPLE sclerosis used to be referred to as a "mystery illness" but now MS risk is less of a mystery as we gain a better understanding of its causes, according to the author of a Perspective published today by the *Medical Journal of Australia*.

Professor Bruce Taylor from the Menzies Institute for Medical Research at the University of Tasmania, wrote that it was now clear that there was no single "smoking gun" risk factor for MS, but "a chain of risk factors stretching back to conception with each factor an important step on the causal pathway".

"Some risk factors are immutable, such as sex and genetics, but others are potentially modifiable, such as obesity, smoking, vitamin D levels and ultraviolet light exposure, and potentially, Epstein-Barr virus immunisation," Professor Taylor wrote.

"The recognition that Epstein-Barr virus infection is likely an obligate factor should increase interest in the development of an early life Epstein-Barr virus vaccine.

"Similarly, awareness of the importance of sunlight exposure and vitamin D levels, particularly in pregnancy and early life but also throughout the life course, presents multiple points of intervention."

Professor Taylor warned, however, that increasing exposure to sunlight and vitamin D levels were not without risk "and no clear equipoise has developed".

"Reducing smoking and adolescent obesity could markedly reduce the risk of MS; however, there is no direct trial evidence to support this due to the complexity and long term nature of such a trial."

Professor Taylor said efforts to reduce the burden of other diseases with similar risk factors, if successful, would have a knock-on effect of potentially reducing the incidence of MS.

"An improved understanding of MS risk factors is important for those in higher risk categories and is invaluable when counselling a person with MS who wants to reduce the risk in their children or other relatives," he concluded.

All MJA media releases are open access and can be found at: https://www.mja.com.au/journal/media

Please remember to credit The MJA.

The Medical Journal of Australia is a publication of the Australian Medical Association.

The statements or opinions that are expressed in the MJA reflect the views of the authors and do not represent the official policy of the AMA or the MJA unless that is so stated.

CONTACTS:

Rachel Clemons Communications Officer - MS Research Flagship University of Tasmania Ph: 03 6324 3716 Email: <u>rachel.clemons@utas.edu.au</u>