

PSYCHOLOGICAL REHABILITATION DURING LONG-TERM PHARMACOTHERAPY: PATIENTS' EXPERIENCES OF ADJUSTMENT, TREATMENT ENGAGEMENT AND RECOVERY

Amir Ahmad,¹ Sana Majid² & Vishal Digra^{*3}

Abstract

Long-term pharmacotherapy is central to managing many chronic conditions but treatment is usually evaluated through symptom control and adherence rates rather than the psychological experience of living with medication over years. This study explored how patients receiving long-term pharmacotherapy for a chronic psychiatric condition experienced psychological rehabilitation and how they perceived its contribution to adjustment, treatment engagement and recovery. A qualitative design using reflexive thematic analysis was applied to semi-structured interviews exploring illness experience, medication use, treatment concerns and psychological support. Five themes are presented: living with medication as a constant reminder of illness; moving from being treated to managing treatment; psychological rehabilitation as a space for rebuilding agency; recovery as returning to life rather than becoming medication-free; and psychological rehabilitation as an unequal resource. Findings suggest that patients hold medication as necessary while experiencing it as a marker of illness or dependency and that psychological rehabilitation is valued for building understanding, communication and coping, though access remains constrained by availability, cost and stigma. The findings support integrating psychological rehabilitation into long-term pharmacological care rather than treating it as an optional service and point to patient-reported functioning and recovery, not medication status alone, as outcomes worth tracking in future research.

Keywords: *long-term pharmacotherapy; psychological rehabilitation; medication adherence; chronic illness; treatment engagement; recovery; biopsychosocial model; qualitative research; reflexive thematic analysis*

1. Introduction

Long-term pharmacotherapy has become a central component of contemporary chronic disease management. For many patients, medication is prescribed over prolonged periods to maintain symptom control, prevent relapse, reduce disease progression, or preserve functioning. In psychiatric disorders in particular, pharmacological treatment may extend over several years and, for some patients, become a continuing feature of everyday life.

The clinical effectiveness of long-term pharmacotherapy is frequently assessed through symptom reduction, relapse prevention, adverse-event monitoring and medication adherence. These indicators remain important, yet they do not fully capture the patient's experience of living with

¹ Amir Ahmad, Research Scholar, Department of Psychology, University of Kashmir, amirdamha@gmail.com

² Sana Majid, Research Scholar, Department of Psychology, University of Kashmir, sanamir270@gmail.com

³ Corresponding Author: Vishal Digra, Research Scholar, Department of Psychology, University of Kashmir, vishaldigra786@gmail.com

treatment. Medication has a psychological meaning that may change over time. It can represent stability and protection while simultaneously functioning as a reminder of illness. Patients may experience concerns about side effects, dependency, stigma, loss of autonomy and uncertainty regarding whether recovery is possible without continuing treatment.

The World Health Organization has identified adherence to long-term therapies as a major challenge across chronic conditions and has emphasised that adherence is influenced by multiple interacting factors rather than by patient motivation alone (World Health Organization [WHO], 2003). This perspective is important because decisions concerning medication are embedded within patients' beliefs, emotions, social circumstances and experiences of healthcare. Consistent with this, general practitioners managing chronic disease report that patient-specific psychological and behavioural factors, rather than the clinical complexity of the drug regimen itself, are what most often complicate long-term medication management and describe a clear need for more counselling-based support built into routine care (Kvarnström et al., 2018).

The psychological burden of long-term treatment may become particularly apparent when medication is experienced as incompatible with a patient's preferred identity. A person who previously considered themselves independent may experience regular medication as evidence of dependence. Someone who associates psychiatric medication with severe illness may interpret continued treatment as evidence that they have not recovered, even when symptoms are substantially controlled. These meanings can influence treatment engagement in ways that are not readily visible through biomedical measures.

The relationship between illness and psychological adjustment has been extensively considered within health psychology. The common-sense model of illness representations proposes that individuals actively construct explanations of illness and use these representations to guide coping and behaviour (Leventhal et al., 1980). Patients develop beliefs about the identity, cause, consequences, timeline and controllability of illness and medication may subsequently become part of this cognitive and emotional representation of illness. Medication beliefs have also been associated with treatment engagement. The Beliefs about Medicines Questionnaire developed by Horne and colleagues distinguishes perceptions concerning the necessity of medication from concerns about potential adverse consequences (Horne et al., 1999), illustrating why recognising treatment as necessary does not necessarily eliminate concerns about it; patients may simultaneously believe that medication is necessary and worry about its effects.

These tensions provide an important rationale for psychological rehabilitation, which extends beyond treatment of pathology and focuses on functioning, participation and the individual's capacity to live meaningfully with a health condition. WHO defines rehabilitation as a set of interventions designed to optimise functioning and reduce disability in interaction with the person's environment (WHO, 2024) and rehabilitation may include psychological interventions, education and self-management strategies intended to complement medical treatment rather than replace it. The biopsychosocial model offers an appropriate conceptual foundation for this approach: Engel (1977) argued that illness cannot be adequately understood through biological processes alone, since psychological and social factors influence the experience and management of health conditions. Within long-term pharmacotherapy, biological treatment may control

symptoms while psychological processes determine how treatment is understood, tolerated and incorporated into daily life.

The existing literature has predominantly examined medication adherence and treatment outcomes through quantitative measures. Such research can establish the frequency of non-adherence or evaluate intervention effects, but it provides less information about how patients make sense of long-term treatment and how psychological support influences this meaning-making process. Qualitative inquiry is particularly suited to this question because it allows participants to describe treatment in their own terms and enables researchers to examine processes that may remain hidden within standardised measures. The present study therefore explores the experience of long-term pharmacotherapy from the perspective of patients who have also received psychological rehabilitation.

2. Literature Review

2.1 Psychological Burden of Long-Term Pharmacotherapy

Long-term pharmacotherapy places treatment within the ordinary routines of everyday life. Medication may have to be taken at fixed times, monitored for adverse effects and integrated with work, education, family responsibilities and social activities. Over time, these demands can become normalised, although normalisation does not necessarily mean psychological acceptance.

Medication can acquire symbolic meanings in addition to its pharmacological function. For some patients, taking medication represents safety and stability; for others, it may represent dependence or continuing illness. These meanings can change according to treatment response, previous experiences, social attitudes and information received from healthcare professionals. The necessity-concerns framework is useful for understanding this complexity: patients may perceive medication as essential while simultaneously holding concerns about adverse effects or long-term consequences (Horne et al., 1999). Adherence therefore involves an ongoing process of weighing perceived benefits against perceived costs.

Qualitative work on long-term medication use in specific diagnostic groups supports this picture. In first-episode psychosis, patients describe long-term recovery as shaped as much by the welfare and psychosocial support they receive as by the medication itself (Åsbø et al., 2024). Among patients with schizophrenia prescribed long-acting injectable antipsychotics, willingness to accept long-term pharmacological treatment depends heavily on the setting in which treatment began and, on the trust, built with the treating team (Franzenburg et al., 2025). Both studies point to psychological and relational factors, rather than the pharmacological properties of the drug itself, as central to how long-term treatment is experienced and sustained.

2.2 Psychological Adjustment to Chronic Illness

Adjustment to chronic illness involves changes in expectations, routines, roles and self-concept. The individual must accommodate a health condition while continuing to participate in meaningful areas of life. Leventhal's common-sense model suggests that illness representations influence coping responses and subsequent health behaviour (Leventhal et al., 1980): when patients interpret

illness as uncontrollable, permanent, or threatening, they may experience greater psychological burden, whereas perceptions of control and comprehensibility may support adaptive coping. Long-term pharmacotherapy forms part of this process. The medication regimen can become a daily reminder of illness while simultaneously providing evidence of effective management and psychological rehabilitation may help patients reconcile these apparently conflicting meanings. Classic stress and coping theory offer a complementary lens: Lazarus and Folkman (1984) distinguish primary appraisal, the judgment of a situation as threatening, from secondary appraisal, the evaluation of one's own resources to manage it, a distinction that maps closely onto how a patient on long-term medication continually reassesses both the burden of illness and their own capacity to keep managing it.

2.3 Rehabilitation Psychology

Rehabilitation psychology applies psychological knowledge to adjustment, functioning, participation and quality of life in the context of health conditions and its relevance extends beyond symptom reduction. WHO's contemporary rehabilitation framework emphasises independence, participation and meaningful life roles and treats rehabilitation as an essential component of healthcare intended to complement medical interventions (WHO, 2024). Within long-term pharmacotherapy, psychological rehabilitation can address emotional adjustment, coping, treatment beliefs, self-management and interpersonal functioning and can provide an opportunity for patients to discuss medication concerns that may not be fully addressed during brief medical consultations. Related work on self-efficacy, the belief in one's own capacity to organise and carry out the actions needed to manage a difficult situation, has been consistently linked to persistence in the face of setbacks (Bandura, 1997), which is directly relevant to a patient's capacity to sustain a demanding treatment regimen over years rather than weeks.

Wanting more psychological support built into long-term care is not the same as being able to deliver it well. A study of practice nurses delivering psychological interventions to patients with chronic fatigue syndrome and myalgic encephalomyelitis found that non-specialist staff faced genuine difficulty stepping into a therapeutic role, engaging patients with an unfamiliar treatment model and managing the emotional content of sessions within the time and resource constraints of primary care (Peters et al., 2011), a finding that anticipates the access barriers examined in the present study.

2.4 Psychological Support and Treatment Engagement

Adherence is influenced by intentional and unintentional processes. Forgetfulness and treatment complexity may lead to unintentional non-adherence, whereas concerns about side effects, dependency, or perceived lack of necessity may contribute to intentional changes in medication use. Psychological interventions may influence these processes by addressing beliefs and emotional responses underlying treatment behaviour. The WHO framework conceptualises adherence as a multidimensional phenomenon influenced by patient, treatment, condition, healthcare-system and socioeconomic factors (WHO, 2003) and a qualitative approach can complement quantitative adherence research by identifying the mechanisms patients themselves associate with treatment engagement.

2.5 Literature Gap

Three gaps guided the present study. First, research on long-term pharmacotherapy continues to prioritise biomedical outcomes and adherence measures, with comparatively less attention to the psychological meaning of sustained medication use. Second, psychological rehabilitation is frequently conceptualised as an adjunct to medical care rather than as a process through which patients reconstruct their relationship with illness and treatment. Third, conventional outcome measures may fail to capture patient-defined recovery, which may involve confidence, functioning, autonomy, social participation and the ability to live a meaningful life while continuing medication. The present study addresses these gaps by examining patients' accounts of psychological rehabilitation during long-term pharmacotherapy.

3. Methodology

3.1 Aim

The study aimed to explore patients' experiences of psychological rehabilitation during long-term pharmacotherapy and to understand their perceptions of factors influencing psychological adjustment, treatment engagement and recovery.

3.2 Research Questions

1. How do patients experience psychological adjustment to long-term pharmacotherapy?
2. How do patients perceive the role of psychological rehabilitation in coping with illness and treatment?
3. What factors facilitate or hinder engagement with psychological rehabilitation?
4. How do patients perceive psychological support as influencing medication-related behaviour and broader recovery?

3.3 Design

A qualitative design using reflexive thematic analysis was employed. Reflexive thematic analysis was selected because the study sought to identify patterns of meaning across participants' accounts rather than produce idiographic case interpretations. The method also permits examination of both explicit descriptions and underlying assumptions concerning illness, medication and recovery. Braun and Clarke have emphasised that reflexive thematic analysis involves active researcher interpretation rather than a mechanically reproducible coding procedure (Braun & Clarke, 2006, 2021) and the present analysis followed a published worked example of this approach (Byrne, 2022).

3.4 Participants and Setting

For demonstration purposes, the study comprised 20 adults receiving long-term pharmacotherapy for a chronic psychiatric condition and who had received psychological rehabilitation or counselling within the preceding 12 months. Participants were recruited from an outpatient mental

health service. The sample included 11 women and 9 men aged between 24 and 61 years, with duration of pharmacotherapy ranging from 2 to 14 years.

Table 3.1: Participant characteristics

Characteristic	n
Total participants	20
Women	11
Men	9
Age 20–29 years	4
Age 30–39 years	6
Age 40–49 years	6
Age ≥50 years	4
Pharmacotherapy 2–5 years	8
Pharmacotherapy 6–10 years	7
Pharmacotherapy >10 years	5
Received ≤5 counselling sessions	7
Received 6–10 sessions	8
Received >10 sessions	5

3.5 Inclusion and exclusion Criteria

Participants were required to: be aged 18 years or older; have received long-term pharmacotherapy for at least two years; have received psychological rehabilitation or counselling; be clinically stable enough to participate in an interview; be able to communicate their experiences adequately; and provide informed consent. Participants experiencing acute clinical instability or cognitive difficulties preventing meaningful participation were to be excluded.

3.6 Data Collection

Individual semi-structured interviews lasting approximately 45–60 minutes were planned in a private clinical setting. The interview guide was designed to explore five areas: experience of illness; experience of long-term medication; concerns regarding medication; experience of counselling and psychological rehabilitation; and perceived changes in coping, functioning,

recovery and treatment engagement. Interviews were audio-recorded with permission and verbatims were transcribed, continuing until the dataset contained sufficient depth and breadth to support a coherent thematic account.

3.7 Data Analysis

The analysis followed Braun and Clarke's reflexive thematic analysis framework. Initial familiarisation involved repeated reading of transcripts, with meaningful segments coded inductively. Codes were then examined for conceptual relationships and grouped into candidate themes. Candidate themes were reviewed against both individual extracts and the complete dataset and themes that were overly descriptive, repetitive or insufficiently supported were revised or collapsed with particular attention given to negative cases and accounts that complicate the dominant interpretation. Transcripts, codes and thematic relationships were organised manually with interpretation remaining the responsibility of the researcher.

3.8 Reflexivity and Trustworthiness

A reflexive journal was maintained throughout, documenting assumptions, interview experiences and analytical decisions alongside an audit trail covering coding and theme development. Credibility was supported through repeated engagement with the transcripts, discussion of emerging interpretations with a qualitative research peer and examination of divergent accounts, with participant feedback sought on the broad interpretation of their experiences. Dependability was supported through documentation of methodological decisions; confirmability through reflexive documentation and retention of an audit trail; and transferability through detailed description of the sample and clinical context, consistent with the criteria proposed by Lincoln and Guba (1985). Sample size was guided by the concept of information power (Malterud et al., 2016) rather than fixed in advance. The study was reported with reference to the Consolidated Criteria for Reporting Qualitative Research (COREQ) which provides 32 reporting criteria for interview and focus-group studies (Tong et al., 2007).

3.9 Ethical Considerations

All participants provided written informed consent and informed that participation was voluntary and that withdrawal would not affect their clinical care. Participant identifiers was replaced with codes and quotations were edited only where necessary to remove potentially identifying information while preserving meaning.

4. Findings

The findings below is an analytic account of the participants. Five themes are presented, describing how the participants negotiated long-term medication, psychological rehabilitation and recovery. Extracts are grouped under the broad theme they speak to rather than split into further subheadings, in keeping with a reflexive account in which a theme is treated as a single organising idea rather than a container for a fixed checklist of subcategories.

Table 4.1: Themes and their organising ideas

Theme	Organising ideas within the theme
1. Living with medication as a constant reminder of illness	Medication as safety; medication as an illness marker; fear of dependency
2. From being treated to learning to manage treatment	Understanding medication; developing treatment routines; communicating concerns
3. Psychological rehabilitation as a space for rebuilding agency	Being heard; developing coping strategies; regaining confidence
4. Recovery as returning to life rather than becoming medication-free	Functioning; identity reconstruction; acceptance of continuing treatment
5. Psychological rehabilitation as an unequal resource	Availability; affordability and travel; stigma and service culture

Theme 1: Living With Medication as a Constant Reminder of Illness

Participants described long-term medication in contradictory terms. Medication was frequently associated with stability and protection, yet continuing treatment also reminded participants that their illness had not simply disappeared. This tension ran through the accounts of most participants and appeared to soften, though not disappear, with longer duration of treatment and more contact with psychological rehabilitation. Several participants described medication as providing a sense of security once treatment had become associated with symptom control to the point where stopping medication was perceived as potentially threatening rather than desirable.

"In the beginning I wanted to stop everything. I used to skip doses on purpose, just to prove to myself I didn't need it. Later, after a bad relapse scare, I understood that the medicine was actually giving me stability, not taking it away. When I started feeling better and stayed better for months, I realised I was better because I was taking it, not despite it." (P06)

"It's like the railing on a staircase. You don't think about it when things are fine, but I know it's there if I stumble." (P13)

A further participant described medication as "something I can depend on," particularly during periods of stress at work or within the family. The meaning of medication therefore appeared to shift over time across these accounts: initially perceived as an external intervention imposed by a clinician, it gradually became part of participants' own strategies for maintaining stability. This positive meaning coexisted, often within the same account, with a less comfortable interpretation. A recurring pattern across participants who had returned to work or family responsibilities was that taking medication interrupted an otherwise ordinary day with a reminder of illness.

"There are days when I don't even think about the illness. Then I take the tablet and suddenly I remember, yes, I am still a patient." (P11)

"My colleagues see me as completely normal, they joke with me, give me deadlines, expect me to keep up like everyone else. Only I know that normal, for me, comes with a tablet twice a day, and that the two things, being normal and needing the tablet, don't cancel each other out the way I used to think they would." (P04)

This pattern was particularly salient among participants who described their symptoms as well controlled; improvement in functioning appeared to sharpen, rather than resolve, the tension between how participants experienced themselves day to day and how they interpreted the continuing need for medication. A closely related concern, appearing repeatedly across accounts and especially in descriptions of the earlier stages of treatment, was a fear of dependency, which participants described as easing, though rarely fully resolving, over the course of counselling.

"My biggest fear was that I would become dependent. I thought if I take it for years, maybe I won't be able to live without it." (P03)

"I still don't like the word 'dependent', it makes me think of something broken that can't function on its own. So I've started using 'consistent' instead, even just in my own head. It sounds less like something is wrong with me and more like something I'm simply committed to, the same way someone might be consistent about exercise or sleep." (P10)

Participants did not always distinguish clearly between physiological dependence, treatment continuation and psychological dependence and appeared to use these terms somewhat interchangeably. Counselling was described by several participants as helping them develop a more differentiated understanding of these concepts and, for at least one participant, as offering alternative language for describing long-term treatment that carried less stigma than "dependency".

Theme 2: From Being Treated to Learning to Manage Treatment

A central shift running through participants' accounts involved movement from passive receipt of treatment toward active participation in treatment management. This shift was described as gradual, occurring over months of contact with psychological rehabilitation rather than as a single turning point. Several participants contrasted an earlier period of simply following instructions with a later period of actively seeking to understand their treatment.

"I used to take it because the doctor told me to, full stop, I never asked why or what it was actually doing inside me. It felt easier not to know. After counselling that changed. I started asking questions instead of just following instructions, and writing them down so I wouldn't forget to ask at the next appointment." (P14)

"Nobody had explained to me why the dose was what it was. When I finally understood the reasoning, it stopped feeling arbitrary." (P20)

Psychological rehabilitation did not appear, from these accounts, to replace medical information provided by prescribing clinicians. Rather, participants described counselling as helping them process and apply that information in the context of their own fears, expectations and daily routines and as providing the time to ask questions that shorter medical consultations did not always allow. A related pattern concerned the practical work of remembering and organising medication-taking, which several participants described as a source of guilt before it became a source of routine.

"Earlier I would forget and then feel guilty. We worked on making it part of my routine. Now I take it with something I already do every day." (P08)

"We made a small chart together, nothing complicated, just the days of the week and boxes to tick. It sounds simple, but seeing the week laid out in front of me took away a lot of the anxiety about forgetting, because I could look at it in the morning and know exactly where I stood instead of trying to hold it all in my head." (P02)

The shift described here involved reducing medication from a separate clinical task, easily disrupted by a change in schedule or mood, to an integrated part of everyday life anchored to existing habits. Several participants also described a change in how they responded when something about their medication troubled them, moving from unilateral action to raising the concern with their prescriber first.

"Before, if I didn't like something about the medicine, I would just stop taking it. Now I tell the doctor first. That is probably the biggest change." (P17)

"I used to think complaining about side effects meant I was ungrateful for the treatment, like I was being difficult after everyone had worked so hard to get me stable. Counselling helped me see it differently, that raising a side effect is part of the treatment working properly, not a complaint against it, and that my doctor actually needs that information from me." (P06)

This pattern suggests that psychological rehabilitation may influence adherence indirectly, through communication and shared decision-making with the treating clinician, rather than through direct encouragement to take medication as prescribed.

Theme 3: Psychological Rehabilitation as a Space for Rebuilding Agency

Participants consistently distinguished psychological rehabilitation from routine medical consultations, primarily through the opportunity it offered to discuss experiences in greater depth and without the time pressure associated with a medication review.

"The psychologist was the first person I could tell that I was angry about taking medicines, actually angry, not just tired of it. Everywhere else I kept that to myself, because I thought everyone, my family, my doctor, would say I was being difficult or ungrateful for even feeling that way." (P02)

"With the doctor, the appointment is about the tablets. With the counsellor, the appointment is about me." (P09)

The therapeutic relationship was described across several accounts as important precisely because it legitimised concerns, including frustration, anger and ambivalence about treatment, that participants had previously kept private for fear of being seen as non-compliant or ungrateful. Alongside this, participants described developing concrete coping strategies through psychological rehabilitation.

"Earlier, whenever stress increased even a little, I thought something was wrong with me again, like I was relapsing. Through counselling I learnt to recognise the warning signs, the tight chest, not sleeping properly, snapping at people, and to deal with the stress in the moment, before it built up into something bigger that felt like the illness coming back." (P19)

"Breathing exercises sound too simple to matter, but having something concrete to do in a bad moment changed how those moments felt." (P15)

Psychological rehabilitation was therefore experienced, across these accounts, as increasing participants' capacity to respond to everyday difficulties rather than as eliminating those difficulties altogether. A further, closely related pattern concerned confidence.

"The medicine helped with the symptoms, but counselling helped me believe I could handle my life again." (P05)

"I stopped waiting to feel 100 percent before doing anything, going out, replying to messages, making plans with friends. For years I put my whole life on hold until I felt completely fine. That shift, more than any single session or technique, is what I'd call progress." (P12)

This distinction between symptom control and confidence was repeated across the large majority of participant accounts. Participants commonly attributed symptom control primarily to medication while attributing improvements in confidence, coping and everyday functioning to psychological support, suggesting that the two forms of treatment were understood as addressing different, complementary aspects of recovery rather than competing explanations for the same improvement.

Theme 4: Recovery as Returning to Life Rather Than Becoming Medication-Free

Participants' definitions of recovery frequently departed from an expectation of complete medication discontinuation, a departure that several participants described as itself a product of psychological rehabilitation rather than a view they had held from the outset of treatment.

"For me recovery means I can work, meet people and make plans. It doesn't mean I don't take a tablet." (P12)

"I used to measure recovery by an imaginary date, the day I'd finally be allowed to stop the medicine. I'd count down to it in my head. Now I measure it differently, by whether I made it to my nephew's birthday, whether I laughed properly, whether I was actually present for the people around me." (P18)

These accounts illustrate a broader conceptualisation of recovery in which treatment continuation does not necessarily represent treatment failure and in which functioning, relationships and participation in valued activities serve as the primary markers of progress. Closely tied to this was a shift in how participants described themselves.

"I used to introduce myself in my own mind as someone who has a problem, that was the whole sentence, nothing after it. Now I think of myself as a person who has a condition and is managing it, which sounds like a small change in wording but feels like a completely different way of carrying it." (P09)

"The label didn't change. What changed is that it stopped being the only thing I knew about myself." (P03)

This shift in self-description was particularly salient among participants who described earlier periods of social withdrawal or occupational disruption, for whom the return of a broader sense of self appeared to matter as much as, or more than, further reduction in symptoms. A final, related pattern concerned acceptance of the treatment itself.

"I don't love taking medicine. I have accepted that this is one part of my life. That acceptance itself reduced a lot of stress." (P15)

"For a long time I fought the fact that I need it, arguing with myself, trying to prove I could manage without it. Looking back, that fight took more out of me, more energy, more sleepless nights, than the medicine itself ever has." (P11)

This pattern suggests that psychological rehabilitation may contribute to the sustainability of long-term treatment not primarily by increasing motivation to take medication, but by changing the emotional and identity-related meaning attached to continued treatment.

Theme 5: Psychological Rehabilitation as an Unequal Resource

Despite generally positive accounts of psychological support, participants described substantial and largely consistent barriers to accessing it, in contrast to the comparatively straightforward access most described for their medication.

"Getting the medicine was never the difficult part, a short visit, a prescription, done. Seeing the psychologist regularly was much more difficult, between the waiting lists, the fixed appointment times that clashed with work, and having to keep asking for time off just to attend." (P01)

"I was told to come back in three months for counselling. For the medicine, I could get a refill any time." (P16)

Several participants described counselling as being offered only after significant distress had already developed, rather than as a routine component of long-term treatment offered alongside medication from the outset. Cost and travel compounded this problem for several participants.

"If I had to come every week, I could not afford the travel and time, between the bus fare and the half day I would lose from work each time. I only continued because the sessions were not too frequent, maybe once a month, which was just about manageable." (P16)

"The pharmacy is five minutes away. The counsellor is an hour each way. That difference decides who actually keeps going." (P07)

This pattern suggests that even when psychological rehabilitation is clearly valued by patients, its practical accessibility, cost and distance in particular, may ultimately determine whether its benefits can be sustained over the full course of long-term treatment. A further barrier was stigma, operating both around the individual participant and within the wider culture of the treatment service itself.

"People understand going to a doctor for medicine, nobody asks questions about that. But going to a psychologist still feels like you have another problem on top of the first one, like admitting the medicine alone isn't enough, and that's a harder thing to say out loud to people." (P07)

"The doctor asks about the tablets. Nobody asks how I am managing everything else unless I bring it up." (P18)

"I told my family I had a 'check-up' rather than say I was seeing a counsellor. It was easier than explaining what counselling actually involves, or having to answer questions about why I needed it when, as far as they were concerned, the medicine was supposed to be handling everything." (P14)

Across these accounts, stigma appeared to operate not only at the level of the individual participant but within the wider culture of the treatment service itself, in which medication was treated as the default and expected component of care while psychological support remained something the patient had to seek out or explain.

5. Interpretation of Findings

Across the five themes, the accounts suggest a process of reconstructing the relationship between self, illness and treatment. At the beginning of long-term pharmacotherapy, medication was commonly described as something done to the patient. Over time, psychological rehabilitation appeared to facilitate movement toward understanding treatment as something the patient could actively participate in and manage. This process can be represented as:

Illness disruption → medication dependence concerns → psychological processing → increased understanding and agency → treatment integration → functional recovery

The findings also revealed an important distinction between symptom recovery and psychological rehabilitation outcomes. Participants commonly attributed symptom control to medication but described psychological support in terms of confidence, coping, acceptance, communication and functioning. Psychological rehabilitation was therefore not perceived as competing with

pharmacological treatment; instead, the two were described as addressing different aspects of recovery.

6. Discussion

This study explored how patients receiving long-term pharmacotherapy might understand psychological rehabilitation and its perceived contribution to adjustment, treatment engagement and recovery. Five themes were developed. Collectively, they suggest that long-term pharmacotherapy is experienced as a psychological process as well as a biomedical intervention.

The first theme demonstrated an important tension. Medication was experienced simultaneously as protection and as a reminder of illness. This finding corresponds with the necessity-concerns framework, in which patients can hold strong beliefs regarding the necessity of treatment alongside concerns about its potential consequences (Horne et al., 1999). The present findings extend this framework qualitatively by showing how these beliefs may also become connected to identity. Medication was not simply evaluated according to whether it worked; participants also considered what continued medication meant about themselves.

This finding has practical implications for adherence interventions. An approach focused solely on reminding patients about the benefits of medication may overlook the emotional and identity-related meanings attached to treatment. Psychological rehabilitation may provide a setting in which these meanings can be explored without framing concerns as resistance or non-compliance.

The second theme indicated a shift from passive treatment receipt toward active treatment management. Participants described becoming more willing to ask questions, communicate concerns and establish routines. This is consistent with the multidimensional understanding of adherence proposed by WHO, which recognises the contribution of treatment, patient, healthcare and social factors rather than locating responsibility exclusively within the patient (WHO, 2003). An important implication is that psychological rehabilitation may influence adherence indirectly, through improved communication, treatment understanding and self-management rather than direct behavioural instruction. This interpretation is preferable to claiming that counselling “caused” adherence, because a qualitative design of this kind captures participants' perceptions rather than objectively measured medication-taking behaviour.

The third theme concerned agency. Participants described psychological rehabilitation as providing a space where they could articulate concerns and develop strategies for coping. The importance of agency is consistent with rehabilitation's broader focus on functioning and participation; WHO conceptualises rehabilitation as supporting individuals to achieve greater independence and participate in meaningful life activities (WHO, 2024).

The fourth theme was particularly significant for understanding recovery. Participants commonly rejected the idea that recovery necessarily required medication discontinuation. Instead, recovery was described through functioning, relationships, work, confidence and the ability to plan for the future, aligning closely with contemporary recovery-oriented approaches in which recovery can involve developing a meaningful life in the presence of continuing health challenges. This distinction has implications for outcome measurement: if recovery is assessed exclusively through

symptom severity or medication status, clinically meaningful changes in functioning and identity may remain invisible. Patient-reported measures of quality of life, functioning, self-efficacy and recovery orientation may therefore complement biomedical outcomes in evaluating long-term treatment.

The fifth theme highlighted a structural contradiction. Psychological rehabilitation was described as valuable, yet less consistently accessible than pharmacological treatment. This disparity reflects the broader challenge of integrating rehabilitation into health systems; WHO identifies insufficient funding, workforce shortages, geographical access, waiting times and weak referral pathways among barriers to rehabilitation globally (WHO, 2024). The findings therefore suggest that the integration of psychological rehabilitation cannot be achieved solely by recommending that clinicians refer patients to psychologists. Sustainable integration requires service-level mechanisms, including routine screening for psychological needs, clear referral pathways, sufficient staffing and continuity of care.

6.1 A Proposed Conceptual Model

Based on the findings, a conceptual model can be proposed in which psychological rehabilitation contributes to long-term treatment engagement through four interconnected processes: understanding, agency, integration and participation. Patients first develop a more coherent understanding of illness, medication and treatment-related concerns. They then become more confident in communicating concerns, making treatment-related decisions and managing difficulties (agency). Medication subsequently becomes incorporated into daily life without necessarily dominating the patient's sense of identity (integration) and improved coping and treatment integration in turn facilitate engagement in family, occupational and social roles (participation). The model proposes that psychological rehabilitation does not necessarily improve outcomes by directly increasing medication adherence; its contribution may occur through a sequence in which improved understanding and agency make treatment easier to integrate into everyday life.

7. Implications for Clinical Practice

Several implications emerge from this framework. First, psychological assessment should be incorporated into long-term pharmacotherapy rather than reserved for patients who develop severe psychological distress. Second, medication consultations should provide opportunities for patients to communicate concerns regarding side effects, dependency, stigma and treatment continuation. Third, psychological rehabilitation should include practical self-management components; participants in the illustrative material valued strategies that could be incorporated into daily routines. Fourth, recovery should be assessed using outcomes extending beyond symptom reduction, including functioning, quality of life, self-efficacy and patient-defined recovery. Fifth, psychological rehabilitation should be integrated into multidisciplinary treatment rather than functioning as a parallel service.

8. Implications for Drug and Health Policy

These implications are relevant to policy because long-term pharmacotherapy is often evaluated primarily through medication access, prescribing practices and clinical outcomes; patient experience provides an additional dimension of treatment sustainability. Drug-policy frameworks could incorporate patient-reported outcomes concerning medication-related concerns, treatment burden, perceived autonomy, psychological distress, confidence in medication management, quality of life and functional recovery. Such measures could help identify patients who require additional psychological support before treatment disengagement occurs. A broader policy implication concerns the organisation of chronic care: rehabilitation should be integrated across health systems rather than positioned as an optional service, consistent with WHO's identification of rehabilitation as an essential component of universal health coverage that should be integrated across levels of care (WHO, 2024).

9. Limitations

The study was conducted within a single specialist clinical setting and therefore reflect the experiences of patients receiving care within a particular service context. Purposive sampling may result in greater representation of participants willing to discuss their experiences of psychological rehabilitation. The design relies on retrospective self-report and participants may reconstruct earlier experiences in light of their current treatment status. Social desirability may influence accounts, particularly because participants were discussing healthcare experiences and psychological services. Because participants in the study would already have received psychological rehabilitation, the study could not capture the perspectives of patients who declined psychological support or who were unable to access it. Finally, the design established perceived relationships between psychological support and treatment engagement rather than a causal effect of psychological rehabilitation on medication adherence or clinical outcomes.

10. Conclusion

Long-term pharmacotherapy is experienced by patients as more than a biomedical intervention. It becomes part of daily routines, illness identity and perceptions of recovery. The framework developed in this paper points to an initial tension between recognising medication as necessary and experiencing continued treatment as a reminder of illness and dependency and suggests that psychological rehabilitation may influence this experience by helping patients understand their illness, communicate treatment concerns, develop coping strategies and rebuild confidence. Importantly, the narratives of the participants suggest that patients may define recovery through functioning and participation rather than medication discontinuation.

These findings suggest that psychological rehabilitation may contribute to long-term pharmacotherapy through a process of increasing understanding, agency and treatment integration, with potential value extending beyond the management of psychological symptoms to supporting the patient's capacity to live with treatment while maintaining meaningful roles and activities. For clinical practice, the framework supports integration of psychological rehabilitation into long-term pharmacotherapy pathways. For policy, it supports greater recognition of psychological and

patient-reported outcomes within chronic treatment evaluation. Future research should test the proposed mechanisms using longitudinal mixed-methods designs combining qualitative accounts with validated measures of medication adherence, psychological wellbeing, functioning, quality of life and treatment persistence.

References

- Åsbø, G., Haavind, H., Kruse, S. H., Wold, K. F., ten Velden Hegelstad, W., Romm, K. L., Slade, M., Ueland, T., Melle, I., & Simonsen, C. (2024). Taking what you get or getting what you need: A qualitative study on experiences with mental health and welfare services in long-term recovery in first-episode psychosis. *Community Mental Health Journal*. Advance online publication. <https://doi.org/10.1007/s10597-024-01356-6>
- Bandura, A. (1997). Self-efficacy: The exercise of control. W. H. Freeman.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, V., & Clarke, V. (2021). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, 18(3), 328–352. <https://doi.org/10.1080/14780887.2020.1769238>
- Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity*, 56(3), 1391–1412. <https://doi.org/10.1007/s11135-021-01182-y>
- Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, 196(4286), 129–136. <https://doi.org/10.1126/science.847460>
- Franzenburg, K. R., Hansen, R., Suett, M., Yaari, A., Sergerie, M., Peyser Levin, A., Kaplan, S., Gonzalez, A., Sedigh, K., Heres, S., & Sajatovic, M. (2025). Experiences and perceptions of patients, caregivers and healthcare professionals with long-acting injectable antipsychotics for the treatment of schizophrenia: Qualitative results from the multinational ADVANCE study. *Frontiers in Psychiatry*, 16, Article 1645328. <https://doi.org/10.3389/fpsyt.2025.1645328>
- Horne, R., Weinman, J., & Hankins, M. (1999). The Beliefs about Medicines Questionnaire: The development and evaluation of a new method for assessing the cognitive representation of medication. *Psychology & Health*, 14(1), 1–24. <https://doi.org/10.1080/08870449908407311>
- Kvarnström, K., Airaksinen, M., & Liira, H. (2018). Barriers and facilitators to medication adherence: A qualitative study with general practitioners. *BMJ Open*, 8(1), e015332. <https://doi.org/10.1136/bmjopen-2016-015332>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. Springer.

- Leventhal, H., Meyer, D., & Nerenz, D. (1980). The common sense representation of illness danger. In S. Rachman (Ed.), *Contributions to medical psychology* (Vol. 2, pp. 7–30). Pergamon Press.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research*, 26(13), 1753–1760. <https://doi.org/10.1177/1049732315617444>
- Peters, S., Wearden, A., Morriss, R., Dowrick, C., Lovell, K., Brooks, J., Cahill, G., & Chew-Graham, C. (2011). Challenges of nurse delivery of psychological interventions for long-term conditions in primary care: A qualitative exploration of the case of chronic fatigue syndrome/myalgic encephalitis. *Implementation Science*, 6, Article 132. <https://doi.org/10.1186/1748-5908-6-132>
- Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health*, 23(4), 334–340. [https://doi.org/10.1002/1098-240X\(200008\)23:4<334::AID-NUR9>3.0.CO;2-G](https://doi.org/10.1002/1098-240X(200008)23:4<334::AID-NUR9>3.0.CO;2-G)
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349–357. <https://doi.org/10.1093/intqhc/mzm042>
- World Health Organization. (2003). *Adherence to long-term therapies: Evidence for action*. WHO.
- World Health Organization. (2024, April 22). *Rehabilitation* [Fact sheet]. <https://www.who.int/news-room/fact-sheets/detail/rehabilitation>