Exploring Alcohol Withdrawal and Frequent Hosptial Readmissions

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Overview

This thesis portfolio comprises three parts:

Part One: Systematic Literature Review

The systematic literature review examined the possible key factors that put individuals more at risk of returning to hospital repeatedly, in relation to alcohol withdrawal. In total, twelve articles were identified for review and narrative synthesis was used to collate the literature findings. The findings were framed using the Biopsychosocial model. The papers were also assessed for methodological quality, and this contributed to the overall review. The findings highlighted the potential influence of biological, psychological, and social factors on hospital readmission related to alcohol withdrawal. Gaps in the current literature were identified, and the clinical implications of the review were discussed.

Part Two: Empirical Paper

Part two consists of an empirical, qualitative study exploring individuals' experiences of hospital readmissions for alcohol withdrawal, and the potential reasons behind such. Eight participants took part in semi-structured interviews, and Reflexive Thematic Analysis was used to explore their experiences and identify patterns. Three main themes were created based on the data, highlighting the complexity of alcohol and individuals' relationship to it, the crucial influence of perceptions of alcohol, and the impact of receiving support. Key clinical implications and opportunities for further research was discussed.

Part Three: Appendices

Part three presents the appendices, which are comprised of key documents to support the first two parts of the thesis portfolio, in addition to an epistemological statement, and a reflective statement.

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Part One – Systematic Literature Review

Factors associated with hospital readmissions for alcohol withdrawal: A systematic review

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This paper is written in the format ready for submission to the Journal of Alcoholism Treatment Quarterly

Please see Appendix C for the Guideline for Authors

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Abstract

This novel systematic review aimed to collate an understanding of possible factors that put individuals more at risk of returning to hospital repeatedly, in relation to alcohol withdrawal. Twelve articles were identified and analysed using narrative synthesis. The methodological quality of the papers was also assessed. The findings suggested that there may be biological, psychological and social factors which influence the likelihood of readmissions for individuals experiencing alcohol withdrawal. The review also highlighted the variable methodological quality of such research, and the overall sparsity of research in this area. Further clinical implications have been discussed.

Keywords

'alcohol withdrawal', hospital, readmissions, factors, review

Introduction

Within the ICD-11 (International Classification of Diseases, 11th revision; World Health Organisation [WHO], 2022), 'Alcohol Dependence' (AD) indicates a severe and chronic Alcohol Use Disorder (AUD), characterised by prolonged and excessive alcohol use over an extended period of time. AD refers to the state in which an individual is unable to cease or control their alcohol consumption, and experiences symptoms such as intense urges to drink, and the prioritisation of alcohol over other necessities (National Institute on Alcohol Abuse and Alcoholism [NIAAA], 2023). It has also been established that chronic alcohol use results in a degree of neuroadaptation. For some individuals, neural pathways responsible for behaviour reinforcement, motivation, and stress responses, have been found to be altered by chronic alcohol use, resulting in the physical tolerance to, and subsequent dependence on, alcohol (Gilpin & Koob, 2008).

'Alcohol Withdrawal' (AW), a key feature of the AD criteria, occurs when alcohol consumption is reduced/ceased, as a consequence of this body/brain adaptation. Withdrawal commonly involves nausea and shaking, with the potential for seizures, or ultimately death, if not treated properly (NIAAA, 2022; WHO, 2022). AW can vary in severity, with more severe withdrawal requiring hospitalisation and medication to treat symptoms (American Society of Addiction Medicine [ASAM], 2020). The gold standard, validated tool used to assess the severity of an individuals' AW is the Clinical Institute Withdrawal Assessment – Alcohol, Revised (CIWA–Ar) which is a ten-item, validated, questionnaire designed to quantify withdrawal severity and inform medication treatment (NICE, 2010; Sullivan et al., 1989). Medication for AW can vary in purpose, from treating AW symptoms directly, to increasing chances of continued abstinence following AW. Previous research and guidelines primarily recommend the use of benzodiazepines for treating acute AW (Amato et al., 2011; Day & Daly, 2021; NICE, 2011), and medications such as Naltrexone and Acamprosate for reducing alcohol consumption and prolonging abstinence (NICE, 2011; Pettinati et al., 2006).

The nature of, and the motivations behind, alcohol use is an ever-expanding area of research. The Biopsychosocial Model suggests that it is interactions between factors of a) biology, b) psychological wellbeing, and c) social/environment/culture, that influence and explain a person's health and wellbeing (Engel, 1977). This model has been frequently applied to try and understand the ways in which individuals use alcohol. The model is often used to provide a framework to consider an individual in a more holistic way, and it has been acknowledged that all of these factors can interact and impact an individual's vulnerability to, and maintenance of, chronic alcohol use (Mackillop et al, 2022).

As may be expected, chronic alcohol use can have numerous implications for an individual, including cardiovascular risks (Quintana et al., 2012), cognitive deficits that persist after abstinence (Crowe et al., 2020), and increased risk of mortality (Zhao et al., 2023). Additionally, AW has been found to carry its own specific risks. Repeated cycles of excessive alcohol use followed by periods of abstinence increases the degree to which neural activity becomes sensitised to alcohol, and increases the risk of more severe AW symptoms (Becker, 1994) and greater levels of anxiety (Overstreet et al., 2002). So, the more often an individual experiences AW, the greater the risk for their physical health.

Alcohol use is also frequently linked to psychological difficulties. This relationship is thought to be bi-directional, as individuals with AUD are more likely to experience psychological distress (Jackson & Sher, 2003) such as anxiety disorders and depression (Lai et al., 2015), and individuals with mental health difficulties are twice as likely to experience an AUD (Puddephatt et al., 2022). Furthermore, this co-morbidity between alcohol use and mental health difficulties has been shown to be more likely for those who are alcohol dependent specifically (Lai et al., 2015). One hypothesis for this relationship is the notion of self-medication, with individuals using alcohol to manage their poor mental health and regulate negative emotions (Hawn et al., 2020; Khantzian, 1997).

It is also understood that AW/AD has significant repercussions for healthcare services (Hansen, Mejldal, & Nielsen, 2020). There has been a shift in type of services that are being accessed for alcohol-related support, with more non-specialist primary care services, such as general hospitals, being accessed for alcohol-related care, as opposed to specialist addiction services (Phillips et al., 2021). Alcohol-related difficulties have been found to be amongst the costliest needs for health services to manage (Blackwood et al., 2021), with individuals who experience substance use disorders (SUD's), including AUD, being more likely to experience hospital readmissions compared to individuals without SUD's (Rowell-Cunsolo et al., 2020). Similarly, Phillips et al., (2019) identified that individuals with Chronic Alcohol Disorder (CAD) have a greater number of admissions, and longer stays in hospital, than people with no alcohol disorder. Therefore, AUD can place an extensive burden on non-specialist hospital services, with CAD in particular exerting the greatest strain financially.

Given the emerging evidence regarding the strain that chronic alcohol use can place on individuals and services alike, particularly in the form of repeated alcohol withdrawal and readmissions, an understandable next step would be to try and reduce this burden. However, before we can know how to help, there must first be a clearer understanding of to whom the support must be targeted.

It is hoped that this review can establish a comprehensive understanding of the possible factors that put individuals more at risk of returning to hospital repeatedly, in relation to alcohol withdrawal. This review aims to synthesise this information to create an integrated understanding, and it does not appear that a review of this nature has been conducted as of yet. AW is the key focus because, as already established, chronic alcohol use is often considered to be the most detrimental form of alcohol use, not only for the individual's physical and psychological wellbeing, but also for the health services responsible for their care (Phillips et al., 2019). Furthermore, AW is developed only

through prolonged alcohol use (WHO, 2022), so may therefore provide a good indicator of those who use alcohol chronically, and highlight the group most in need of support. This review intends to focus on hospital readmissions specifically, as these have not only been found to be the costliest form of healthcare (Phillips et al., 2019), but may also be considered an indicator of healthcare quality (Fischer et al., 2014). They are therefore a relevant target for this review, in the interest of better understanding how this service impact could be reduced.

Clinical rationale

By systematically reviewing the literature in this way, with a focus on these particular aspects of alcohol use and healthcare, it is hoped that a unified understanding can be gained regarding the factors associated with alcohol withdrawal-related hospital readmissions; an understanding which may have implications for individuals, teams, and healthcare services alike. This could not only indicate who needs support, but also provide insight into potential sub-optimal care, as revealed by the presence of readmissions (Fischer et al., 2014). Information of this kind could therefore better enable future intervention/research to be targeted towards the right individuals, in order to improve their care and physical/psychological wellbeing. For example, hospital-based Alcohol Care Teams have been developed across the UK with the aim of establishing alcohol treatment pathways within acute hospitals, and improve alcohol-related hospital healthcare (Moriarty, 2019; NHS England & Public Health England [PHE], 2019). Additionally, given the established links between alcohol dependence/withdrawal and individual's psychological wellbeing, greater insight into the indications of who may be a risk of increased repeated readmissions for alcohol withdrawal could also inform psychological services as to who may be most in need of psychological support and interventions.

Aims

This review aimed to consolidate the existing literature to identify and assess potential factors surrounding individuals' readmissions into non-specialist hospitals related to alcohol withdrawal. This led to the research question:

'Within the current literature, what factors are related to the frequent hospital readmissions of individuals who experience alcohol withdrawal?'

Method

Search strategy

The systematic literature review was carried out in January 2024. The search was conducted via EBSCOhost, which searched the following databases: Academic Search Ultimate, APA PsycArticles, APA PsycInfo, CINAHL Ultimate, and MEDLINE. These databases were chosen to increase the likelihood of the review encompassing all relevant literature, and to specifically acknowledge the medical context of the review (unplanned, general hospital admissions). Citation and reference list searches also took place to ensure the review captured all relevant existing literature. Prior to the full literature search, scoping searches were carried out to confirm a review of this nature had not yet been completed. These scoping searches also provided opportunity to refine the search terms, and ensure the terms yielded results representative of all relevant literature. The systematic literature review was registered on Prospero in November 2023 (ID: CRD42023483758).

Search terms

Initial search terms were created and trialled to ensure that searches using these terms would yield all possible relevant literature. A librarian was consulted, and the search terms were broadened

to increase the likelihood that the search captured all available literature. Boolean Operators were used to further broaden the terms used. The final search terms were:

alcohol*

AND

readmission* or "re-admission*" or readmit* or "re-admit*"

AND

hospital* or ward* or acute or inpatient*

The final search also included the limiters of ‘peer-reviewed’ and ‘available in English’. The defining of the acute/medical hospital setting was done during the screening process, as it was too difficult to define these settings via the search terms alone, for risk of excluding relevant research. A scoping search was also done to trial the addition of psychological/behavioural search terms, such as “relapse”, in order to investigate whether this would yield further relevant literature. The addition of such terms led to the over-restriction of the search results. The decision was therefore made to not include such specific terms.

Inclusion/exclusion criteria

The tables below (Table 1 and Table 2) display the inclusion and exclusion criteria applied to this review.

Table 1

Inclusion Criteria and Rationale.

Inclusion criteria	Rationale
Peer reviewed	To increase the likelihood that the literature results were of a high quality.

Available in English language	To enable researcher understanding and subsequent synthesis of results. The translation of papers not written in English was not possible within the timeframe of this review.
Primary research	To ensure the reviewed literature included only original studies and findings.
Date range: No limit	This is because this review aimed to consolidate all relevant literature to date.
Participants: Individuals who experienced hospital admissions with a primary/secondary diagnosis of AW/AD	Individuals with AW/AD were the target population of this review.
Intervention: Acute, unplanned, hospital admissions	This is the setting deemed to experience the most burden, and is therefore the subject of this review.
Outcome: Factors relating to/characteristics of/predictors of AW readmissions to hospital	The aim of the review is to consolidate these factors as presented within the current literature.
Study Design: Any methodology/study design	Studies of any design were included in the review. This was partly due to the sparsity of the current literature on this topic, and also due to all methodologies potentially yielding findings relevant to the question this review aimed to answer.

Table 2

Exclusion Criteria and Rationale.

Exclusion criteria	Rationale
Participants: Individuals with admissions relating to broader alcohol-related reasons only	This review only included admission reasons that were directly related to AW i.e., papers with criteria that limited participants to those who experience AD/AUD, or alcohol withdrawal. Admissions relating to alcohol intoxication were included as long as they were evidenced to accompany the other two reasons for admission. Studies that referred to other alcohol-related reasons for readmissions were excluded. This was because not all alcohol-related reasons/codes for admissions indicate chronic alcohol use. For example, an admission coded for alcohol intoxication alone, may be more likely to indicate 'hazardous alcohol use', which is a different experience/diagnosis to long term, chronic difficulties associated with AD (Saunders et al., 2019) Some papers also group many of alcohol-related reasons together, and referred only

	generally to 'alcohol-related' readmissions. These were also excluded, because AD/AW, as exclusive outcomes of chronic alcohol use, are also specific diagnostic classifications (WHO, 2022), and therefore may have specific reasons from re-admissions. They could present differently, have different treatments, impact different populations, and are not the focus of this review.
Intervention: Studies not relating to acute hospital admissions specifically	Different medical contexts, like emergency department attendances or specialist addiction services, have been suggested to meet different clinical needs (Stephens et al., 2018). Therefore, individuals presenting to these different medical settings may be associated with different predictors/risk factors that are not relevant to the target population of this review. If a study examined both general AND specialist/psychiatric hospital admissions, and the data for the two settings could be separated, then it was included. Studies that only looked at specialist settings (such as a

	residential unit or specialist addiction inpatient facilities) were excluded.
Participants: Studies relating to wider substance use	Broader 'substance use' is classified differently to alcohol use (WHO, 2022) and may involve different, less relevant factors compared to the experience of AD specifically. Some studies recorded drug and alcohol data separately, however. If alcohol-related data could be isolated, then the research was included in the review.
Secondary research e.g., conference posters	This review aims to analyse original studies and findings only

Data extraction

The data extracted from the final papers included: General information (title, authors); study characteristics (aims, design, methodological quality); participant characteristics (age, gender); intervention/setting (description, location); outcome data/results; study conclusions. A standardised spreadsheet was used to organise and display the extracted data.

Quality assessment

A methodological quality assessment was performed in order to maximise the reliability and validity of the review, in addition to ensuring the findings could be conceptualised within the methodological constraints of their respective pieces of research. The Mixed Methods Appraisal Tool (MMAT; Hong et al., 2018) was used to assess the quality of the papers included in this review. This tool was chosen because it has been deemed a valid and reliable means to assess the

internal and external validity of primary research papers with varying study designs methods; all of which made it a suitable tool for use in this review. Additionally, the more descriptive nature of the tool (i.e., no final quality score) fit well with the epistemological stance and qualitative approach of the review as it made space for contextual, balanced considerations of methodology, rather than strict, inflexible scores. The characteristics of the studies which were quality assessed included: sampling, measures/data collection techniques, and analysis.

The assessment of methodological quality was carried out by the lead researcher. A random selection of papers was also blindly appraised by an independent reviewer, and the conclusion of methodological quality was compared between reviewers. If disagreements arose, the reviewers discussed the assessments and ensured consensus was reached regarding the quality of the studies. No papers were excluded on the basis of quality, the assessments were instead used to inform the critical analysis of the current literature as it stands. Additionally, there were multiple discussions held between the lead researcher and the researcher supervisors regarding paper inclusion/exclusion, and the quality of the papers. These discussions further informed the choice to include/exclude certain papers, and the assessment of quality of included articles.

Data synthesis

Narrative Synthesis was used to analyse and consolidate the findings of existing research, and summarise the patterns of factors relating to hospital re-admissions for AW. This synthesis aimed to not only integrate previous findings, but also incorporate reliable assessments of study quality, which hopefully allowed for a 'story' to be constructed regarding the factors relating to individuals returning to hospital for AW. The procedure for Narrative Synthesis by Popay et al. (2006) was adhered to, in order to provide structure and reliability to this review.

Position of the researcher

The primary researcher who conducted this review was a 23-year-old, white, British, middle-class female, and a trainee clinical psychologist. Whilst not having direct personal experience of hospital readmissions for alcohol use, as part of their clinical psychology training, the researcher had gained theoretical understanding of concepts such as motivation for alcohol use, and clinical experience of the practicalities of hospital care. This is likely to have informed their attitudes towards, and expectations of, what factors may or may not have influence repeated healthcare access in this instance. As acknowledged through a critical realist ontological position, the researcher's experiences and attitudes shape the way in which they observe information and create subsequent knowledge (Adler et al., 2016). Therefore, it was vital that the researcher remained reflexive, utilising techniques such as keeping a reflective diary, in order to maintain awareness of their own assumptions and acknowledge the influences this had, regarding this review.

Results

Identification of relevant studies

The initial search, with applied limiters, yielded 1955 papers. After duplicates were removed, 1432 papers were reviewed by title. Of these papers, 1245 were excluded based on the inclusion/exclusion criteria (see Table 1 and Table 2), and the remaining 187 papers were screened by abstract. After further paper exclusion due to unsuitability, 116 papers were assessed for eligibility via full text. The final sample of 12 papers met the inclusion/exclusion criteria. No new papers were found from citation and reference list searches. The study selection process was guided by the Preferred Reporting for Systematic Reviews and Meta-Analyses (PRISMA) 2020 statement (Page et al., 2021; Figure 1).

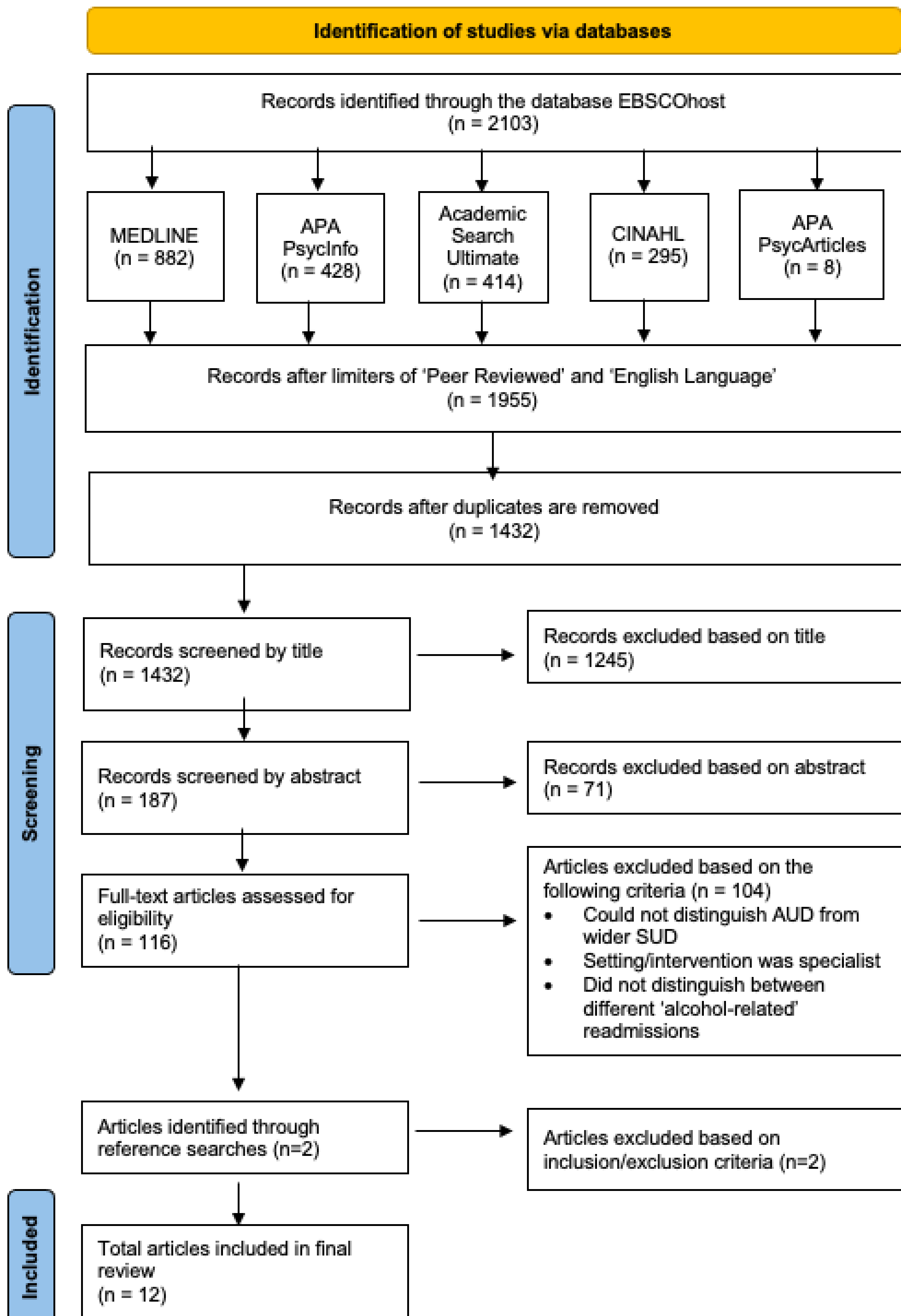

Figure 1. PRISMA flow diagram summarising the article selection process

Characteristics of included studies

An overview of the studies included in this review is presented in Table 3. All the studies were quantitative, but utilised a variety of different study designs. Two studies were descriptive (Al-Maqbali et al., 2022; Yedlapati & Stewart, 2018), three studies used a pre-and-post design (Stephens et al., 2018; Tigh et al., 2022; Wei et al., 2014), three studies used case controls (Hundert et al., 2024) and two of which were propensity score-matched (Singh-Tan et al., 2023; Wilson et al., 2022), three studies conducted cohort comparisons (Larson et al., 2012; Patel et al., 2022; Schoonover et al., 2015), and one study was a non-randomised control trial (Al-Maqbali et al., 2023). All studies were published between 2012 and 2024 (n=12), and nine out of the twelve studies were conducted in the United States of America. The remaining studies took place in Oman (Al-Maqbali et al., 2023; Al-Maqbali et al., 2022), or otherwise the geographical location of the research was not specified (Hundert et al., 2024). The majority of the papers (n=10) described the research taking place at only one location, such as a specific hospital or medical unit. The other two papers utilised data from a multi-hospital system (Patel et al., 2022) or national database (Yedlapati & Stewart, 2018). The studies contained varying participant sample sizes, ranging from 59 participants (Tigh et al., 2022) to nearly 400’000 cases of AW hospital discharges (Yedlapati & Stewart, 2018).

Three of the papers aimed to directly identify factors or characteristics relating to alcohol withdrawal hospital readmissions (Al-Maqbali et al., 2022; Larson et al., 2012; Yedlapati & Stewart, 2018) whereas nine studies examined specific interventions or protocols to either assess their impact on hospital readmissions, or used readmissions as a way to evaluate outcome. Two studies analysed the implementation of an Addiction Consultation Service (Singh-Tan et al., 2023; Wilson et al., 2022), and the other seven explored the effects of specific treatment procedures for AW in hospital (Al-Maqbali et al., 2023; Wei et al., 2022), including appraisals of different

medications used (Hundert et al., 2024; Patel et al., 2022; Schoonover et al., 2015; Stephens et al., 2018; Tigh et al., 2022).

Table 3

Overview of Included Studies.

Author(s) and year	Setting	Study design	Aim(s)	Sample	Key finding(s)
Al-Maqbali et al. (2022)	The General Medicine Unit of a tertiary hospital in Oman	Retrospective review of medical records Descriptive	To establish the clinical characteristics and health outcomes for individuals admitted with AW	All patients admitted to the hospital with a diagnosis of Alcohol Withdrawal Syndrome (AWS) as defined by the Diagnostic and Statistical Manual of mental disorders, 5th edition [DSM-V] criteria (American Psychiatric Association [APA], 2013) (n=150) 38% of participants were admitted with a primary diagnosis, 62% developed AWS during their admission	Diabetes and epilepsy were the only significant factors associated with readmission to hospital within 90 days Other factors found not significant included: • Other health comorbidities • Discharge Against Medical Advice (DAMA) • Age • Dose of medication
Al-Maqbali et al. (2023)	The General Medicine Unit of a	Single centre, prospective, non-	To compare the implementation of symptom-triggered verses	• Intervention group - all patients admitted with AWS (from November 1, 2020, to October 31, 2021) and treated with	More patients were readmitted within 90 days with AWS within the control group

	tertiary hospital in Oman	randomised control trial	fixed approach of administration of benzodiazepines to treat Alcohol Withdrawal Syndrome (AWS) during acute hospital admissions	benzodiazepines according to a symptoms-triggered approach (n=50) Control group - all patients admitted with AWS (between October 1, 2019, to September 30, 2020), and treated with the fixed-scheduled approach of benzodiazepines (n=150)	There was a significant reduction in 90-day readmission when using the symptoms- triggered approach There was a significantly shorter duration to the first readmission in the fixed-scheduled control group
Hundert et al. (2024)	General Medicine Unit	Retrospective Case-control study	Compared the outcomes of patients after different treatment protocols for AW	• Intervention group (n=54) - Patients admitted to the acute General Internal Medicine service and treated with a fixed-dose phenobarbital protocol from January 2022 to June 2022 • Comparison group (n=197)- all patients admitted from January 2018 to June 2018, who were treated with as-needed benzodiazepines	The study did not find a statistically significant difference in 30-day re-admission rates when a fixed-dose phenobarbital protocol was used for treatment, compared to an as-needed benzodiazepine protocol

Larson et al. (2012)	General Medicine Unit of an academic tertiary hospital, USA	Retrospective Cohort comparison	To identify the risk factors for multiple hospital readmissions for AWS	All patients admitted for AWS in 2006 (n=332) Patients with single admissions (n=180) were compared to those who were readmitted on multiple occasions (n=142)	Multiple admissions were found to be significantly associated with: • Positive urine drug screen • Some psychiatric comorbidities (adjustment disorder, psychotic disorder, eating disorder) • Some medical co-morbidities (diabetes, cardiovascular and cerebrovascular diseases) • More severe withdrawal symptoms • High school education or less Other factors found not to be significant: • Depressive disorder
Patel et al. (2022)	An 11-hospital system across Minnesota and Wisconsin USA	Retrospective Cohort comparison	To compare the outcomes of AW hospital patients treated with different treatment protocols	Patients with an ICD diagnosis of AD/AW admitted between 2013-2017 were placed in one of two groups • MINDS group (n=5409) - Patients admitted 2015-2017 and were assessed using the new Minnesota Detoxification Scale (MINDS; DeCarolis et	When covariates are accounted for, patients who received the MINDS protocol (high dose, front loading diazepines) had a significantly increased risk of 30-day readmissions

				al., 2007) and treated with a higher dose of longer-acting benzodiazepines • Pre-MINDS group (n=8218) - Patients admitted 2013-2015 and were treated with previous standard protocols, usually assessed using The Clinical Institute Withdrawal Assessment for Alcohol (CIWA-A; Sullivan et al., 1989) and treated with a lower dose of short-acting benzodiazepines	
Schoonover et al. (2015)	General Medicine Unit of an academic tertiary hospital, USA	Retrospective Cohort comparison	To determine if antidepressant medication use is associated with lower hospital readmission rates for AWS	Adults admitted to general medicine services and treated with symptom triggered protocol between January 2006 and December 2008 Patients were placed in one of three groups:	There was no significant difference between readmission rates for non-depressed patients, and depressed patients, regardless of whether they were receiving anti-depressants or not Depression, treated or untreated, did not appear to influence the risk of readmission for patients admitted for AW

				• No history of depression (n=161) • History of depression and taking antidepressant medication (n=111) • History of depression and not taking antidepressant medication (n=50)	
Singh-Tan et al. (2023)	An academic hospital in New York, USA	Propensity score-matched case control	To determine the association between an Addiction Consultation Service and the time to 7-day and 30-day hospital readmission	Patients were included if: • They had a primary or secondary diagnosis of AUD according to ICD-10 (WHO, 2004) • They were admitted April-December 2019 (prior to ACS launch) **OR** April-December 2021 (after ACS launch) Of the potential participants who received a consulted, 215 were successfully matched to a historical	The intervention group (those who received ACS consult) and control group (matched historical controls) had similar rates of 30-day and 7-day readmission ACS was found to be not significantly associated with readmissions

				control, resulting in 430 total participants	
Stephens et al. (2018)	The University of North Carolina Hospitals – tertiary academic centre, USA	Retrospective Pre and Post	To implement and evaluate the impact that naltrexone counselling has for patients hospitalised for alcohol detoxification / withdrawal	Patients admitted for alcohol detoxification or withdrawal (including seizures) as primary reason (n=242)	There was no significant difference in the adjusted re-hospitalisation rates for the post-intervention group (those who were counselled on Naltrexone) compared to pre-intervention (those who did not receive counselling) Also, there were no significant differences in adjusted readmission rates between those who were prescribed naltrexone, and those who were not
Tigh et al. (2022)	Academic Medical Centre in Nebraska, USA	Non-randomised Pre and post	To evaluate the frequency of hospital admissions in patients with AUD who received an extended-release naltrexone injection before	Patients with AUD who received Naltrexone during a hospital admission (n=59) between June and November 2020 Participants acted as their own controls, with their admissions pre and post injection being compared	90-day hospital readmissions were not significantly different following the naltrexone injection, compared to pre-injection The administration of ER naltrexone prior to hospital discharge in acute care patients with AUD did not show a significant decrease in health care utilization

			hospital discharge, compared to routine care		
Wei et al. (2014)	San Francisco General Hospital, USA	Non-randomised Pre and Post	To implement and evaluate a new discharge planning protocol for those admitted to hospital for AD	Patients with AD (according to the DSM-IV; APA, 1994) who were admitted to the Internal Medicine teaching service in June 2011 (pre-intervention group, n=64) and March 2012 (intervention group, n=49)	There was a statistically significant decrease in 30-day readmission rates when the discharge protocol was implemented This decrease remained significant regardless of whether a patient was eligible for naltrexone medication
Wilson et al. (2022)	An urban academic hospital in USA	Propensity score-matched case control	To evaluate whether an inpatient Addiction Medicine Consultation Service (AMCS) is associated with all-cause hospital utilisation	All participants had ICD-10 (WHO, 2004) codes consistent with any Substance Use Disorder (SUD) • Intervention group (n= 711) - participants referred to the AMCS from October 2018 to March 2020 • Control group (n=2172) - Matched control patients	Participants in the intervention group (i.e., seen by the AMCS) who had AUD specifically, did not show statistically significant differences in 30-day readmission rates compared to their matched historical controls

				hospitalized from October 2017 to September 2018	
Yedlapati & Stewart (2018)	Acute care hospitals across the USA	Retrospective review of national data Descriptive	To evaluate the predictors of AW-related hospital readmissions	All hospital discharges that were AW coded based on the ICD-9 (WHO, 1978) – information gathered from the 2013 Nationally Representative Database (n= 393'118)	The strongest predictors of readmission: • DAMA • Co-morbid psychosis Other factors that increased the likelihood of readmission: • Male gender • Poor socio-economic status • Co-morbid depression • Other drug abuse • Alcohol-related medical conditions Factors <u>not</u> associated with readmissions within 30 days: • Age • Tobacco use

Overview of quality assessment

A visual depiction of the quality assessment conducted through the MMAT (Hong et al., 2018) can be seen in Table 4. As intended through the design of the MMAT, no final quality scores were produced. Instead, indications of the quality of a paper were determined through answers of 'Yes (Y)', 'No (N)', or 'Can't tell (CT)' to methodology-related questions. The greater the number of 'yes' answers, the stronger the methodological quality of the paper.

The articles included in this review were of varying quality. Both descriptive studies (Al-Maqbali et al., 2022; Yedlapati & Stewart, 2018) and one non-randomised quantitative study (Wilson et al., 2022) were deemed to be very strong in quality, with answers of 'yes' to all questions. All but one paper (Hundert et al., 2024) clearly stated their aim/research questions, and all papers collected data suitable for addressing said aims. For eight studies, it was unclear whether their participants were representative of the target population. For one of these, it was unclear who their target population was because of the lack of clear research aims (Hundert et al., 2024), and for other seven, there was no clear description of how the sample may/may not appropriately represent their intended population. Additionally, these eight studies were further limited by collecting data from one location/hospital ward only (Al-Maqbali et al., 2023; Larson et al., 2012; Schnoover et al., 2015; Tigh et al., 2022; Stephens et al., 2018; Wei et al., 2014; Singh-Tan et al., 2023), with some reporting additional demographic limitations of their sample (Schnoover et al., 2015; Singh-Tan et al., 2023). Two studies utilised a short timeframe for data collection, calling into question how representative the sample may be for other times of the year (Hundert et al., 2024; Wei et al., 2014).

Four studies did not account for potential confounding variables in design or analysis (Al-Maqbali et al., 2023; Schnoover et al., 2015; Patel et al., 2022; Tigh et al., 2023). Two studies suggested that their intervention/exposure may not have been administered as intended, whether it be because of

an inability to carry out part of the intervention (Stephens et al., 2018), or possible non-compliance with medication (Schnoover et al., 2015).

Table 4

Quality Assessment of Included Studies.

Study	Screening questions		Quantitative non-randomised					Quantitative descriptive				
	S1	**S2**	**3.1**	**3.2**	**3.3**	**3.4**	**3.5**	**4.1**	**4.2**	**4.3**	**4.4**	**4.5**
Al-Maqbali et al., (2022)	Y	Y	-	-	-	-	-	Y	CT	Y	Y	Y
Al-Maqbali et al., (2023)	Y	Y	CT	Y	Y	N	Y	-	-	-	-	-
Hundert et al., (2024)	N	Y	CT	Y	Y	Y	Y	-	-	-	-	-
Larson et al., (2012)	Y	Y	CT	Y	Y	Y	Y	-	-	-	-	-
Patel et al., (2022)	Y	Y	Y	Y	Y	N	Y	-	-	-	-	-
Schnoover et al., (2015)	Y	Y	CT	Y	Y	N	CT	-	-	-	-	-
Singh-Tan et al., (2023)	Y	Y	N	Y	Y	Y	Y	-	-	-	-	-
Stephens et al., (2018)	Y	Y	CT	Y	Y	Y	N	-	-	-	-	-
Tigh et al., (2022)	Y	Y	CT	Y	Y	N	Y	-	-	-	-	-
Wei et al., (2014)	Y	Y	N	Y	Y	Y	Y	-	-	-	-	-
Wilson et al., (2022)	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-
Yedlapati & Stewart (2018)	Y	Y	-	-	-	-	-	Y	Y	Y	Y	Y

Note. MMAT responses: Y = Yes; N = No; CT = Can't tell.

Narrative synthesis

In accordance with the narrative synthesis process (Popay et al., 2006), the results of the review were tabulated (see Table 3), and trends across the included papers were identified to help integrate the results in the meaningful way, in answer to research question being explored by this review. The findings have been framed through the lens of the Biopsychosocial approach (Engel, 1977), and conceptualised within three categories of factors: biological, psychological, and social.

Biological factors

Ten studies examined biological/medical aspects of physical health and healthcare, and the impact these have of readmissions related to alcohol withdrawal.

Medical protocols. Five studies assessed specific protocols used to treat AW within acute hospital admissions. Patel et al. (2022) examined the implementation of a new treatment protocol against the standard procedures previously used across an 11-hospital system in the USA. The standard treatment procedures usually involved assessment of withdrawal using the Clinical Institute Withdrawal Assessment for Alcohol (CIWA-A; Sullivan et al., 1989) and short-acting benzodiazepines. The new protocol involved assessing withdrawal using the Minnesota Detoxification Scale (MINDS; DeCarolis et al., 2007), and treating patients with a standardised, single, higher dose of longer-acting benzodiazepines. Even when covariates were adjusted for, Patel et al. (2022) found that patients who received the new protocol were significantly more likely to experience hospital readmissions within thirty days of discharge.

Two protocols specifically regarding medication administration were evaluated by Al-Maqbali et al. (2023). They compared a fixed-schedule approach (benzodiazepines were given to patients at set, standardised times) to a symptoms-triggered approach (patients were given benzodiazepines as and when they needed it). This study found that there was a significant reduction in 90-day hospital

readmissions when the symptoms-triggered approach to medication administration was used. Additionally, not only were more patients readmitted when they received a fixed-schedule approach, but they experienced significantly shorter duration between discharge and first readmission. Hundert et al. (2024) compared similar protocols for medication delivery; their new ‘fixed-dose’ protocol using phenobarbital, and the previous ‘as-needed’ approach which utilised benzodiazepines. However, in contrast to Al-Maqbali et al. (2023), Hundert et al. (2024) found that there was no statistically significant difference between the two different protocols in relation to thirty-day hospital readmissions rates. Comparably, Al-Maqbali et al. (2022) found that medication dosage was not significantly associated with hospital readmissions within ninety days of discharge for AW.

Medication. As already revealed, the included studies assessed various different medications in relation to the treatment of AW and subsequent impacts on hospital readmissions. In Patel et al. (2022), medication types differed as part of the different protocols they evaluated. The patients who received the higher dose of longer-acting benzodiazepines (as part of the new protocol) were the patients who were found to be at greater risk of hospital readmission within thirty days. Additionally, Hundert et al. (2024)’s fixed-schedule and symptoms-triggered protocols also differed in relation to the medications given as part of each protocol. In the fixed-schedule group, phenobarbital was given, whereas the symptom-triggered approach utilised benzodiazepines. There was found to be no difference in the rates of readmissions between the patient who received phenobarbital and those who received benzodiazepines, as part of their respective protocols.

Stephens et al. (2018) also examined the use of naltrexone as an entire variable, separate to their analysis of the effects of naltrexone counselling. However, there was no significant difference between adjusted readmission rates between patients who were prescribed naltrexone, and those who were not. Similarly, the decrease in hospital readmission risk seen by Wei et al. (2014)

remained consistent regardless of whether patients were eligible to receive Naltrexone medication or not. Naltrexone was further investigated by Tigh et al. (2022), who specifically studied the implications of an extended-release naltrexone injection when administered to patients with AUD prior to discharge. They concluded that there was no significant difference in healthcare utilisation, particularly ninety-day hospital readmissions, following the implementation of the injection.

The role of antidepressant medication was examined by Schoonover et al. (2015), and they found no difference between readmission rates of patients who were taking antidepressants, and patients who were not.

Physical health. Some of the reviewed papers also explored the physical health of individuals who had been readmitted. Al-Maqbali et al. (2022) established that diabetes and epilepsy were significant factors associated with readmission within ninety days. Larson et al. (2012) also found diabetes to be a factor significantly associated with multiple admissions for AW. Larson et al. (2012) further saw cardiovascular and cerebrovascular medical conditions to also be significantly associated with these multiple admissions. Concurrently, Yedlapati and Stewart (2018) showed that broadly 'alcohol-related medical conditions' increased the likelihood of readmission.

Additionally, Larson et al. (2012) found that the severity of an individual's withdrawal symptoms was also associated with readmission risk; specifically, the more severe the withdrawal, the greater the risk of readmission after discharge

Psychological factors

Some papers discussed readmissions in relation to the mental health of individuals, and certain co-morbid mental health difficulties were found to be associated with AW and hospital readmissions. Yedlapati and Stewart (2018) found that one of the two most significant predictors of hospital

readmission following AW was co-morbid psychosis. This was also seen by Larson et al. (2012) who found that ‘psychotic disorder’ was significantly associated with multiple hospital admissions.

Yedlapati and Stewart found co-morbid depression was also associated with an increased risk of hospital readmissions. Conversely however, the study conducted by Schoonover et al. (2015) concluded that depression, regardless of whether it was being treated with antidepressants or not, did not significantly influence the risk of readmission to hospital following AW. Similarly, whilst Larson et al. (2012) found a significant association with ‘psychiatric co-morbidities’ as a whole, they found that ‘depressive disorder’ specifically was not significantly associated with multiple hospital readmissions.

Other psychological co-morbidities found by Larson et al. (2012) to be significant were ‘adjustment disorder’ and ‘eating disorder’.

Social factors

Finally, socio-environmental factors were found to be considered by six papers, particularly in relation to support offered in and out of hospital, as well as the impact of individual social factors.

Services. Two studies examined the use of Addiction Counselling Services (ACS). Singh-Tan et al. (2023) retrospectively studied the effects of an ACS that offered patients varied support, from withdrawal management, to counselling and linkage to outpatient support. They found that patients who received this support from the ASC had similar rates of hospital readmissions compared to patients who did not receive ASC support; a finding that was consistent for readmissions within seven days and within thirty days respectively.

Concurrently, Wilson et al. (2022) explored the implementation of an ACS provided within a different hospital, but still offered similar support e.g., withdrawal management, linkage to post-discharge support, brief motivation interviewing etc. Again, within patients admitted for Alcohol Use Disorder specifically, there was no reduction seen in either seven day or thirty-day readmissions rates. Overall, both studies did not find significant differences in the rates of readmissions between patients who were seen by an ACS, and patients who were not.

Discharge. Discharge planning was also explored within the literature. Wei et al. (2014) implemented a specific protocol relating to patient discharge from hospital. The protocol encouraged the use of a ‘discharge planning tool’ to support patient discharge, assess eligibility for further medication support, and arrange of follow-up appointments. This protocol was also preceded by greater training/information for the healthcare professionals responsible for such patients, focussed particularly on medication use. The study showed that there was a statistically significant decrease in hospital readmission rates following the implementation of the discharge protocol. Furthermore, this decrease was maintained, regardless of whether a patient was deemed eligible for further relapse prevention medication support (naltrexone) or not.

Stephens et al. (2018) also aimed to implement changes to a discharge protocol, and examined the effects of counselling patients about medication use. Specifically, patients were counselled on the effects that Naltrexone can have in relation to maintenance of their sobriety post-hospital discharge. Stephens et al. (2018) found that there were no significant differences in the adjusted re-hospitalisation rates for those who were counselled on use of Naltrexone, compared to those who did not receive this counselling.

Discharge against medical advice (DAMA) was named the other strongest predictor of AW readmissions, according to Yedlapati and Stewart (2018), however Al-Maqbali et al. (2022) found that DAMA was not significantly associated with hospital readmission within 90 days.

Individual characteristics. Additional social factors identified by Yedlapati and Stewart (2018) that may increase the likelihood of readmission included being male and having poor socio-economic status. Larson et al. (2012) identified that patients who had a high school education or less, are more likely to be admitted multiple times. Two studies consistently found age to not to be significantly associated with AW and hospital readmissions (Al-Maqbali et al., 2022; Yedlapati & Stewart, 2018).

Discussion

Overview of the findings

This systematic review aimed to create a cohesive understanding of the factors impacting hospital readmission following AW, as presented within the current literature. The findings were organized in line with the biopsychosocial model (Engel, 1977). Overall, the findings of this review suggest that there are various factors associated with hospital readmissions for AW/AD. These factors range from 'biological' characteristics related to aspects of healthcare and individual physical health, to psychological factors related to the individual's mental health, to social factors such as specific service offered/protocols outside of hospital. The papers included in the review are of varying methodological quality, commonly limited by potentially unrepresentative participant samples, or a lack of accounting for cofounding variables.

This review identified some biomedical factors that could reduce hospital readmissions, including using a symptom-triggered approach for delivery of benzodiazepines, rather than a fixed-schedule approach (Al-Maqbali et al., 2023). This finding was not a consistent finding within this review,

with Hundert et al. (2024) reporting that a symptom triggered approach did not significantly influence readmissions compared to a fixed-schedule approach. However, Hundert et al., (2024) changed multiple variables between their intervention and control groups, i.e., the medication type changed, as well as the protocol structure, making the findings difficult to reliably interpret. A symptom-triggered approach is line with NICE guidelines for AW treatment within an inpatient setting (NICE, 2010), and its suggested efficacy within alcohol-related healthcare is consistent across research conducted within other settings, such as an alcohol-specialist care (Holleck et al., 2019).

On the other hand, risk of readmission was suggested to increase when treatment protocol involves using the Minnesota Detoxification Scale (MINDS; DeCarolis et al., 2007) to assess AW, alongside one high-dose of long-acting benzodiazepines (Patel et al., 2022). However, due to the multiple variables that were changed in this study, it is hard to attribute this increased risk to a specific factor i.e., it is unclear whether it is the higher dose of benzodiazepines, the long-acting nature of benzodiazepines, or the use of MINDS assessment of ASW instead of the CIWA-Ar (Sullivan et al., 2007), that influenced the readmission rates most. Therefore, this finding of an increased risk should be interpreted with caution.

An identified social factor to potentially reduce readmissions is the implementation of discharge protocols to provide specific discharge planning, further medication support, and arrangements for follow-up appointments. This was found to be particularly beneficial when staff received education on specific medication beforehand (Wei et al., 2014). This concurs with wider understandings that dedicated discharge care is a vital part of reducing general hospital readmissions, particularly when it is initiated during an admission, rather than post-discharge (Braet et al., 2016).

The outcomes of this review also highlighted that there are factors that do not appear have an impact, positive or negative, on patient readmission. Addiction Consultation Services were found to have no effect of readmission rates for AW, and whilst this finding is only based on results from two studies (Singh-Tan et al., 2023; Wilson et al., 2022), it is consistent with other research regarding the effect of ASCs on readmissions for other patient groups, such as those with general 'Substance Use Disorders' (Weinstein et al., 2020). As previously stated, the benefit of a discharge planning protocol has been established by this review, so it is perhaps unexpected that the use of ACS, in which discharge planning is a key element, was suggested to have no effect of readmission rates. The reason for this conflicting finding is unclear.

The use of Naltrexone was also consistently found to have no impact on readmissions. Multiple reviewed studies found that Naltrexone had no effect on readmission rates, regardless of whether it was delivered orally or by injection, delivered pre-discharge, or delivered alongside specific counselling about its use. As readmission rates are thought to be partially linked to quality of care (Rumball-Smith & Hider, 2009), a lack of evidence for Naltrexone reducing readmission rates may indicate a lack of effectiveness of the medication. There may instead be need for further evaluation of the role Naltrexone plays, or should play, in the treatment of AW in acute hospital admissions.

This review's results indicate that co-morbid psychosis (psychological factor), co-morbid physical health conditions (biological factor) such as diabetes, and the use of other substances, are all consistent factors that increase the likelihood of hospital readmissions for AW. This is congruent with research exploring readmissions for more general 'alcohol-related' reasons, which similarly demonstrates that comorbid mental health difficulties, physical problems, and other use of other substances, all increased the likelihood of readmissions (Hoy, 2017; Silverstein et al., 2020). This is also consistent with the biopsychosocial approach which acknowledges the key influences of the proposed factors lie in the complex interactions between such (Engel, 1977). Furthermore, co-

morbid physical and psychological difficulties increase the complexity of the individual, and potentially result in what Blunt et al. (2015) framed as anticipated re-admissions; a category of readmissions where the individuals, due to their complexity, are anticipated to need further readmissions as part of their pattern of care.

Within the present review, there is conflicting evidence for the role of discharge against medical advice (DAMA), with one study suggesting it to be the strongest predictor of readmission (Yedlapati & Stewart, 2018), and another study finding previous DAMA to have no significant influence (Al-Maqbali et al., 2022). Compared to the single-hospital sample of the latter, Yedlapati and Stewart (2018) analyzed a nationally representative data set, therefore it may be appropriate for their finding to be considered the more reliable.

There was also conflicting evidence regarding the impact of 'depression' on hospital readmission likelihood. Yedlapati & Stewart (2018) found it to be significant, however two other studies found it to be not significant (Larson et al., 2012; Schnoover et al., 2015). Again, given the former was deemed to the methodologically stronger study in comparison, it may be more prudent for this finding to carry more weight.

Limitations

Firstly, the definitions of factors are likely to differ between different studies, as there were no universal categorizations used conceptualize factors. For example, 'psychotic disorder' as a psychological factor may be defined differently within one hospital, compared to its definition within a nation-wide database. Also, the majority of the psychological factors were derived from one study only (Yedlapati & Stewart, 2018). Whilst the paper was deemed to be of strong, reliable methodological quality, it is still only one paper, with little evidence from other reviewed papers to corroborate or contradict the findings. This may increase the risk of the 'biological' factors

identified in this review becoming the predominant focus, and perhaps subsequently implying that these factors are therefore most important. This may be an unfair conclusion, as this unbalance appears to be due to the sparsity of psychological or social-related research, rather than established conclusions that 'biological' factors are the most significant. Moreover, the question of which factors are most important could not be determined within the scope of this review.

Another limiting factor may be inconsistencies between aspects of the reviewed studies that were otherwise assumed to be consistent. Firstly, methods of Alcohol Withdrawal or Alcohol Dependence identification changed between papers. Specifically, the ICD-9 (WHO, 1978), the ICD-10 (WHO, 2004), the DSM-IV (APA, 1994), and the DSM-V (APA, 2013) were all used by different studies to identify participants who were alcohol dependent, and to code hospital admissions to reflect the presence of AW. However, different criteria like these have been found to offer poor general consistency and tend to make different judgements about the 'severity' of AUD (Lane et al., 2016). Secondly, some of these older criteria have been suggested to have a higher threshold for AD diagnosis, and so under-identify the true number of individuals that experience AD (Lundin et al., 2021). If some individuals experiencing AW are being overlooked by very the criteria used to identify them, they are at risk of exclusion from not only the support they need, but from representation in research like this. Subsequently, the use of different criteria calls into question how comparable the participant samples are within this overall review. Another presumed consistent factor is hospital admission pathways. Different hospitals may have different criteria for admissions, and may have even altered these pathways during data collection periods. This would subsequently affect readmission rates, and inadvertently impact the findings collated in this review. Overall, differing criteria for AW/AD diagnosis, and potentially different admission pathways, may mean the findings of the review itself are not as representative of the intended target population than initially thought. This may have also been a contributing reason for the inconsistencies between reported factors within the reviewed papers.

A third limitation may be a lack of generalizability of the findings. Most of the research analyzed in this review (n=9) was conducted in the USA, which implements a unique healthcare system based on public and private health insurance programs, rather than a universal free healthcare (Rice et al., 2020). Furthermore, in the US, health services are often organized at a local level, rather than using one, nationwide structure; the latter of which is more common in other countries, such as the UK. Such structural and accessibility differences to US healthcare services may be an unaccounted variable influencing the factors associated with admissions and readmissions to said services. Furthermore, only two papers recruited from more than one location (Patel et al., 2022; Yedlapati & Stewart, 2018), with the rest conducting their studies in one hospital only, or even one specific unit/ward. Moreover, some participant samples were further restricted by unbalanced demographic characteristics. For example, 95% of one sample was Caucasian (Schnoover et al. 2015), whereas Singh-Tan et al. (2023) recruited predominantly Black and Hispanic participants from a poorer economic area. Overall, these limitations due to a) study location, both in terms of geography and specific service environment, and b) sample characteristics, may mean that the findings of this review lack external validity, and fail to represent services or participants outside of those examined in each respective study.

The standard measure of outcome within the studies should be considered too. As noted by Wei et al. (2014), data gathered was often limited to a specific hospital, meaning authors could not report on patient readmissions that may have occurred elsewhere. Therefore, whilst all studies reported complete outcome data, there may be unintentional 'missing' data. Also, '30-day readmission' rate is a common outcome measure of hospital care, and it was used by all studies in this review to measure readmissions relating to AW. However, this measure of outcome has been suggested to under-represent the true impact of readmissions (Vaduganathan et al., 2013), with readmissions likely occurring over a longer time period (James et al., 2023). Therefore, if readmissions were

potentially missed by the outcome measures, both through limited data and too-short timeframes, it could be suggested that the findings of this review are also limited in regard to its representativeness of the target population and their true healthcare use.

Finally, despite efforts taken to ensure the process remains systematic as possible, another key area of reflection may be the unavoidable subjectivity within this review. The researcher recognized that aspects of the review, such as the screening of papers and quality assessment, all required some level of subjective interpretation. However, action was taken to acknowledge this bias, e.g., inter-rater assessment of methodological quality, reflexivity.

Clinical implications and future research

As previously discussed, before we can know how to help, we must first have a clear understanding of to whom we need to target support. In the case of AD, there needs to be a greater understanding of the factors that influence an individual returning to hospital following AW. This is to ensure we know who may be at risk of these readmissions, to subsequently better support them and reduce the rate at which they may be readmitted, as well as improve their overall wellbeing. The findings of this review could help inform services tasked with addressing these alcohol readmissions (Moriarty, 2019; NHS England & PHE, 2019). For example, understanding these factors could help shape the support offered by Alcohol Care Teams (ACT), and help identify to whom they should target their support to best address the high rates, and significant implications of, readmissions for AW e.g., teams could target those most likely to DAMA (Coleman et al., 2023).

Furthermore, in response to these highlighted impacts of individual complexity and comorbidity, and in line with the holistic approach of ACT's (Quelch et al., 2024), and there is also evidence to support increased multidisciplinary working between ACT and other specialist health teams, such as diabetes services and mental health teams, which may help address these established

complexities. Similarly, as identified by the Division of Clinical Psychology, if clinical psychologists can work collaboratively with other professionals, such as primary care staff, it can help better meet the needs of the individual and mean they need to access less primary care (DCP, 2023). There may be scope for consultancy work, with clinical psychologists offering insight and support to other staff teams, such as ACT's, to help manage their evidently complex clinical population, and offer support to staff themselves.

Secondly, there may not only be implications from what is present in the review, but also what is *not* present. Most of the reviewed papers explored the treatment or medications provided during admissions, and whilst it has been evidenced that some of these biological/medical factors have significant implications for hospital readmissions, it has also been made clear that these influences are not the whole story. A biological, reductionist approach to treating addictions is not sufficient, in and of itself (Hall & Weier, 2017). As highlighted by the Biopsychosocial approach (Engel, 1997), biological, medical factors are indeed fundamental contributors to an individual's behavior and wellbeing, however, it is not the only component. The model suggests that psychological and social aspects wield equal influence, so should therefore also be considered within this wider picture of alcohol use and subsequent service usage. Despite this, it is evident that currently there is greater research emphasis on exploring biological characteristics and interventions associated with AW and hospital readmissions, and a lack of exploration of psychological or social factors that may influence a person's likelihood of readmission. This review highlights this large gap in the literature. Patient-specific factors, as opposed to aspects of medical care for example, have been suggested to be key predictors of general acute hospital readmissions (Benbassat & Taragin, 2000). Acknowledging the pre-established detrimental physical and psychological impacts that chronic alcohol use/repeated withdrawal can have on an individual, it is paramount that future research further investigates psychological and social factors related to AW readmissions. This should be with the aim to inform service provision and policy, to address the readmissions and improve the

outcomes of alcohol-related care for services and individuals alike. Clinical Psychologists may be well placed to conduct such research, given their extensive clinical and research training, as well as the knowledge to help introduce and enforce more psychologically informed ways of thinking.

This review also indirectly raised a wider question regarding how AW/AUD is defined during admission. Between hospitals, if methods of assessment/diagnosis differ, and there are also reported discrepancies between the methods themselves, then some individuals 'slip through the cracks', and it could be seen that this speaks to a wider identification issue within the field of alcohol use and healthcare. Further research should explore the identification of AW within a hospital setting in more depth, and address this apparent lack of a unified, reliable way to identify those experiencing AW/AD. If there was a way to do this with greater uniformity, subsequent support could be more suitably targeted to these individuals, meeting the needs not only of the individual themselves, but subsequently the need to reduce readmissions on a service-level.

Conclusion

This review aimed to establish an integrated understanding of the factors that influence general, acute hospital readmissions for alcohol withdrawal. The findings suggest that the factors which may impact readmissions are holistic, including not only biological aspects (such as the clinical medical management of alcohol withdrawal), but psychological and social components too, relating to social support, personal characteristics, and additional co-morbid difficulties. The review highlighted the variable methodological quality of such research, the overall sparsity of research in this area, as well as the existing gaps in the literature. Future research should seek to address these gaps, particularly in relation to the apparent need for greater understandings of the potentially crucial 'psychological' factors, and what they may mean for readmissions. The current findings may still have important clinical implications for the development and advancement of alcohol withdrawal treatment, in addition to providing insights as to who may be most at risk of readmission, to better

inform healthcare decisions and wider service provisions as to whom their support is best targeted towards.

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Part Two – Empirical Paper

Exploring individuals' experiences of hospital readmissions related to alcohol withdrawal

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Please see Appendix C for the Guideline for Authors

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Abstract

The aim of this study was to gain a better understanding of the experiences of, and reasons for, frequent hospital admissions for alcohol withdrawal, from the perspective of those being readmitted. Eight participants, recruited through a local Alcohol Care Team, were interviewed using a semi-structured approach, and the data was analysed using Reflexive Thematic Analysis. Three key themes were created based on participant experiences and views of their own hospital readmissions; 'A complex relationship with alcohol', 'Significance of perceptions', and 'Support is vital'. Critical clinical implications and opportunities for future research were discussed.

Keywords

'alcohol withdrawal', hospital, readmissions, qualitative, experiences

Introduction

'Alcohol dependence' is defined by several characteristics including: a lack of control surrounding alcohol use, continuous use despite negative consequences, and a strong internal 'drive' or craving to use alcohol (World Health Organisation [WHO], 2022). A key indicator of alcohol dependence is also the development of a physical tolerance to alcohol. This tolerance results in the individual experiencing 'alcohol withdrawal' (AW) when alcohol is not consumed, or when consumption is greatly reduced. Mild withdrawal can involve nausea and tremors, whilst extreme cases can see seizures, require hospitalisation (National Institute of Alcohol Abuse and Alcoholism [NIAAA], 2022a), and can be fatal if not adequately monitored and treated. AW usually begins a few hours after the last alcohol consumption, with more severe symptoms, like seizures, potentially emerging around 48 hours later (Foy, 1997). The severity of withdrawal symptoms is linked to the severity of the alcohol dependence, as those with more severe dependence experience more severe withdrawal (Bayard et al., 2004). The urge to drink however, is a common symptom, which also places the person at risk of re-establishing drinking.

Previous research has found that hospital readmission rates for AW are increasing, with almost 60% of hospital admissions for AW resulting in future readmissions (Yedlapati & Stewart, 2018). These high readmission rates could have significant, potentially detrimental, consequences for several reasons. Firstly, there are significant impacts for the individuals experiencing AW. As may be expected, alcohol dependence and withdrawal can have several serious physical health effects, such as reduced cardiovascular functioning (Quintana et al., 2012), liver disease, and impaired nervous system functioning (NIAAA, 2022b). AW has also been linked to cognitive decline, such as reduced brain plasticity (Loeber et al., 2010).

Severe alcohol use is often associated with serious psychological difficulties, with mental health difficulties being a significant predictor of AW readmissions within 30-days (Phillips et al., 2022).

However, the specific nature of the relationship between alcohol use and mental health is not simple. Mental health difficulties have repeatedly been identified as a risk factor for alcohol use, with alcohol commonly being used as a way to manage psychological distress (Turner et al., 2018). Conversely, alcohol use has also been found to be a precursor to mental health difficulties. Hermens et al. (2013) explored the effect of alcohol on the brains of young teens and established that extensive alcohol use, particularly from an early age, may predispose an individual to psychological difficulties. Alternatively, one may exacerbate the other (NIAAA, 2022a). Regardless of which may come first, co-morbidity of alcohol dependence - and therefore AW – and mental health difficulties is a prevalent struggle for many (Singh et al., 2005).

There is also a suggested societal element to the individual consequences of AW. Alcohol disorders have been found to be the difficulties most stigmatised by the public (Rundle et al., 2021). It is this stigma (Schomerus et al., 2011) and shame (Andréasson et al., 2013) surrounding alcohol dependence that has been suggested to influence why a person may not seek help regarding problems with alcohol. Therefore, these public and internalised perceptions of alcohol use may create a very real barrier between those who need support, and the help that they receive.

The Biopsychosocial model (Engel, 1977) may be a helpful and relevant way to conceptualise these overlapping but equally influential factors/outcomes in relation to chronic alcohol use. The model posits that an individual's health and wellbeing is affected by a combination of biological, psychological, and social factors, in addition to the interactions between such. As already highlighted, alcohol dependence can see an array contributing biopsychosocial factors, from physical tolerance to alcohol, to psychological difficulties. It can also result in a wide range of biopsychosocial outcomes, such as physical health problems, exacerbated mental health difficulties, and societal stigma.

These biological, psychological, and social costs of alcohol dependence and withdrawal increase the need for intervention and accessible care and support for the individual. There may be an illusion that repeat readmissions is providing an individual with frequent and regular care, but this is often not the case; instead, repeated hospital admissions for AW could also be further damaging for an individual. For example, those who have experienced AW (aka: detoxification or "detox") numerous times are more at risk of severe withdrawal symptoms such as seizures (Yost, 1996). Furthermore, consistent returns to hospital may implicitly indicate an element of incomplete treatment or sub optimal care (Rosano et al., 2013), which results in a greater length of time until an individual receives the level of care and support they truly need, potentially exacerbating their difficulties in the meantime.

Within a broader context, AW and high hospital readmission rates also have fundamental impacts for hospitals and healthcare services. An increased likelihood of readmission has been shown to place greater strain on services (Moos et al., 1995; Hansen et al., 2020). For example, there is greater monetary cost incurred for readmissions compared to single/infrequent admissions (Phillips et al., 2019), and alcohol-related difficulties have been revealed to be the costliest for health services (Blackwood et al., 2021) Furthermore, there may be an additional strain from COVID-19. In several different cultures, the amount of alcohol being consumed by the general population has increased compared to pre-covid times (Oksanen et al., 2020; Tran et al., 2020). Within the UK, the consumption of alcohol has increased in risk level by 58% compared to 2020 (Public Health England, 2021). Comparably, the number of alcohol-related hospital admissions has also increased following the pandemic (Subhani et al., 2021). It could be inferred that this increase in hospital admissions would also see an increase in hospital readmissions.

To date, there has been limited research investigating the relationship between AW, the impact on services, and the possible reasons behind this. Firstly, most current research is primarily descriptive

and quantitative in nature. Hospital Episode Statistics (HES) are commonly used to analyse frequency and predictors of alcohol-related readmissions (Blackwood et al., 2021; Phillips et al., 2019). Whilst this administrative information enables the exploration of hospital readmissions for alcohol-related reasons on a national scale, it lacks richness and insight into why the data shows what it shows. Additionally, data sets are retrospective and, as acknowledged by Phillips et al. (2019), given the increase in alcohol disorder prevalence in recent years, the context of alcohol-related readmissions and relevant statistics may have changed significantly.

There have been some qualitative explorations regarding alcohol-related difficulties and the frequent use of A&E services. Neale et al., (2016) and Parkman et al., (2017) used semi-structured interviews respectively, and both identified themes of alcohol-related frequent A&E attendances including unemployment, mental health difficulties and problems with housing. Parkman et al., (2017) established that many of their participants had high perceived health needs, and this was their main reason as to why they sought out A&E services (Parkman et al., 2017). They also revealed that individuals who frequently attend A&E departments for an alcohol-related problem often have little interest in specialist services. Despite these more in-depth explorations of individual experiences, service such as A&E departments can be distinctly different to the experience of an acute hospital admissions. This is apparent within the NHS data, which showed that in 2020-2021, only 23% of people who attended A&E departments went on to be admitted into hospital (NHS, 2021). Hospital A&E departments and hospital admissions serve different purposes within the healthcare setting and may therefore not only be experienced differently by an individual, but primarily attract different individuals for different reasons (Stephens et al., 2018). Moreover, the cost of hospital admissions is much greater than an A&E attendance. The cost of attending an Emergency Department for an alcohol-related reason has been estimated at £103 (Phillips et al., 2019) whereas the average cost of a hospital admission is approximately £446 per day (Phillips et al., 2021) which would be approximately £524 today when inflation is considered. Therefore,

frequent hospital readmissions have a much larger financial burden for services than frequent A&E attendances. In terms of research aimed to reduce service burden, a focus on specifically hospital readmissions, and the reasons behind them, may be more beneficial.

Possible reasons behind hospital readmissions have also been explored in relation to overall substance use. Raven et al., (2010) identified three themes across hospital readmissions related to substance use; the presence of barriers to long-term treatment, hospital admissions being viewed as a solution to housing/social problems, and unsuccessful care following discharge. Admittedly, 'alcohol use' is often included under the umbrella of 'substance use' and so there may be a pull to view them as one in the same. However, they are considered separate disorders within diagnostic criteria, such as the ICD-11 (WHO, 2022), so it may be more accurate to view the two difficulties as separate in their presentations and relationship to hospital readmissions rates. Additionally, certain problem domains, such as social experiences/relationships, mental health problems, and physical health problems, have been linked to alcohol dependence specifically (Drummond, 1990). So, much like the research focusing on A&E departments, substance use research could provide initial insights into the reasons behind alcohol-related readmissions. However, it may not be reliable to consider reasons for substance-related readmissions as wholly equal to the reasons for alcohol withdrawal readmissions.

Overall, the current research surrounding alcohol-related problems and service utilisation may initially appear to answer pertinent questions surrounding the repeated use of non-specialist services for alcohol-withdrawal; however, it may only be a part of the exploration needed. It appears there is a lack of qualitative, in-depth examinations into the reasons behind AW readmissions. Additionally, given rising costs and frequency of readmissions, this is a pertinent area of research now more than ever. A greater understanding of what drives high readmission rates, through a more in-depth, qualitative exploration as proposed in this study, could inform the development of emerging

Alcohol Care Teams (ACTs). These are NHS-funded teams that are designed to support the care of individuals admitted into hospitals with alcohol-related illnesses, including AW. In 2022, only 31% of hospitals had ACTs working within them for seven days a week (Juniper et al., 2022). This research could better inform these teams as to where the greatest needs for their target population currently are and, in turn, guide their development and policies to better meet these needs. The findings of this research surrounding what compels the need for readmissions could also enable the establishment of practical and psychological interventions that can better support this population. For example, greater insight into what individuals believe would help avoid future readmissions could aid the more accurate design of practical care pathways to help achieve this. Given the established complex connections between alcohol use and mental health, the findings may also provide insight for intervention opportunities in relation to an individuals' psychological wellbeing too. It could highlight potential psychological drivers behind re-admissions, therefore shedding light on what could be addressed to meet these needs.

Research aims and questions

It is because of the lack of current research, and the potential benefits from further exploration, that qualitative research into hospital readmissions related to alcohol withdrawal is the focus of this study. The aim was to gain a better understanding of the experiences of, and reasons for, frequent hospital admissions for alcohol withdrawal, from the perspective of those being readmitted.

Research questions:

- What do service users view as the reasons behind their returns to hospital?
- What influenced service users' decisions surrounding their admissions?
- What do these service users believe is needed to avoid future readmissions?

Method

Design

This research aimed to be exploratory, given the current lack of research in this area to date. Therefore, the study had a qualitative design and used semi-structured interviews with open-ended questions to allow for rich insight to be gathered directly from participants. Reflexive Thematic Analysis was used to analyse the qualitative data. This was chosen due to its suitability for initial, exploratory research, and for the opportunity it provides to construct valuable meaning and themes regarding the individual experience (Braun & Clarke, 2022). Some participant demographic information was also gathered to provide context for the qualitative findings.

In May 2023, a Patient and Public Involvement (PPI) group were consulted regarding the design and content of the study. The group consisted of four individuals with lived experienced of difficulties with alcohol dependence. They were asked to reflect on the appropriateness of the interview questions and procedure, they gave their opinions on the documents that were to be provided to participants, and they were asked for advice on how best to engage potential participants. Their feedback was subsequently incorporated throughout the design and procedure of the study. This predominantly resulted in changes to the wording of the information sheets/consent forms that would be provided to participants, to ensure the resource content and language was accessible. Per advice from PPI members, wording of the interview guide was also changed (e.g., changing a question from "what made you decide to come back to hospital?" to "what has brought you back to hospital", to remove any potentially blaming language) and recommendations on how to build rapport with participants was also incorporated (e.g., the icebreaker questions).

The study was pre-registered through the Open Science Framework (OSF, https://doi.org/10.17605/OSF.IO/4RGW6) in December 2023, in the interest of maintaining research transparency and quality.

Participants

Opportunity sampling was used to recruit eight participants, the inclusion criteria for which can be found in Table 1. Participants were aged between 28 and 74 years old, with a mean age of 44 years old. Five participants were female, and three were male. All participants were recruited and interviewed during their current hospital admission. Recruitment took place between March and May 2024. The number of participants was guided by the richness of the information gathered. From a constructivist standpoint, all individuals have the potential to provide new insights, as their realities and any subsequent co-constructed understandings would be unique between them and the researcher. Additionally, the concept of 'data saturation' is not consistent with the values of thematic analysis, as meaning is constantly constructed, not *found* by a certain number of participants (Braun & Clarke, 2019). Therefore, analysis took place alongside data collection, to gage the quality of the information being gathered to guide the sample size, and eight participants was deemed sufficient for the scope of this study.

Table 1

Inclusion Criteria and Rationale.

Inclusion Criteria	Rationale
Must have experienced three or more hospital admissions for Alcohol Withdrawal/Alcohol Dependence within the past 12 months prior to recruitment	• It is those who are more frequently re-admitted (e.g., multiple times within a year) that are the group deemed to have the most unmet needs, and therefore it is only this group being investigated within the current study • The definition of "frequent readmissions" varies within the literature, from two or more admissions (Blackwood et al., 2020) to four or more admissions (Blackwood et al., 2021) – therefore, an average of three or

	more admissions has been used as criteria for 'frequent re-admissions' in this study
Must be over 18 years of age	
Able and willing to give informed consent	As participants were recruited during a hospital admission, they needed to be medically well enough, and cognitively able, to consent to take part. Ability to consent was checked by asking participants to recall and explain their understanding of what they would be asked to do.

Potential participants were excluded from taking part on the basis of the following: (a) English fluency was not sufficient to allow for an interview, and/or (b) the individual was not able to consistently give informed consent. In total, 13 potential participants were approached, however three individuals refused to take part, and two individuals were found to be unsuitable prior to interview. The reasons for refusal included: (1) interest in participation but did not feel it was the right time, (2) refrained from contacting the researcher to rearrange an interview, (3) abscondence from the ward before interview. Two individuals were deemed unsuitable as they were not able to demonstrate ability to consent to participate.

Ethics

Ethical approval for this research was granted by the Faculty of Health Sciences at the University of Hull (Reference: FSH 22-23. 100) (see Appendix D). Ethical approval was also granted by the NHS Health Research Authority (REC reference: 23-NI-0161) (see Appendix E), as

well as the local NHS trust Research and Development office. All ethical bodies approved the documentation used within this study, including the Participant Information Sheet, version 2.0 (PIS; see Appendix F), and the consent form, version 2.0 (see Appendix G).

All participants were provided with the PIS, which was also verbally explained prior to interview. The PIS highlighted the procedure that would be followed should any significant and immediate risk be disclosed during the interview, and sources of support were included at the end of the document. Participants were required to sign the consent form in order to participate. Their ability to consent to take part was checked at recruitment, and again prior to the interview. Their right to withdraw was explained, as they could withdraw up until two weeks post-interview. To maintain confidentiality, all participants chose their own pseudonym. Interview audio recording were stored on a secure NHS encrypted laptop accessible only to the lead researcher. The recordings were transcribed, and any identifiable information was removed.

Procedure

Participants were recruited through an Alcohol Care Team (ACT) at a local hospital. The ACT staff used patient medical records to identify who potentially met the study inclusion criteria. Once the ACT staff confirmed the person would be interested in taking part in research, the lead researcher would approach the individual to explain the study in more detail, provide the Participant Information Sheet, and answer any questions. All participants were given a minimum of an hour to consider whether they would like to partake in the study. If they agreed to participate, a consent form was discussed and signed by participants.

The one-to-one interviews took place at the local hospital. Interviews lasted between 54 to 72 minutes, and the locations of these within the hospital grounds differed depending on location availability and participant preference (e.g., in a participant's private room, in a dedicated 'quiet

room' on the ward, in the hospital cafeteria etc). An NHS encrypted laptop was used to audio record the interviews.

An interview schedule was used (see Appendix H) which was adapted from the topic guide constructed by Simon et al. (2020). The questions were altered to suit the design and questions of this study, in addition to incorporating the feedback provided from the PPI group. The schedule questions focussed on exploring participants' experiences of admissions, both prior to and during their stay at hospital, as well as their experiences of support outside of hospital.

Position of the researcher

The researcher was a white, British, middle-class female in their early twenties, and consideration was held for how these characteristics may have helped or hindered the research process. For example, how participants' perceptions of the researcher may have influenced the relationship that could be built between them, or created barriers to disclosure, etc. The researcher was also a trainee clinical psychologist who valued the experiential expertise of individuals, and whose way of thinking was often psychologically informed, first and foremost. Throughout the research process, the researcher also reflected on their own beliefs and assumptions about participant experiences, what may be contributing to readmissions, and chronic alcohol use overall. The research recognized that they themselves had recently experienced their first hospital admission. This had undoubtedly influenced the way in which they viewed admissions, predominantly highlighting more difficult, negative aspects of admissions that the researcher previously had not considered. Whilst the researcher hoped this personal experience may have enabled them to connect with participants experiences on a slightly deeper level, they were also conscious of the risk of assuming shared experiences. A reflective diary was therefore essential for the researcher, and it was utilised throughout the process, in addition to research supervision. These proved invaluable as spaces to reflect on these preconceived ideas, current assumptions, and impact on the research.

Data analysis

The data gathered was analysed using Reflexive Thematic Analysis (TA). Reflexive TA, informed by a constructivist epistemological stance, is suited to the exploratory and inductive nature that this study aimed to embody (Braun & Clarke, 2022), and it was anticipated that Reflexive TA could provide space for the investigation of individuals' admission experiences, whilst still enabling the exploration of patterns across participant understandings. It was also hoped that the production of themes in this way would enable any findings to be disseminated to stakeholders/relevant parties in a clear, transferrable way (Braun & Clarke, 2013), facilitating the utility of the research findings and subsequent implications.

The analysis procedure followed the six-phase reflexive TA process, as outline by Braun and Clarke (2022). Firstly, each interview audio recording was transcribed and re-read to encourage data familiarisation. Then, each transcript was systematically coded for information deemed to be potentially relevant to the focus of this study and research questions. Following this, codes were clustered and re-clustered together based on underlying concepts, in order to explore how different elements of the data related to one other and to trial potential themes. From here, themes were created more formally, revised, and then re-formed to establish the patterns that felt most pertinent to the data. This included the construction of more specific subthemes. The themes were discussed between the lead researcher and supervisors, and as the core concept of each theme was refined, informative names for each theme/subtheme were given. Finally, the themes were formally written up, which enabled further refinement and ensured the themes felt coherent and relevant.

Throughout the research process, the researcher upheld their own reflexivity, primarily by using a research diary to document and reflect on the process and their personal subjectivity throughout the entire research experience. Additionally, supervision between the lead researcher and supervisors was frequently utilised to discuss topics such as reflections on interviews, and theme generation and

definition. These elements of reflexivity were all in line with suggestions from Braun and Clarke (2022) to ensure the research and analysis was of high quality.

Results

Three themes were created, each with their own subthemes. An overview of these themes can be seen in Table 2 below. The title of each subtheme is taken directly from participant quotes.

Table 2

Overview of Generated Themes and Subthemes.

Theme	Subtheme
1. A complex relationship with alcohol	1.1 “A chemical attachment”
	1.2 “An emotional attachment”
2. Significance of perceptions	2.1 “You get judged’
	2.2 “It’s just really shameful”
	2.3 “You feel validated and you feel understood”
3. Support is vital	3.1 “The help that we need”
	3.2 “Sometimes you’re met with a brick wall”

Theme 1. A complex relationship with alcohol

Alcohol use was understood to be complex and multifaceted, involving a variety of contributing factors. Participants commonly felt that, in order for them to avoid future readmissions, sobriety is a necessity, but that this road to sustained abstinence is not simple:

I mean obviously, maintaining sobriety's the obvious answer, but, to maintain sobriety erm (.) dunno there's so many factors around it (Percy)

This theme of a complex relationship with alcohol was further classified into two subthemes based on the nature of the relationship. On one hand, participants described their alcohol use/actions as being influence by the more biological impacts of alcohol as a substance ("a chemical attachment"). Comparably, evidence of a psychologically driven relationship with alcohol also seemed to be prominent for participants ("An emotional attachment") and appeared to be equally as meaningful in the context of their experiences.

Cos I know the, chemical attachments there cos, withdrawal and all that I know that's what, that's gonna happen if I stop drinking, I'm gonna, you know getting to that point where I know that's gonna happen, but I'd call it more of an emotional attachment (Julio)

Subtheme 1.1. "A chemical attachment"

Participants spoke of the physical aspects of drinking, and these elements were commonly contextualized in respect to their returns to hospital. Individuals would experience an urge to drink, which would be followed by feeling 'out of control', with one drink always leading to more:

As soon as I have that one drink, there isn't a limit you know, so one drink's too much, erm, like hundreds and hundreds of drinks is not enough, you know, obviously not in a day but you know like (.) like continuously till I end up in here (Percy)

This progression of drinking was further complicated by the physical consequences of consuming too much alcohol. Participants would also find themselves having to drink more alcohol in order to manage or avoid the symptoms of alcohol withdrawal that would occur if they were to stop

drinking. This consequently impacted the decisions they must make surrounding their alcohol use, and hospital admission is a common outcome:

Most of the time it's a necessity because you can't just stop (.) erm, and so, because when you do just stop you end up here (Judy)

I can tell myself I'm stopping no matter what, but the withdrawals, it's, they're more scary I think, cos I don't want to have a seizure and the kids to find me (.) so I, I try and avoid them but end up like this (Chantel)

Subtheme 1.2. "An emotional attachment"

All participants also emphasized the significance of psychological influences when considering why they use alcohol to the extent that they do. Every participant described using alcohol as a way to change or manage their emotion, and it was frequently described as being a habitual coping mechanism:

It can be something really small, like a personal thing in my life can trigger it and I'll feel upset and it's like a coping thing for me (Charlotte)

It's your go-to when you're upset (Pandora)

Sarah and Julio specifically linked feelings of loneliness and isolation to the reasons why they were drinking prior to their most recent admission:

So then I came out [of hospital], erm (.) didn't drink for (..) a good, at least a month maybe a bit longer, erm (.) and then (.) the loneliness hit again, the isolation, that's why, that's why I'm

drinking again at the moment, erm (.) that came back in and, erm, yeah just started, started drinking (..) and then (..) I had about, three ambulances over like a week period (Julio)

Participants also shared the impact that their wider social contexts often had on their alcohol use. They discussed how difficult or unsafe living environments meant that they increased their alcohol use, as well as drinking to manage experiences of previous trauma, or to cope with grief:

When he died, three months ago (..) I was-I don't know what I was doing (.) and, the first thing I turned to was the bottle of vodka (Sarah)

Theme 2. Significance of perceptions

Perceptions of alcohol use and hospital admissions - held by professionals, others, and the participants themselves - appeared to hold strong significance for participants when they considered their admission experiences. Three patterns in particular appeared most meaningful for participants and these formed the three subthemes. There appeared to be a juxtaposition between the distinct negative experiences of judgement ("You get judged") and shame ("It's just really shameful"), alongside suggested benefits of more positive attitudes ("You feel validated and you feel understood").

Subtheme 2.1. "You get judged"

Experiencing judgement from other people appeared to be a common occurrence for participants, especially during their readmissions to hospital. Some participants felt as though they were being labelled or treated differently compared to other patients receiving care for non-alcohol-related issues:

I overhear comments to do with like 'oh she's just here for alcohol withdrawal' like, I don't know whether it's just me being conscious but it like feels a bit like, like you're being pushed to the side a little bit you know cos it's (.) it's just deemed as like an alcoholic (Charlotte)

Similar to Charlotte, other participants also recalled feeling dismissed or ignored by staff, and reported that professionals appear to grant greater attention to a person's alcohol use, rather than consideration for the individual as a whole:

The first thing that anyone says is, 'well how much you drinking' (..) and I feel like a kid, that's been caught shop lifting or something (Sarah)

Some participants often also felt as though this judgement from others was centred around their *return* to hospital specifically:

You get admitted, and then it's like ah he's back again he's been drinking again, and that's why he's in, you know what I mean 'ah he's just a pisshead', 'why're you still drinking' all those kinds of things (Percy)

Furthermore, participants often identified these experiences of judgement and dismissal as direct influences for their decisions whether or not to access hospital care again:

I delayed coming in for two days because I didn't want to come on the ward where, erm, I get tret [sic] differently, cos I'm in because of alcohol (Percy)

Judgement was even suggested as directly contributing to their alcohol use prior to admission. When Judy was describing one reason behind her urge to drink, she shared:

Just to take the anxiety away about like I'm gonna end up here again, I'm gonna be judged again (Judy)

Subtheme 2.2. "It's just really shameful"

The influence of shame appeared to have particularly significant implications too. Participants commonly experienced feelings of shame and guilt surround their alcohol use and admissions:

It's just really shameful to come on here, knowing that they know, you've done it to yourself (Percy)

I do feel (.) I do feel mortified when they come and give me Librium (.) I think oh god not again (Sarah)

The majority of participants viewed a hospital admission as a last resort, and described accessing emergency services only after they felt they would not otherwise survive, or if they were unable to manage their withdrawals independently/with community support:

It's not somewhere you choose to be (.) but I chose to be here because (.) I was worried I would die, to be very honest (Pandora)

A common association to participants' feelings of shame around admission, was their awareness of hospital resources. Some participants shared that they felt guilty taking up beds, felt as though they were wasting people's time, or perceived other, non-alcohol-related patients as more deserving of care:

I do feel guilty being here I keep saying that to everybody like, yeah like having people care for me and stuff like I feel guilty because it does feel like, I'm here cos I've done this to myself, whereas other people are poorly because they're poorly (Charlotte)

It's not worth it (.) I want to save you all money and stay at home (Sarah)

Subtheme 2.3. "You feel validated and you feel understood"

Conversely, the benefits of more positive, understanding approaches to alcohol use and admissions were also emphasised by participants, either through appreciation of their past care, or because they identified the aspect to be lacking thus far.

Participants acknowledged the value of feeling cared for when in hospital, and identified this as an ideal, favourable aspect of their hospital experiences:

I quite, enjoyed, is that- is that the word, I quite like being in hospital because, living on your own is erm, quite solitary and when people are doing your dinners and taking care of you (Adamant)

Feeling understood by professionals was another valued approach for participants. Some felt that doctors did not understand the nature of their alcohol use, and comparably, others spoke of how valuable it felt for staff to take into consideration their story behind their alcohol use:

Oh it's great, it's great you feel validated and you feel understood cos you feel like, they get it (Pandora)

Theme 3. Support is vital

All participants expressed the importance they placed in receiving support, whether it be during their admissions in hospital, within the community from local services, or from family and peers. It appeared to be a necessity for participants, in relation to tackling their alcohol use and staying out of hospital.

For example, Pandora likened her overwhelming emotions to a glass that was too full, and described using alcohol as a way to manage this overflow. Similar to other participants, she suggested that, with support, she could change this approach and find different ways to cope instead:

You'd have the back up for that overflowing glass (.) to reduce it down to a safe limit (.) before you revert to dealing with it with alcohol (Pandora)

The concept of 'Support is vital' has been further conceptualized as two subthemes to try and capture the parallel needs of participants for not only the right *type* of help ("The help that we need"), but easier and safer access to said help ("Sometimes you're met with a brick wall").

Subtheme 3.1 "The help that we need"

Participants often shared wanting to see different types of support, or aspects of care, which they felt would better meet their needs.

It was expressed that hospital care and admissions often related solely to their physical health, and whilst participants acknowledged this was understandably the main aim of admissions, given the complexity of their alcohol use, some felt they would benefit from further psychological support, both in and out of hospital:

There's never been really any treatment (.) like following or during the end of a hospital visit, for like kind of, like the psychological effects you know, it's just like let's get your body better, make sure you don't have a fit and die (Percy)

The importance of consistency and continuation of support was also highlighted as being crucial, whether that be consistency of medical or psychological support specifically, or general access to care:

I think in my opinion they need to be on, Librium a lot longer, and reduce it in, erm, long stages (Adamant)

Probably something that's ongoing for me, that I stick to, would help me, erm, because even when I'm feeling like oh I'm okay, like I probably- that is a point where I still need to be going because, you know it could, prevent that, that peak from happening (Charlotte)

In relation to the approach of services, there was consensus amongst participants for the necessity of person-centred support, tailored to the needs of an individual, as opposed to broader, generic help:

I just think it needs to be person specific, cos obviously you can't paint everyone with the same brush and even that some people feel more comfortable going to group meetings at [local community alcohol service], I don't, so then I, it feels like I'm not taking part in the programmes, so more, more person specific so 'what do you need' not 'we do <u>this</u>, we offer <u>this</u> kind of help and we do it <u>this</u> way', yeah generally person specific (.) a little bit more tailored (Judy)

Subtheme 3.2. "Sometimes you're met with a brick wall"

Participants also described experiencing barriers to this vital support, one of which being problematic criteria to accessing services. Individuals often had a desire to access support in the community to help with their alcohol use and the underlying reasons for such. However, they often described being prevented from doing so *because* of their alcohol use:

They won't give you mental health support, until you fully stop drinking, but (.) you've gotta fully stop drinking for like, I don't know like three months or something stupid so (.) you know when you have, if you have a moment (.) and you're used to the drink you turn to the drink (Julio)

I am on the list to get looked at and counselling for PTSD (.) erm but that's not happened yet, cos it can't happen if I'm drinking, so it's a bit of a vicious cycle (Pandora)

Services were also reported to be inaccessible because of factors such as lengthy, confusing processes to gain access, a lack of money to physically attend support, or long waiting times which had very negative consequences for their drinking:

Their waiting lists were weeks and weeks and weeks and that's when I ended up having to go to rehab because, whilst I was waiting even just for a call back, my drinking got so bad that I had to go to rehab (Charlotte)

At the moment the waiting list is rubbish, what, four months, six months, that's a long time to be fighting your demons (Pandora)

Discussion

Overview of Findings

This was the first study to qualitatively explore the experiences of alcohol withdrawal-related hospital readmissions, from the perspective of those being readmitted. This study aimed to gain a better understanding of the reasons for frequent hospital admissions for alcohol withdrawal, as conceptualised by those who experience alcohol dependence/withdrawal and are readmitted for such. The findings suggest that there are three key aspects of these experiences that influence alcohol withdrawal and hospital re-admissions: the complexity of individuals' relationship with alcohol itself, the perceptions of alcohol use and admissions, and the significance of support.

When participants considered what they thought were the reasons why they frequently returned to hospital, consideration for *why* they use alcohol appeared especially important to them. It seems that, from their perspective, one cannot examine why readmissions occur without also, or perhaps primarily, considering the underlying motivations for drinking; whether it be because of the physical symptoms of alcohol dependence/withdrawal, or the reliance on alcohol to cope with emotional/situation distress. This is in line with the ideas proposed through the Biopsychosocial model (Engel, 1977), as participants demonstrated that 'psychological' factors of their own mental health, in addition to their emotional relationship with alcohol, are indeed core influences of their readmission decision-making, and overall physical/mental wellbeing. This is also concurrent with previous models of alcohol dependence/addiction which also acknowledge these complex interactions between the physical and psychological, and how they maintain alcohol use, or even hinder treatment of such (Garland et al., 2011; Larimer et al., 1999). A 'taxonomy of relapse' proposed by Marlatt and Gordon (1985) suggested there are interpersonal and intrapersonal influences that may precipitate relapse, including the need to cope with negative emotional/physical/physiological states, as well as experiencing interpersonal conflict. Moreover, the Cognitive Processing Model of Reactivity (Tiffany, 1990) suggests that craving is not central to

further substance use, but rather the automaticity surrounding substance use, due to a long history with such, can better explain the progression from stimuli (such as environmental, emotional, physical states etc) to drug use. These concepts appear to be very similar to the accounts from participants, who reflected that their complex relationship with alcohol was driven by a need to cope with various physical and psychological influences, in addition to the now habitual nature of their drinking.

The role of perceptions and attitudes toward alcohol use and admissions is another prominent and potentially meaningful finding within this study. Participants often highlighted how influential these perceptions can be for their care decisions. Additionally, it was made apparent how their own perceptions of themselves and their admissions, in addition to their treatment from others, are often predominantly negative. This is again similar to the picture that might be expected through the lens of the Biopsychosocial model (Engel, 1977). The 'social' aspect of the model alludes to the impact of factors such as interpersonal relationships, as well as social interactions, and how these can influence an individual's wellbeing. As suggested through the second constructed theme of this current study, not only do others' perceptions of alcohol use and readmissions impact participants' psychological wellbeing, but also influences their own decisions and beliefs surrounding their readmissions, illustrating the central, and vital, part that 'social' factors play in the context of alcohol withdrawal and frequent hospital readmissions.

Correspondingly within previous research, judgement and stigma are often prevalent experiences in the context of Alcohol Use Disorders specifically (Kilian et al., 2021), and this perhaps highlights a lack of understanding of the nature of alcohol dependence/withdrawal. The judgement expressed by others, and the shame felt by participants, may reflect a wider, older, societal belief that individuals are to be *blamed* for their alcohol use and admissions. Furthermore, within a hospital setting, this may present as AW being more commonly perceived as an acute symptom to be 'fixed', rather than

an indication of a broader struggle with a chronic and complex psychological difficulty. This lack of understanding of the nature of alcohol use could therefore perpetuate an incorrect, negative narrative surrounding alcohol dependence and readmissions, when in fact, as suggested through the themes in this study, alcohol use and the context surrounding readmissions is so much more complex than 'just stop drinking'. This need for more inclusive and compassionate narratives that move away from blame and judgement is becoming more recognised within wider literature (Morris et al., 2023) but there clearly remains significant progress to be made.

In the context of readmissions, the idea of positive experiences being equally as important as negative experiences is similar to the conclusions drawn by Parkman et al., (2017) relating to reasons for A&E attendances. They proposed that there are 'push' and 'pull' factors that influence the likelihood of an individual with alcohol-related problems attending A&E, including positive beliefs/experiences of A&E care (pull factors) and individual/service level problems (push factors). It could be suggested that the participants of this current study also experienced similar push and pull factors. For example, negative experiences of judgement/shame and inaccessible services appear to act as 'push factors' which keep participants away from services until absolutely necessary. On the other hand, positive attitudes and experiences of care contributed to participants willingness to return to hospital, aka 'pull' factors. Therefore, when conceptualising the influences surrounding readmissions as understood by the individuals themselves, these may not be limited to the 'negative' aspects, and instead the ways in which positive, 'pull' factors come into play should also be considered.

Interestingly, the themes devised within this study may have also highlighted potential variance between the perspective of individuals, in contrast to wider professional understanding. It was intimated that participants often considered their alcohol use as complex in respect to the relationship they have with it. Contrastingly, within wider literature, alcohol 'complexity' is more

often thought of in relation to patient factors such as co-existing health conditions, factors of inequality etc (McGill et al., 2021). Within this research, participants occasionally referenced their co-existing health conditions, but not to an extent that justified their distinct inclusion within theme generation. This may indicate that whilst previous research has focussed on wider interacting factors in relation to alcohol use and readmissions, for the individual themselves there may be an additional layer of complexity specifically centred around their relationship with alcohol, which can be equally as impactful for their alcohol use and eventual healthcare access.

Limitations

One limitation of this study may be the cross-sectional design. As already suggested, alcohol dependence and the context surrounding healthcare use is broad, longstanding, and complex. Whilst this study tried to explore participant experiences retrospectively, one relatively short interview may have limited the information and depth that could be captured. Therefore, whilst greater insight was gained regarding the experiences and perspective of the participants, this research could only capture ‘a point in time’ of a much wider problem, and should consequently be considered a small reflection of the individual experience, rather than a complete picture.

Another drawback of this study may have been the unequal gender split across participants. The intention of this study, in line with the Reflexive TA approach and broader epistemological stance, was not to produce generalisable, objective results, but rather provide deeper insight in the experiences of those who experience alcohol withdrawal and related hospital readmissions. However, gender plays in fundamental role in personal experience, and there may be differences between the experiences of people of different identities, in relation to alcohol use. For example, males have been suggested to experience higher rates of perceived stigma in relation to alcohol use (Keyes et al., 2010) and transgender/non-binary individuals often experience greater stressors which contribute to the severity of their alcohol consumption (Connolly et al., 2024). As the findings of

this current study suggest, experiences of stigma and consideration of *why* someone uses alcohol, are potentially significant influences in the context of a person's frequent hospital admissions. It could therefore be implied that gender may also have a significant role within this context. However, due to the uneven gender representation in this present study, potential nuances relating to gender and admission experiences could not be explored further, but should therefore be a target of future research.

A third limitation of this study may be the method through which participants were recruited. All participation was limited to those who were well enough to participate. It could be argued that those who experience extreme ill health and emergency readmissions are those whose alcohol dependence is most severe, and healthcare use most frequent. This may have therefore been a group that would be the epitome of interest to this research area, but whose views were unable to be captured within the ethical remit and scope of this study. Furthermore, recruitment relied on one local Alcohol Care Team to determine who was 'clinically fit' enough to be approached to participate. This may have unintentionally influenced who was approached to take part, outside of the designated criteria, as pure objectivity could not be possible given the, albeit necessary, direct involvement of staff, each with their own attitudes/beliefs and past experiences with patients. However, the ACT are specialists in their field, with clearly defined, thorough processes and knowledge for the identification and management of alcohol dependence/withdrawal. Therefore, consistency, objectivity, and fairness across recruitment was able to be maintained to the greatest possible extent.

Clinical implications and future research

Overall, the constructed themes within this study capture the complexity of the complications surrounding alcohol withdrawal treatment and accessibility to such. There is therefore emphasis on the importance of support being holistic; from not only considering the

individual's relationship to alcohol, but also the societal influences, the practical barriers/facilitators to accessing the right the support, the availability of that support etc. This is consistent with the intended agenda for Alcohol Care Teams, which are designed to promote and reinforce greater encompassing care for individuals who struggle with alcohol use (Quelch et al., 2024). In line with the current findings, ACT's and wider services should continue to strive for holistic, person-centred care that is tailored to meet the needs of the individual. It is also acknowledged, however, that perfectly individualised, tailored care may be somewhat idealistic given the already lacking resource provisions, further highlighted by participants. It is therefore proposed that future research should seek to further explore possible ways in which more holistic, person-centred care could be provided, within the remit and ability of current resources.

In relation to available provision, there is an apparent interest and perceived need for greater consideration of the psychological aspects of alcohol use and understanding. On a wider systemic level, there perhaps needs to be a 'reframing' of alcohol dependence, to instead promote greater psychological understanding of the context surrounding those who use alcohol and are readmitted to hospital because of it. One way this could be facilitated is through further teaching/training for healthcare professionals regarding alcohol dependence and withdrawal. The role of clinical psychology may be vital here, in bridging the gap between the medical and the psychological (Ray & Grodin, 2021). The role of Clinical Psychologists within primary care, as outlined by the Division of Clinical Psychology (DCP; 2023) should involve consultancy work to support teams to work in psychologically informed way, as well as providing specialist training/teaching. In this context, this training could cover topics such as the complex nature of alcohol, the experiences of those who use it, and how to provide more systemic support. This would be in the hopes that it would increase staff support, knowledge and compassion for potential patients, and improve the experiences and overall quality of healthcare for the individual (Bartlett et al., 2013).

There is also an apparent need for greater access to psychological support for the individuals themselves. Not only did participants identify their alcohol use being significantly impacted by their psychological wellbeing, but it was also understood that receiving support for their mental health felt central to their goal of reducing their admissions and maintaining sobriety. This aspect of support was suggested to currently go unaddressed during admissions and within community support, and so more psychological provision is needed to address this. This may also be another opportunity for the input of clinical psychology, whether that be through consultancy during admissions to encourage psychologically informed hospital care, or direct therapeutic work within the community. Clinical psychologists could offer the more in-depth therapeutic working that participants suggested they believe is fundamental for reducing their readmissions and supporting their wellbeing. Models such as the Biopsychosocial model (Engel, 1977), third wave approaches such as Compassion Focused Therapy (Gilbert, 2009; Chen, 2019), and trauma-informed work (Sannibale et al., 2013) may be examples of specialist approaches that could be beneficial for this population.

Finally, the insights that have been gained from participants within this research have proved invaluable for not only understanding experiences of re-admissions, but in adding to the broader representation of alcohol dependence. Without this space to explore these experiences, the needs the individuals most affected by alcohol dependence and frequent hospital admission may have remained unknown, with their experiences overlooked. Therefore, there is a clear need to continue to include the individuals themselves in future research opportunities and service development. There should also be scope for future research to be more in-depth and longitudinal. As already highlighted, the nature of chronic alcohol use is not short-term and yet this current study could only capture a ‘moment in time’. Consequently, future research should aim to better reflect this longstanding nature of alcohol dependence, and further explore alcohol dependence/withdrawal and hospital readmissions over a more extended period of time.

Conclusion

This study aimed to explore the subjective experiences of hospital readmissions for alcohol withdrawal, and the potential reasons for such, as understood by those who are readmitted. The constructed themes highlighted the complexity surrounding alcohol use and readmissions, including the relationship one has with alcohol, the influence of perceptions and attitudes, and the crucial value of support. The potential clinical implications of these elements were considered, particularly in relation what this could mean for services in their design and development, in addition to the role of clinical psychology within this. Opportunities for vital future research were also able to be identified.

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Part Three – Appendices

Appendix A - Reflective statement

Empirical paper

Starting the research process, all I knew was that I had a desire to directly explore the experiences of others. After I met with Tom for the first time to discuss his advertised topic of ‘alcohol and addiction’, his passion for the subject, and for research as a whole, was infectious and I soon became invested in the opportunity to try and give space to those whose experiences had since been unexplored. Reflecting now, it no longer seems like the unexpected leap of interest that it had felt at the time, given my chosen career path and overall value for being person-centred. But in the beginning, it definitely felt like new terrain, but one I was excited to explore.

The NHS ethics process proved to be a greater challenge than I initially thought, primarily from an emotional perspective. Whilst the tasks and applications were not too difficult, I found the time-consuming, lengthy processes to be quite disheartening and frustrating (despite the numerous warnings from previous trainees that this would most definitely be the case). At a time when I felt ready to get stuck in, I found myself unable to make the progress I wanted, held back by seemingly endless applications, amendments, as well as a period of illness. The desire to compare my progress with that of others was very strong, but despite the cliché, it is undoubtedly true that ‘everyone is on their own journey’, and these were the words I clung to like a mantra, throughout the ethics process and beyond.

By March 2024, I had still not been able to begin data collection, and I felt well behind the schedule I had set for myself. My supervisors provided wonderful, steadying reassurance however, and this made it much easier for me to take the delays in my stride. My concern was also eased once I began interviewing participants, and I was struck by how much I enjoyed the interviews. Interacting with people, hearing their experiences directly, felt like such a privilege, and renewed my focus and passion for the research. This was also the time where I felt my own reflexivity was becoming more

and more paramount. It became increasingly more apparent that I was holding assumptions of what I thought the interviews would be like, what people would want to disclose, or not disclose, and so forth. These preconceived ideas were challenged as the conversations with participants gave me such valuable new perspectives.

Throughout the interview process, I reflected on my potential positions as an 'insider' and an 'outsider'. My period of illness - which had partially delayed my ethics progress - had also meant I was briefly admitted to hospital. These were my first experiences of a hospital environment as a patient, and I cannot help but view the experiences as timely, as it gave me so much unexpected insight into the realities of a hospital stay – through no fault of the hospital or staff, I remember feeling incredibly vulnerable, isolated, and I could not wait to go home. These experiences, though minor and relatively brief, altered my preconceptions of hospital admissions, truthfully towards a more negative outlook. From my perspective, these experiences allowed me to connect with participants on a slightly new level, as I had somewhat deeper insight into the realities of what hospital admissions can sometimes look and feel like. I was conscious, however, that this perhaps ran the risk of me assuming shared understanding between myself and participants. To try and combat this, a consistent feature in my reflective diary was contemplations such as, did I check out their intended meaning when they said…? Did I assume or expect a certain answer, based on my own experiences? This enable me to increase my awareness of my own assumptions when they inevitably arose, and remain more receptive to what participants were bringing. I was also aware of how participants perceived me, and where they may have placed me along the spectrum of 'insider' to 'outsider'. I wondered what assumptions they may have had about me as a white, British, female in her early twenties, whether they had expectations of my experiences, and how this may have influenced our interactions and their participation.

I was also struck by the influence of my role as a trainee clinical psychologist, and I soon realised that caution was needed to balance my position as a trainee, with my new role as a researcher. During the first interview, I noticed the significant temptation to lead with curiosity about the 'psychological' aspects of experiences, and I needed to take great care in subsequent interviews not to exclude exploration of other aspects of experience e.g., medical care, physical health etc. I quickly realised I also needed to be careful to maintain the dynamic of 'researcher and participant', and not slip into viewing the participants as 'clients'. This encouraged me to reflect on the seemingly great extent to which my lens is sculpted by psychology, my interest in mental health, and my clinical psychology training. Comparably, I also pondered the extent to which participants themselves were swayed by the knowledge of my psychology background, and how this may or may not have influenced their disclosure, based on what they may have expected I would want to know. If I were a medical doctor, how might have our conversations been different? Using in-vivo reflections, as well as my reflective diary, proved to be important ways to monitor this dynamic, as was reflecting upon such during research supervision.

During analysis, I read a line in a thematic analysis guide that likened theme construction to 'wrestling with a sea-monster', and I remember thinking to myself, 'yes that's exactly how it feels right now!'. At that time, I was in the depths of analysis, surrounded by my codes on 89 individual post-it notes, and I felt so overwhelmed by what needed to be done, that it truly felt as though I was battling with the data, to try and establish some semblance of coherency and meaning. I reflected that I was often caught by a desire to 'get it right', falling into the trap of envisioning there to be right answer, if only I could uncover it. I believe this came from a place of wanting to represent the participants to the best of my ability, given all they had contributed. But in doing so, I tried (in vain) to downplay my own influence within the context of meaning-making, which was understandably impossible, and instead left me feeling overwhelmed, and led to subsequent procrastination. At times like these, I found it most helpful to remind myself of my epistemological stance, and the

ethos of Reflective Thematic Analysis: there is actually *no* right answer. Instead, my contribution is a certain, central part of the process, and perhaps representing participants to the best of my ability does not mean removing myself from the process, but rather trying my best to create something together. Whilst I still feel daunted by this prospect, even at the end of my write-up, I remind myself of the notion that there is no 'perfect' answer, and instead, perhaps I can strive for 'good enough'.

Systematic Literature review

Unlike my empirical research, the systematic review proved to be more constant throughout my research journey. When I was unable to make progress on the former, my focus could be shifted to the latter and this allowed me to still feel like I was moving forward, with optimism that I could indeed reach the finish line.

Although, I noticed that many of my worries were the same for both parts of this thesis; the desire to 'get it right' in particular. From the start, when choosing my question, I found myself delaying the choice, due to the self-imposed pressure to choose 'the perfect question' that would be interesting, yet impactful; Thoughtful, yet significant. Similar to my empirical research, this led to procrastination, and an eventual need to let go of the idea of 'perfect', and to instead embrace the notion of 'good enough'. Tom's guidance, as the field supervisor, was especially helpful due to his extensive knowledge of the topic area and where the gaps in the literature lay.

I was faced with a similar dilemma during the narrative synthesis stage too. I found myself with lots of ideas of possible ways to group/conceptualise the findings of the literature, and a desire to choose the best one. I reflected on this dilemma, and realised that perhaps the most helpful way forward is not to try and choose the 'best' one (likely not possible anyway), but rather be mindful of the reasons why I make the choice I do. Upon reflection, I sought to find a balance between the

inductive approach I aimed to take, and a desire to create meaning that could be meaningful to others too. I chose to conceptualise the findings in the way that I did because I believed it would inform my research question in the most helpful way. I also felt it was important to balance this with what I hoped would be beneficial within the wider contextual picture e.g., when thinking about the dissemination of findings in a way most effective to inform services.

Overarchingly of course, it was all influenced by my own attitudes and beliefs. The way in which I grouped and presented the data is as much a reflection of my own lens and beliefs, as it is a reflection of the studies being reviewed. It was subject to my own understanding and interpretation, such as what I consider to be a 'factor' etc. This is influenced by my layered lens, from my clinical psychology training, to my own experiences of alcohol and healthcare use.

Furthermore, I often reflected on the fact that I was completing my empirical research in parallel. This involved me directly speaking to readmitted individuals about their experiences, at the same time I was trying to conceptualise and organise the possible factors related to such events. I wondered how much this therefore shaped my review as I went: as my understanding of individuals' experiences expanded, did my perception of influencing factors inadvertently alter also? Probably. It feels important, therefore, to reflect on the fact that the review is one interpretation of the literature, influenced by my own understanding, experiences and beliefs. If someone else were to conduct the same review, following the same steps of narrative synthesis, they may arrive at different conclusions to me. So, as I've been constantly learning throughout the research process, this does not make my construction right or wrong. It is simply one, hopefully 'good enough', way.

Final thoughts

It feels very fitting that I am writing this reflective statement last. To look back and think how far my research has come, how far *I* have come, is more overwhelming than I thought it would be. There were understandably times when it felt impossible, and the end was nowhere near in sight. And yet, despite the difficulties, the delays, the battling, the procrastination, I greatly enjoyed and valued the entire research process. To have the opportunity to create something that could hopefully go on to inform change – it is an exciting thought, and true privilege; one I hope to be able to hold on to throughout my career.

Appendix B - Epistemological statement

Ontology refers to one's assumptions about the nature of reality (Killam, 2013), which are commonly thought to exist on a continuum from 'realism' to 'relativism'. 'Realism' is the belief that reality exists objectively and statically, whereas 'relativism' assumes the stance that there are multiple realities that are constructed in the mind of individuals, and are therefore inherently subjective (Moon & Blackman, 2014). Epistemology relates to the concept of 'knowledge' specifically, and how it is thought to be defined and acquired (Willig, 2013). As a result, it is guided by wider ontological positioning, and goes on to be central to research underpinnings and methodology. This statement outlines the epistemological stance adopted by the researcher throughout this portfolio thesis.

Located more centrally on the ontological spectrum is the idea of 'critical realism' which denotes that our ability to perceive and understand reality is eclipsed by our own subjectivity – in other words, there is a single reality, but multiple interpretations of such (Adler et al., 2016). In line with 'critical realist' ontological underpinnings, the researcher assumed a constructivist epistemological stance. The foundation of a constrictivist approach is the belief that meaningful knowledge and understandings cannot be 'found' but are constructed by individuals, and so whilst there may be a real truth, the ability to observe this is shaped by our assumptions, experiences and social lens' (Ültanir, 2012).

The ontological and epistemological positions of the researcher influenced the portfolio thesis throughout. A qualitative paradigm is well suited to the constructivist epistemology, as it can allow for more in-depth exploration of experiences. For the empirical research, the qualitative approach of semi-structured interviews facilitated greater insight into individual experiences. Furthermore, the epistemology stance informed the decision to use Reflexive Thematic Analysis (TA), primarily because it encourages crucial consideration of researcher's lens and assumptions, which is a core

influencing factor of knowledge construction, according to constructivism. Reflexive TA also facilitated to generation of themes in a co-constructive way, based on the researcher's understanding of participant experiences, rather than attempting to uncover one singular truth or 'correct' answer.

Another key element of a constructionist epistemology is the active engagement in meaning making to develop understandings (Ültanir, 2012). Active engagement with the data is a central element of the reflexive TA process (Braun & Clarke, 2022) and it enabled the researcher to co-create meaning in the form of themes and subthemes. The constructivist epistemology also informed the decision for an inductive approach. Rather than being led by overt, preconceived theoretical underpinnings, the researcher aimed to remain open to the data gathered throughout the thesis. This is recommended for exploratory research (Braun & Clarke, 2022) and enabled the researcher to better immerse themselves in the data in front of them, to generate what they considered to be meaningful understandings. As highlighted by the constructivist approach however, there will have been layers of the researcher's own underlying assumptions that influenced this meaning-making process, subsequently emphasising the importance of reflexivity.

As the role of the researcher within the research process is central to this epistemology, reflexivity was vital, and it was paramount that steps be taken for the researcher reflect on their lens, potential biases, and expectations. As a result, Reflexive TA was further deemed the most appropriate analysis technique to use within this research, due to the space is allows for, and emphasis it place on, researcher reflexivity. To further encourage this, a reflective journal was kept by the researcher throughout the process. This allowed for personal bias, preconceptions, and beliefs to be consistently reflected upon and examined by the researcher in an explicit way. Research supervision was also regularly utilised to reflect on the process of the thesis and all its components. This was not done with the intention to seek differing viewpoints, because the individual – in this case, the

researcher - constructs their own understanding (Ültanir, 2012), and corroboration is not the goal of Reflexive TA either (Braun & Clarke, 2021). But rather, supervision helped encouraged researcher reflexivity and aid coherency of findings.

The systematic literature review was also guided by the critical realist ontology and epistemological position. As this was a piece of work that called for a more 'objective' and standardised analysis of data, Narrative Synthesis (Popay et al., 2006) was used to enable the researcher to integrate current literature findings to create a 'story' of alcohol withdrawal and factors relating to frequent hospital readmissions.

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Appendix C – Submission Guidelines for Alcoholism Treatment Quarterly Journal

About the Journal

Alcoholism Treatment Quarterly is an international, peer-reviewed journal publishing high-quality, original research. Please see the journal's Aims & Scope for information about its focus and peer-review policy.

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Your paper should be compiled in the following order: title page; abstract; keywords; main text introduction, materials and methods, results, discussion; acknowledgments; declaration of interest statement; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figures; figure captions (as a list).

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Please refer to these quick style guidelines when preparing your paper, rather than any published articles or a sample copy.

Please use American spelling style consistently throughout your manuscript.

Please use double quotation marks, except where "a quotation is 'within' a quotation".

Please note that long quotations should be indented without quotation marks.

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· All authors named on the paper are equally held accountable for the content of a submitted manuscript or published paper.

· The corresponding author must ensure all named co-authors consent to publication and to being named as a co-author. All persons who have made significant scientific or literary contributions to the work reported should be named as co-authors.

· Authors must not submit a manuscript to more than one journal simultaneously.

· Authors should not submit previously published work, nor work which is based in substance on previously published work, either in part or whole.

· Authors must appropriately cite all relevant publications. Information obtained privately, as in conversation, correspondence, or discussion with third parties, should not be used or reported in the author's work unless fully cited, and with the permission of that third party.

· Authors must make available all necessary formal and documented ethical approval from an appropriate research ethics committee, including evidence of anonymization and informed consent from the client(s) or patient(s) studied, if appropriate.

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· If required, authors must facilitate access to data sets described in the article.

· Authors must avoid making defamatory statements in submitted articles which could be construed as impugning any person's reputation.

· Authors must declare any potential conflict of interest – be it professional or financial – which could be held to arise with respect to the article.

· Authors must disclose all sources of funding for the research reported in the paper.

· If asked to provide a list of suggested reviewers, authors must provide the correct details for suitable reviewers with the appropriate experience to review, ensuring that the suggested reviewers do not have a conflict of interest.

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Word templates are available for this journal. Please save the template to your hard drive, ready for use.

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2. Should contain an unstructured abstract of 100 words. Read tips on writing your abstract.
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   This work was supported by the [Funding Agency] under Grant [number xxxx].
   For multiple agency grants
   This work was supported by the [Funding Agency #1] under Grant [number xxxx]; [Funding Agency #2] under Grant [number xxxx]; and [Funding Agency #3] under Grant [number xxxx].
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Where one or multiple data sets are associated with a manuscript, these are not formally peer-reviewed as a part of the journal submission process. It is the author's responsibility to ensure the soundness of data. Any errors in the data rest solely with the producers of the data set(s).

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Queries

If you have any queries, please visit our Author Services website or contact us here.

Updated 6th June 2024

Appendix D – Ethical approval from Faculty of Health Sciences

Page removed for digital archiving

Appendix E – Ethical approval from the Health Research Authority

Page removed for digital archiving

Appendix F – Participant Information Sheet

Date: 30.11.23
Version number: 2.0
IRAS ID: 327799

INFORMATION SHEET FOR PARTICIPANTS

YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

Title of study: Exploring Individuals' Experiences of Frequent Hospital Readmissions for Alcohol Withdrawal

I would like to invite you to participate in a research project which forms part of my thesis for my Doctorate in Clinical Psychology research. The sponsor for this research is the University of Hull. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask me if there is anything that is not clear or if you would like more information.

What is the purpose of the study?

The purpose of the study is to explore the experiences of individuals who have experienced alcohol withdrawal and have been admitted into hospital multiple times because of this. Other research has found that the number of people who experience alcohol withdrawal is very high, and the number of people to repeatedly return to hospital because of alcohol withdrawal is very high too. Currently, researchers have not listened to the stories and experiences of individuals who experience these readmissions for alcohol withdrawal. This research plans to listen to people with experiences like this, and we hope to give these individuals a voice to express their wants and needs when it comes to their care. We also hope that, by better understanding these needs, changes can be made (with future research) to health care and services in order to better meet these needs.

Why have I been invited to take part?

You are being invited to participate in this study because you have been identified as someone who has been admitted to hospital multiple times for alcohol withdrawal within the past year. This information sheet is being shared with people who are suitable to take part and have expressed an interest in being involved with this research.

What will happen if I take part?

If you decide that you would like to participate in this research, we will arrange a day and time for us to talk more in-depth about your experiences. This may be right away, after we have finished discussing this information sheet, or this may be arranged for a different day, depending upon which is convenient for you. Participation will take place at Hull Royal Infirmary.

Your decision whether to take part in this research will have no effect on your current health care or contact with other services

When we do meet, I will ask you some questions, ranging from your age, to your experience of your most recent admission to hospital for alcohol withdrawal. Please feel free to talk about your experiences as much as you want. The Alcohol Care Team, or your GP (if you have been discharged from the Alcohol Care Team at the time of the interview) will be made aware that you are participating. However, what you share during the interview will be confidential and will **not** be reported back to other healthcare staff, your GP, or members of the Alcohol Care Team (see page 5 for the only exception to this confidentiality rule).

I expect the interview to last between 45 minutes and 1 hour, but this may vary. These interviews will be recorded on an NHS encrypted laptop so they can be typed up by me at a later time. The recording and typed versions of the interview will not be able to be linked back to you, and the recordings will be deleted as soon as they have been typed up. Any names/places you say will be deleted from the conversation so that nobody will be able to guess who you are.

Do I have to take part?

Participation is completely voluntary. You should only take part if you want to, and choosing not to take part will not disadvantage you in any way. Once you have read the information sheet, please let us know if you have any questions that will help you make a decision about taking part. If you decide to take part, we will ask you to sign a consent form and you will be given a copy of this consent form to keep.

Your rights

- You do not have to take part
- You can withdraw from the study at any point without giving a reason, even in the middle of the interview, up to two weeks after the interview - after these two weeks, your data will not be able to be separated from the rest of the research data
- All your data will be kept safe and cannot be linked back to you
- You have a right to ask questions about the research before and after taking part
- Participating or not participating will have no effect on your health care, or the contact you have from other services

What are the possible risks of taking part?

The interview will involve talking about your experiences of alcohol withdrawal and hospital admissions, which some people might find difficult. Whilst you will be asked about these experiences, you do not need to share any more information than you are comfortable sharing. If at any point during the interview you feel that you are too upset to continue, you can stop the interview and I will delete the recording if you would like. There is also a list of possible sources of support provided at the end of this document, in case you would like to access further support.

What are the possible benefits of taking part?

We cannot promise that you will have any direct benefits from taking part in the study. However, it is hoped that the information you give us will help us to understand more about individuals' experiences of alcohol withdrawal, and the hospital admissions they may go through as a result. It may also lead to future research into different ways that

individuals who are frequently admitted to hospital for alcohol withdrawal can be better supported by services and teams.

How will we use information about you?

We will need to use information from you for this research project.

This information may include:

- Your name
- Your contact details (email address and telephone number)
- Your GP's contact information
- Demographic data (your age and gender)

People who do not need to know who you are will not be able to see your name or contact details. Your data will have a fake name instead. We will keep all information about you safe on secure encrypted NHS laptops. We will write our reports in a way that no-one can work out that you took part in the study. The information you provide during the interviews will be used within the research and you may be quoted within the report. However, any identifiable information will be removed, and you will remain anonymous. The anonymised data may be used to support future research, and may be shared anonymously with other researchers.

Your data will be processed in accordance with the UK-GDPR and the Data Protection Act 2018. You can provide your consent for the use of your personal data in this study by completing the consent form that has been provided to you**.** Information about how the University of Hull processes your data can be found at https://www.hull.ac.uk/choose-hull/university-and-region/key-documents/data-protection.aspx

You have the right to access information held about you in accordance with the General Data Protection Regulation. You also have other rights including rights of correction, erasure, objection, and data portability. Questions, comments, and requests about your personal data can also be sent to the University of Hull Information Compliance Manager (dataprotection@hull.ac.uk). If you wish to lodge a complaint with the Information Commissioner's Office, please visit www.ico.org.uk.

The recorded interviews will be stored on an encrypted secure laptop that only the lead researcher, Bethany Cragg, will have access to. Once these interviews have been typed up and all details such as names and places have been removed, the original recording will be deleted, and the written version will only be linked to the fake name connected to the data. This is in case you wish to have your data withdrawn from the study.

The only time that information cannot be kept confidential is if you disclose something that suggests that you or someone else is at risk of significant and immediate harm. If this happens during the interview, your clinician at the Alcohol Care Team will be contacted. If you have been discharged from the Alcohol Care Team by the time of the interview, your GP will be contacted. In extreme cases, we will contact emergency services to ensure that you and other people are safe. It is unlikely that this will happen, and we will try to discuss this with you before taking any action.

What are your choices about how your information is used?

You are free to withdraw at any point during the study, up until two weeks after the interview takes place. If you want to withdraw within this time, you do not have to give a reason, and it will not affect your health care or contact with other services in any way.

Your rights to access, change or move your information are limited, as we need to manage your information in specific ways for the research to be reliable and accurate. If you choose to withdraw from the study before the two-week deadline after the interview, then any information you shared up until this point will be destroyed. After the two weeks post-interview, it will not be possible to withdraw your information from the study, and we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

Where can you find out more about how your information is used?

You can find out more about how we use your information:

- At www.hra.nhs.uk/information-about-patients/ and https://www.hra.nhs.uk/planning-and-improving-research/policies-standards-legislation/data-protection-and-information-governance/gdpr-guidance/templates/template-wording-for-generic-information-document/
- By asking one of the research team
- By contacting the University of Hull Data Protection Officer by emailing dataprotection@hull.ac.uk or by calling 01482 466594 or by writing to the Data Protection Officer at University of Hull, Cottingham Road, Hull, HU6 7RX
- By reviewing the University of Hull Research Participant privacy notice: https://www.hull.ac.uk/choose-hull/university-and-region/key-documents/docs/quality/research-participant-privacy-notice.pdf

Data Protection Statement

The data controller for this project will be the University of Hull. The University will process your personal data for the purpose of the research outlined above. The legal basis for processing your personal data for research purposes under GDPR is a 'task in the public interest'.

If you are not happy with the sponsor's response or believe the sponsor is processing your data in a way that is not right or lawful, you can complain to the Information Commissioner's Office (ICO) (www.ico.org.uk or 0303 123 1113).

What will happen to the results of the study?

The results of the study will be summarised in a written thesis that will contribute to a Doctorate in Clinical Psychology. The research will be made available online through the University of Hull's repository website, Worktribe, located at https://hull-repository.worktribe.com .

The research may also be published in academic journals or presented at conferences.

Who has reviewed this study?

Research studies are reviewed by an independent group of people, called a Research Ethics Committee (REC), to protect your interests. This study has been reviewed and been given a favourable opinion by the Faculty of Health Sciences Ethics Committee at the University of Hull. It has also been reviewed by the Health & Social Care Research Ethics Committee A (HSC REC A), and the REC reference for this study is 23-NI-0161.

Who should I contact for further information?

If you have any questions or require more information about this study, please contact me using the following contact details:

Bethany Cragg
Email address: bethany.cragg@nhs.net
Phone number: 07977 050238

What if I have further questions, or if something goes wrong?

If you wish to make a complaint about the conduct of the study, you can contact the University of Hull using the details below for further advice and information:

Dr Nick Hutchinson - n.hutchinson@hull.ac.uk
Aire Building
University of Hull
Cottingham Road, Hull
HU6 7RX

Professor Thomas Phillips - Thomas.phillips@hull.ac.uk
Allam Medical Building
University of Hull
Cottingham Road, Hull
HU6 7RX

Alternatively, you can contact the local NHS Patient Advice and Liaison Service (PALS) with your concerns, via the details below:

PALS - hyp-tr.pals.mailbox@nhs.net , 01482 875875
Hull Royal Infirmary
Anlaby Road
Hull
HU3 2JZ

Sources of support

Smart Recovery

- They are a charity aiming to "empower people with practical skills, tools and support so that they may manage their addictive behaviour and lead satisfying and meaningful lives"
- https://smartrecovery.org.uk/about-our-organisation/

Renew

- A local service that offers dedicated drug and alcohol support for prevention, problem-solving, harm reduction, recovery, and aftercare support
- https://www.changegrowlive.org/hull-renew/recovery-hub#help

Your GP

- They can discuss your difficulties with you and support you to access treatment if that is what you'd like
- They may offer you treatment at the practice, or refer you to your local drug service
- They could advise you on how to access detox

Thank you for reading this information sheet and for considering taking part in this research

Appendix G – Consent form

Version number: 2.0

Date: 30.11.23

IRAS ID: 327799

CONSENT FORM

Title of study: 'Exploring Individuals' Experiences of Hospital Readmissions for Alcohol Withdrawal'

Name of Researcher: Bethany Cragg

Please initial box

1. I confirm that I have read the information sheet dated 30.11.23, version 2.0, for the above study. I have had the opportunity to consider the information, ask questions, and have had any questions answered satisfactorily. ☐

2. I understand that my participation is voluntary and that I am free to withdraw up until two weeks post interview, without giving any reason, and without my medical care being affected. ☐

3. I understand that the Alcohol Care Team, or my GP if I have been discharged by the ACT, will be informed that I am participating in this study ☐

4. I understand that my GP or the Alcohol Care Team will be contacted if immediate and significant risk of harm to myself or others becomes evident during my participation in the study. ☐

5. I understand that my healthcare or contact with other services will not, in any way, be affected by my participation or by anything that I share. ☐

6. I understand that the research interview will be audio recorded and that my quotes (which will be anonymous, aka, not able to be linked to me) may be used word-for-word in research reports and conference presentations. ☐

7. I understand that the research data, which will be anonymised, will be retained by the researchers and may be shared with the public to support other research in the future. ☐

8. I understand that my personal data will be kept securely in accordance with data protection guidelines, and will only be available to the immediate research team. ☐

☐

9. I give permission for the collection and use of my data to answer the research question in this study.

10. I agree to take part in the above study.

____________________	____________________	____________________
Name of Participant	Date	Signature

____________________	____________________	____________________
Name of Person taking consent	Date	Signature

____

Chosen pseudonym for participant

GP contact information -

Name: ____

Telephone number: ____

Address: ____

____

____

Copies of this consent form will be stored in a locked filing cabinet at the University of Hull and will not be stored with any research data. Only you, the participant, and the researcher will receive copies of this form.

Appendix H – Interview schedule

Ice-breaker questions:

- Demographic information collection – Age, gender
- Number of admissions for alcohol withdrawal in the past year?
- How long have you been drinking? What's your typical day like? When in the day do you tend to drink?

Main interview questions:

- Can you tell me about your experiences of hospital admissions for alcohol withdrawal?
    - What were they like?
    - How long did they last?
- What did you do immediately after being discharged from the hospital?
- What brought you back to hospital this time?
- What do you think are the reasons why you've returned to hospital more than once for support for alcohol withdrawal?
    - Were there triggers or events that happened leading up to your admissions?
    - What was the main reason?
- Do you see your alcohol use as a problem, or something you would like to change?
    - If so, is it a 'main' problem for you?
- How do you feel you were treated compared to other patients in the hospital? (meaning patients who were admitted for reasons other than alcohol use)
- What was it like for you to receive care during your most recent admission to the hospital?
- How do you feel your withdrawal symptoms were treated in the hospital?
    - (e.g., were they treated appropriately? If so, how? If not, can you describe how it should have been treated?)
- What support would you like to see for people who experience alcohol problems, outside of hospital?
- What do you think is needed to avoid future readmissions for you?

- How did it feel to think about your experiences during this interview?