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"Two different sides to it": An Exploration of Psychotic Experiences and Cannabis use in young adults

Hayes, Amy-Rose

Award date: 2021

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"TWO DIFFERENT SIDES TO IT": AN EXPLORATION OF PSYCHOTIC EXPERIENCES AND CANNABIS USE IN YOUNG ADULTS

Amy-Rose Hayes North Wales Clinical Psychology Programme

Submitted in partial fulfilment of the requirements for the degree of Doctor of Clinical Psychology

June 2021

Declaration

I hereby declare that this thesis is the results of my own investigations, except where otherwise stated. All other sources are acknowledged by bibliographic references. This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree unless, as agreed by the University, for approved dual awards.
Yr wyf drwy hyn yn datgan mai canlyniad fy ymchwil fy hun yw'r thesis hwn, ac eithrio lle nodir yr wahanol. Caiff ffynonellau eraill eu cydnabod gan droednodiadau yn rhoi cyfeiriadau eglur. Nid yw sylwedd y gwaith hwn wedi cael ei dderbyn o'r blaen ar gyfer unrhyw radd, ac nid yw'n cael ei gyflwyno ar yr un pryd mewn ymgeisiaeth am unrhyw radd oni bai ei fod, fel y cytunwyd gan y Brifysgol, am gymwysterau deuol cymeradwy.
Signed:
Print name:AMY-ROSE HAYES

Date:.....13/08/2021.....

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you both and sharing in your wisdom, both in terms of the research and clinical work.

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Hundreds of miles, an ocean, and a global pandemic are no match to the strength of our friendship and my love for you both!

Last but not least, I would like to say a huge thank you to the young men who showed immense bravery and vulnerability in sharing their experiences with me. I feel I could fill another three papers with all your reflections on the role of music, art, passion, and friendship in the journey towards living a personally meaningful life. It has been a privilege to learn from all your insights and I truly hope that this thesis will provide other professionals with the opportunity to learn from your wisdom too.

Table of contents

			Page number
Declaration			2
Acknowledgements			3
Table of contents			4
Thesis summary			5
Chapter 1 – Literature Review			7
	Abstract	9	
		10	
	Background		
	Method	12	
	Findings Discussion &	20	
		37	
	conclusion	477	
	References	47	
	Appendices A	55	
Chapter 2 – Empirical Study			62
	Abstract	64	
	Background	65	
	Method	69	
	Results	72	
	Discussion &	88	
	conclusion		
	References	95	
	Appendices B	101	
Chapter 3 – Contributions to Theory & Clinical Practice	••		112
	Implications for future research and theory development	113	
	Reflections on the research process	117	
	Implications for clinical practice	121	
Word count			130

"TWO DIFFERENT SIDES TO IT": AN EXPLORATION OF PSYCHOTIC EXPERIENCES AND CANNABIS USE IN YOUNG ADULTS

Thesis summary

The quote "two different sides to it" was taken from a participant describing both helpful and unhelpful aspects of cannabis use. However, the tension captured by this simple phrase appears as a thread throughout this thesis. For example, the tension between staff and service-user experiences; the ability of service involvement to empower or disempower individuals. Maybe what is less encapsulated by this phrase is the complexity of the experiences explored, and how they are made sense of through the lens of the wider context, personal history, and identity. Hopefully this thesis can begin to draw attention to some of these nuances.

The first chapter explores how health workers experience working with patients with dual diagnosis, through a metasynthesis of qualitative studies. Themes were identified which describe working with this client group as often difficult and emotionally burdensome, which was related to services-related issues and the wider context. A third-order analysis aimed to interpret and explain findings through describing a vicious cycle of systemic issues, frustration, burnout, and stigma. How these themes fit in with the previous research and how they may inform service provision are explored.

The second chapter explores the lived experiences of six young men who experience psychosis and use cannabis, using an interpretative phenomenological approach. Themes were identified regarding cannabis use and identity, the impact of cannabis on psychosis and wellbeing, and experiences of services. The overarching theme highlighted how these experiences can function to empower or disempower participants in their personal recovery. Themes were explored in relation to the current literature and how they may inform services.

The third chapter details how both the literature review and empirical paper in this thesis may contribute to theory and clinical practice in the area of dual diagnosis, and psychosis and cannabis use in particular.

Chapter One

Literature Review

How do health staff experience working with patients with dual diagnosis? A metasynthesis

Amy-Rose Hayes¹, Robin Owen², & Mike Jackson³ ¹ North Wales Clinical Psychology Programme ² Betsi Cadwaladr University Health Board, NHS Wales ³ School of Psychology, Bangor University Address for correspondence: Dr Mike Jackson, North Wales Clinical Psychology Programme, School of Psychology, Brigantia Building, Bangor, North Wales, LL57 2AS, email: mike.jackson@bangor.ac.uk The aim for this paper is submission to the Journal of Social Science and Medicine, and therefore follows the journal's guidelines for literature reviews; https://www.elsevier.com/journals/social-science-and-medicine/0277-9536/guide-for-authors

Abstract

Aims and objectives: To aggregate, synthesise, and interpret qualitative research regarding how health staff experience working with patients with dual diagnosis.

Background: Dual diagnosis of mental health problems and substance misuse is associated with poor therapeutic alliance, negative attitudes of clinicians, and high levels of unmet need. Developing an understanding of health staff's experiences and perceptions in the context of working with patients with dual diagnosis may be important in developing appropriate interventions and improving engagement and outcomes for patients. Qualitative studies may provide more in-depth insights into these experiences as previous reviews have primarily used quantitative survey data.

Design: A metasummary and a metasynthesis were conducted, both informed by the metasynthesis methodology outlined by Sandelowski and Barroso (2007).

Methods: A systematic structured literature search was conducted involving four electronic databases and hand searches. 17 studies were appraised using the Critical Appraisal Skills Program assessment tool and were all included in the metasynthesis.

Results and conclusion: Five interrelated categories that illustrate experiences of working with patients with dual diagnosis were outlined and further explained through a vicious cycle of systemic issues, frustration, burnout, and stigma. This explanatory model may offer a framework to inform levels of intervention needed to address these issues in health care systems, organisations, and at the individual level. Incorporating the views and experiences of patients with dual diagnosis is also recommended to improve quality of care.

Keywords: dual diagnosis, co-morbidity, substance misuse, mental health, staff experiences, staff attitudes

Background

Substance misuse and mental illness are common comorbid conditions and, although prevalence rates vary, studies indicate that approximately half of all people with a serious mental illness experience substance misuse disorders (Fowler *et al.*, 1998; Gregg *et al.*, 2007). The relationship between these conditions is likely to become stronger over time as the incidence of substance misuse tends to increase after the onset of mental illness and vice versa (Cantwell *et al.*, 1999). Despite its prevalence, comorbid mental health problems and substance misuse, or dual diagnosis, is associated with high levels of unmet need compared to those with only one psychiatric diagnosis, with many patients not receiving any kind of formal treatment (Wright *et al.*, 2000) and where treatment is received disparities in quality of care persist. For example, studies have found that patients with dual diagnosis were less likely to receive recommended nutrition and exercise counselling when compared to patients with just one psychiatric diagnosis (Desai *et al.*, 2002). This has been attributed to numerous factors such as diagnostic overshadowing, poor therapeutic alliance, and negative attitudes of treatment providers (Evans-Lacko & Thornicroft, 2010; Balhara *et al.*, 2016).

Previous research has highlighted the role of attitudes in predicting professional behaviour and treatment outcomes. For example, the stigmatising attitudes of clinicians towards individuals diagnosed with mental illnesses may lead to inadequate care, which may be characterised by under-treatment, poor communication, labelling, and other unhelpful behaviours (Schulze, 2007; Avery *et al.*, 2013; Gilchrist *et al.*, 2011). Patients who perceive a stigmatising attitude toward their mental health diagnoses are more likely to withdraw socially and avoid treatment (Gary 2005; Perlick *et al.*, 2001). Conversely, patients who perceive that a health professional will be helpful are more likely to seek help for psychological problems (Komiti *et al.*, 2006). Furthermore, a meta-analytic review of 28 studies indicated that negative attitudes of health

professionals toward patients with substance use may lower patient empowerment and lead to poorer treatment outcomes (van Boekel *et al.* 2013).

Dual diagnosis has been associated with increased or 'double stigma', which is likely to have further deleterious effects on patient care and staff attitudes (Askey, 2007). Adams' (2008) review of workers' reported attitudes and perceptions towards working with patients with dual diagnosis included 18 studies published between 1996 and 2006. These studies primarily implemented quantitative survey data with the exception of two studies that implemented a phenomenological approach (Carey et al., 2000; Deans & Soar, 2005). Although the attitudes towards the patient group were described as mixed, there was a high prevalence of negative perceptions regarding inadequacies in service provision and training (Adams, 2008). This is also reflected in Howard and Holmshaw's (2010) questionnaire study on inpatient staff perceptions in providing care to individuals with co-occurring mental health problems and illicit substance use, which indicated that staff who had received training in how to work with co-morbidity were more likely to have a less negative attitude towards these patients. Another survey study which explored attitudes of psychiatrists towards patients with dual diagnoses indicated that both addiction and community psychiatrists had more stigmatising attitudes towards patients with dual diagnoses compared to patients with either substance misuse or diagnoses of schizophrenia (Avery et al., 2013).

These studies indicate not only the possibility of higher levels of stigma, negative attitudes, and training need among professionals who work with patients with dual diagnosis, but also the likelihood that their experiences may be qualitatively different from those associated with psychiatric illness or substance use disorders alone. Developing an understanding into health staff's experiences and perceptions in the context of working with patients with dual diagnosis

will be important in developing appropriate treatments and staff training, which may improve engagement and outcomes for patients. This relies not only on staff having well informed knowledge of both mental health and substance misuse concerns, but also on supporting staff to address potentially harmful preconceptions and harness helpful attitudes towards these patients. Qualitative research in particular has been shown to provide useful insights into health professionals' perceptions of patient care and identification of barriers to changing health care practice (Al-Busaidi, 2008).

Therefore, the aim of this metasynthesis is to aggregate, synthesise, and interpret existing qualitative research studies of health staff's experiences of working with patients with dual diagnosis. The research question addressed is "How do health staff experience working with patients with dual diagnosis?"

Methods

A metasynthesis is a third-person interpretation of qualitative studies that offers novel insights resulting from interpretive transformations of findings derived from included research reports (Sandelowski & Barroso, 2007). The metasynthesis approach seeks diversity in studies to explore how separate findings are conceptually related to each other and to clarify the defining and overlapping attributes (Sandelowski & Barroso, 2007). It therefore aims towards a conceptual understanding that includes diversity and similarity across studies to provide a global picture of the issues explored (Hammer *et al.*, 2009). Findings from metasyntheses have the potential to inform theory development or be translated into intervention and service implementation (Ludvigsen *et al.*, 2016).

The study followed Sandelowski and Barroso's (2007) methodological procedures as this provides a comprehensive framework for metasynthesis through providing guidelines for the systematic retrieval, analysis, and interpretation of information, which has been indicated as helpful for bolstering the trustworthiness and credibility of the studies included and contributes to a valid synthesis of the research (Ludvigsen *et al.*, 2016). It combines technical guidance with a creative approach where the findings are synthesised into a metasummary and a metasynthesis (Sandelowski & Barroso, 2007).

Tables were used to provide an audit trail throughout the research process and enhance transparency. To promote trustworthiness, the authors separately appraised studies based on inclusion criteria and the quality appraisal tool before working together to reach consensus.

The first author conducted a structured literature search in five databases from November 2020 to January 2021: PsycINFO, MEDLINE, Social Science Premium Collection, and SciTech Premium Collection. To formulate search terms and aid in the search process, the Population, Intervention, Comparison and Outcomes approach (PICO; Liberati *et al.*, 2009) was used to define criteria. Table 1 provides an overview of the inclusion and exclusion criteria, which followed logically from the PICO approach.

Keywords and word stems derived from the different PICO elements informed the search strategy (see appendix 1). Combinations and variations of subject terms were adjusted to fit the different database search systems. Hand-searching of articles was also undertaken through examining reference lists and Google Scholar articles.

Table 1. Inclusion and exclusion criteria

Inclusion criteria

- Primary research studies that explored perceptions, perspectives or experiences of working with patients with dual diagnosis
- Studies that used a qualitative approach
- Studies that used mixed methods that provided the results of qualitative research
- Subjects are health professionals or a combination of health professionals and medical students
- Articles published in English

Exclusion criteria

- Studies that focus on a very specific subgroup (i.e. refugees, prisoners, homosexual/bisexual people)
- Exclusively quantitative or survey studies
- Non-peer reviewed studies
- Studies focusing on experiences of specific treatment interventions (i.e. methadone maintenance treatment, cognitive behavioural therapy)
- Studies that focus on nicotine-related substance use

After removal of duplications, the database searches produced 3,345 electronic publications and two additional records were identified through a reference list search and Google Scholar. Titles were read and papers not meeting the inclusion criteria were filtered out and the remaining abstracts (n = 63) were reviewed. 27 full text articles were accessed to review for final inclusion, which was facilitated by two of the authors (A-RH & MJ), independently using a screening tool based on the inclusion criteria. Of the 27 articles, 17 were included in the analysis and for quality appraisal. Articles citing the included studies were also screened, which yielded no additional papers. The search strategy is illustrated in figure 1.

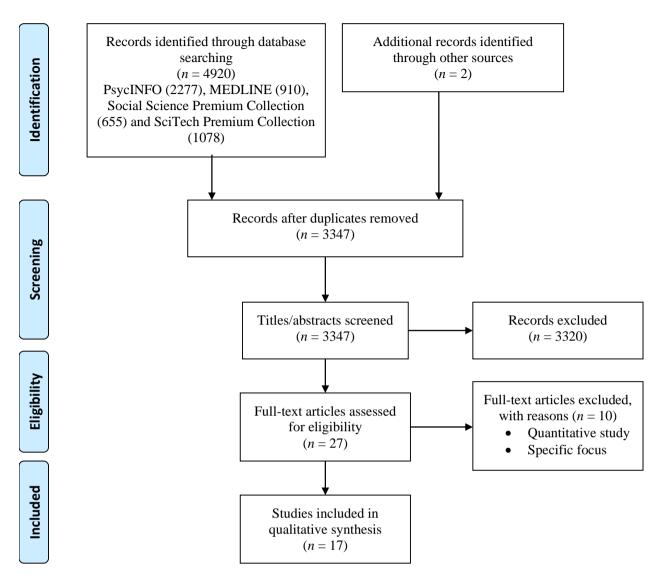


Figure 1: Flow chart of systematic literature search adapted from Moher, Liberati, Tetzlaff, and Altman (2009)

Appraisal

The Critical Appraisal Skills Programme's (CASP, 2018) qualitative checklist was implemented to appraise the quality of the studies and for familiarisation with the reports. This tool was developed to determine rigor, credibility, and relevance of qualitative research studies. The tool comprises of 10 questions: two for screening out inapplicable studies and eight which assess research design, data collection and analyses, ethics, reflexivity, and clinical implications of qualitative studies (CASP, 2018). Two of the authors, A-RH and RO, appraised

the studies independently and disagreements were resolved through discussion. No studies appraised were excluded due to poor quality as illustrated in Table 2. Overall, the quality of the studies was appraised as high, although the consideration of the researcher and participant relationship was the main area of concern.

The classification of studies was examined in relation to Sandelowski and Barroso's (2007) typology of findings, which are described on a continuum from descriptive to more transformational or interpretative accounts. The majority of studies were descriptive with thematic survey typology findings, although some studies included conceptual descriptions and interpretative accounts. The characteristics of each study are described in Table 3.

Table 2: CASP, checklist for appraising qualitative studies

First author (year)	Was there a clear statement of the aims of the research?	Is a qualitative methodology appropriate?	Was the research design appropriate to address the aims of the research	Was the recruitment strategy appropriate to the aims of the study?	Was the data collected in a way that addresses the research issue?	Has the relationship b/t researcher and participants been adequately considered?	Was the data analysis sufficiently rigorous?	Have ethical considerations been taken into consideration?	Is there a clear statement of findings?	How valuable is the research?
Groenkjaer, 2017	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Sorsa, 2017	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Klingemann, 2019	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Deans, 2005	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Pinderup, 2018	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Clutterbuck, 2009	Y	Y	Y	Y	Y	Y	Y	CT	Y	Y
Howard, 2010	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Mericle, 2007	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Wadell, 2007	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Clutterbuck, 2008	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Coombes, 2007	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Carey, 2000	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Dikobe, 2016	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Halfpenny- Weir, 2009	Y	Y	Y	Y	Y	N	N	CT	Y	Y
Searby, 2017	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Philips, 2007	Y	Y	Y	CT	Y	N	N	Y	Y	Y
de Crespigny, 2015	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Key: Y = yes, N = no, CT = Cannot tell

Analysis

Following the Sandelowski and Barroso (2007) method, the findings were synthesised using two consecutive approaches. First a metasummary was implemented to facilitate an aggregation of the findings with a calculation of their frequency. This informed the metasynthesis and provided an empirical basis by suggesting how much emphasis should be accorded each category in the synthesised findings. In-vivo concepts, or direct quotes from participants, taken from the primary studies were used to categorise findings and the frequency of identified themes was calculated across the included studies (see table 4).

As there was adequate similarity across studies, a reciprocal translation analysis of the findings was facilitated from one study to another using in-vivo concepts, or quotes and metaphors borrowed from the primary studies. The aim of reciprocal translation was to integrate findings interpretively, as opposed to comparing them interpretively, although important contextual differences were commented upon (Sandelowski & Barroso, 2007). This involved exporting themes and in-vivo quotations from the included studies and collating these into a separate document. An iterative process of interpretation was facilitated to review important connections among the first- and second-order constructions across the studies, although differences in settings and contexts (e.g., hospital and community settings, alcohol misuse and other substances) were highlighted where this appeared particularly relevant to staff experiences. While complete congruence of meanings in qualitative research is rarely achieved, allowing for differences can provide an understanding of other perspectives and interpretations (Sandelowski & Barroso, 2007).

Findings

Metasummary

The 17 studies included, described in table 3, are from a variety of professional contexts and cultural settings. Countries of origin include the UK, Poland, India, Australia, USA, Sweden, Finland, Denmark, and South Africa. Professional settings include inpatient, community mental health, substance misuse services, assertive outreach, and homelessness support services. Although the majority of professionals included were nurses, studies also included psychologists, other medical professionals, social workers, managers, drug and alcohol clinicians, occupational therapists, and care assistants (see table 3). The majority of designs were descriptive and/or exploratory. The metasummary is described in table 4, which includes the frequency for findings which are explored further in the second-order analysis.

Table 3: Characteristics of the included studies

Number	First author (year)	Country of origin	Aim	Research design	Method	Setting & sample	Data analyses	Typology of finding
1	Groenkjaer, 2017	Australia	To elicit clinicians' and workers' knowledge, experiences, and opinions regarding issues pertaining to service needs of people with comorbidity.	Qualitative, descriptive	Semi- structured interview	Method: purposive sampling Setting: Mental health (MH) and alcohol and drug (AOD) treatment settings Sample: 20 MH and AOD workers, including MH nurses, family support social workers, program managers, comorbidity specialists, drug and alcohol clinicians	Thematic analysis (Braun & Clarke, 2013)	Thematic survey
2	Sorsa, 2017	Finland	To describe the provider viewpoint on barriers to care for people with co-occurring disorders.	Qualitative, descriptive	Semi- structured interview	Method: purposive/ opportunistic sampling — subset from survey study Setting: Local health care, social care and mental health settings Sample: 104 care providers (58 nurses, 27 social work professionals, 3 psychologists and 3 medical professionals, 13 other)	Content analysis (Hsieh & Shannon, 2005)	Thematic survey
3	Klingemann, 2019	Poland and UK	To explore the personal experiences of patients and clinicians regarding	Qualitative, descriptive/ explorative	Semi- structured interview	Method: purposive sampling – subset from larger study	Content analysis (Hsieh & Shannon, 2005)	Thematic survey

			the assessment and treatment of comorbidity of alcohol and mental disorders.			including patientsSetting: hospitals/wards or community mental health teams in Poland and the UK Sample: 28 clinicians (19 psychiatrists, 4 psychologists, 3 social workers, 2 nurses), 12 female, 16 male		
4	Deans, 2005	Australia	To identify and describe the experiences of mental health professionals while caring for clients with a dual diagnosis in rural setting.	Qualitative, descriptive/ exploratory	Semi- structured interview	Method: purposive sampling Setting: Community mental health or inpatient services Sample: 13 mental health professionals (10 nursing staff, 1 social worker, 1 psychiatrist and 1 psychologist), 3 female, 10 male	Phenomenological analysis	Thematic description
5	Pinderup, 2018	Denmark	To examine which challenges mental health professionals experience when working with patients with dual diagnosis.	Qualitative, interpretive	Semi- structured interview	Method: purposive sampling – subset from larger intervention study Setting: Mental health centres. Sample: 85 mental health professionals (53 nurses, 15 nurse assistants, 7 occupational therapists, 1 physiotherapist, 8	Grounded theory (Glaser, 1992)	Interpretive

						psychiatrists, 8 psychologists, 7 social advisors) 68 female, 17 male		
6	Clutterbuck, 2009	United Kingdom	To explore the attitudes of staff working within mental health settings toward cannabis in general and cannabis use in individuals with severe mental health problems.	Qualitative, descriptive	Semi- structured interview	Method: purposive sampling Setting: participants' places of work Sample: 17 from early intervention service and 3 from assertive outreach teams (10 community psychiatric nurses, 4 social workers, 3 support workers, 2 psychology assistants and 1 occupational therapist) 11 female, 9 male	Grounded theory (Strauss & Corbin, 1990)	Interpretive
7	Howard, 2010	United Kingdom	To explore how mental health inpatient staff experience caring for patients who both have mental health problems and who use illicit drugs.	Mixed methods (quantitative survey and qualitative descriptive)	Survey & semi- structured interview	For qualitative arm of study Method: purposive/ opportunistic sampling — subset from survey study Setting: inpatient setting. Sample: 10 multidisciplinary staff (2 nurses, 2 medical staff, 1 occupational therapist, 1 manager, 2 care assistants, 2 other)	Thematic framework analysis (Ritchie & Lewis 2003)	Thematic survey

8	Mericle, 2007	USA	To explore strategies used by mental health providers to address substance use problems among seriously mentally ill clients and their perspectives on barriers to treatment and how treatment can be improved.	Qualitative descriptive/ explorative	Focus group with semi- structured interview	Method: purposive sampling Setting: Intense care management (ICM) programme locations Sample: 17 ICM staff (14 social workers, 1 psychiatrist, 2 psychologists) 8 female, 9 male	Cross case thematic analysis (Miles and Huberman, 1994)	Thematic survey
9	Wadell, 2007	Sweden	To describe mental psychiatric health nurses' experiences of caring for persons with the dual disorders of major depression and alcohol abuse.	Qualitative descriptive	Semi- structured interview	Method: purposive sampling Setting: three psychiatric wards located in two general hospitals. Sample: 11 nurses, 9 female, 2 male	Content analysis	Thematic survey
10	Clutterbuck, 2008	United Kingdom	To explore the extent of use of cocaine/crack cocaine in individuals with severe mental health problems and impact of client use on mental health service staff.	Mixed methods (quantitative survey and qualitative descriptive/ explorative)	Semi structured interview	Method: purposive/ opportunistic sampling – subset from survey study Setting: Assertive Outreach, early intervention and homeless support service settings Sample: for qualitative interview, 12 care coordinators (8 community psychiatric nurses, 4 social workers) 8 female, 4 male	Open coding/content analysis	Thematic survey

11	Coombes, 2007	United Kingdom	To describe the lived experience of community mental health nurses working with people who have dual diagnosis.	Qualitative descriptive	Semi structured interview	Method: purposive sampling Setting: community mental health setting Sample: 7 community mental health nurses, 4 female, 3 male	Phenomenological analysis (Colaizzi 1978).	Thematic description
12	Carey, 2000	USA	To elicit clinicians' perspectives of treating substance abuse in the context of severe and persistent mental illness.	Qualitative descriptive	Focus group with semi structured interview	Method: purposive sampling Setting: 4 focus groups in psychiatric service setting Sample: 12 clinicians (3 nursing, 2 counselling, 3 social work, 1 rehabilitation, 3 psychiatry) 8 female, 4 male	Thematic analysis	Thematic survey
13	Dikobe, 2016	South Africa	To explore and describe the experiences of professional nurses in caring for psychiatric patients with dual diagnosis.	Qualitative, explorative/ descriptive	Semi structured interview	Method: purposive sampling Setting: psychiatric hospital Sample: 12 professional nurses. Further information not stated	Tesch's method of content analysis	Thematic survey
14	Halfpenny- Weir, 2009	United Kingdom	To explore the experiences of social care and health professionals working with people with dual diagnosis and to explore the acceptability and	Qualitative Explorative	Semi structured interview	Method: purposive sampling Setting: early intervention psychosis service	Grounded theory (Strauss & Corben, 1998)	Thematic survey

			perceived usefulness of the screening tool in early intervention psychosis.			Sample: 4 mental health practitioners working as care co-ordinators		
15	Searby, 2017	Australia	To explore the experiences of a clinical team providing care to older adults with dual diagnosis.	Qualitative descriptive/ explorative	Semi structured interview	Method: purposive sampling Setting: older adult community mental health service Sample: 10 clinicians (5 nurses, 2 social workers, 1 occupational therapist, 1 psychologist, 1 carer consultant)	Content analysis (Hsieh & Shannon, 2005)	Thematic survey
16	Philips, 2007	India	To investigate the extent and clinical correlates of dual diagnosis and traditional substance use among the mentally ill.	Qualitative descriptive	Semi structured interviews and focus groups	Method: not described – purposive inferred Setting: statutory and nongovernmental substance misuse and mental health services in two Northern Indian states Sample: 15 substance misuse professionals (3 nursing, 7 psychiatry, 2 public health, 1 psychology, 2 social work) 2 female, 13 male. 14 Indian, 1 Caucasian	Content textual analysis	Thematic survey

17	de	Australia	To identify barriers in	Qualitative	Semi-	Method: purposive/	Thematic analysis	Thematic
	Crespigny,		delivering effective	descriptive/	structured	opportunistic sampling:	(Miles &	survey
	2015		comorbidity care by	explorative	interview	subset from large mixed	Huberman, 1994)	
			government and non-			methods study		
			government MH and					
			Alcohol and other Drug			Setting: MH and AOD		
			services in Northern			services across Northern		
			metropolitan Adelaide.			metropolitan Adelaide		
						Sampling: 20 MH and AOD		
						service staff (registered		
						nurses, social workers, and		
						managers)		

Table 4: In vivo concepts and frequency interstudy effect sizes for findings across 17 studies

Only abstracted findings with frequency $>25\%$ included, $n = 32$ (see appendix 3 for	
	%
complete list of abstracted findings, $n = 57$)	
Staff experience of client group: "I found them the most challenging and difficult and	
they tend to slip through all the service systems" (Deans & Soar, 2005)	
1. Dual diagnosis patients as complex	29
2. Dual diagnosis patients are described as difficult	35
3. Difficulty of working with patients is attributed to co-morbidity	41
4. Patients have poor compliance and poor engagement with services	53
5. Patients have a lack of insight or deny problems	41
6. Patients lack motivation	47
7. Patients experience social issues	47
8. Patients can be physically aggressive	35
	35
9. Aspects of mental illness are barriers of complicating factors for engagement	
10. Substance use and its impact is a complicating factor or barrier	53
11. Mental health and substance misuse perceived as related	29
12. patients experience a negative cycle of mental illness, substance misuse and social	35
marginalisation which complicates engagement	
13. Perceived importance of the therapeutic relationship (e.g. trust, an open non-	41
judgemental approach)	
Emotional impact on staff: "Pain and disappointment, if we cannot find proper care"	
(Sorsa et al., 2017)	
14. Experience of working with patients as frustrating	41
15. Staff feel helpless and powerless	29
16. Staff feel unconfident and unprepared to deal with comorbidity	35
Experience of services "The Chicken or the Egg story" (Groenkjaer et al., 2007)	
17. Single treatment focus - services focus on what is deemed the original, specific	59
problem to dictate who is responsible	0,
	35
18. Perceived lack of responsibility and reluctance for services to engage with clients	35 41
18. Perceived lack of responsibility and reluctance for services to engage with clients 19. Lack of understanding and knowledge around comorbidity	41
18. Perceived lack of responsibility and reluctance for services to engage with clients 19. Lack of understanding and knowledge around comorbidity 20. Identified need for training in comorbidity	41 88
18. Perceived lack of responsibility and reluctance for services to engage with clients 19. Lack of understanding and knowledge around comorbidity 20. Identified need for training in comorbidity 21. Lack of resources available to help patients	41 88 29
18. Perceived lack of responsibility and reluctance for services to engage with clients 19. Lack of understanding and knowledge around comorbidity 20. Identified need for training in comorbidity 21. Lack of resources available to help patients 22. Identified need for more time to assessment, treatment and liaison with staff and	41 88
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18. Perceived lack of responsibility and reluctance for services to engage with clients 19. Lack of understanding and knowledge around comorbidity 20. Identified need for training in comorbidity 21. Lack of resources available to help patients 22. Identified need for more time to assessment, treatment and liaison with staff and services 23. Lack of formalised guidance for assessment and treatment 24. Negative or stigmatising attitudes of other professionals and services as a barrier to care 25. Decisions based on attitudes or personal working models due to lack of shared knowledge	41 88 29 41 47 53
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18. Perceived lack of responsibility and reluctance for services to engage with clients 19. Lack of understanding and knowledge around comorbidity 20. Identified need for training in comorbidity 21. Lack of resources available to help patients 22. Identified need for more time to assessment, treatment and liaison with staff and services 23. Lack of formalised guidance for assessment and treatment 24. Negative or stigmatising attitudes of other professionals and services as a barrier to care 25. Decisions based on attitudes or personal working models due to lack of shared knowledge 26. Importance of integration of care and specialised care for dual diagnosis 27. Lack of collaboration and communication between services 28. Lack of clarity around service policy and procedure, referral pathways, and organisational structures 28. Importance of outreach or care provided outside of clinical settings Experience of the wider context: "The most ill patients are "thrown around" in the	41 88 29 41 47 53 53 82 47 41

Themes from second-order analysis

Four interrelated categories emerged from the synthesis (second-order analysis) which explore aspects of how health workers experience working with patients with dual diagnosis. These categories were illuminated by use of in-vivo concepts, or direct quotations from the included studies, which describe pertinent experiences.

Staff experience of the patient group: "I found them the most challenging and difficult and they tend to slip through all the service systems" (Deans & Soar, 2005)

Patients with dual diagnosis were often described as difficult, which was attributed to high levels of complexity due to comorbidity (Deans & Soar, 2005; Pinderup, 2018; Groenkjaer *et al.*, 2017). Patients were perceived as difficult to engage, which has been attributed to intrinsic or personal factors such as lack of motivation (Sorsa *et al.*, 2017; Klingemann *et al.*, 2019), lacking insight into their problems (Clutterbuck *et al.*, 2009; Mericle *et al.*, 2007) and physically aggressive (Dikobe *et al.*, 2016; Searby *et al.*, 2017).

The impact of substances was also identified as a factor that may exacerbate and complicate these issues (Philips, 2007; Howard & Holmshaw, 2010; Clutterbuck *et al.*, 2009; Pinderup, 2018), which seemed particularly relevant in services which primarily focused on mental health problems (Pinderup, 2018; Searby *et al.*, 2017). This was perceived as also reflecting staff training and service priorities, which resulted in some staff feeling less competent to address issues around substance misuse (Pinderup, 2018; Searby *et al.*, 2017). Substances were also perceived as contributing to additional problems regarding maintaining a safe environment for in-patient staff (Wadell & Skärsäter, 2007; Howard & Holmshaw, 2010). Mental health was perceived as another complicating factor for engagement (Halfpenny-Weir, 2009; Coombes & Wratten, 2007), particularly for assessing patients experiencing a psychotic episode (Halfpenny-Weir, 2009). For many staff, substance misuse and mental health were perceived

as interrelated. For example, substances such as cannabis and cocaine were perceived as increasing risk for either the exacerbation or precipitation of psychotic illness (Philips, 2007; Groenkjaer *et al.*, 2017) while alcohol, cannabis, and benzodiazepine use were perceived to be more related to depression (Groenkjaer *et al.*, 2017). Some staff perceived that patients used substances to self-medicate or manage aspects of their mental health (Carey *et al.*, 2000) such as using cannabis for sedation or alleviating psychotic symptoms and anxiety (Clutterbuck *et al.*, 2009) or using cocaine for gratification or 'escapism' in contexts that offered limited opportunities for pleasurable experiences (Clutterbuck *et al.*, 2008).

Staff also acknowledged wider social issues experienced by this client group and described a vicious cycle of social isolation and marginalisation due to the impact of their mental illness, substance use, and issues in their wider social contexts (Groenkjaer *et al.*, 2017; Sorsa *et al.*, 2017). In particular, poverty, social isolation, and living in a context where substances are prevalent were perceived as barriers to accessing support or staying engaged (Mericle *et al.*, 2007). For many staff, social and economic problems were perceived to be inextricably linked to both physical and mental health problems (Coombes & Wratten, 2007). This was also particularly salient in the narratives of staff working in rural contexts, where both patients and staff had limited access to resources and support (Deans & Soar, 2005).

A therapeutic relationship based on trust, understanding, and a non-judgemental approach was viewed as imperative for engaging with clients experiencing comorbid issues (Carey *et al.*, 2000; Mericle *et al.*, 2007; Wadell & Skärsäter, 2007; Coombes & Wratten, 2007). For some staff, this involved creating an environment where patients would feel comfortable exploring their experiences, even if substance misuse was not overtly discussed as problematic initially (Mericle *et al.*, 2007; Wadell & Skärsäter, 2007). This reflected staffs' desire to avoid evoking feelings of guilt or coercion, while allowing time to develop a trusting relationship and help increase patient confidence (Wadell & Skärsäter, 2007) However, some staff perceived that

there was often a lack of time to invest in building trusting relationships with patients (Coombes & Wratten, 2007). Other factors perceived as facilitating a trusting therapeutic relationship included an intensive and assertive outreach approach and consistency of staff contact (Halfpenny-Weir, 2009).

The emotional impact on staff: "Pain and disappointment, if we cannot find proper care" (Sorsa et al., 2017)

Staff described experiences of working with patients experiencing comorbidity as frustrating (Sorsa et al., 2017; Deans & Soar, 2005), which was attributed to patient-related factors such as their lack of motivation to engage and perceived service-related barriers to helping patients (Groenkjaer et al., 2017; Pinderup, 2018), which could result in staff feeling that they did not have the means to address the complex problems that patients experienced. Staff often felt unprepared and unconfident working with comorbid problems, which contributed to feelings of helplessness and powerlessness (Klingemann et al., 2019; Coombes & Wratten, 2007). Deans and Soar (2005) noted how this frustration, if left unresolved, may over time manifest in negative attitudes towards clients with a dual diagnosis, which could have a detrimental impact on patient care. This suggestion is developed and explored under the third-order theme. Studies that acknowledged more positive emotional experiences when working with patients with dual diagnosis espoused a more integrated approach to patient care, where staff were trained for a dual diagnosis caseload or worked in integrated teams (Clutterbuck et al., 2009; Clutterbuck et al., 2008), or where staff were supported to treat both diagnoses simultaneously (Philips, 2007). This was perceived as increasing staff willingness to engage with the client group and a greater sense of responsibility (Philips, 2007). A sense of competence and confidence were also perceived as important, which reflected training in co-morbidity, clear assessment, and treatment structures (Philips, 2007; Clutterbuck *et al.*, 2008; Sorsa *et al.*, 2017) and protocols for managing aggressive behaviour (Dikobe *et al.*, 2016).

Experience of services: "The Chicken or the Egg story" (Groenkjaer et al., 2017)

The majority of studies identified the importance of integrated mental health and substance misuse care for managing the complexities associated with dual diagnosis (Groenkjaer et al., 2017; Halfpenny-Weir, 2009; Pinderup, 2018). However, services often focused on what was considered the 'primary' diagnosis to dictate who was responsible for providing care (Groenkjaer et al., 2017: Sorsa et al., 2017; de Crespigny et al., 2015). This single treatment focus was perceived as a barrier to providing effective support and was associated with a perception that services were often unwilling to engage patients with dual diagnosis due to perceived lack of responsibility (Groenkjaer et al., 2017: Coombes & Wratten, 2007; Wadell & Skärsäter, 2007). Where simultaneous treatment of both mental health and substance misuse occurred separately, there were perceived issues with communication and effective collaboration between mental health services and substance misuse services, which was perceived as a significant barrier to addressing patient need effectively and contributed to staff experiences of helplessness (Groenkjaer et al., 2017: Sorsa et al., 2017; Deans & Soar, 2005). For many staff there was also a perceived lack of clarity around service policy, structures, and procedures around assessing and treating co-morbidity. There was also ambiguity around appropriate referral pathways, particularly for substance misuse services (Halfpenny-Weir, 2009; Groenkjaer, et al., 2017; Searby et al., 2017). There was a perception that due to these issues, many patients "fall between the cracks" of services, which again was perceived as contributing to feelings of frustration and helplessness (Groenkjaer, et al., 2017; Pinderup, 2018; Wadell & Skärsäter, 2007).

Due to a lack of shared formal treatment and assessment guidelines for comorbidity, staff reported that often clinicians and teams based their decisions on "personal working models", or models derived from individual learned experience through 'trial and error' and the attitudes of leading clinicians, as opposed to a shared or evidence-based structure (Sorsa *et al.*, 2017; Pinderup, 2018; Howard & Holmshaw, 2010). This is particularly concerning given that negative and stigmatising attitudes of clinicians and teams were identified as prevalent and a barrier to providing effective care (Sorsa *et al.*, 2017, Deans & Soar, 2005; Pinderup, 2018). Indeed, this approach was associated with inconsistent care and conflict within teams due to differing attitudes regarding perceptions and treatment of co-morbid problems (Sorsa *et al.*, 2017: Pinderup, 2018).

There was a clear identified need for training in working with dual diagnosis, due to a lack of knowledge and understanding around addressing comorbidity (Dikobe *et al.*, 2016; de Crespigny *et al.*, 2015; Sorsa *et al.*, 2017; Groenkjaer *et al.*, 2017). There was also an identified need for more individualised, flexible treatment (Clutterbuck *et al.*, 2009; Sorsa *et al.*, 2017; Pinderup, 2018; Carey *et al.*, 2000), particularly in regard to offering support outside of formal clinical settings, such as through assertive outreach (Sorsa *et al.*, 2017; Carey *et al.*, 2000). There was also an identified need for more time to assess and treat patients with dual diagnosis and to liaise effectively with other staff and services (Pinderup, 2018, Searby *et al.*, 2017; Howard & Holmshaw, 2010). Staff also identified a lack of resources (Groenkjaer *et al.*, 2017; Wadell & Skärsäter, 2007) which undermined the possibility of working effectively with comorbidity.

Experience of the wider context: "The most ill patients are "thrown around" in the system" (Pinderup, 2018)

Many of the service-related barriers identified to providing adequate care were thought to be the consequence of wider systemic barriers in organisations and health boards (Sorsa *et al.*, 2017; Mericle *et al.*, 2007; de Crespigny *et al.*, 2015). Wider societal views or stigma towards patients with dual diagnosis were also identified as a complicating factor (Mericle *et al.*, 2007; Philips, 2007; de Crespigny *et al.*, 2015), which some staff believed were reflected in a lack of funding for specialist comorbidity care and the lower priority of these patients in service provision (Mericle *et al.*, 2007; de Crespigny *et al.*, 2015). As discussed, the clinicians themselves were not perceived as immune from the influence of societal views and they were seen as often reflecting and perpetuating stigmatising attitudes within services (Carey *et al.*, 2000; Mericle, *et al.*, 2007; Sorsa *et al.*, 2017). As a result of these prevailing attitudes, substance use issues were perceived as almost invisible to many clinicians working in mental health settings (Sorsa *et al.*, 2017). The prevalence of stigmatising attitudes was also perceived as a barrier to patients accessing support for substance use in the first place, due to fear of being stigmatised for their mental health (Mericle *et al.*, 2007).

Third-order analysis

While the second-order analysis provided a 'reconceptualisation' of the primary findings, this informed a third-order analysis as described by Sandelowski and Barroso (2007), which involves the use of imported concepts that provided a lens to further explore and interpret the second-order findings. An imported concept is one that is borrowed from theoretical and empirical literature outside the included studies to integrate and not simply organise, the findings (Sandelowski & Barroso, 2007).

An overarching theme was constructed which seeks to elucidate how systemic-level factors and service-level issues, such as working with limited resources in ambiguous and difficult contexts, may impact negatively on health workers' wellbeing and influence how professionals perceive their patients' problems. This was achieved through reflexive exploration of the second-order findings and through exploration and integration of literature pertaining to staff burnout and stigma, which appeared to be particularly salient in the context of dual diagnosis due to its associated complexities and the emotional burden on staff.

"We have stopped believing that health care services can actually change their way of functioning. We have tried so many times already" (Sorsa et al., 2017): A vicious cycle of systemic issues, frustration, burnout and stigma.

According to Maslach and Jackson (1981), burnout describes negative work-related attitudes that incorporates three factors: emotional exhaustion with work, depersonalisation or disengagement from patients, and low personal accomplishment. Burnout has been acknowledged in the literature as detrimental in mental health care due to its deleterious impact on staff wellbeing, services, and patient care (Johnson *et al.*, 2018). Identified causes and contributors of staff burnout include high emotional labour, experiences of risk or aggression, and underfunding or lack of resources (Johnson *et al.*, 2018). These issues appear to be particularly relevant for experiences described in the included studies regarding working in the context of dual diagnosis, such as experiences of frustration, helplessness, physical aggression, and a lack of structure and resources for managing the complexities of co-morbidity (Groenkjaer *et al.*, 2017; Klingemann *et al.*, 2019; Dikobe *et al.*, 2016; Sorsa *et al.*, 2017).

Further, burnout may perpetuate stigma due to its impact on emotional and cognitive resources (Hobfoll, 2002; Johnson *et al.*, 2018), which can increase tendencies for clinicians and services

to attribute difficult and complex systemic issues to the patient or individual-level characteristics, which may then result in staff developing negative attitudes and pulling away from patients. The complexities and "double stigma" associated with having substance use issues and mental illness may also amplify these tendencies as they reflect prevailing social attitudes (Askey, 2007; Avery *et al.*, 2013). Indeed, the studies included in this metasynthesis indicate the prevalence of negative attitudes of staff within services, which was identified as a barrier to offering effective care (e.g., Deans & Soar, 2005). As identified from the included studies, the use of "personal working models" can also perpetuate stigmatising attitudes within services (Sorsa *et al.*, 2017) as patient narratives and therapeutic decisions may be based on the attitudes of leading clinicians and teams, as opposed to a shared or evidence-based structure, or an understanding of the complexities of patient behaviours and experiences.

Further, staff frustration, negative attitudes, and burnout may also reflect and interact with system inefficiencies and limited resources, especially when this is combined with high volume expectations and a lack of service containment or shared knowledge and structures (Halbesleben *et al.*, 2008). This is reflected in the second-order themes regarding a lack of funding, resources, structures, and a lack of flexibility and time to meet the demands of dual diagnosis (Sorsa *et al.*, 2017; de Crespigny *et al.*, 2015; Carey *et al.*, 2000) Being unable to work in a way that is aligned to one's values due to systemic inefficiencies can be frustrating and demoralising (Winner & Knight, 2019), which may contribute to further emotional burden and may perpetuate the cycle of burnout further. Figure 2 illustrates these interacting components based on a system model (Winner & Knight, 2019) which describes a positive feedback loop whereby wider systemic problems and funding issues have a detrimental impact on organisations and work practice, which in turn contributes to staff frustration and negative attitudes, which perpetuates societal stigma.

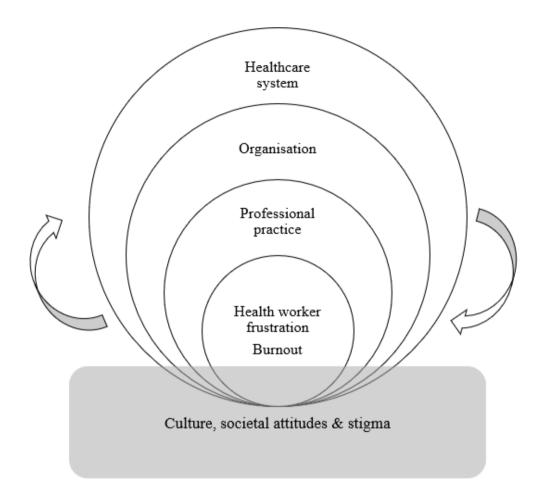


Figure 2. Systemic issues, frustration, burnout, and stigma as a system model (Winner & Knight, 2019).

Discussion

To the knowledge of the authors, this is the first metasynthesis that has offered a comprehensive understanding and interpretation of how health staff experience working with patients with dual diagnosis. The first theme of the second-order analysis indicates that many staff experience working in the context of dual diagnosis as difficult due to the complexities of comorbidity. A strong therapeutic relationship was identified as important for engaging with this patient group. The second theme describes the emotional impact of working in the context of dual diagnosis, which indicates that many staff experience feelings of frustration and helplessness due to perceived patient-related and service-related barriers. This theme also

highlighted the role of more integrated approaches and staff confidence as important for creating a more containing work environment. The third theme describes experiences of services in terms of a single-treatment focus, a lack of perceived clinical responsibility, and a lack of communication and collaboration between mental health and substance misuse services, which were perceived as contributing to patients falling between the cracks of services. This theme further described negative staff attitudes and the use of "personal working models" in the absence of shared structures for treatment, referral pathways and training as barriers to effective care. The fourth theme of the second-order analysis relates to staff's perceptions of wider systemic influences on their work, which includes wider societal stigma, the low priority of patients with dual diagnosis in service provision and funding issues. These second-order themes and imported concepts from literature pertaining to staff burnout and stigma informed the third-order theme regarding the vicious cycle of systemic issues, frustration, burnout, and stigma, which aimed to integrate and explain the second-order findings. This theme describes how stigma, systemic and organisational level issues may interact and impact on health workers' experiences of working with patients with dual diagnosis.

As previously explored, Adams' (2008) narrative review of worker's reported attitudes and perceptions primarily explored quantitative evidence with the exception of two studies that used qualitative methodologies. The review study is 13 years old and aimed to be a descriptive account (Adams, 2008). While the current metasynthesis aimed to also describe findings across qualitative studies, reciprocal translation of findings and imported concepts were also implemented to inform a new interpretive perspective of the worker's experiences, which was less explored in the previous research. The findings are similar to those discussed by Adams (2008) who described both positive and negative attitudes and perceptions of staff towards patients with dual diagnosis and linked negative experiences and perceptions to systemic and service-related issues. Indeed, an almost-universal negative perception of the effectiveness of

service systems which provide support to patients with dual diagnosis was identified (Adams, 2008). Inadequacy of training was also identified as a barrier to providing effective care (Adams, 2008), which corresponds to the findings of the present metasynthesis. However, the present study also aimed to provide an interpretation of how system-level, service-level, and individual-level factors interact to inform experiences of working with dual diagnosis.

Although there were mixed experiences identified in this metasynthesis, which may reflect the heterogeneity of work contexts or the client group itself, experiences of frustration were widespread. The need for integrated, specialist care was identified as a pertinent issue under the theme regarding experiences of services, although this was perceived as lacking in many of the studies. Positive experiences of working with patients with dual diagnosis were linked to an integrated approach to patient care and clear responsibility. Indeed, an integrated approach has been identified as imperative for treating dual diagnosis and working with the complexities of comorbidity (Public Health England (PHE), 2017; Anderson et al., 2016). Integrated treatment involves staff being trained and skilled specifically for a dual diagnosis caseload, which represent an alternative to independent working or joint/coordinated care, where mental health services and substances misuse services collaborate. Further, service user survey evidence indicates that patients with dual diagnosis often experience difficulties accessing the care they need for both substance misuse and mental health problems (The Recovery Partnership, 2015; PHE, 2017), which is reflected in staff experiences of services' single-treatment focus and issues around clinical responsibility. However, due to inconclusive evidence for the efficacy of integrated services (Hunt et al., 2019), the National Institute for Health and Care Excellence (NICE, 2016) recommends coordinated care as an alternative.

Workers were aware of the complexities of dual diagnosis and the difficult social contexts and cycle of marginalisation experienced by many patients. However, staff often appeared to feel that they did not have the support, resources, or training to address these issues, which may

have contributed further to frustration and feelings of powerlessness. This is reflected in previous findings from the survey arm of Howard and Holmshaw's (2010) study, which indicated that staff who had received training regarding working with the complexities of comorbidity were less likely to exhibit negative attitudes towards this patient group. Research on burnout has also indicated that a lack support and opportunities for skill development can result in staff developing negative attitudes towards their patients (Halbesleben *et al.*, 2008; Willard-Grace *et al.*, 2014)

Indeed, stigmatising and unhelpful attitudes of staff and wider society were described under the themes exploring experiences of services and the wider context, which is line with evidence that suggests that dual diagnosis is associated with higher levels of stigma compared with either a diagnosis of a mental health problem or substance misuse issues alone (Avery et al., 2013). Previous evidence from survey data also suggests that clinicians' negative attitudes may increase in severity overtime (Gilchrist et al., 2011; Lindberg et al., 2006), even if perceived training needs are met, which has been associated with an increased belief that these patients overutilise health care resources (Lindberg et al., 2006). This suggests that although training may be an important component towards empowering health workers to feel confident and competent in their roles, this may not be sufficient in itself to target the wider systemic issues associated with treating dual diagnosis and negative attitudes towards this patient group. This metasynthesis identified workers' experiences of service-level insufficiencies that resulted in the perception that patients with dual diagnosis were "bounced" around the system (Groenkjaer et al., 2017). Therefore, negative attitudes towards patients with dual diagnoses and perceptions that they overutilise resources may stem from systemic and service-related insufficiencies that may lead to therapeutic helplessness, nihilism, and blaming the patient.

A cycle of systemic issues, frustration, burnout, and stigma was identified as an overarching theme which attempts to integrate and explain the second-order findings. This cycle aims to describe how stigma, systemic, and organisational-level issues may interact and impact on health workers' experiences of working with patients with dual diagnosis. Research indicates that burnout may be particularly problematic for mental health workers (Johnson *et al.*, 2018), and the identified causes and correlates of burnout align with the experiences of health workers in this study (Maslach & Jackson, 1981; Groenkjaer *et al.*, 2017; Klingemann *et al.*, 2019; Dikobe *et al.*, 2016; Sorsa *et al.*, 2017). Interventions have been developed which aim to prevent or reduce burnout for mental health workers at an individual level, through psychological intervention and organisation-level interventions, which focus on education and teamwork training. While there is support for the efficacy of these approaches, effect sizes are small (Dreison *et al.*, 2016). The impact of these interventions may be limited as they fail to account for more systemic issues that impact on staff wellbeing, such as issues stemming from funding issues, lack of resources and support, and a lack of collaboration between organisations and services, which is particularly pertinent for the effective and safe treatment of dual diagnosis.

Although mental health staff well-being and burnout is consistently associated with the quality and safety of care (Hall *et al.*, 2016; Johnson *et al.*, 2017), according to Johnston *et al.* (2018), the direction of this relationship is unclear. The associated factors may function as either a negative or positive feedback loop, where higher staff wellbeing may lead to better quality and safety of care, although an inability to provide high quality, safe care may lead to disillusionment, increased stress, and burnout (West *et al.*, 2009). Further, negative attitudes and stigma of clinicians towards patients with dual diagnosis may stem from difficult clinical experiences due to issues that correspond with problems identified in the burnout literature, such as lack of skill and resources, service inflexibility, and frustrating experiences of the patient group (Johnson *et al.*, 2018), which may lead to the reinforcement of societal attitudes. Indeed, negative attitudes and burnout may also function as a positive feedback loop, where

stigmatising attitudes may be the consequence of burnout through processes associated with depersonalisation and emotional withdrawal from patients (Johnson *et al.*, 2018), or where stigma contributes to burnout through reinforcement of fear, confirmation bias (Wason, 1960), dissatisfaction, and unsafe work practices.

Clinical implications

The findings of this metasynthesis indicate support for an integrated treatment approach for dual diagnosis to prevent patients from falling through the net of services and improve staff experiences. Where joint working did occur in the studies included, there were perceived issues with communication and collaboration. This corresponds with literature exploring challenges regarding dual diagnosis, which suggests that collaboration issues may result from both cultural and practical barriers, such as disparities in service criteria, professional preferences for treatment and care, and a shortage of funding for dual diagnosis provision (Hamilton, 2014). As an alternative, integrated services would involve staff being trained for a dual diagnosis caseload. As staff would share the same policies, processes and values, barriers to effective information sharing and ambiguity around responsibility would be reduced. Despite commissioners and staff working in dual diagnosis contexts recommending integrated care (PHE, 2017; Anderson et al., 2016), there is limited review evidence for its effectiveness (Hunt et al., 2019), which may reflect difficulties of comparing treatment models which do not lend themselves to rigorous forms of analysis. This may also be due to the poor quality of studies included in their review, the short-term nature of the research, and issues with recruitment and retention of participants (Hunt et al., 2019). This may indicate a need to move away from the requirement for research to produce evidence, which is then translated into practice, and alternatively promote the case for integration based on practice-based evidence rather than evidence-based practice (Hunt et al., 2019). Indeed, the staff experiences explored in this metasynthesis support the need for a shared approach and structure to maintain staff resilience

and prevent frustration and therapeutic helplessness. An integrated treatment approach could inform local policies and organisational initiatives, as achieved by the Combined Psychosis and Substance Use (COMPASS) programme in the UK (Copello *et al.*, 2013).

Indeed, the interacting factors associated with systemic issues, frustration, burnout, and stigma provide a framework for considering interventions aimed at supporting staff in regard to increasing their emotional wellbeing and resilience, while simultaneously considering wider service-level and systemic issues that need addressing in order to provide better quality, safe care for patients with dual diagnosis. At the health care system level, policies are required that facilitate efficient health care coverage and ensure that provisions are available to manage the complexities of patients with dual diagnosis, therefore reducing the frustration that staff feel when they are unable to effectively help patients because of socioeconomic issues.

At the organisational level, lead clinicians and managers may need to be more responsive to the ideas and experiences of their staff who are working directly with patients with dual diagnosis. More hierarchical health care organisations may need to ensure that there is a forum for staff to share their concerns and experiences, which could involve conducting service-related audits, facilitating regular meetings to gauge experiences, or through addressing cultural barriers that impede communication. This could also involve training on leadership skills, which can be effective for ensuring that staff are adequately supported (Johnson *et al.*, 2018). Building partnerships between health care and academic institutions can also be mutually beneficial (Johnson *et al.*, 2018), for example, for helping identify new and important avenues for research, ensuring that health care staff have access to novel, evidence-based interventions and strategies, and through providing rigorous means of assessing these approaches.

At the level of professional practice, ensuring that staff have access to appropriate supervision and training, particularly in regard to known areas of need, such as de-escalation of violence, reduction of coercive practices, and the management of self-harm and suicide risk (Johnson et al., 2018). These approaches may bolster the impact of service-directed interventions for burnout, such as educational interventions, work scheduling changes, and teamwork training. At the individual level, effective stress-management strategies may enable staff to care for both themselves and their patients in a more effective and safe manner. This could be in the form of reliable and supportive peer supervision or more formal interventions for stress management. Mindfulness interventions in particular have been indicated as effective in reducing burnout and improving relaxation and satisfaction (Mackenzie et al., 2006). Emphasising the benefits of these interventions as helpful and proactive could undermine stigma, which may be a barrier to staff acknowledging their difficulties and accessing support. Brief interventions targeting the stigmatising attitudes of staff towards patients with dual diagnosis may also be effective (Avery et al., 2016). This could also involve exposure to patients who are in recovery. Indeed, meaningful collaboration with patients who have lived experience of dual diagnosis at all levels of practice may aid in ensuring that services are responsive to their complex psychosocial contexts and may aid in alleviating the impact of stigmatising attitudes in services. Although there has been some exploration of the experiences of patients with dual diagnosis (e.g., Nicholas et al., 2017), further exploration and integration of these views may aid in developing responsive care.

Limitations

There are several limitations to this study. The articles included in the metasynthesis represent various professions, health care contexts, and cultures. Therefore, the contextual and cultural nuances may have been lost and the findings may not be generalisable across settings, professions, and cultures. However, inclusion of studies from different contexts ensures the diversity of findings and increases the understanding of the complexity of the experiences of

working with patients with dual diagnosis. Another limitation is the variety of methodological approaches used in the included studies and the differing philosophical assumptions. A variety of approaches were included based on the argument that the findings themselves are more important than the methods of data collection and analysis (Bondas & Hall, 2007). A thorough audit trail using tables and figures was maintained throughout the research process to enhance transparency and aid creative interpretations, which aimed to overcome rigid methodological forms of assessment and strengthen the credibility of the synthesis (Sandelowski & Barroso, 2007).

The first author has experience of working with patients with dual diagnosis in different professional settings for over five years and was aware of the danger of over-interpretation of findings when researching a familiar area. Liaising with other members of the research team throughout the research process and maintaining an audit trail based on comprehensive descriptions from primary studies aided in maintaining transparency. Collating and summarising the findings in a metasummary before performing a metasynthesis also strengthens the credibility of the research (Sandelowski & Barroso, 2007).

A further area of contention relates to the diagnostic label of 'dual diagnosis' itself, its heterogeneity and lack of consistency in its use throughout the literature (Todd *et al.*, 2004). This study aimed to be inclusive through expanding search criteria to include terms relating to comorbidity. However, health workers are likely to hold differing perceptions of substance use, based on perceived levels of safety or detriment and the legal status of the substances. For example, Clutterbuck *et al.* (2008) found that staff had more uncertain or ambivalent attitudes towards cannabis use compared to crack cocaine. Further research exploring these differing perceptions may help inform service provision and interventions targeting stigmatising attitudes in services.

Conclusion

This metasynthesis brings together an integration and interpretation of findings from 17

qualitative studies to inform an understanding of how health staff experience working with

patients with dual diagnosis. Although contexts and cultures varied across studies, experiences

of working with the patient group as difficult and emotionally burdensome were common. This

reflected patient-level attributes, such as lack of motivation and insight, and service-related

issues, including lack of training, lack of integration of mental health and substance misuse

treatment, and a lack of communication and collaboration. These issues were also identified in

the context of wider organisational challenges and prevailing social attitudes towards the client

group. A vicious cycle of systemic issues, frustration, burnout, and stigma was outlined as a

way of interpreting how these factors are interrelated, in order to offer a framework to inform

levels of intervention needed to address these issues. These included health care, organisation

and individual approaches, and interventions aimed at improving staff wellbeing and the care

of patients with dual diagnosis. Incorporating the experiences and views of patients may also

aid in informing service provision and reducing the impact of stigma.

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46

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Appendices A

Appendix 1. Example search terms and syntax for metasynthesis

Database	Syntax
PsychINFO	su((health* personnel OR health* staff OR medical staff OR Nursing staff OR Nurse\$ OR physician\$ OR general practitioner\$ OR psychiatrist\$ OR health professional\$ OR psychologist\$ OR social worker\$ OR care worker\$ OR care staff) AND (substance-related disorders OR alcoholism OR drug use OR substance use OR substance misuse) AND (mental illness OR psychiatric illness OR mental health OR mental disorder\$ OR mental health condition\$ OR psychiatric disorder\$ OR psychiatric condition\$ OR mental health diagnos?s OR psychiatric diagnos?s) OR (dual diagnosis) AND (attitude\$ OR experience\$ OR perception\$ OR view\$))

Appendix 2: Example of extracted findings, themes and notes for second and third order analysis

Report and	Edited findings	themes	Notes
purpose			
Groenkjaer, 2017	Participants described complexity of clients' comorbidity and related problems. These included use of various combinations of substances, which were described as mental health related, such as alcohol, cannabis and	Complexity of comorbidity and related problems	
	benzodiazepine use related to depression, cannabis and other substances related to psychosis, and the general MH-related use of cannabis, amphetamines and opiates	Perceived relationship between substances and mental health	Differs among substances – make note of some differences [relevance for Pecan?]
	participants reported that clients commonly had a variety of acute and chronic health conditions including diabetes, hypertension, lung disease, liver and kidney disease, cancer, chronic pain, nutritional issues, communicable diseases (HIV & Hepatitis	Physical health issues Poor compliance with medication	Vicious cycle between SUD/MH/ psychical health/ social isolation etc?
	C), and infections in general, along with poor compliance with medications.		
	participants reported a range of social problems. These were mainly associated with the serious levels of disadvantage of the study region. Unemployment, intergenerational poverty, low levels of education, bullying and school disengagement, social isolation, domestic violence, neglect and abuse, crime, inadequate housing and homelessness, and problem gambling	Social issues -associated with area disadvantagesocial issues associated with poor social outcomes, poor selfcare and decision making capacity	Vicious cycle

	were all major		
	determinants of people's		
	MH and AOD problems,		
	including comorbidity. In		
	general, participants		
	stressed that in general		
	their clients had very poor		
	social outcomes, and low		
	levels of self-care and		
	decision making capacity		
	Participants reported	Lack of services or	Lack of resources AND
	scarcity of local AOD	facilities for working with	lack of understanding
	services or facilities for	co-morbidity	[uncontaining,
	working with co-morbidity.		stressful?] – this
	Although a minority		combined with
	reported that		complexity of co-
	their organisation was		morbidity
	willing to assist clients with		
	comorbidity, most		
	emphasised that they		
	found it difficult to locate		
	services whose staff		
	possessed the appropriate		
	therapeutic knowledge,		
	skills and understanding of		
	comorbidity.		
	With comorbidity services	Complexity of clients	Patient level fous on
	being sparse, participants	viewed as impacting on	barriers – motivation-
	highlighted that complex	accessing services	however, could this
	MH and AOD problems		reflect service related
	often prevented people		issues?
	from obtaining appropriate		
	services. This was a	Lack of motivation and	
	particular problem for	poor insight	
	those with mental illness as		
	they often had limited		
	motivation and poor insight		
	and judgement about their		
	complex situation and		
	needs, and did not know or	Mental illness as a barrier	
	trust where to get the right		
	help. These characteristics		
	of mental illness were in		
	themselves seen as a		
	barrier, which needed to be		
	addressed by service		
	providers in order to help		
	those affected by		
1 '	1.1.10.		
	comorbidity.		

Participants reported that up-to-date information about the location and nature of the available MH and AOD services was not widely known or well-advertised. In addition to negatively affecting the community, this issue also influenced the staff of local government and NGO services, with participants reporting difficulty making inter-service connections or referrals on behalf of their comorbidity clients.	Lack of information available on MH and AOD services	Lack of resources and lack of info for referral – therapeutic helplessness? Impact overtime?
Lack of resources, untrained staff and lack of clear pathways for referral of people with comorbidity were considered major barriers to obtaining comorbidity services. Consequently, people with comorbidity sometimes chose not to seek help, adding to the negative cycle of becoming sicker, further isolated, disenfranchised from others, and marginalised in the	Lack of resources and training Unclear referral pathways Difficult for clients to seek help Negative cycle of sickness and marginalisation	Vicious cycle- acknowledge that service related issues are barriers to aptients receiving care
community. Thus, limited access to appropriate comorbidity services had serious consequences, leading to repeated presentations at emergency departments or GPs due to relapses and crises. GPs were reported to be under extreme pressure and some had reached the point where they were unable to accept new patients.	frequent attending ED or GPs GPs under extreme pressure	Frequent ED or GP due to unmet need – feeds into negative perceptions and patient blame?
NGO funding challenges	Funding issues	Funding issues – does this reflect government priorities? Social perceptions?

Appendix 3: Draft of full metasummary

	Theme	Occurrence	frequency
Percept	ion of client group		
1.	Dual diagnosis patients as complex	G17, S17, P18, H10, C07	29%
2.	Described as difficult	S17, D05, C05 C07,	35%
		S172, D16	
3.	Working with comorbidity as difficult	P18, s17, G17, D05,	41%
		D16, W09, S172	
4.	Poor compliance and engagement with	G17, P18, C20, S17, C08,	53%
	treatment and services	C07, H10, C00, D16	
5.	Perceived lack of insight or denial	G17, S17, C09, M07,	41%
		S172, C00, W07	
6.	Perceived unwillingness	M07, S172	12%
7.	Perceived lack of motivation	G17, S17, K19, D07,	47%
		C09, M07, C07, S172	
8.	Perceived social issues	G17, C09, C08, C07,	47%
		C20, P07, M07, C00	
9.	Aggressive/ physical risk	G17, S17, D05, C07,	35%
		S172, D16	
10.	Perceived increased risk of suicide	W07, D16	12%
11.	Negative cycle of the above impacting on	G17, s17, C09, C08, C07,	35%
	outcomes and engagement	M07	
12.	Mental illness as a barrier or complicating	G17, C00, P18, HW09,	35%
	factor	C07, M07	
13.	Substance use as a barrier or complicating	C07, C09, H10, M07,	53%
	factor	W07, C08, S172, P07,	
		P18	
14.	Clients disagree with intervention or have	S17, P18	
	incompatible goals		
15.	Perceived relationship between SUD and		
	mental health		
	Related	P07, C09, W07, C00,C08	29%
	Differing opinions		
	Substances as self-medicating		
	Differences between substances		
16.	Perception that substance use is a choice	S172, DC15	
17.	Perception of patients as helpless or hopeless	M07, C07, C00, S172	24%
18.	Perception that patients are treated unfairly	C00	
19.	Perception of patients as fragile	W07	
20.	Perception of patients as avoidant	C00	
21.	Perception of lacking means of coping	C00	
22.	Perception of working with clients as positive	S172, DC15, C08	
	 attributed to training and resources 		
23.	Perceived importance of the therapeutic	C09, M07, W07, C07,	41%
	relationship and trust, understanding/non-	C00, HW09, s17	
	judgemental approach		
24.	Reluctance around discussing SUD due to	C09, M07, W07, S172	24%
	potential impact on relationship		
Emotion	nal impact on staff		

25.	Experience of working with patients as	S17, D05, C09, M07,	41%
	frustrating	C08, C000, S172	
26.	Staff feel helpless/powerless	D05, M07, C08, S172, C07	29%
27.	Staff feel unconfident and unprepared to deal	K19, D05, H10, C07,	35%
_,.	with comorbidity	HW09, S172	3370
28.	Staff feel hopeless	M07, C00	
29.	Staff feel like failures	S172, C07	
30.	Staff feel vulnerable	D16, S17, C07	
31.	Staff feel confident or empowered	S17, C08	
32.	Staff feel devalued and patronised	C07	
33.	Staff feel they are not taken seriously	C07	
	ence of services		
34.	Single treatment focus -Services focus on	C17 C17 C07 DC1E	59%
54.	what is deemed the original, specific problem	G17, S17, C07, DC15, K19, P18, S172, W07,	39%
	to dictate who is responsible		
25	·	s172, H10 P18, H10, W07, C07,	250/
35.	Perceived lack of responsibility and reluctance		35%
36.	to engage with clients Lack of clarity around which service is	S172, G17 G17, S17, C00, HW09	24%
30.	appropriate – results in patients being	G17, 317, C00, HW09	24%
	bounced around or falling through cracks		
37.	Lack of understanding and knowledge around	S17, D05, C07, P18, D16,	41%
57.	comorbidity		41%
20	,	S172, G17	000/
38.	Identified need for training in comorbidity	G17, S17, D07, C09,	88%
		H10, M07, W07, C07,	
		C00, D16, S172, DC15,	
20		C07, C00, D16	200/
39.	Lack of resources available to help patients	G17, S17, P18, W07, C00	29%
40.	Need for individualised treatment	P18, C09, W07, C00	24%
41.	Need for service flexibility	P18, C00	
42.	Identified need for more time to assessment,	S17, P18, H10, C08, C07,	41%
	treatment and liaison with staff and services	S17, W07	
43.	Lack of clarity around service policy and	G17, P18, C07, S172,	41%
	procedure, referral pathways, and	S17, H10, W07	
	organisational structures		
44.	Lack of standard treatment and assessment or	G17, P18, M07, P18,	47%
	formal treatment guidelines	H10, W07, s17, s172	
45.	Importance of comprehensive assessment	W07, C07	
46.	Negative or stigmatising attitudes of other	S17, D05, P18, H10,	53%
	professionals and services as a barrier to care	W07, C00, P07, DC15,	
	·	C07	
47.	Decisions based on attitudes or personal	P18, H10, W07, S17,	53%
	working models due to lack of shared	D05, C07, S172, C09,	
	knowledge	C00	
48.	Skills and approach learned through	S17, D05, C09, S172	24%
	experience/ trial and error	=====================================	
49.	Lack of services and support for SUD	S17, P18, H10, W07	24%
50.	Importance of integration of services and	G17, S17, HW09, P18,	82%
50.			02/0
J0.	specialised care for dual diagnosis	D05, W07, C00, K19,	02/0

		M07, C07, COO, s172,	
		H10, P07	
51.	*Lack of staff appropriate support and supervision	H10, C07, C00, D16	24%
52.	Need for more staff	C00, D16, S17	
53.	Lack of collaboration and communication	G17, S17, K19, P18, D16, C07, C00, H10	47%
54.	Importance of outreach and care outside of clinical settings	W07, D05, S17, C00, D16, HW09(for trust)	35%
Experience	e of wider context		
55.	Wider Organisational and system challenges as limiting access to appropriate care	S17, M07, G17, C07, DC15, C00	35%
56.	Funding issues	G17, P18, H10, C00, M07	29%
57.	Wider societal views and stigma as a barrier to care	C000, P07, M07, DC15, P18	29%

Chapter Two

Empirical Study

"Two Different Sides to it": An Exploration of Psychotic Experiences and Cannabis use in Young Adults

Amy-Rose Hayes¹, Robin Owen², & Mike Jackson³

¹North Wales Clinical Psychology Programme

²Betsi Cadwaladr University Health Board, NHS Wales

³School of Psychology, Bangor University

Address for correspondence: Dr Mike Jackson, North Wales Clinical Psychology Programme, School of Psychology, Brigantia Building, Bangor, North Wales, LL57 2AS, email: mike.jackson@bangor.ac.uk

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p20

Abstract

There is increasing evidence supporting associations between cannabis use and negative outcomes for psychosis, although there is limited evidence supporting the efficacy of interventions targeting cannabis reduction in this population. There is also little in-depth exploration of the experiences of young adults who experience psychosis and use cannabis. This study uses interpretative phenomenological analysis to explore the lived experiences of six young adults who use cannabis and are supported by early intervention psychosis services in North Wales, United Kingdom. The analysis revealed three interrelated themes regarding experiences of cannabis use, with an overarching theme of empowerment versus disempowerment: 1) "it's something I sort of live by": Identity as a cannabis user; 2) "two different sides to it": Impact on psychosis and wellbeing; 3) "people who make me feel human": Experiences of services and support. These themes emphasise the importance of an accepting, individual approach, which may at times appear to contradict the evidence that cannabis is harmful for individuals experiencing psychosis.

Key Words: psychosis, cannabis, substance misuse, qualitative, interpretative phenomenological analysis

Background

Emerging evidence supports a number of associations between cannabis use and psychosis. For example, cannabis use has been linked to higher rates of relapse and hospitalisations, and pronounced positive symptoms (Hamilton & Monaghan, 2019; Hasan et al., 2020). There is also growing evidence suggesting increased risk of chronic psychosis among those who use cannabis at a younger age (e.g., Large et al., 2011). One explanation for these findings proposes that cannabis has a causal effect on psychosis, its longevity, and its exacerbation (Van der Steur et al., 2020; Marconi et al., 2016). It has also been proposed that the relationship between cannabis use and psychosis may be mediated by biological and genetic factors which may increase vulnerability (Colizzi et al., 2019; Van der Steur et al., 2020). Frequency of use and consumption of high-potency cannabis (i.e., strains higher in tetrahydrocannabinol (THC) and lower in cannabidiol (CBD)) are also associated with greater risk of developing psychosis (Van der Steur et al., 2020). Another hypothesis for the association between cannabis use and psychosis suggests that cannabis may be used to mitigate early signs of negative symptoms (Dekker et al., 2009), which indicates that cannabis may be perceived as helpful for some individuals. These differences in regard to the impact of cannabis use may also reflect the heterogeneity of psychosis experiences.

Based on this evidence, guidelines have stressed the importance of cannabis reduction or elimination for individuals experiencing psychosis and for its prevention (Hasan *et al.*, 2020; National Institute for Health and Care Excellence, 2014). However, there is a lack of strong evidence for the efficacy of specific psychotherapeutic interventions in cannabis users who experience psychosis (Hunt *et al.*, 2019; Hasan *et al.*, 2020). Despite this, cannabis reduction is often cited as an important component of early intervention treatment, particularly due to the association between cannabis use and disengagement from early intervention services (Kim *et al.*, 2019). Indeed, disengagement rates are high (33%, Kim *et al.*, 2019) and are associated

with high relapse risk, persistent psychotic symptoms, and poor prognosis (Kim *et al.*, 2019; Doyle *et al.*, 2014; Turner *et al.*, 2009). Engagement is particularly crucial for early intervention services to support people experiencing a first episode of psychosis, as there is evidence that longer durations of untreated psychosis are associated with poorer outcomes in terms of both positive and negative symptoms, relapse rate and treatment response (Boonstra *et al.*, 2012; Albert *et al.*, 2017). Perceived stigma has also been associated with longer durations of untreated psychosis, which points to the need for services to be aware of how patients experience their interactions with professionals and other factors that may contribute to perceived stigma (Mueser *et al.*, 2020).

Exploration of predictors of disengagement are crucial for ensuring that services can meet the needs of their service users and promote early help seeking. Although there has been heterogeneity in the research (Kim *et al.*, 2019), an epidemiological study exploring predictors of disengagement from early intervention psychosis (EIP) services in the United Kingdom found that disengagement was associated with milder negative symptoms, more severe hallucinations, being employed, not meeting diagnostic criteria for first-episode psychosis, and polysubstance use (Solmi *et al.*, 2018). There has been some qualitative exploration of factors that hinder engagement for individuals involved in EIP services, which has highlighted how initial contact with services can greatly influence later engagement (Tindall *et al.*, 2018). For example, crisis contacts and admissions in particular were perceived as frustrating and paternalistic and were associated with higher levels of internalised stigma (Tindall *et al.*, 2018). Continued distress and confusion in early engagement due to lack of clarity around reasons for service contact and disparities between perceived needs and treatment priorities also impacted negatively on a person's desire to engage (Tindall *et al.*, 2018).

Further, it is possible that the experience of feeling coerced by professionals, especially when information given contradicts patient experience, can result in patients pushing away from

health services. Negative pressures, having viewpoints ignored, the feeling of being treated with no respect, and low satisfaction with treatment have been found to be significantly associated with perceived coercion (Fiorillo *et al.*, 2012; O'Donoghue *et al.*, 2014; Sampogna *et al.*, 2019). These authors concluded that a shared approach in decision-making should be adopted in order to improve not only patients' satisfaction with received treatments, but also patients' adherence to treatments (Sampogna *et al.*, 2019), as more didactic treatment approaches may lead to dissatisfaction, increased perceived coercion, and therapeutic disengagement. Therefore, it is important that patients feel involved in their treatment and that patient views and experiences are taken into consideration.

Given these issues and the implications of service disengagement, it is surprising how little the perspectives of individuals with psychosis who use cannabis have been explored to add to our understanding of these issues, especially considering that studies exploring views on controversial topics have contributed to insights into important clinical issues, such as patients' reasons for following or refusing medical recommendations (Benson & Britten, 2002). Most studies that have attempted to identify reasons for cannabis use in psychosis have primarily used self-report questionnaires (Schaub *et al.*, 2008; Addington & Duchak, 1997) which may not capture the richness of experience that can be more accessible using qualitative approaches (Al-Busaidi, 2008).

Where research has explored patient perspectives in more depth, it contradicts the psychiatric perspective quite sharply. For example, one qualitative study which used a grounded theory approach to explore whether adult patients diagnosed with schizophrenia who use cannabis believe that its use has caused their schizophrenia found that of the ten patients included, none described a causal link between their use of cannabis and the onset of their symptoms (Buadze *et al.*, 2010). Instead, they described difficult familial relationships, social difficulties, other drug use, and genetic or biological factors in explaining their beliefs regarding the causation of

their schizophrenia. Cannabis negative effects were described as dose-dependent, with difficult experiences being explained as relating to higher doses (Buadze *et al.*, 2010). Most shared that cannabis served to improve mood and reduce anxiety and tension, in keeping with the quantitative evidence (Schaub *et al.*, 2008; Addington & Duchak, 1997).

Lobbana *et al.* (2010) used a thematic analysis to explore factors influencing the use of substances in young people (17-35 years old) with recent onset psychosis. All 19 participants reported cannabis use, although 11 also regularly used other substances (Lobbana *et al.*, 2010). Themes emerged relating to normalisation of drug use in their communities, attributions for initial drug taking and ongoing use, which included peer pressure, enjoyment, anxiety reduction, and personal choice. Themes were also identified relating to changing goals relating to drug maintenance and reduction, and links between mental health and drug use (Lobbana *et al.*, 2010).

These findings offer a different perspective on cannabis-use which conflicts with the evidence of its harmfulness, and the idea that reduction is a clinical priority (Hasan *et al.*, 2020). This apparent tension between these perspectives has not been explored and may offer useful insights for addressing issues of disengagement for EIP services. As young adults seek out and begin to form their adult identity, it is likely that this group will have a different relationship with cannabis compared to other adults. (Hammer & Vaglum, 1990). For example, there is evidence indicating that patterns of substance use are more likely to be in a state of flux during the early stage of psychosis (Addington & Addington, 2007) and may be more influenced by peers and a need for social belonging (Lobbana *et al.*, 2010). As there is limited in-depth exploration of the lived experiences of young adults who experience psychosis and use cannabis or how they experience their involvement with services, this study aims to explore these experiences using an interpretative phenomenological approach (Smith *et al.*, 2009).

Methods

Sampling and recruitment

Participants were recruited from EIP services in North Wales, which support people aged 16 to 35 years who have experienced a first episode of psychosis.

Interviews took place between December 2020 and March 2021. Eligibility for participation required that participants be receiving treatment for psychosis and be current users of cannabis over the previous six months minimum.

Purposive sampling was used to achieve variation in demographic information. Ethical approval was given by an NHS Research Ethics Committee and informed consent was obtained from all participants.

Procedure

To provide an in-depth account of the lived experience of cannabis use, psychosis, and service involvement, the study adopted a qualitative study design using Interpretative Phenomenological Analysis (IPA) methodology (Smith *et al.*, 2009). IPA is an established methodology in clinical, health, and social psychology, which provides a stance and procedure for the analysis of experiential qualitative data (Smith *et al.*, 2009). IPA was the approach of choice due to its potential to provide insights into how participants make sense of their experiences, while acknowledging the "double hermeneutic", or the role of the researcher in making sense of the participants' accounts and interpretations (Smith *et al.*, 2009).

Due to COVID-19-related restrictions, semi-structured interviews took place remotely using a video platform or via telephone. The main interview was guided by a schedule (see appendix 1) which was co-developed with an Expert by Experience (EbE) and explored cannabis use, psychosis experiences, and experiences of service involvement. This process involved sending

study documentation and a draft schedule to the EbE for review, and amending drafts based on feedback and suggestions. Interviews lasted between 45 to 75 minutes. The interviews were digitally recorded and transcribed verbatim. Additional information was collected in writing including demographics, patterns of cannabis use, and current service involvement to help describe the study sample.

Participants also completed the Questionnaire about the Process of Recovery (QPR) (Neil *et al.*, 2009) to give a sense of how they fit in to the early intervention psychosis population. The QPR is a validated measure developed by service users as a means of assessing aspects of meaningful recovery for service users who experience psychosis. The questionnaire is measured on a scale of 0 to 60, where higher scores indicate greater psychological wellbeing, quality of life, and empowerment (Neil *et al.*, 2009).

Analysis

The data were analysed using procedures outlined by Smith *et al.* (2009). The process involved reading through each transcript individually and making initial comments regarding linguistic and conceptual observations in the right-hand margin. These initial exploratory comments were analysed to identify emerging themes, which were described in the left-hand margin of the transcript documents (See appendix 3). Once all interviews were analysed individually, patterns were established across all cases. These emerging themes across cases were used to establish connections to form superordinate themes through a process of abstraction, which involved clustering similar themes under a superordinate title. This was achieved through reviewing themes in tabular format and creating separate documents based on these clusters. These were based not only on levels of reoccurrence but with consideration to the 'richness' of accounts. Continual reflection and re-examination of transcripts ensured themes were

embedded in the original text. The analysis was primarily conducted by the first author as primary researcher, with the guidance and supervision of the second and third authors.

Validity and Reflexivity

Regular meetings were held with members of the research team to discuss emerging themes and to ensure that the interpretations were appropriately grounded in the data.

The importance of reflexivity is also emphasised in qualitative research, which is the process of examining the influence of the researcher in the research process (Yardley, 2000). Therefore, values, beliefs, and assumptions were acknowledged at the outset of the research. The first author acknowledged that therapeutic training and professional experiences had informed her fidelity to a more 'critical-psychology' stance, particularly through working with individuals experiencing psychosis (see appendix 2). The first author perceived from these experiences that services can sometimes respond in ways that place blame and responsibility on serviceusers and fail to account for wider contextual and social influences on behaviour. This made the author aware of the potential for the research process itself to be experienced as oppressive for participants, particularly due to the sensitive and potentially stigmatising nature of the subject topics. This drew attention to the importance of offering the opportunity to discuss these experiences openly and in ways that were not perceived as aversive or as imposing on their accounts. This involved collaboration with the EbE early in the research process, reiterating informed consent during the interview process where appropriate, and using participant feedback to inform subsequent interviews. A reflexive diary was maintained throughout the research process in order to bring awareness to the impact of these experiences in the process of analysis (see appendix 4). The primary researcher also ensured that she had no professional involvement with the participants to minimise the potential for bias and risk of compliance.

Results

Participants

Six participants were interviewed. A distinctive feature of IPA is its commitment to a detailed interpretative account of the cases and many researchers are recognising that this can only be achieved realistically with smaller sample sizes (Smith & Osborne, 2003). According to Malterud *et al.* (2016), as opposed to previous conceptions of 'saturation', sample size should reflect factors such as the aim of the study, sample specificity, richness of dialogue, as well as operational constraints (Malterud *et al.*, 2016). The researchers aimed for a sample size between six to 10 participants, depending on these various factors. All participants were male, aged between 19 to 31 years old and identified as White British. All were involved in the first episode psychosis (FEP) arm of the service and had been regular users of cannabis over a period of at least two years (See table 1). Pseudonyms are used throughout the article to ensure the anonymity of participants.

Table 1. Participant characteristics and patterns of cannabis use

	Gender	Age	Ethnicity	Level of care	Period of sustained	Quantity of cannabis use	QPR
		(yrs)		or care	cannabis	cannabis use	score
					use		
					(yrs)		
David	Male	19	White British	FEP	7	1-2 joints daily	29
Max	Male	31	White British	FEP	12	1-2 joints daily	42
Bryan	Male	19	White British	FEP	4	3-4 joints daily, bong 4-5 times weekly	42
Reeves	Male	20	White British	FEP	6	2-3 joints weekly	39
Rhyfelwr	Male	25	White British	FEP	8	3-4 joints daily	50
Tomos	Male	20	White British	FEP	2	3-4 joints daily	23

Interviews

The primary researcher was initially cautious of facilitating interviews remotely due to the sensitive nature of the research and the impact this could have on rapport. However, as the primary researcher also worked remotely in a clinical capacity in mental health services, she was aware of some strategies for overcoming barriers to engagement, such as using verbal affirmations and summarising information to ensure that the person is understood. Balancing these validating strategies with allowing space and time for participants to share their experiences was sometimes challenging, especially for participants that presented as nervous and initially closed. This may have reflected the researcher's discomfort and urges to make the participants feel at ease. Participants who initially presented as nervous became more at ease during the course of the interview and were more willing to share their experiences, including painful experiences regarding their life contexts and distress. Again, this created a tension for the researcher in regard to balancing openness and facilitation of space to explore experiences, while ensuring the wellbeing and safety of the participant. This sometimes involved pausing the interview at intervals and checking in with participants to ensure their wellbeing and willingness to continue.

Questionnaire about the process of recovery (QPR)

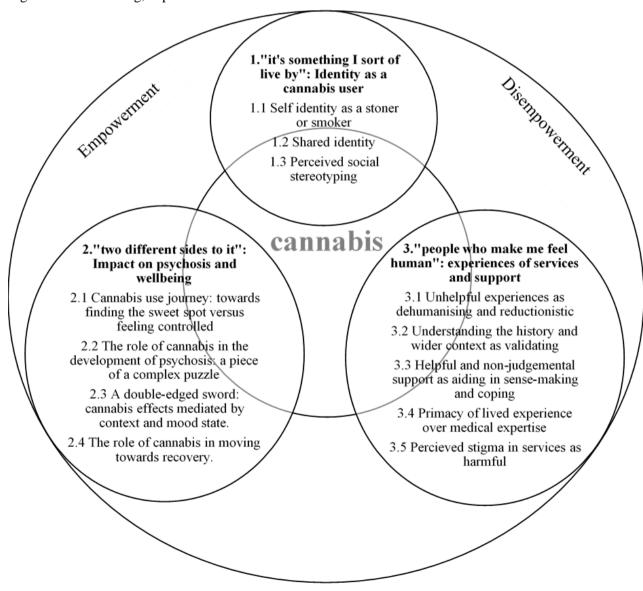
The QPR (Neil *et al.*, 2009) was implemented to describe the study sample and assess aspects of meaningful recovery for participants. Individual scores are outlined in Table 1. While this measure was not intended to be used for quantitative analysis for this study, it offers an interesting adjunct to describe the study sample. For example, the participants who scored highest in terms of personal recovery were Rhyfelwr, Max and Brian, who all described their relationship with cannabis in terms of trusting their experience, feeling in control, and described feeling empowered in other aspects of their lives, such as in their current mental

health and relationships. Conversely, both David and Tomos scored lowest on the QPR, which also seemed to reflect their relationship to their cannabis use and disempowerment in other facets of their lives.

Themes

Three interrelated superordinate themes emerged from the analysis, with an overarching theme of empowerment versus disempowerment. The overarching theme is explored under each superordinate title. These themes are illustrated in figure 1. Due to its particular relevance for informing services, there will be more in-depth exploration of the third superordinate theme.

Figure 1. Overarching, superordinate and subordinate themes



1. "it's something I sort of live by": Identity as a Cannabis user

The first superordinate theme relates to how some participants view cannabis as an intrinsic part of who they are. This functioned to empower participants who took ownership of the 'stoner' label and who perceived it as a positive aspect of their social identity. Conversely, the influence of the social identity appeared to function to disempower some participants through perceived loss of control regarding their cannabis use. Below are the predominant themes that illuminate these experiences.

1.1 self-identity as a stoner or smoker.

Some participants who identified as regular cannabis users stressed the difference between cannabis and other illicit drugs and the importance of not feeling dependant on substances. These factors were related to the perceived safety of cannabis use, control over their use and its positive functions in these individuals' lives. The identity as a cannabis user or 'stoner' was described as a process that changed overtime, for example, some participants described their past identity as a polydrug user or 'partier', and following their experiences of psychosis and receiving support, moved towards solely using cannabis. Max described this process and how he feels cannabis has made him a better person, while maintaining the importance of not feeling addicted to cannabis.

"Max: it [cannabis] just makes me a better person all together I think.

Interviewer (I): and do you like do anything different or act differently? Do you tend to be more social or go out more or anything?

Max: I'm kinder. I'm more caring I think. Just a better bloke all round after joint (laughs) because nothing fazes me once I've had a smoke. I can kinda just, I don't take things to heart when people say stuff. I just relax and just I'm just being my own little zone like"

I: so do you notice that when you don't kind of smoke, if you have like an evening without it, that you notice then it does impact on your mood a little bit?

Max: I'm still like I said, I'm not an addictive personality really, so I still have a good time with them, just not laughing as much"

1.2 cannabis and shared identity.

All participants described cannabis as an important part of their social identity. For most participants, this shared activity and identity promoted connection with their peers and other smokers, which for some participants was further promoted through the effects of cannabis itself. This social identity is illustrated by Bryan, who also described how this shared identity promotes connection with others.

"like most of my friends, sort of like have other groups as everyone does. And then you'll be introduced to them and it sort of makes it easier if like the first thing you're doing is like rolling a joint or something because the, you just, you know okay we have common interests... Yeah, It's like Tommy Chong who's a very notorious smoker and advocate, he said weed is one of the most friendliest drugs because the first thing you want to do when you take a toke is to pass it to someone else. So I completely agree with that statement, and it's something I sort of live by".

However, for two participants David and Tomos, this social identity was not always described as something that was helpful due to its influence on their cannabis consumption, especially when this went against their own experience of what was helpful. David described this in terms of smoking cannabis in the context of his family.

"when I smoke weed, and my head's bad, it just sort of like, gets worse, soo, so what I tried to do is I try to just smoke it when I'm not having a bad day, but I can't really help it if it's, like in my family and we're all smoking it everyday sort of thing."

1.3 perceived social stereotyping

The identity of a cannabis smoker was described by some participants in terms of how it contrasted with wider societal views, which were perceived as stereotyped and not aligned with lived experience of use. This was illustrated by Max.

"I'm sure a lot of people, I'm sure my dad thought like, when you watch like, films and people are high and everything is like, you know, you see unicorns and all this stuff. I think like, that's how they think that happens, is they think you have a spliff and next thing everything's all like psychedelic and that (laughs). It's not. It's strange. They never bothered. They ask, they ask professors and all sorts of stuff about weed and all these studies and that, but they never ask someone that actually smokes weed (laughs) it's a bit daft, like."

This perception of wider social views of cannabis being misaligned with lived experience of use may have had implications for identity through processes associated with in-group versus out-group mentality (Brewer, 1999). This could also increase reluctance to discuss experiences of cannabis use due to concerns regarding being labelled or stereotyped.

2. "two different sides to it": Cannabis Impact on Psychosis and Wellbeing

Participants had varied experiences regarding the impact of cannabis on their experiences of psychosis and wellbeing and described both helpful and unhelpful aspects of cannabis effects, which appeared to be mediated by individual experience, mood, and contextual factors. This appeared to function to empower some participants who developed a sense of control over their cannabis use and had learned how to harness positive effects which they felt improved their lives. Some participants, however, did not feel they had control over their cannabis use, which at times could worsen their symptoms through amplifying their existing mood state. This also seemed to reflect a lack of control and disempowerment in other facets of their lives.

2.1. cannabis use journey: towards finding the sweet spot versus feeling controlled.

Participants acknowledged that their experiences of cannabis use were very individual and emphasised how cannabis may impact on other people differently. Most participants described their current relationship to their cannabis in the context of a journey towards finding their own personal "sweet spot", which involved past experiences of experimentation with quantities, strains, and smoking in different contexts. This was illustrated by Max when he described negative effects of cannabis in terms of a "trialling" experience.

"There's been times when I've been twitching the curtains and paranoid and all that stuff yeah, so I've had that yeah, so that was negative I've had from it, but like I said that was more when I was trialling it out and seeing what it's like, so I got paranoia anyway with my psychosis, paranoid psychosis, so that yeah, so too much literally made a bit more intense to a certain degree."

These past experiences of use were perceived as contributing to his current relationship to cannabis use and insights into achieving his desired effects.

"so I got quite a decent tolerance to it [cannabis] really right from years and years ago. For me now, it's just you could basically feel it, so if I had a joint and then then add one more spliff or something, I can get halfway through it and think 'that's enough now', 'cos you can kind of feel it'.

However, for two participants, David and Tomos, their relationship with cannabis changed from recreational use towards feeling more dependant or controlled by their cannabis use overtime. Tomos described the experience of using cannabis socially and this developing into dependence.

"I was just thinking like doing it, it became normal, and I started doing it more and more but obviously at first I wasn't really addicted to it, I'd just buy it at times and make it last, have enough and not really think about it. But now it's just more and more."

2.2 the role of cannabis in the development of psychosis: a piece of a complex puzzle.

While some participants felt that cannabis played a role in triggering their psychosis, no participant felt that cannabis use in itself was a sufficient explanation. Some participants felt that there were biological or genetic contributors to their psychosis, while other cited the role of wider life and existing mental health problems.

Some participants felt that mixing drugs played a role in the development of their psychosis. For Reeves, cannabis served to amplify the effects of other illicit substances that were seen as playing more of a causal role, although he felt that existing mental health problems may have also contributed.

"I think, I think like the coke triggered it but because I was smoking weed as well, that elevated the effects, because it's the same, weed has the same effect as like, on medicine morning they sometimes say don't drink grapefruit juice with certain medicines because it can umm increase the effects of it and weed is like grapefruit to the drugs ... I was struggling with mental health for a few years as well. Umm so that might have had bit of a role to play in it."

2.3 a double-edged sword: cannabis effects mediated by context and mood state.

Participants had varied experiences regarding the impact of cannabis on their experiences of psychosis and described both helpful and unhelpful aspects of cannabis effects. Participants described cannabis as helpful for reducing anxiety, balancing mood, increasing motivation, and reducing the impact of psychotic experiences. Conversely, cannabis could serve to exacerbate these experiences, as illustrated by David.

"but it's just what it does for me, it just chills me out..umm sometimes it does make my psychosis worse.. but I think that's just because of the people in my head.. like sometimes it'll make it out, like, I'm getting touched more than usual and uh, sometimes it'll just quieten down completely. So there's two different sides to it."

Balanced use was identified as important for mediating effects for most participants, as described by Max.

"Everything within moderation I believe, so everything is balanced, and everything has to be the right amount 'cos I just smoke quite weak cannabis and I find it's enough just to make me mellow and chill but if I smoke too much cannabis, I'm the opposite. I'm looking at the curtain getting paranoid and stuff'.

In line with other themes relating to cannabis use, these effects appeared to be mediated by individual experience and contextual factors. Bryan illustrates how cannabis can be motivating or demotivating, depending on the context.

"if you are sat doing nothing while you smoke you are more likely to just sit there and do nothing, but if you like start off being out and about while you smoke it, like moving or playing football or something you are more your brain will want to like do stuff more if that makes sense?"

2.4 the role of cannabis in moving towards recovery.

Experiences of cannabis were also perceived as important in moving towards feeling more positive and empowered. This experience was sometimes described as evolving over time. This is illustrated by Bryan, who described how cannabis facilitated a different relationship to his voices.

"It seemed to respond worse like the first time [smoking cannabis] and I did feel quite paranoid and like.. I was sort of.. unsure if it was for me and then I smoked the second time and it still sort of felt the same.. but.. you sort of, I sort of then started to, be able to like, not block it out, as it's more, but like sit with it more if that makes sense?...yeah, so I could sit with it and not have it upset me or annoy me as much like that sort of stuff"

Trusting one's own experience of cannabis was also perceived as important for moving towards recovery or feeling better. Rhyfelwr shared that cannabis helped him stay off other drugs which

were perceived as more detrimental to his mental health and life in general. For him, choosing to smoke cannabis was equated with making a choice to be happy.

"it makes me happy, if it makes me happier, I'll just do what makes me happy basically. I'm not living in misery that I shouldn't be living in."

The experience of trusting one's experience of cannabis use was sometimes described as a process from feeling dependant on medical expertise to re-learning to trust one's own perceptions of what is helpful and feeling empowered to make a personal choice. This is illustrated by Max when he described using cannabis following his experience of psychosis, which contradicted professional advice.

"I just got to a point I thought nobody knows more what's good or bad for me than myself really, because they're not inside my body. It got to the point where I thought, I said I just felt like a number, and then I literally thought 'do you know what? Fuck them like.' (laughs)"

For Max, his righteous anger following his experiences of services appeared to be important for him in moving towards feeling more empowered and trusting his own experience. The first author became aware of similar emotions rising from hearing this narrative, as it reflected some of her professional experiences of services. This also gave rise to a feeling of tension between the primacy of personal choice and the evidence that cannabis can have harmful effects. These issues and how they may relate to engagement are discussed under the following theme.

3. 'People who make me feel human': Experiences of Services and Support

Experiences of professionals and services were varied, with participants describing both helpful and unhelpful interactions in regard to support and receiving advice regarding their cannabis use. These experiences appeared to empower some participants through acknowledging or validating their experiences while aiding in moving towards their personal recovery. Alternatively, these experiences could function to disempower participants through

discounting their lived experiences and undermining their autonomy, which resulted in some participants pulling away from professionals.

3.1 unhelpful experiences as dehumanising and reductionistic.

Participants described experiences where they felt dehumanised and patronised by services, which appeared to result from their lived experiences being discounted or unrecognised, or through having their difficult experiences overly simplified by professional narratives. This is illustrated by Max who contrasts his experiences of helpful and unhelpful interactions with professionals.

"to be honest all I am to them as a number ..once we get into the system. I mean the only people that make me feel human are people like Dave [psychiatric nurse] because he talks to me like a normal person, but my case worker and stuff like they just talked to you like you're an idiot. They automatically think that you're stupid and if you stay anything, like if I said to her 'yeah I smoked weed', like 'oh that's what's done it', because they say when you smoke weed when you're younger you're gonna get this and this, do you know what I mean like? They don't know it's bull shit like (laughs). They are all an expert but no one has any experience like, so everyone thinks they're an expert anti weed, so everyone that's anti weed are just people that have never taken weed (laughs) ..or taken too much"

As mentioned previously, the role of personal choice and trusting his lived experience appeared to be particularly important for Max in moving towards feeling empowered in his personal recovery. Although it again highlights tension between the primacy of lived experience and the quantitative evidence for harmful effects of cannabis in psychosis, it also draws attention to how these apparent contradictory views may lead to pushing away from professionals and disengaging from services. This seems particularly concerning when professionals take approaches which are perceived to be reductionistic.

3.2 understanding the history and wider context as validating.

In terms of helpful interactions with professionals, participants described the importance of professionals taking time to listen, understand, and validate their experiences. This is described by Reeves.

"I: what do you think makes those experiences more positive?

Reeves: Umm I think it's that they're there to listen. Umm they just listen to what I have to say, and then they can make sense of it and they understand why I'm feeling the way I am, umm yeah.

I: so does that then have an impact on how you feel when they kind of, when you feel you're understood?

Reeves: yeah it's a good feeling like, I've not had anyone to understand me really so yeah."

This also involves understanding the broader context of experiences of psychosis and distress, as further described by Reeves.

"the psychologist I work with Marc he's been really good as well, like he understands umm why, why things have happened and we've been talking about my childhood and things like that, so it all makes sense to him."

This understanding of the broader influence of past experiences contrasts sharply with Max's experiences of professionals appearing to reduce his distress to cannabis use alone. This experience of feeling listened to and understood appears to correspond with a stronger therapeutic relationships and positive emotions, which is likely to promote more meaningful engagement.

3.3 helpful and non-judgemental support as aiding in sense-making and coping

Participants described helpful experiences of support as aiding in the shared process of sensemaking in regard to psychosis experiences, as illustrated by Max.

"I: So how did the psychosis affect you?

Max: it scared me like. It absolutely terrified me at first. I didn't have any idea, any idea what was going on. I was hearing voices and all sorts of stuff. I thought 'this is not normal' and then I thought that I could literally hear everything and my brain was overworking. It was an absolute nightmare and then obviously I started speaking to Dave, like he's my psychiatrist, and he was basically teaching me how my brain works, how to cope with it and deal with it, so it's a lot better. I feel a lot better about it all now. I'm more positive about it now but before I thought this is, my life is over, like I've lost everything.

I: so it's been a bit of a journey?

Max: yeah it's been a journey, but, it's one of those things like. It's character building as well though, because you come out stronger after it all to be honest."

The process of sense-making and finding ways of coping appeared to be an important part of feeling empowered in the journey towards personal recovery. This seems to correspond to more integrative styles of recovery, which are associated with greater resilience and wellbeing and involve making sense of psychosis in the context of one's life, as opposed to compartmentalising psychotic experiences as discrete events (Espinosa *et al.*, 2016).

Experiences of feeling supported and empowered to share experiences was also perceived as an important aspect of moving towards feeling better. This is described by Rhyfelwr when he reflected on feeling initially apprehensive about taking part in this study due to negative past experiences of feeling judged.

"And I thought I was just going to be like get criticised with my opinion, but then Marc [psychologist] helped me to realise like, it's it's really good to get my opinion across for other people to get like, umm like an insight into what, what it's like from different points of view do you know what I mean?"

Experiences of helpful support were described in the context of working with professionals who were more accepting of personal choices. Rhyfelwr illustrated how this experience of acceptance in the context of his cannabis use can be motivating for him to be more engaged in activities.

"on the other hand, there are a lot of people, people that work with me who do understand how I am as a person, and accept me for who I am, and like still help me even though I choose to be, I choose to smoke it like regularly. There is a lot of good people as well. Yeah I feel it really probably pushes me to be more, more like motivated even when I don't have any plans and stuff."

Indeed, Reeves had previously decided to reduce his cannabis use and cited the importance of this being his own personal choice based on his own life goals.

"I: do you think it could have been different [reducing cannabis] if people were pushing you?

Reeves: Umm yeah I think I'd feel a little bit more pressure to do it but because I just, it was my own decision to, I didn't feel any pressure that I had to do it because someone told me or anything like that... I just feel that it's time that I make a change in my life. I've been really.. I didn't think that I could get a job or anything like that. I started taking school seriously again, 'cos I'd started dodging things like school. It was only recently that I decided that I want to go back into education and do something with my life."

3.4 primacy of lived experience over medical expertise.

There was a perception among most participants that some professionals were disconnected from the lived experience of cannabis use, which led some participants to discount their medical opinions. This was illustrated previously by Max when he stated, "They are all an expert but no one has any experience".

Some participants also described feelings of distrust regarding prescribed medications, which seemed to be reflective of their perceptions of some professionals as unhelpful, their experiences of side-effects and perceptions regarding the efficacy and safety of cannabis in managing their distress. This is illustrated by Max.

"Max: I've got two... uh two different types of tablets just to keep my heart rate calm so I don't get anxious and all this stuff.. it doesn't work like, if I have a joint, I'm already calm so marijuana does more

beneficial for me for being calm than any of these tablets. These are just um, little poison tablets. I don't like them.

I: And with poison, do you say poison because of the side effects or the way it makes you feel?

Max: all of them. It's not good for you like. At least cannabis is made by God like, it grows. It's natural. These are all manufactured in laboratories and stuff and probably tested on fucking rats and that. Do you know it's not, like? At least cannabis, you know that cannabis is cannabis. No one's ever died from it, yeah. Yes people say they've messed their heads up but that's just idiots smoking too much."

Participants described professionals using what were perceived as 'scare tactics' to motivate people to stop using cannabis, which was also perceived as biased and unhelpful. Bryan illustrated this experience and described how he believed this could lead to negative consequences through creating more anxiety.

"Bryan: Emm, they sort of like, tell you the war stories, trying to deter you from substances.

I: So they tell you kind of the worst of the worst?

Bryan: yeah try and spook you out for a bit but it can't really sort of, as long as you know, as long as you know you're safe and as long as you know how to regulate it...The thing is it's literally just like how they sort of like, so if you worry too much about it, that can give you bad experience if that makes sense."

The perception of having one's experiences discounted regarding cannabis use led to some participants pushing away from professionals or reluctance in discussing their cannabis use. This is illustrated by Rhyfelwr.

"all they told me was that it doesn't help with your anxiety or anything, It makes it worse, but like that's not the case, so yeah, yeah it really is frustrating when, when I do get told that... I just feel sometimes some people like, there's no point explaining, it's not worth explaining like, stuff like that because they wouldn't understand anyway."

The perception that some professionals were disconnected from the lived experiences of cannabis use and the functions it served in participant's lives appeared to reduce the legitimacy of professional advice and support. Having a narrative imposed on their experiences and feeling misunderstood appeared to create a reluctance to discuss their cannabis use, which may inhibit an integrative recovery style (Espinosa *et al.*, 2016) or prevent individuals from exploring and learning from their experiences.

3.5 perceived stigma in services as harmful

Participants also felt that some professionals held stigmatising views towards their problems, which some participants felt impacted on their interactions in a negative way. Max described initial experiences of feeling labelled and stigmatised following his experience of psychosis, which over time led to him pulling away from some professionals and relying on his own perceptions and experiences of what was helpful. Max described this change as shift in his attitude towards professionals.

"I: When that shift started, did you find that had an impact on the relationships with staff and the people that you were involved with?

Max: I think they started taking me a little bit more seriously to be honest because before it's like, do you know what I mean, it was like 'there's nuts Max. Let's just let him wait for ages sitting here, or let's say we're going to phone him and not call him' and stuff, and then once I started thinking, 'oh fuck you guys', well, my care coordinator's still crap, but they made a bit more of an effort and they were, I've seen they were better."

This shift was also associated with trusting his own experience of cannabis, as he perceived that following being labelled by professionals, they were less willing to help him.

"it's weird like. It's like they tell you that you're mental and then uh they just kind of leave you there (laughs). 'surprise! This is a gift. You're mental. And uh, we're not going to bother doing anything to really help you', to be honest. If they think about marijuana and stuff, it's been legal in so many places."

There was also a perception among some participants that the stigma itself could lead to harmful experiences of cannabis use due to the anxiety that stigmatising attitudes create and the potential for cannabis to amplify this. This experience was illustrated by Bryan.

"I think it's more the stigma of it to be honest that sort of gets in the way of people... when they do sort of smoke it, if they are like full of all that worry and the, you know, worrying about what if, then you will have you are more likely to have a bad, or experience the worst experience."

For the author, these narratives correspond with clinical experiences of stigma within services, particularly when there is comorbid substance use, and how this can become internalised by individuals who experience psychosis, which can create a reluctance to seek support. Again, feelings of righteous anger at perceived unhelpful professional attitudes and being empowered to make choices that may contradict professional advice appeared to be an important aspect of moving forward for some participants, which again illuminates the tension between these experiences and the quantitative evidence regarding the harmful effects of cannabis.

Discussion

This study aimed to provide insights into the lived experience of young people who use cannabis and receive support for psychosis. The three interrelated themes describe cannabis use, its impact on identity, psychosis, wellbeing, and experiences of support as deeply individual and dynamic experiences. The overarching theme of empowerment versus disempowerment discussed under each superordinate theme reflects how experiences of

cannabis use and professional support has functioned to either empower or disempower participants, and how this seems to reflect wider issues around power and control in their lives.

The superordinate theme of identity draws attention to cannabis-use experienced as an integral and defining aspect of the self. Social identity was also explored both in terms of facilitating connection and potentially reducing personal agency. This corresponds with quantitative evidence regarding the social reasons for cannabis use (Schaub *et al.*, 2008) and qualitative evidence regarding substance use and peer pressure in young people who experience psychosis (Lobbana *et al.*, 2010). The theme of identity has previously been explored in qualitative research on psychotic experiences, which has highlighted perceptions of the self as a complex interplay between interpersonal, cultural, and structural aspects of self-experience (Berkhout *et al.*, 2019). The present study indicates that self-identifying as a cannabis smoker may also reflect a dynamic interplay of these experiences, which may bear implications for engagement, as individuals who perceive cannabis use as an integral part of their identity may experience additional frustration when told information that contradicts their experience of cannabis as helpful. Indeed, this could be perceived as rejection of their self-experience.

The superordinate theme regarding cannabis' impact on psychosis and wellbeing corresponds with published quantitative evidence on reasons for use in individuals who experience psychosis, including recreational use, anxiety reduction (Schaub *et al.*, 2008), and management of intrusive sensory experiences (e.g., Addington & Duchak, 1997). The present study also revealed themes describing participants' perceptions of psychosis as reflecting complex biological, genetic, and contextual factors, in line with previous qualitative evidence regarding patients' beliefs around the causes of psychosis (Buadze, *et al.*, 2010) and other review evidence which highlight the causal role of psychosocial factors and adversity in psychosis (Longden & Read, 2016). The findings relating to the two sides of cannabis use also correspond with experiences that negative effects associated with cannabis are dose-dependent (Buadze *et*

al., 2010). Personal choice was also identified as important, which reflects other qualitative evidence on factors influencing cannabis use and use of other substances (Lobbana *et al.*, 2010).

This superordinate theme related to experiences of services and support illustrates how these experiences can serve to further disempower individuals by viewing the complexities of their experiences through a reductionistic lens which discounts their experiences and autonomy. Conversely, this study illustrates how experiences of professional support may facilitate the process of finding meaning and ways of coping, while preserving or nurturing a sense of autonomy and self-efficacy that can support individuals towards feeling empowered in their personal recovery. The crucial role of power, how this manifests in individuals' lives and in their experiences of services has been highlighted in recent years (Read & Harper, 2020; Johnson, et al., 2018). This issue is particularly critical for individuals diagnosed with psychotic disorders, who are more likely to face discrimination and stigma, which can be internalised into shame and feelings of being defective, both of which can impede recovery (Corrigan & Kosyluk, 2013). Concurrent substance use with severe mental health diagnoses has been associated with amplified or "double" stigma, which can manifest in a lack of engagement with mental health services (Askey, 2007). According to proponents of the power threat meaning framework (PTMF), the pervasiveness of the biomedical lens in mental health services can further promote stigma and may serve to reduce the complexities of individuals' presentations, psychosocial contexts and experiences to discrete psychiatric labels or purely biological causations (Johnson, et al., 2018). This in turn can further disempower people through creating a sense of lack of agency and through preventing the opportunity to find personal meaning and validity in their experiences.

Although it is understandable given the substantial evidence regarding the detrimental impact of cannabis on psychosis outcomes (e.g., Hasan *et al.*, 2020; Van der Steur *et al.*, 2020), this

study indicates that service users may be subject to reductionistic, didactic, and sometimes coercive experiences regarding their cannabis use. These experiences can be perceived as patronising and frustrating, as they fail to account for individuals' lived experiences of cannabis use, how it functions in their lives, and the wider context of the problems they experience. Reducing complex problems and experiences to cannabis alone may inhibit sense-making and prevent an integrative recovery style, which has been indicated as reducing relapse risk (Espinosa *et al.*, 2016). The more didactic, paternalistic approaches may increase perceived coercion, which may have further detrimental consequences for engagement (Sampogna *et al.*, 2019).

In terms of facilitators of engagement, participants shared experiences of feeling listened to and validated. This also involved an understanding of the wider context of their experiences, which contrasts with the more reductionistic approach that some participants cited. Regarding cannabis use, this also involved professionals accepting participants and respecting their choices. Indeed, these correspond with previous findings from a qualitative metasynthesis on engagement in EIP services, which highlighted the importance of the therapeutic relationship, which was linked to increased sense of agency and an improved sense of identity (Loughlin *et al.*, 2020). Another finding in the present study which bears implications for engagement is the primacy of lived experience over medical 'expertise', which led to some participants discounting the opinions of professionals. This may bear implications for the role of EbE involvement in developing services, which has been highlighted as an important aspect of minimising power differences and undermining stigma in services (Read & Harper, 2020).

Limitations

IPA is an idiographic method which emphasises depth over breadth, and hence utilises smaller samples to facilitate in-depth exploration of the data. Although the minimum sample size was

recruited, which reflected practical constraints related to COVID-19, the majority of the interviews contained rich dialogue which facilitated in-depth analysis. Although the results may provide useful insights that may reflect common difficulties associated with experiences of psychosis and cannabis use, they have limited generalisability. Further, as participants were sampled from an EIPS in North Wales, they may not be representative of the wider population. Although there is a higher proportion of males accessing EIP services in North Wales (63% in 2021), future research incorporating female experiences may provide important insights. Given that all participants were recruited from the FEP arm of the service, they may not be representative of the spectrum of psychosis experiences.

Although interviews took place in English, some of the participants were first language Welsh speakers. The remote nature of the interviews due to COVID-19-related restrictions may have also had an impact on interview quality. However, the researchers worked clinically in the area using remote interventions and were sensitive to potential barriers. Further, given the dual role of the primary researcher, it is likely that therapeutic experiences and training may have influenced the process of analysis. For example, the overarching theme of empowerment versus disempowerment seemed to be particularly reflective of the first author's experiences of working in EIP services and her interest in critical psychology. The first author attempted to acknowledge interpretational boundaries though the use of reflexive accounts and regular supervision with the other members of the research team.

Clinical implications

The present study highlights an uncomfortable tension between evidence of the detrimental impact of cannabis for individuals who experience psychosis and the experience of cannabis use as helpful and empowering for some individuals. As this study highlights the complexity of these experiences and the role of sense-making in the process of recovery, it is important to

create contexts in which people have agency to develop their own meanings and personal narratives (Johnson *et al.*, 2018). This may be achieved in the context of an individual therapeutic relationship through providing an accepting and validating space to explore individual experiences and formulations. This may also be achieved collectively with others through peer-led groups. Indeed, services with EbE involvement can play a crucial role in addressing power imbalances in services (Read & Harper, 2020).

In the absence of sufficient evidence for cannabis reduction interventions for individuals who experience psychosis (Hunt et al., 2019; Barrowclough et al., 2014), these approaches may also be useful for gaining an understanding of the function of cannabis use in individuals' lives, its consequences, and mediators of positive and negative effects, which may facilitate a harmreduction approach. Harm-reduction approaches are based on respect of the client's individual choice, use of non-judgemental but directive strategies such as motivational interviewing, and practitioner assistance with developing alternative behaviours and relapse prevention, if these correspond with client goals (Logan & Marlatt, 2010). This approach may overcome the issues associated with more didactic approaches while preserving or enhancing the therapeutic relationship and through creating contexts for exploring and addressing the complexities of cannabis experiences. Given the primacy of the therapeutic relationship in research exploring engagement in EIP services (Loughlin et al., 2020), a more person-centred approach which accounts for the complexities of cannabis use experiences may enhance early help-seeking for young adults and promote meaningful engagement with EIP services. This could lead to better outcomes for service users through reducing the duration of untreated psychosis, which in turn may improve treatment response (Albert et al., 2017).

Conclusion

This study indicates that experiences of psychosis and cannabis use are dynamic and deeply

individual experiences, influenced by a myriad of internal and external factors. Experiences of

support may serve to aid participants in feeling empowered or further reduce empowerment

through discounting their lived experiences, which may lead to disengagement from services.

These insights may aid commissioners and clinicians in developing person-centred approaches

that meaningfully take into account service users' subjective experiences, which may at times

appear to contradict established guidelines and research recommendations regarding the

priority of cannabis reduction in psychosis services. These considerations may enhance early

help-seeking for psychosis, treatment collaboration, and meaningful engagement with services.

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94

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Appendices B

Appendix 1: Interview schedule

PECan Interview schedule

Main research Question:

What are participants' lived experience of cannabis use, psychosis, and the mental health services they receive?

- Can you tell me about your experience of cannabis use (participants' own words, e.g. smoking weed) and how this may have changed overtime?
- What does cannabis bring to your life?
- What are the benefits of what cannabis brings? Are there any ways you have found cannabis unhelpful?
- Can you tell about your unusual experiences (participants own description of experience, e.g. paranoia, visions etc). How has this changed over time?

Question 2:

How do participants experience and make sense of the relationship between their cannabis use and their psychosis?

- What do you feel is the relationship between your cannabis use and unusual experiences, if any?
- Are there any other activities that have a similar impact to cannabis on your experiences?

Question 3:

What are participants' experiences of receiving advice about cannabis use from professionals?

- What is it like being involved with services as a cannabis user?
- What has your experience been of receiving advice around your cannabis use?
- In what ways, if any, has this impacted on your cannabis use over time?
- How do you feel this has impacted on your relationship with clinicians and services?

Appendix 2: First-author reflexive statement

Author's Reflexive Statement

'Calling forth one's own story to avoid overpowering the story of the other' (Miehls & Moffat, 2000)

In this statement I aim to reflect on my role as researcher and how my experiences, world view, biases, and preferences may influence the lens from which I formulated and designed the research project and subsequently impact on my interpretation of the lived experiences of the research participants.

Epistemological stance

If I was to describe my epistemological stance, I would veer towards a more pragmatic-constructivist view on the world around me. This is reflected also in my preferred therapeutic approaches, which place emphasis on what is workable for the individual in living a life that is personally meaningful, as opposed to navigating painful emotions and thoughts through working towards an inherent truth. However, from my experience workability may involve drawing from approaches that are based on more realist interpretations of reality, and where this is helpful, I'll have no qualms about adopting strategies!

Experiences of cannabis use and psychosis

As both cannabis use and psychosis are associated with societal stigma, which is reflected in the media, prevalent narratives and health services, I think it important that I attempt to reflect on my own experiences of these phenomena and try to shine a light on how my experiences, societal views and discourse have been influenced by interpretations.

Cannabis

Although I do not use cannabis due to unpleasant experiences in my teenage years, I grew up in a family that were very tolerant towards cannabis use, which was viewed as very much separate from other illicit substances that were perceived as categorically bad. I grew up pretty accustomed to family members smoking regularly and later many of my friends and partners were regular cannabis users. I noticed on the whole that it made people seem more comfortable and light-hearted, which I viewed mostly as positive. However, I also felt at times that it made some of my family members complacent with a life that they otherwise didn't feel fulfilled by, which I would find frustrating. I felt that for some people cannabis was a band aid for wider problems that were more difficult to address, which would sometimes rile up the socialist in me or prompt me to respond by trying to problem solve, which in retrospect I think may have been quite paternalistic! I noticed that there were differences between cannabis as enhancing experience and cannabis as a crutch, which was often the case when smoking was the 'main event' in someone's life.

Psychosis

My perceptions of psychosis have changed more drastically based on my more recent experiences of being involved in mental health services and an early intervention psychosis service, which brought to light previously held biases that I otherwise probably wouldn't have been aware of. This has enhanced my belief that exposure is the best antidote to stigma.

Growing up I had an estranged relative who was described as a 'schizophrenic', which became a shorthand for his dangerous and unpredictable nature. I later learned that the reasons for this reputation were less based on aspects of psychosis but on premeditated acts of violence and his general demeanour. However, growing up hearing stories and having my own unpleasant interactions with this person, "schizophrenic" and "psychotic" had become equated to dangerous and untrustworthy. I remember "psycho" being thrown around in the playground when a child was acting out or angry, which I imagine reinforced this perspective.

I wasn't truly aware of these harmful internalised beliefs until my undergraduate degree, when I was handed a sheet by another student who requested me to complete a rating scale and questions relating to my perspectives on schizophrenia. I completed my form as honestly as possible and then the student shared her presentation, which focused on the evidence base around psychotic disorders and violence, and also contained her personal reflections growing up with a brother who experiences psychosis. I felt pretty ashamed at the time and also began to question what other unhelpful beliefs I may be blindly holding on to, unscrutinised. The student and I became close friends and I would often stay with her family, which again aided in challenging my previous belief and helped me broaden my perspective. However, it wasn't until my experience of working in the early intervention psychosis service that I began to see experiences of psychosis as an understandable experience and reaction to social inequalities, trauma and isolation. Because of my experiences, I'm very sensitive to stigmatising perspectives held by services and professionals and have described the experience of this as a 'fire in my belly' whenever I see this at play. Although my impulse sometimes is to fall into a protective, paternalistic role, I try to consider how helpful this is in terms of empowering service users and helping staff harness more helpful perspectives without feeling threatened or undermined.

From my experiences, I feel that being aware of the impulse to fall into a paternalistic, protective role will be important to hold and navigate, especially if my perspective of the individual's cannabis use contradicts what the person deems as helpful. I'm also aware that being invited to speak about experiences that have previously been met with disapproval may be painful for people, and I may need to ensure that my desire to validate and comfort is not at the expense of giving the person space to describe their experience openly and honestly.

References

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Appendix 3: Sample extract from coded transcript as part of IPA

Emerging themes	Transcript	Exploratory comments
Importance of finding balance	P2: Yeahum definitely since I got psychosis, I guess it's ehh, I'm one of those people who is on the fence I smoke cannabis but I'm not pro	Individual choice vs 'pro
	cannabis to a certain point. Everything within moderation I believe, so everything is balanced and everything has to be the right amount 'cos I	Moderation and balance – the right amount and type (weak)
Two sides of cannabis effects -cannabis is lower dose can have mellowing effects -can	just smoke quite weak cannabis and I find it's enough just to make me mellow and	Smokes weak cannabis to mellow out/relax
enhance paranoia if too much is taken	chill but if I smoke too much cannabis I'm the opposite, I'm looking at the curtain getting	Opposite effects if too much consumed [2 sides?]
	paranoid and stuff so I'm one of those people who's found the balance that works for me	Can increase paranoia if too much
Cannabis use as an individual experience	and that affects my life in a better way, so the amount I consume for myself personally is the perfect amount. So at	Importance of finding balance [personal process, journey?] 'Personally'- [not one size fits
Positives of cannabis use -relaxing and chills out	night usually it makes me more relax and it kinda makes me more chilled out really	all] 'Perfect amount' promotes
reducing and crims out	I: And how for you did it get to that stage where you kind of knew but the right amount was for you, was it a bit of a process?	relaxation
Journey of cannabis use -relationship with cannabis use changing over time	P2: um well I've always like when like I always found when I was younger, I always had a bit of a party lifestyle to be honest when I was younger, so I did quite a lot of different types of drugs and stuff and	Process of cannabis use over time – started as part of party lifestyle
Cannabis as mediating effects of other drugs	ecstasy and things, so cannabis really to me at that point when I used to go out and take quite a lot of pills and stuff, and it would help me to calm me	Cannabis as mediating effects of other drugs, helps to calm down
Journey of cannabis use -building tolerance over time	down anyway, so I got quite a decent tolerance to it really right from years and years ago. For me now, it's just you could basically feel it so if I had a	Tolerance built over time to cannabis

Journey of cannabis use -finding the sweet spot – knowing when to stop	joint and then then add one more spliff or something, I can get halfway through it and think that's enough now 'cos you can kind of feel it	Awareness of effects now, knowing when to stop [learned process over time]
	I: and once you feel like you've had enough is it kind of fairly easy for you to just kind of put it down	
Empowered versus controlled by cannabis use -importance of not feeling dependant	P2: Yeah just you know, sometimes I even go detox from it sometimes so I'll go two weeks without any because I don't like too much of a habit	Detox – importance of not being dependant [importance of feeling empowered, in control of experience?]
	I: yeah? so how often would you kind of go without it kind of to almost detox yourself?	
	P2: uml would probably saylike every quarter almost so uhh like uh, I'd usually be on it for three months or something and then be off it then for two weeks on it for three months off for two weeks, but I do the same with alcohol and everything as well,	Detox with other substances, same function
Importance of going without substances to prove independence to self	just because I don't like the thought just in case, 'cos you never know otherwise, you don't know if you're dependent, so I just don't want to depend on anything	Importance of knowing that you are not dependant on substances
	I: so it sounds like it's really important to you to kind of know that you know you're in control of it and that you can stop it when you want to?	
Importance of not being addicted	P2: so if someone said to me 'you can never smoke cannabis again from now', it wouldn't have any negative impact on me. I'm not like addicted to it or anything. I enjoy it if you	Importance of freedom – not being 'addicted' to anything [empowerment, in control vs Pecan 1 experience] Enjoyment but not at cost of dependence

	know what I mean, but I can take it or leave it really	
	I: and have you always felt like that?	
	P2: yeah pretty much yeah with cannabis definitely yeah	
	I: so it sounds like kind of in those teenage years, you kind of took a lot of other stuff and it just helped take the edge off a bit, calm you down	
At early stages of use, helped to mellow and sleep	P2: yeah it would calm me down yeah so yes you're talking 19, 20, between like 21, 22 that's prettypretty much quite a heavy partier to be honest it did it mellowed me	While having partier lifestyle, would help 'mellow' and get to sleep
Perceived safety of cannabis use -whitey as worst that can happen	down and got me to sleep so the worst thing I think, the worst side effect I ever had was that I had a whitey once and I was sick and just vomited. That is the worst thing that can happen	Worst side effect is a whitey, when vomited. This was the worst experience with cannabis – belief that that's the worst that can happen [perceived safety?]
	I: and did that feel like quite an isolated incident, was that like, it didn't put you off?	
Negatives effects associated with taking too much in the past	P2: it was just literally vomiting, just like if you drank too much alcohol or anything and then I slept (laugh)	Negative effects of cannabis – associated with taking 'too much' – equated to other substances – too much of anything as bad
	I: so you used it during that time in your life, and you just continued using it then, and kind of stopped taking some of the other stuff, but cannabis still remains important?	
Journey of cannabis use	P2: so I stopped everything for about six years, yes for six years. I became a good boy and I stopped everything, and then I like, just a couple of my mates had a bit of weed and I,	Stopped 'everything' for six years, before starting again. [journey of cannabis use/process over time]

	I might as well start just having a bit of weed again, just for its relaxing me so that's the only reason I started back really. Just chills me out	Function of cannabis use as relaxing at that time
	I: and it was kind of your friends, but they were kind of taking it and you had some with them. Is that something that is still, that still happens, that it's kind of a social thing as well or is it something you do mostly on your own?	
	P2: yeah for myself, I always have it if I'm with myself. I'll still smoke it but if I'm with a mate we'll probably share a joint definitely	Smokes alone but also with friends [social function]
	I: but it's kind of that's not the main event, it's more the fact that it relaxes you?	
Positive effects of cannabis -positive social impact	P2: that yeah and when you're with someone smoking it you get the giggles and stuff do you know what I mean? So it's good like, its all happy type effects happening	Makes him laugh more with friends, more happy
	I: and is it a big thing in your friendship group as well, everyone kind of smokes?	
Identity and cannabis use -part of social lifestyle – would standout if not smoking	P2: yeah everybody basically, I think all my friends. I can't even think of one that doesn't	Social function [identity, ingroup?]
	I: so is it kind of like you'd almost be the odd one out if you weren't smoking as well?	
	P2: definitely would be yeah (laughs.) I think people would start getting concerned, probably feel like they'd have to do a welfare check on me (laughs)	Although joking, It would be unusual for him not to smoke, would stand out as unusual [Identity as someone who smokes weed]

Appendix 4: Reflective diary extracts

Reflective diary for Pecan

I've used cannabis regularly from my early teens for about three years. Following experiences of severe paranoia and panic, I completely stopped using. However, family members and friends continue to use and share that it enhances their sense of wellbeing. It was very much normalised in my life, even if my person experience wasn't necessarily positive. Although this doesn't mean I'm neutral on the topic, I hope that my personal and clinical experiences have provided a more rounded perspective. I'm definitely not an avid supporter myself but I can see why it can add to people's lives, or can potentially cause or exacerbate problems

13/01/21

I'm noticing parallels between my clinical experiences, reading and themes emerging relating to power, particularly in relation to experiences of services and didactic approaches to care. I think this is really important in terms of engagement and why people may push away from services. I've noticed the power threat meaning framework has become increasingly salient in my clinical work, so this maybe the lens through which I'm interpreting these themes. Also, Foucauldian discourse analysis may be useful to explore.

The double stigma of psychosis and cannabis use may prevent people from being able to explore and consider their own experiences. Both participants commented that they had never really had the opportunity to speak about these things. Drawing on individual experiences of when its useful/not useful could help manage the risk of use and help identify other activities or experiences that could provide similar functions.

It seems more difficult to illicit psychosis experiences compared to cannabis use. Could this be related to stigma, or the language used? Using diagnostic terms may not be helpful as there may not be a shared understanding of what this means. Imposing this could further disempower the individual and prevent then from creating their own meaning. Note to try and mirror the persons language and openly explore experience in a non-pathologizing way

Getting to know personal parameters is like a journey – learning is based on unpleasant experiences of 'too much' or 'not in the right mindset', this is re-evaluated and behaviour is changed overtime until a sweet spot is achieved

Positives relate to attention? Focus on friends, music, not on painful thoughts or voices

Emotional regulation? 'just feel happy' 'chills me out'

Social? Enhances experiences with friends 'makes me a better person', shared experience, 'ingroup' facilitates new friendships.

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Chapter three

Contributions to theory and clinical practice

Contributions to Theory and Clinical Practice

This chapter explores further ways in which the metasynthesis and empirical paper in this thesis can contribute to theory and clinical practice in the area of dual diagnosis, and psychosis and cannabis use in particular. The metasynthesis outlined in chapter one explores how health workers experience working with patients with dual diagnosis, and identified themes describing working with this client group as often difficult and emotionally burdensome, which was related to services-related issues and the wider context. A third-order theme describes a vicious cycle of systemic issues, frustration, burnout and stigma to further interpret the findings. The second chapter uses interpretative phenomenological analysis to explore the lived experiences of six young men who experience psychosis and use cannabis. Themes were identified regarding cannabis use and identity, the impact of cannabis on psychosis and wellbeing, and experiences of services. The overarching theme highlighted how these experiences can function to empower or disempower participants in their personal recovery. Both chapters draw attention to the importance of taking time to develop a trusting therapeutic relationship and how experiences of services and support often reflect wider systemic factors and prevailing attitudes, which can impact on both staff and service users in both helpful and unhelpful ways.

Implications for future research and theory development

Literature review

Staff experiences and perceptions of working with patients with dual diagnosis has been explored extensively over the last 20 years, with the majority of earlier studies adopting a quantitative survey approach (Adams, 2005). As far as the author is aware, this is the metasynthesis of qualitative evidence exploring how health workers experience working with patients with dual diagnosis.

Literature on staff burnout appeared to be particularly relevant to themes across included studies and these were explored to inform the third-order analysis. Theories on burnout and its impact on patient care were reviewed, including Conservation of Resources (Hobfoll, 2002) which postulates that burnout occurs because of individual resource over-investment from the individual in combination with too few gains. For example, working in emotionally challenging situations with limited support may result in staff pulling away from patients. An alternative biological explanatory theory posited that stress, depression, and burnout can lead to physical and emotional fatigue which can impede cognitive functioning skills, including decisionmaking, memory, and attention (Hammar & Ardal, 2009). Stressed staff may therefore be more likely to make poor judgements based on their cognitive biases (Hall et al., 2017). This seemed particularly relevant to the themes identified in the second-order analysis of the metasynthesis relating to lack of shared knowledge and use of personal working models, which were particularly concerning given the observed negative attitudes of other staff. These theories, however, appeared to focus primarily on individual-level factors, which has been criticism of the burnout literature (Winner & Knight, 2019). Wider systemic factors seemed particularly salient, especially given the 'double stigma' associated with dual diagnosis and the cycle of marginalisation that patients experience (Askey, 2007).

Indeed, health staff are not immune to the influence of societal pressures and pervasive views and there is evidence that mental health professionals may hold more stigmatising views compared to the general population (Nordt *et al.*, 2006). Professionals' attitudes towards patients with dual diagnosis have been indicated to be more stigmatising than either substance misuse or mental illness diagnosis alone (Avery *et al.*, 2013). According to Goffman (1963) in his conceptual work, stigma not only effects those who are labelled with a diagnosis but also those who are related to the stigmatised individual through social structure. Therefore, health workers themselves may be subject to stigmatising attitudes within their organisations and in

their interactions with other services, which may again contribute to both resource issues, staff stress, frustration, and burnout (Yanos *et al.*, 2017). This led to an exploration of literature that de-individualises burnout and incorporates the interdependence of wider systemic influences. Wong (2020) and Winner and Knight (2019) both discuss these issues in terms of physician wellbeing and describe the interconnectedness of systemic, service-level and individual factors that contribute to frustration and sometimes result in some staff pulling away from their patients. This informed the explanatory model outlined in the third-order analysis of the metasynthesis, 'A vicious cycle: systemic issues, frustration, burnout and stigma', which aimed to aid in developing a framework for addressing issues contributing to frustration and burnout associated with working in the context of dual diagnosis.

The literature assessing interventions targeting burnout in health staff have generally focused on either person-directed, psychologically-informed interventions, or organisation-related interventions (Johnson *et al.*, 2018). Meta-analysis has indicated some efficacy for both types of intervention, particularly for job training or education for reducing burnout and improving personal accomplishment, and person-directed interventions for reducing emotional exhaustion (Dreison *et al.*, 2018). However, overall the impact of these interventions are small (Dreison *et al.*, 2018). For interventions to be more effective, they may need to be grounded in the research literature pertaining to the causes and contributors of burnout in the context of dual diagnosis. For example, health staff working in the context of dual diagnosis may experience more associative stigma, which may increase the likelihood of stress and burnout.

Findings also identified a need for integrated treatment to manage the complexities of dual diagnosis although there is limited evidence for integrated approaches (Hunt *et al.*, 2019). Research exploring patient and staff experiences of services, particularly programmes that utilise an integrated approach such as the Combined Psychosis and Substance Use Programme

(COMPASS, Copello *et al.* 2013), could contribute towards practice-based evidence for integration.

Empirical paper

Considering the growing evidence supporting associations between cannabis use and psychosis, there is a surprising lack of support for the efficacy of interventions aimed at reducing cannabis use in this population (Hunt *et al.*, 2019; Barrowclough *et al.*, 2010; Baker *et al.*, 2006). The difficulties in intervening effectively in enduring psychosis suggests that targeting interventions at an earlier stage may be more effective, as studies indicate that patterns of substance use are in more likely to be in a state of flux during the early stage of psychosis and people may have more motivation to change their cannabis use (Addington & Addington, 2007). However, a combined motivational interviewing and cognitive behavioural therapy intervention for cannabis reduction which was trialled in Early Intervention in Psychosis (EIP) services over 9 months again found no statistically significant change for the intervention compared to treatment as usual (Barrowclough *et al.*, 2014).

The role of power appeared to be particularly relevant to the experiences of participants in the present study, which was illustrated as the overarching theme. Exploring themes of power in the discourse of professionals working with individuals who experience psychosis and use cannabis could also provide important insights, which could inform strategies for minimising power imbalances in services and minimise perceived coercion. Exploring both client and professional experiences of power-threat meaning framework (PTMF)/trauma-informed care and harm-reduction approaches for cannabis use could also inform services. The empirical study explored the experiences of British males in early intervention psychosis services in North Wales. Although interpretative phenomenological analysis (IPA) approaches are more idiographic and less aimed at generalisability, further research exploring the experiences of

females and other ethnic groups could yield important insights, which may help inform approaches for further exploring or addressing cannabis use in individuals who experience psychosis.

Reflections on the research process

Literature review

As this was the primary author's first time conducting a metasynthesis, there was more of an emphasis on validity and reliability through adherence to the Sandelowski and Barroso (2007) method of qualitative metasynthesis. To facilitate transparency, the protocol was submitted to PROSPERO, an international prospective register of systematic reviews. The aim of this register is to reduce unplanned duplication of reviews and provide transparency in the review process in order to reduce reporting bias (Booth *et al.*, 2011). There were two amendments made to the protocol during the study process due to COVID-related time constraints and changes to search terms based on feedback from the university research team. The criteria were kept broad, as the aim was to provide a synthesis of how health staff experience working with patients with dual diagnosis, as opposed to focusing primarily on attitudes towards the client group. However, there were times of uncertainty when attempting to ascertain whether particular studies were too specific to include. This was particularly contentious when there was possibility of other stigmatising factors, such as substance use among LGBT populations. When this was the case, the primary researcher sought support from the other researchers and consensus was achieved regarding what studies to include.

Due to the primary author's dual role as researcher and clinician, reflexivity was an important element of the metasynthesis process. This was achieved through use of a reflective diary throughout the process and maintaining audit trails. For example, the author became

increasingly aware while reading themes from the included studies of the wider service-level and system-level issues that seemed to contribute to resource issues and staff frustration. These issues were viewed through the lens of the author's clinical experiences, where staff frustration, burnout and client engagement issues often reflected wider resource and training insufficiencies. The reflexive accounts and metasummary aided in ensuring that the second and third-order interpretations remained grounded in the data.

Empirical paper

Given the double stigma of psychosis and cannabis use, the author was aware of the potential for preconceptions or researcher bias influencing the research process. It was also anticipated that if some participants have had punishing experiences regarding their cannabis use in health services, they may experience difficulties discussing this or find the process aversive. In an attempt to minimise the impact of these issues, an expert by experience from an EIP service was consulted at the developmental stage of the research process. An interview schedule was co-produced and study documents were reviewed. The author also attempted to acknowledge preconceptions through use of reflexive accounts, which revealed some awareness of the impact of early familial and social experiences on attitudes towards psychosis and cannabis use, and how these have changed overtime, particularly through working in an EIP service. Together with therapeutic training and a leaning towards critical psychology, these professional experiences provided an additional lens for interpretation that the author attempted to become more aware of, particularly in regard to difficult experiences with services taking paternalistic approaches with service users or not considering their experiences and social contexts. This is likely to have informed the overarching theme of empowerment versus disempowerment, as it seemed that participants' relationship with their cannabis use and psychosis reflected wider issues around power and control in their lives, which also played out in the context of their experiences of services. While IPA acknowledges the role of the researcher in the process of interpretation, the author acknowledged the need to address and acknowledge preconceptions and alliances (Smith, Flowers, & Larkin, 2009).

COVID-19 related issues and restrictions also impacted on the research process, particularly in regard to recruitment. This reflected wider issues around engaging service users remotely in the EIP service, particularly for those living in more rural locations with limited internet access. Given the sensitive nature of the topic, the author was initially cautious of facilitating remote interviews and was aware of potential risk issues with this. This again reflected wider concerns of adapting to working under COVID-related restrictions and the researcher utilised research supervision and clear communication with participants' leading clinicians to navigate these issues. Initially there was interest from a female service user who was keen to share her experiences. However, interviews could not be scheduled due to childcare commitments during lockdown. Although there is a higher proportion of males accessing EIP service in North Wales (63% in 2021), this lack of a female voice is a limitation of the empirical study and should be incorporated into future research, which may need to consider more the broader context of participants lives and caring commitments.

The researcher was also aware of the lack of accommodation for Welsh language speakers in the study, which was due to the author's inability to speak Welsh. This was acknowledged in the participant information and was discussed at the interview appointment. Two of the participants shared that they felt less confident expressing themselves in English, although as the interviews progressed, they felt more able to communicate. However, it is important that participants where at all possible are given opportunities to engage in research in their language of choice, not only to provide richer accounts but to ensure that the research process does not serve to disenfranchise or disempower individuals through imposing restrictions on their ability to express themselves fully.

Additional concerns during the interview process pertained to participants who struggled to engage for the duration of the research. For example, one participant becoming agitated or silent during the interview process. When this occurred, informed consent was reiterated, and the author would check to ensure that the participant was safe and whether he would like to reschedule or discontinue. This resulted in the interview taking place over multiple sessions, which initially raised concerns regarding the quality of the accounts. However, according to Flowers (2008), the use of multiple interviews within IPA research can serve practical considerations, including participants' availability, health or attentional capacity, while facilitating in-depth and considered reflection for both participant and researcher across the data collection process (Flowers, 2008). Despite the interview process being somewhat disjointed, the participant wanted to continue and provided a thorough account.

For the primary author, listening to the narratives of the participants highlighted the complexities of their experiences and the role cannabis plays in their lives. Although this sat uncomfortably with the evidence that cannabis use can exacerbate outcomes for people with psychosis, it also highlighted a need for people to be listened to and have their opinions respected. Most of the participants reflected at the end of the interview that they had a positive experience of the research process, although some reflected that they had initially expected to be judged for speaking about cannabis, as this had been their previous experiences. A concern with writing up the empirical paper was whether it would be possible to capture these complexities, without the outcomes being interpreted as either advocacy for cannabis use or for an 'easy fix' to solving these issues. Instead, the primary author hopes that the research draws attention the primacy of the individual's experiences and the importance of taking time to listen and understand their story, which may be all the more imperative when it comes to cannabis use, due to its association with stigma and how functions in peoples' lives, depending on the individual, their wider context, and experience of use.

Implications for clinical practice

Literature review

Although support for the efficacy of integrated substance misuse and mental health care has been inconclusive, the results of the metasynthesis indicate that health staff view integration as important for addressing the complexities of dual diagnosis effectively. Integrated treatment may improve how health staff experience their work with patients with dual diagnosis by overcoming issues regarding insufficient collaboration between services and through providing a shared knowledge base, values, and processes. This may prevent patients from falling through the gaps of services, which is likely to reduce staff frustration and have a positive impact on patient care (Anderson et al., 2016). COMPASS is an example of service integration from Birmingham and Solihull Mental Health NHS Foundation Trust, one of the largest mental health trusts in the UK. This service was developed in the late 1990s with the initial aim of supporting integrated treatment for people who experience co-occurring mental health and substance use problems (Graham et al., 2003), although this was later expanded to include other mental health diagnoses (Copello et al., 2013). In order to achieve integrated care, COMPASS focuses on three areas; 1) mental health staff training for responding to alcohol and drug use, 2) intensive clinical and supervision input into assertive outreach, early intervention, and homelessness services, and (3) the delivery of a consultation-liaison service that offers support to the remaining mental health teams and addiction services across the trust (Copello et al., 2013). COMPASS has a strong commitment to research and evaluation and also delivers group training and workshops to external services and offers advice, information, and liaison (Copello et al. 2013). Research into staff experiences of this programme indicate that staff felt more confident and supported working with dual diagnosis following COMPASS training, which remained high ten years on (Copello et al., 2012). Therefore, integrated approaches may increase staff confidence, support and retention in dual diagnosis contexts.

The cycle of systemic issues, frustration, burnout, and stigma outlined in the metasynthesis may be helpful for informing areas where interventions can be targeted at the level of the individual, service, and organisation to improve the experiences of staff working in the context of dual diagnosis. Implementing an integrated treatment approach could be a way of intervening at the service and organisational level. Where integration of service is not feasible, this model may still provide insights into the levels of support required to enhance staff experiences and wellbeing, and ultimately patient care.

Empirical paper

The Questionnaire about the Process of Recovery (QPR, Neil et al., 2009) was implemented to describe the study population. Although there was not an intention to analyse this data as part of the study, there were some interesting observations regarding how the scores reflected participants' experiences. For example, two of the participants that scored the lowest on the QPR described a lack of control in terms of their experiences of cannabis use, their psychotic experiences, and in their wider context. Conversely, the highest scoring participants described their relationship with cannabis in terms of trusting their experience of use, feeling in control of their experience of use, and not feeling overwhelmed by their experiences of psychosis and other aspects of their lives. Interestingly, there is a high level of association between the QPR and the Making Decisions and Empowerment Scale, which is a self-report questionnaire that measures empowerment (Rogers et al., 1997; Neil et al., 2009). Again, this points to the primacy of empowerment in the journey towards personal recovery and emphasises the need for services to respond to service users in ways that no not impede this or further disempower people. Indeed, people who have suffered significant adversities in their lives are often retraumatised and further disempowered when they come into contact with services, particularly when their experiences are unrecognised or discounted (Read & Harper, 2020).

The findings of the empirical paper indicate the importance of a shared approach in decisionmaking in order to improve satisfaction with received support and engagement with services. In order to address or minimise the inherent power imbalances between service users and professionals, adopting approaches that put primacy on patient choice and experience is imperative. The PTMF offers an alternative approach to strategies based on diagnosis or biomedical conceptualisations, which places emphasis on how the patient makes sense of their experiences and adversities and what they have had to do to survive. Examples of how this could be achieved come from services that adopt principles of 'trauma-informed care', which closely mirror those of the PTMF (Read & Harper, 2020). The Substance Abuse and Mental Health Services Administration (SAMHSA, 2015) in the United States established the US National Centre for Trauma-Informed Care, which provides resources on developing a traumainformed approach and involves working towards a shift from a paradigm that asks, "what's wrong with you?" to one that asks, "what has happened to you?" (SAMHSA, 2015). In the UK, Tees, Esk and Wear Valleys NHS Foundation Trust (TEWV) has been in the process of applying trauma-informed care across their adult division through using staff training and supervision to implement guidance, which are facilitated by experts by experience where possible. A pilot project was undertaken on an acute mental health ward involving all staff, where 80% of the patients were experiencing substance misuse issues and 40% were experiencing a form of psychosis (Sweeney, Clement, Filson, & Kennedy, 2016). It was found that three-quarters of the patients could directly link their current difficulties with experiences of trauma. Following the pilot, staff felt more empowered to engage in meaningful discussion about trauma and this information was used to inform formulation-based care plans. Staff felt competent in supporting patients in learning some core emotional regulation and grounding skills, which resulted in a reduced PRN medication (Sweeney et al., 2016).

Although studies have called for the adoption of a trauma-informed approach for early intervention psychosis services (Coates *et al.*, 2019) due to high levels of trauma experienced by service users (Bendall *et al.*, 2012), there is a lack of consensus on what constitutes trauma-informed care within services for people who experience psychosis (Bloomfield *et al.*, 2020). Nevertheless, the empirical paper indicates that service users may have greater satisfaction and therapeutic alliance with professionals who take the time to understand their distress within the wider context of their experiences, while adopting a non-judgemental approach towards their personal choices.

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Word count

	Excluding references, tables, appendices etc	Inclusive
Thesis summary	298	298
Literature review	7,214	12,519
Empirical study	9,054	13,701
Contributions to theory and clinical practice	3,497	4,604
Title pages, acknowledgements, contents, word count page	-	690