Factors associated with hepatitis C treatment uptake among females of childbearing age in New South Wales, Australia: A population-based study

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Background: Females of childbearing age with hepatitis C virus (HCV) face increased marginalisation with intersecting, sex-specific barriers to direct acting antiviral (DAA) therapy. We assessed the factors associated with uptake of DAA therapy among females of childbearing age, including those with evidence of recent drug dependence.

Methods: HCV notifications in New South Wales, Australia (1995-2017) were linked to opioid agonist therapy (OAT), hospitalisations, incarcerations, perinatal, HIV notifications, deaths, and prescription databases. Recent drug dependence was defined as hospitalisation due to injectable drugs or receipt of OAT occurring in the DAA era (2016-2018). Logistic regression was used to analyse factors associated with DAA uptake among females of childbearing age (18-44), including those with recent drug dependence.

Results: Among 57,467 people with evidence of chronic HCV in the DAA era (2016-2018), 20,161 (35%) were female, including 33% (n=6,563/20,161) of childbearing age (18-44). Among all females of childbearing age (n=6,563) and those with evidence of recent drug dependence (n=2,278/6,563, 35%), DAA uptake was lower among those who had given birth in the DAA era (vs. no birth record, all females of childbearing age; aOR: 0.74, 95%CI: 0.61, 0.89; those with recent drug dependence; aOR: 0.69, 95%CI: 0.51, 0.93) and Aboriginal and Torres Strait Islander peoples (all females of childbearing age; aOR: 0.81, 95%CI: 0.71, 0.93; those with recent drug dependence aOR: 0.75, 95%CI: 0.62, 0.90).

Conclusion: Females of childbearing age should be considered a key population for DAA therapy. Enhancing antenatal and postnatal HCV care may be critical in the pursuit toward elimination.

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