The Prevalence of Non-Alcoholic Fatty Liver Disease in the United Kingdom: A Systematic Review and Meta-Analysis.

Yusef M. Alenezi
The University of Nottingham, United Kingdom

Non-alcoholic fatty liver disease is increasingly recognized as a cause of cirrhosis and an indication for a liver transplant. The continued growth of this problem means that up-to-date and authoritative estimates of its size are essential. The assessment of the roots of the problem shall also help policy makers in addressing the problem right to the point. We have therefore conducted a systematic review of studies in the UK to estimate the prevalence of NAFLD. We identified studies that investigate NAFLD prevalence among the UK population through conducting a systematic search of electronic databases in PubMed, EMBASE, CINAHL, Web of Science, and Google. A random-effects meta-analysis was performed on disease-unrestricted studies and disease-restricted studies, including BMI$\geq$25, HIV patients, liver admissions, patients with type-1 diabetes mellitus, and patients with type-2 diabetes mellitus. Results indicate a pooled prevalence of 23.77% in non-disease restricted populations (95% CI 20.69% - 26.84%). Among three studies of type-2 diabetic patients, the overall prevalence of 38.59% (CI: 25.52% - 51.67%). The overall prevalence in the disease-restricted studies was 34.35% (CI: 23.49 – 49.21). Our major finding is that there is a high prevalence of NAFLD within the UK based on the limited available number of studies. We demonstrated good evidence supporting that adults with impending T2DM have a higher prevalence of NAFLD which should be targeted for screening. We, however, found less evidence for other groups, including patients with HIV, T1DM, and obesity. Thus, we encourage further studies to be conducted to examine the prevalence among these vulnerable groups.

Biography

Yusef works as a teaching assistant at the department of family and community medicine, college of medicine, Northern borders university, Saudi Arabia. Yusef completed his bachelor degree in medicine from college of medicine, Dammam university, Saudi Arabia, in 2013, then he got his master in Public health from Cardiff university, United Kingdom, in 2017. Yusef is currently proceeding with his Phd study at the department of epidemiology and Public Health, University of Nottingham, United kingdom about the biomarkers to predict liver diseases.