

Introduction:

Liver disease disproportionately affects the most economically disadvantaged, exacerbating health inequalities. In the United Kingdom, the prevalence of food insecurity (FI) has increased by 230% since 2021, affecting an estimated 17% of the general population. Evidence indicates a paradox wherein FI contributes to both obesity and compromised nutritional status. FI may also hamper the adoption of recommended dietary lifestyle advice. We aimed to assess the extent of FI and its associated factors among patients within outpatient hepatology services at a tertiary centre.

Methods:

A prospective review was undertaken assessing consecutive patients attending hepatology outpatient services between October to December 2023. Food security status was assessed using validated tools (Hunger Vital Signs Two-Item Screener and United States Department of Agriculture, Food and Nutrition Service Six-Item Food Security Survey). Brief advice/ signposting was offered to individuals identified as food insecure. Descriptive statistics were conducted, and Chi-square or Fisher's exact tests were performed, as appropriate.

Results:

227 patients (mean age 59 years [range 25 – 85]; 56% male and 80% white British) completed FI screening. Metabolic dysfunction-associated steatotic liver disease (MASLD) (46%) predominated, followed by alcohol-related liver disease (16%), viral hepatitis (16%) and other diagnoses (17%). 50 patients (22%) were identified as food insecure. Comparing food insecure and secure groups, FI was more prevalent in those with MASLD (52% vs 45%, $p = 0.036$), type 2 diabetes (56% vs 41%, $p = 0.002$), hypertension (58% vs 53%, $p = 0.04$), depression (22% vs 11%, $p = 0.012$), mixed anxiety and depression (20% vs 12%, $p = 0.04$) and psoriasis (18% vs 10%, $p = 0.037$). No significant differences were observed between groups in relation to age, gender, ethnicity, smoking status, presence of cirrhosis, HbA1c, alcohol intake or body mass index.

Conclusions:

FI was higher amongst patients with liver disease attending hepatology outpatient services than in the background population, and our results suggest that FI was associated with MASLD and metabolic syndrome features. FI presents an important barrier to implementation of diet lifestyle advice. Healthcare professionals should consider FI within holistic patient assessment to optimise outcomes and attenuate inequalities.