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# What do lifetime hospitalisation patterns tell us about people receiving specialist addiction services in England?

# Cheng Chen

Commentary

Department of Pharmaceutical Outcomes and Policy, University of Florida College of Pharmacy, Gainesville, FL, USA

## ARTICLE INFO

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What are the previous hospitalisation patterns of people seeking addiction services? This was an unanswered question due to the lack of a national database with information on both hospitalisation and addiction services. Using a novel linkage between Hospital Episode Statistics and the National Drug Treatment Monitoring System, Roberts and colleagues extracted the hospitalisation records back to 1997 of patients in England who presented to specialist addiction services for alcohol or opioid use disorder in 2018 and 2019 [1]. The authors categorised patients into clinical clusters, based on the causes of previous hospitalisations, and examined the associations between these clinical clusters and sociodemographic characteristics with three outcomes: rate of hospital admissions, death during addiction treatment, and successful completion of addiction treatment. Understanding individual-level factors that predispose patients to these health outcomes may help identify high-risk populations and target interventions more precisely.

The main findings that patients with mental and behavioural disorders had more than 7-fold the rate of hospitalisations fit well with established evidence on the interplay of substance misuse and other psychiatric disorders [2]. Previous studies have linked co-occurrence of mental illness to severe health outcomes and increased service utilisation among patients with substance misuse [3]. As most studies were performed in the United States, whether or to what extent these results could be generalised to a UK scenario remained unclear. Adding to the existing literature, Roberts' study was among the first to provide data specifically from the UK. Considering that the prevalence of coexisting psychiatric disorder may be as high as 75–85% among patients with opioid and alcohol use disorders in the UK [3], future research on and interventions targeting patients with dual diagnoses specifically in the UK are warranted.

The findings presented by Roberts et al. also align with current efforts towards treating the dual diagnosis of mental illness and substance use disorders. In 2016, the National Institute for Health and Care Excellence (NICE) had published guidance specifically on

DOI of original article: http://dx.doi.org/10.1016/j.lanepe.2021.100036. *E-mail address:* chenc92@ufl.edu treating several coexisting mental conditions and substance misuse in the UK, in which case they recommended a partnership approach among multiple agencies [4]. Following NICE, Public Health England also released a similar guideline in 2017, in which they emphasised the joint responsibilities of all health services providers in treating patients with a dual diagnosis [5]. While these guidelines targeted correctly high-risk patients, how well they were implemented in clinical practice and whether they translate into better health outcomes remain to be evaluated.

One novel yet less-discussed finding in the paper is the very low rate of successful treatment completion-a strong predictor of recovery from substance dependence [6]. As shown in the paper only 54.9% of patients with alcohol use disorder and 11.3% of patients with opioid use disorders completed their course of treatment. These rates seem somewhat lower than those reported by other countries and thus may represent opportunities for optimising care delivery [7]. Predictors of incompletion included male gender, younger age, lower deprivation quintile, and co-occurrence of mental illness and injury. Identifying these factors is the first step to answering several important questions-for example, why did these patients drop out of treatment? Was this result due to inadequate continuing access and thus a more structured treatment plan should be in place, or fear of treatment and thus educational programs should be implemented, or ineffectiveness of treatment itself and therefore novel interventions should be developed? And what are the barrier(s) that prevented them from completing the treatment? Future studies addressing these questions may help improve adherence to current addiction treatment and inform healthcare policy.

Although this study provides a comprehensive examination on clinical characteristics of patients attending addiction services, the results should be interpreted considering several points. First, the study is purely descriptive and therefore may not provide direct implications for clinical practice. Second, the associations were examined exclusively among cohorts with substance use problems. Thus, instead of interpreting the associated factors as "predictors of the development of substance use disorder," one should interpret results as "characteristics associated with higher hospitalisation rate among patients later attending addiction treatments." Of a relevant note, as the hospitalisations were measured before patients presented to addiction treatment services, whether the clinical clusters were precursors or consequences of the substance use disorders is unclear. Third, as the authors have suggested, the results may not be generalisable beyond those who underwent addicting treatment. Due to the fact that as many as four-in-five patients with substance misuse may not seek publicly funded addiction treatment [8], future

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research characterising patients outside addiction treatment centres should also be conducted.

So, where should we go from here? Building on these findings by Roberts et al., future studies may aim to understand the trajectories of the development of substance use disorder and evaluations of different care pathways. Of most relevance, comparison of lifetime hospitalisations between patients who presented to addiction services versus those who did not may assist in the early identification and prevention of later-on substance use disorders. Besides, the investigation into barriers against addiction treatment completion among patients attending treatment services will contribute to more effective healthcare delivery.

# **Author Contributions**

C.C. conceived the idea and wrote the paper.

# **Declaration of Interests**

Dr. Chen has nothing to disclose.

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