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Prevalence of medical conditions, severity of IBS and asthma and associations with diet, other lifestyle behaviours and mental health in 5,015 Australian adolescents

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Chronic diseases are the most common cause of death worldwide in adults. Poor lifestyle behaviours, mental health and socio-demographics heighten risk factors such as inflammation that can become pathologic and contribute to the rise in chronic disease incidence^(1,2). Throughout adolescence, poor lifestyle behaviours can begin to emerge, and childhood/adolescent obesity is rising^(3,4), despite this less is known about the impacts of lifestyles on medical condition prevalence in this age group. This study aims to depict the prevalence of medical conditions that emerge during adolescence and assess if these medical conditions and the severity of inflammatory conditions, irritable bowel syndrome (IBS) and asthma correlate with poor lifestyle behaviours, mental health, and sociodemographic factors.

Adolescents across three states Australia-wide (New South Wales, Queensland, and Western Australia) took part in the Health4Life trial. Participants completed a self-report survey at 14.4 years old. Data was collected on ‘The Big 6’ health behaviours (diet, exercise, sleep, screen time, alcohol use and tobacco use), mental health, socio-demographics, medical conditions and severity of IBS and asthma. Binary logistic regressions to estimate the associations between diet, other health behaviours and medical conditions and IBS and asthma severity, moderating from sex and SES will be used.

A total of 5,015 adolescents took part in this study. 50.6% were male, 15.1% were from lower socioeconomic status (SES), 36.7% were from middle SES and 48.2% were from high SES backgrounds. 71.7% of Australian adolescents were not eating 5 or more vegetables a day and 31.3% were not eating 2 or more vegetables a day, whilst 10% were drinking 5 or more cups of SSB a week. The most prevalent medical conditions in this age group were hay fever (23.2%) and asthma (15.1%), followed by food allergies (10.1%), eczema (10.6%) and ADHD/ADHD (9.4%). Concerningly 1% of this population already have type 2 diabetes at age 14.4years old. The main findings from the binary logistic regressions in this study are currently in progress.

Adolescence is a crucial period of time where poor health behaviours commonly emerge, and evidence shows an increase in diagnoses of inflammatory conditions such as IBS and asthma during this time. It is important to depict contributing risk factors to medical conditions and to help halt the trajectory to further chronic disease. In doing so we have the opportunity to guide future prevention programmes and improve public health messaging.

References

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