Missed Opportunities in HCV Care: Trends in Late Diagnosis and Treatment in New South Wales, Australia.

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Background: This study examines trends in late Hepatitis C virus (HCV) diagnosis and treatment in people diagnosed with end-stage liver disease (ESLD) in New South Wales (NSW), Australia.

Methods: HCV notifications in NSW, Australia (1995-2022) were linked to hospital admissions (2010-2021) and treatment records (2002-2022). Descriptive analyses and logistic regression were used to examine trends and factors associated with late diagnosis and missed treatment opportunities. Late diagnosis and treatment were defined by absence of HCV notification and HCV treatment within two years prior to or following first hospitalisation for ESLD.

Results: Among 4,419 people with an HCV notification and ESLD diagnosis, late HCV diagnoses decreased from 24% in 2010-2012 to 16% in 2019-2021, while the proportion receiving no or late treatment declined from 98% (85% no, 13% late) to 70% (48% no, 22% late) over the same period. Residing in rural or regional areas was associated with late HCV diagnosis (aOR 1.44, 95% CI 1.05-1.97, p=0.024). Recent injecting drug use (aOR 0.78, 95% CI 0.60-0.99, p=0.041), incarceration [distant (aOR 0.55, 95% CI 0.38–0.78, p=0.001), recent (aOR 0.51, 95% CI 0.28–0.96, p=0.037)], recent government assistance (aOR 0.57, 95% CI 0.39-0.82, p=0.002), and older age [≤1944 (aOR 0.31, 95% CI 0.15-0.66, p=0.002), 1945-1959 (aOR 0.47, 95 CI% 0.29-0.77, p=0.003)], were associated with lower odds of a late HCV diagnosis. Recent alcohol use disorder was associated with increased odds of no or late treatment (aOR 1.80, 95% CI 1.40-2.32, p=0.001). Those born between 1945-1959 were less likely to have no or late treatment (aOR 0.58, 95% CI 0.34-0.98, p=0.041).

Conclusion: Encouragingly, factors associated with social marginalisation predict earlier HCV diagnosis, while rural/regional residence predicts late HCV diagnosis among people with ESLD. Missed HCV treatment opportunity, defined by no or late treatment is associated with alcohol use disorder, but not social marginalisation factors.

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