Review Article

Types of Medication Non-adherence & Approaches to Enhance Medication Adherence in Mental Health Disorders: A Narrative Review

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ABSTRACT

Background: Medication non-adherence (MNA) presents a significant obstacle that negatively impacts treatment effectiveness in mental health disorders. The objective of this review is to study different types of MNA and interventions designed to enhance medication adherence among individuals with mental health disorders.

Methods: We conducted an electronic search on PubMed and Google Scholar using keywords such as adherence, non-adherence, compliance, non-compliance, mental health disorders, psychotropic drugs, major depressive disorder (MDD), schizophrenia, anxiety disorders, and bipolar disorders (BD). From the search results, we selected studies pertinent to the objective of the review.

Results: Non-adherence can be categorized into primary nonadherence (not starting medication) and secondary non-adherence (not taking the medication as directed). Generally, we can group the reasons for non-adherence into unintentional and intentional. Unintentional non-adherence (UNA) arises when patients genuinely desire to comply with their prescribed course of therapy but are hindered by factors beyond their control. When addressing UNA, interventions should simplify medication regimens, utilize long-acting injectable (LAIs) medications, offer tools to manage medication and provide follow-up reminders. When a patient deliberately decides not to follow their treatment plan, this is known as intentional non-adherence. To improve intentional non-adherence, the focus should be on patient-centred care and shared decision-making, psychoeducation, effective doctor-patient communication, cognitive-behavioral strategies, and addressing concerns related to the side effects of psychotropic drugs.

Conclusion: It is crucial to understand that there is no universal solution to address non-adherence in mental health disorders. Each patient has distinct needs and characteristics, making personalized strategies and interventions of utmost significance.

Keywords: Intentional non-adherence, mental health disorders, non-adherence, Unintentional non-adherence

The World Health Organization (WHO) has defined treatment adherence as "The extent to which a person's behaviour taking medication, following a diet, and/or executing lifestyle changes, corresponds with agreed recommendations from a healthcare provider."[1] Non-adherence to psychotropics is a significant problem in mental health treatment, with research indicating that about half of patients prescribed psychotropic medications do not take them as prescribed.[2–4] Not adhering to psychotropic medication can worsen the individual's condition, diminish the effectiveness of treatment, and decrease their responsiveness to future interventions. Additional outcomes of non-adherence encompass the need for rehospitalization, negative impacts on quality of life and social well-being, symptom relapse, heightened co-existing medical problems, inefficient healthcare resource utilization, and an elevated risk of suicide.[2] Globally, non-compliance rates in mental health

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treatment have been reported to range from 40% to 60%. In developing nations, it is anticipated that the problem of inadequate adherence will become more pronounced.[5] It is crucial to remember that assigning blame to the patient for non-adherence is misguided. The issue often lies in systemic shortcomings within healthcare delivery, which can stem from initial misunderstandings about prescriptions or a lack of ongoing patient support. Both healthcare providers and patients need to collaborate, engaging in open discussions to enhance adherence through better comprehension and the identification of necessary support mechanisms.[6] This article aims to study different types of MNA and interventions designed to enhance medication adherence among individuals with mental health disorders.

Search Strategy: We conducted an electronic search on PubMed and Google Scholar, utilizing a combination of keywords such as adherence, non-adherence, compliance, non-compliance, mental health disorders, psychotropic drugs, major depressive disorder (MDD), schizophrenia, anxiety disorders, and bipolar disorders (BD), with relevant Boolean operators (such as AND, OR). From the search results, we selected studies pertinent to the following three main categories for the review: Types of MNA, Challenges in medication adherence for mental health disorders, and Methods to enhance medication adherence in mental health disorders. Ethics approval and informed consent were not required for this narrative review.

Types of Medication Non-adherence (MNA)

MNA can be categorized into primary and secondary MNA. Primary non-adherence is when patients fail to fill a new prescription and do not initiate the medication as prescribed by their healthcare provider. Secondary non-adherence is when a patient fills a prescription but does not take the medication as prescribed by their healthcare provider.[7] Though there are many reasons for non-adherence, they can be divided into two groups: unintentional and intentional. When a patient tries to adhere to the prescribed course of care but is hindered by circumstances beyond their control, it is known as unintentional non-adherence (UNA). Examples include forgetting to take a medication, having trouble using it, being unable to pay for it, or having difficulty remembering or understanding the directions. When a patient chooses not to adhere to the treatment instructions, it is known as intentional non-adherence. This may occur for several reasons, including worries about adverse effects, doubts about the efficacy of the therapy, values or personal convictions that clash with the recommended course of treatment, or the patient's belief that the prescription is unnecessary.[6,8] In a systematic review that examined the available studies on factors influencing non-adherence to antipsychotic medication among individuals with serious mental illness (SMI), several modifiable factors were identified. Lack of insight was the most frequent cause of non-adherence, which was observed in 55.6% of the included studies. Substance abuse ranked second at 36.1%, followed by a negative attitude toward medication at 30.5%, medication side effects at 27.8%, and cognitive impairments at 13.4%. One significant finding from the review was that a negative attitude towards medication was a crucial factor directly linked to intentional non-adherence, serving as a mediator between insight and therapeutic alliance. Additionally, substance abuse emerged as a single variable consistently associated with UNA across various types and stages of severe mental illness.[9] Earlier studies indicate that substance abuse contributes to intentional and UNA to medication. Those involved in substance use can result in a disorderly lifestyle, which makes it difficult to follow the prescribed medication regimen. Furthermore, substance misuse can directly affect judgment on health behaviors, causing individuals to deny their illness and attribute symptoms solely to substance misuse rather than recognizing a mental health condition, ultimately resulting in non-adherence.[10] In a prospective study involving patients with schizophrenia or schizoaffective disorder, it was observed that by the end of the follow-up period, 58% did not adhere to their treatment regimens. These non-adherent patients were further divided based on their non-adherence, with half (50%) categorized as intentionally not adhering (INA). In comparison, the remaining 50% demonstrated UNA. The primary reasons for INA patients were a lack of belief in the necessity of treatment, a desire to minimize or avoid potential adverse effects, an attempt to make the treatment regimen more convenient for their daily routine, and a curiosity about the outcome without treatment. In UNA patients, the predominant reasons included forgetfulness, financial constraints and difficulties accessing medication, misunderstanding, and the intricacy of the treatment plan. Some patients experienced mixed reasons, involving a combination of factors from the INA and UNA categories.[11]

Challenges in Medication Adherence for Mental Health Disorders

Maintaining medication adherence in mental health disorders presents a variety of challenges. MNA is a complicated issue affected by five main interrelated factors: Factors related to the healthcare team and the healthcare system, factors related to the patient, factors related to the treatment itself, socioeconomic factors, and factors related to the specific medical condition.[12] A comprehensive review of the factors contributing to non-adherence to antidepressants in Nepal has identified several significant barriers that fall into distinct categories. Patient-related factors encompass issues like forgetfulness, concurrent health conditions, and misunderstandings regarding the illness and the prescribed medication. Medication-related factors include taking multiple medications, experiencing adverse effects, managing a high pill burden, and facing financial obstacles related to the cost of antidepressants. In healthcare system-related factors, the relationship between physicians and patients and the quality of communication and support from healthcare professionals significantly influence adherence. Socio-cultural factors such as cultural and religious beliefs, as well as societal stigma surrounding mental health and the use of antidepressants, play a substantial role in determining whether individuals adhere to their prescribed treatment. Logistical factors, like access to healthcare systems and the availability of transportation, can also impact adherence.[13]

Initial adherence is a predictor of long-term adherence and, thus, is a crucial metric to explore and support. Persistent low levels of initial adherence were seen among psychiatric outpatients in a general hospital in China. The study identified several primary reasons for patients not returning for their follow-up visits within the recommended timeframe. These reasons included patients feeling that they were getting better and no longer needing a follow-up, not experiencing any improvement in their condition, experiencing noticeable side effects from their medication, fearing potential side effects of the medication, facing travel inconvenience to the hospital, lacking time to return, failing to schedule appointments, actively refusing the follow-up visit, acknowledging financial difficulties, and expressing dissatisfaction with the hospital's environment.[14]

A recent systematic review conducted in India revealed that approximately 50% of individuals suffering from psychiatric disorders do not adhere to their prescribed psychotropic medications. Several factors contributed to MNA, including a negative attitude towards medications, multiple medications, more severe illness, a lack of insight into their condition, and the high cost. The most commonly reported reasons for MNA included experiencing undesirable side effects, encountering financial obstacles, not perceiving the medications as necessary, lacking knowledge and awareness regarding the course of their illness, and not seeing any noticeable benefits from the medications.[3] A research based on secondary analysis of data from a randomized controlled trial (RCT) across 49 primary care health centers investigated the correlation between psychosocial factors and medication adherence among individuals in rural southern India managing both non-communicable diseases (NCDs) and common mental disorders (CMDs). The results highlighted a strong connection between increased internalized stigma associated with mental illness, reduced social support and lower medication adherence in these patients. This study offers a comprehensive understanding of how psychosocial aspects affect medication adherence in a substantial sample of rural primary care patients dealing with both NCDs and CMDs.[15] A qualitative observational research was conducted in the outpatient psychiatry services of a teaching hospital in South India. The study included participants aged between 18 and 65 years, comprising patients or caregivers. Eligible participants had a current diagnosis of conditions such as schizophrenia, unspecified psychosis, BD, or MDD, with a minimum illness duration of one year and a treatment duration of at least six months. Among the identified challenges to medication adherence, side effects emerged as the most prevalent issue, followed by patients' limited insight into the necessity of treatment. Difficulties related to transportation, logistical constraints, and challenges in taking leave from work were highlighted as the most common obstacles affecting adherence to follow-up appointments.[16] A cross-sectional observational study conducted at a tertiary care centre in southern India sought to explore the determinants of MNA among individuals managing severe mental disorders. The study analysed patient-related factors, caregiver attitudes toward medication, and the effectiveness of doctor-patient communication. The results revealed that increased illness severity, self-stigmatization, and opposing viewpoints held by both patients and caregivers regarding psychotropic medications were correlated with reduced adherence to the prescribed medication regimen.[17] A cross-sectional study was conducted at a tertiary care private hospital's psychiatric outpatient department in South India, involving individuals aged 18 and above who had been prescribed at least one psychotropic medication for a minimum of one month. The study revealed a non-adherence rate of 43% among psychiatric patients. Notably, individuals with lower levels of education displayed higher rates of non-adherence. The number of drugs prescribed for a patient is also associated with medication adherence, with a higher number of drugs leading to lower adherence. Non-adherence was notably associated with the patient's family income. The reasons for non-adherence varied, with 33.5% attributed to patient-related factors, followed by drug-related factors at 32%, and disease-related factors at 31%. The most commonly cited reasons for patient-related factors included the patient's commitments and inadequate family support. On the other hand, regarding medication-related causes, adverse drug reactions (ADRs) and the expenses associated with the medications emerged as the primary reasons for non-adherence. In disease-related aspects, individuals most frequently reported self-monitoring for symptom recurrence and a subjective sense of improvement as the primary reasons for their adherence patterns.[18]

The key hurdles to adhering to psychotropic medications include social stigma, cultural beliefs, complex drug schedules, concurrent medical conditions, side effects with psychotropics, medication costs, limited access, lack of family backing, insufficient knowledge about the illness trajectory, and the importance of following medical guidance. To tackle these challenges, a comprehensive approach to psychiatric medication adherence is essential. This involves prescribing appropriate medications and educating patients, involving family or their support networks, simplifying treatment regimens when feasible, promptly managing side effects, and fostering open communication between patients and healthcare providers. Tailored treatment plans, patient education initiatives, consistent follow-ups, and a supportive therapeutic relationship play crucial roles in significantly enhancing medication adherence and, consequently, improving the overall management of psychiatric conditions.

Approaches to Enhance Medication Adherence in Mental Health Disorders

Non-adherence remains a severe public health issue that is likely to persist. However, more clinical and scientific focus should be given to developing more effective methods for identifying and managing treatment non-adherence.[19] Efforts to enhance adherence to treatment involving drugs encompass using extended-release injectable substances, simplified dosing schedules, and better handling of side effects. Enhancements concerning the patient involve tailored prompts, psychological and behavioral interventions, and careful medicinal treatment alongside proactive community

care. Developments in healthcare services encompass novel technology-centred oversight, mobile apps, digital medication setups, and communication reliant on artificial intelligence.[20] After conducting a targeted analysis of the existing literature concerning adherence to antidepressant medication among individuals with depression, ten clinical recommendations were developed to enhance adherence to antidepressant treatment. The ten clinical recommendations can be categorized into four main areas. Four recommendations focus on the patient, emphasizing the importance of building a solid therapeutic relationship, conducting thorough history-taking, assessing depressive symptoms, and addressing adverse effects while improving access to clinical care. Three recommendations centre around prescribing practices, advocating for psychoeducation, personalized antidepressant selection, and simplified treatment regimens. Two recommendations pertain to mental health services, emphasizing the need for improved access to mental health care and the implementation of incentives for promoting and monitoring adherence. Finally, one recommendation highlights the significance of measuring adherence through scales and therapeutic drug monitoring.[21] According to a systematic study summarizing the effectiveness of interventions to enhance medication adherence in individuals with schizophrenia or BD, beneficial approaches included behavioral and educational techniques. Treatment adherence can be increased by combining one-on-one intensive training programs. These education sessions concentrate on diagnosis, symptoms, treatment, relapse, and medication reminders at patients' residences. These interventions, which include aspects of motivational interviewing, education, and medication self-management, assess adherence rates using a variety of assessment instruments over prolonged follow-up periods.[22]

A quasi-experimental study was carried out at a tertiary care hospital in northeast India to assess the efficacy of targeted interventions in enhancing treatment adherence among individuals with mental health disorders. Thirty randomly selected patients participated in this preliminary study. The interventions included psychoeducation, personalized explanations of individual behaviors, tailored memory aids, demonstrations on organizing and using pill organizers, and the distribution of an informative booklet. This study indicated that adherence to treatment among individuals with mental health conditions can be enhanced through uncomplicated interventions such as providing psychoeducation, detailed medication explanations, and detailing some memory cues.[23]

Improving treatment adherence is crucial for aiding the recovery of individuals with mental illnesses despite the availability of various pharmacological and psychosocial therapies. In India, where non-adherence is widespread and obstructs recovery, interventions aimed at boosting medication adherence in psychiatric treatment are essential. It is essential to differentiate between intentional and UNA because the reasons and solutions for each type of non-adherence can differ. For example, addressing UNA may involve providing reminders or simplifying medication regimens, while managing intentional non-adherence may involve addressing patients' concerns and beliefs about the treatment. By identifying the reasons for non-adherence, healthcare providers can work with patients to develop individualized strategies to improve medication adherence and promote better health outcomes.

Interventions to Improve Unintentional Non-Adherence

1. Simplify the regimen: This can be achieved by reducing the number of medications prescribed and simplifying dosing schedules. A retrospective cohort study conducted in the United States on 224,412 individuals diagnosed with either MDD or obsessive-compulsive disorder found that simplifying the treatment plan and reducing the number of pills led to enhanced adherence and/or persistence with sertraline therapy.[24] Making the medication schedule more straightforward helps patients avoid confusion regarding dosing times. This simplification can aid them in taking their medication regularly, thereby boosting adherence to the prescribed regimen. More extensive research focusing specifically on the impact of reducing the number of pills, whenever possible, on medication adherence in people with mental health disorders in India is essential. Bridging this research gap is critical for understanding and effectively addressing this essential treatment element.
2. Spacing out follow-ups/providing improved access to mental health—A qualitative study in India identified that reducing the frequency of follow-ups and providing medications at nearby locations, including primary health centers, were the most commonly reported methods to enhance adherence to follow-up appointments. The study acknowledges the praiseworthy objective of the National Mental Health Program, aiming to enhance the accessibility of psychiatric care at the primary care level. However, the study emphasizes the need for additional coordinated efforts to implement this objective effectively.[16] Randomized trials are necessary to establish the efficacy of implementing less frequent follow-up appointments and facilitating access to medications at local health centers to relieve patients from the financial strain of travel costs. Additionally, these trials are crucial in validating whether this strategy supports individuals in managing work-related challenges, such as taking time off from work, and ultimately contributes to improving medication adherence.
3. Use long-acting injectable (LAIs) drugs: A multicentre cluster randomized trial conducted in the United States found that LAIs antipsychotic drugs, as compared to treatment as usual in individuals experiencing early-stage schizophrenia, can significantly prolong the time before they require hospitalization. This outcome holds substantial importance both on a personal and economic level. Therefore, healthcare providers should seriously contemplate adopting LAIs treatments for patients in the initial phases of their schizophrenia.[25] In five Indian cities, a cross-sectional survey involved experienced psychiatrists from various healthcare settings and compared treatment adherence between Oral Antipsychotic Treatments (OATs) and LAIs. Findings indicated higher

adherence among LAI users (78%) compared to oral medication users (50%) over the past six months. Psychiatrists observed a greater likelihood of treatment discontinuation within the initial six months among patients on OATs. Notably, patients treated with LAIs exhibited a lower relapse rate as compared to 60% of OAT users. Despite the observed enhanced treatment adherence with LAIs, they are not preferred for schizophrenia treatment in India due to perceived higher costs.[26] The availability and utilization of LAIs psychotropics in India may face certain challenges. Factors such as cost, accessibility, healthcare infrastructure, awareness and acceptability among healthcare professionals, and patient preferences could influence their adoption.

4. Provide medication-improving aids: Supply medication calendars or timetables detailing when to administer medications, medication cards, drug charts, or informative documents about medications. Additionally, it offers specialized packaging like pill organizers, unit-dose packaging, and unique containers that indicate the appropriate dosing times.[27] In a Phase 3b multicentre study that was open-label, researchers examined whether using aripiprazole tablets with a sensor (referred to as AS) could lower the rates of psychiatric hospitalization among adults with mild-to-moderate schizophrenia, as compared to the standard oral medication regimen (SOC). The AS system, which assists in tracking medication intake, was also investigated for its potential to enhance symptom management, potentially leading to a decrease in the need for acute psychiatric care in individuals with schizophrenia.[28]
5. Medication/follow-up reminders: A randomized controlled study conducted at a primary health centre in Lebanon examined the effectiveness of a visual self-assessment card in boosting patients' attendance at follow-up appointments with their healthcare provider. Prioritizing strategies to improve adherence to follow-up appointments should be fundamental to integrating mental health services. This research indicated significant promise for cost-effective interventions and emphasized exploring innovative ways to enhance the use of reminders for promoting compliance.[29] A cross-sectional study conducted in Puducherry suggested that employing short message service (SMS), voice calls, and mobile applications can enhance medication adherence among individuals with severe mental illness. The top-rated service via mobile phone platforms was sending reminders regarding hospital appointments and medication. A majority of the participants expressed a preference for voice calls as their chosen method for receiving these reminders. The frequency most favoured for these reminders was twice a week.[30] A pilot study conducted in London found that SMS or text message reminders on appointments improve patient attendance. The use of text message reminders resulted in a 37% reduction in the number of missed appointments, demonstrating the potential impact of this intervention.[31] A study carried out in Puducherry used an open-label, rater-blinded, RCT to investigate the impact of text message reminders on medication adherence in stable adult outpatients with bipolar I disorder who were on maintenance medication. The research revealed that a three-month intervention involving text message reminders effectively enhanced medication adherence in these patients. Notably, the positive effects persisted for at least three months, even after discontinuing the intervention.[32] A systematic review has determined that telemedicine holds promise in improving medication adherence among individuals managing depression, BD, or schizophrenia. However, further investigations are necessary to investigate technology adaptation to the specific needs of various non-adherence patterns.[33] Artificial intelligence can potentially improve medication adherence through nudge interventions. However, it is imperative to prioritize privacy, data security, and ethical concerns when implementing these AI technologies.[34]
6. Financial incentives: A systematic review incorporating 26 articles encompassing Randomized Controlled Trials (RCTs), cohort studies, qualitative research, and ethical analyses, adherence to antipsychotic medication can be enhanced through financial incentives.[35] A recent article highlights the controversy surrounding financial incentives for medication adherence within mental healthcare. However, much of the debate stems from a misunderstanding of the nature and intent of these incentives. Contrary to assumptions, financial incentives are not aimed at impacting informed consent regarding treatment choices. Instead, their purpose is to aid them in adhering to a treatment they have willingly agreed to undergo.[36] In a country like India, where financial constraints have been identified as one of the leading causes of MNA, providing incentives could enhance medication adherence and adherence to follow-up appointments.

Interventions to Improve Intentional Non-adherence

1. Patient-centred care (PCC)/Shared Decision making (SDM): This involves engaging patients and their families in healthcare planning and is a beneficial strategy for enhancing medication adherence. Patients who feel respected and informed are more likely to adhere to the treatment plan.[37] In psychiatric diseases, such as BD, the conception of treatment adherence has changed from illness- and clinician-centred approaches to patient-centred ones.[38] A research conducted in Karnataka aimed to examine the treatment adherence tendencies among individuals with neuropsychiatric illnesses attending a rural community mental health centre. The study underscores the necessity of implementing patient-centric approaches to engage individuals in treatment services, pinpointing the exact stage and reasons for discontinuation. Strategies such as coordinating mental health services within primary healthcare, adopting home visit approaches, employing tracing and tracking methods, and leveraging suitable technology are recommended to address the challenge of treatment non-adherence in mental health services provided at community mental health centers.[39] Recent Canadian research on antidepressants has

revealed that no one antidepressant stands out as superior to others for treating individuals with MDD. This suggests the potential for improving treatment adherence and effectiveness by customizing antidepressant therapy to match each patient's preferences. To facilitate this, the Antidepressant Decision Support Tool was created to assist healthcare providers and adult patients in collaborative decision-making when choosing a personalized and ideal first-line antidepressant for acute MDD treatment.[40]

2. Psychoeducation: According to the General Principles of Psychoeducation outlined in the Clinical Practice Guidelines for Psychoeducation in Psychiatric Disorders, psychoeducation has emerged as a valuable adjunctive therapeutic tool for patients and their families dealing with various psychiatric disorders. Its effectiveness in improving treatment adherence and preventing relapses has been well-demonstrated in clinical trials conducted in cases of schizophrenia and BD. Psychoeducation remains a straightforward, adaptable, cost-effective treatment approach with significant potential. It is pivotal in empowering patients and their family members by equipping them with a deeper understanding of their mental health condition. This knowledge, in turn, helps individuals and their families cope more effectively with the challenges posed by the condition and manage it more successfully.[41] A quasi-experimental study conducted in Uttarakhand evaluated the effectiveness of family psychoeducation in enhancing medication adherence among specific psychiatric inpatients from a tertiary care centre. The findings suggest a significant necessity for regular implementation of family psychoeducation within hospitals. Patients with higher self-esteem will likely exhibit enhanced social and occupational functioning, leading to better treatment adherence and reduced caregiver burden.[42] A systematic review carried out in India aimed to examine the influence of psycho-educational interventions on medication adherence among patients with Bipolar Affective Disorder (BPAD). The review concluded that psychoeducation stands as a promising element in managing BPAD alongside pharmacotherapy. The review recommends integrating psychoeducation as a standard practice within healthcare services in inpatient and outpatient departments.[43]
3. Patient-Doctor Communication: Patients who express positive experiences communicating with their physicians tend to exhibit higher levels of satisfaction with their healthcare. This satisfaction often leads to a greater willingness to provide relevant information crucial for precise problem diagnosis, adherence to medical advice, and compliance with prescribed treatments.[44] A cross-sectional observational study conducted at a tertiary care hospital in Puducherry among patients with severe mental health disorders and their caregivers found that improved communication between doctors and patients was linked to higher levels of medication adherence.[45] A research investigation in Andhra Pradesh focused on non-adherence to pharmacotherapy among psychiatric patients. The study was conducted over seven months among patients attending the psychiatry outpatient department; the study utilized a tailored questionnaire to assess the reasons behind treatment non-adherence. The study's findings revealed that a primary cause of non-compliance was a lack of understanding of the illness, emphasizing the significance of psychoeducation. Furthermore, the study highlighted the growing acknowledgment of the role of effective communication between patients and doctors in promoting treatment adherence.[46]
4. Psychosocial Interventions/Cognitive Behavioural Strategies: In Chandigarh, a longitudinal study compared patients diagnosed with BD and their caregivers to those with schizophrenia. The research explored treatment attitudes and related factors, revealing that patients' attitudes toward medication treatment strongly influence their adherence. These attitudes persist and are primarily linked to insights into their condition, understanding of the illness, and satisfaction with the treatment among patients and their caregivers. These findings have implications for guiding psychosocial interventions intended to enhance treatment attitudes and promote adherence among individuals dealing with BD and schizophrenia.[47] Implement behavioral techniques such as cognitive-behavioral therapy (CBT) to address negative beliefs or attitudes contributing to non-adherence. In a non-randomized, controlled, interventional study that examined the impact of cognitive CBT-based interventions by community pharmacists on medication adherence and related measures in patients with depression, the findings demonstrated that CBT could assist patients in identifying and changing thought patterns that obstruct their commitment to adhering to their treatment.[48]
5. Increase community support: In Karnataka, a cluster randomized trial was conducted among rural Indian women diagnosed with depression. The increased community support delivered by trained Community Health Workers (CHWs) to rural women diagnosed with major depression resulted in a higher number of women adhering to antidepressant treatment and experiencing improved retention in their treatment plans. In economically constrained nations, it is vital to explore whether trained community-level workers with easier community access can offer psychosocial interventions.[49]
6. Address Side Effects: If the medication's side effects contribute to non-adherence, work with the patient to manage these effects. Adjusting medication dosages, switching, or combining medications can help mitigate side effects. Educating patients about the typical side effects of their prescribed medications, minimizing potential adverse reactions, and emphasizing the necessity of treatment can help mitigate patients' apprehensions and worries related to ADRs.[27] A qualitative study in India suggested that selecting medications with fewer adverse effects could enhance adherence.[16]

More comprehensive reviews that assess interventions to improve adherence among individuals with mental health disorders in India are needed. Although there is proof indicating that interventions can enhance medication adherence

within Indian psychiatry, further investigation is required to pinpoint effective strategies specifically designed for the Indian setting. More systematic reviews and RCTs are essential to assess the efficacy of interventions promoting adherence in India.

Conclusion

A comprehensive and integrated approach is essential to tackle non-adherence to psychotropic medications among patients with mental health disorders. The foremost priority in this approach should be creating a supportive and comforting environment for patients and their caregivers. Applying comprehensive strategies that address the underlying causes of non-adherence can yield highly favourable outcomes. Recognizing that there is no universal strategy to deal with non-adherence in mental health issues and that each patient possesses unique requirements and characteristics is of utmost importance. Healthcare providers should treat every patient with compassion, understanding, and a willingness to modify their plans in light of their unique requirements and circumstances.

Our recommendation for clinicians is to emphasize patient education, address the side effect pattern of prescribed medications, customize treatment plans to suit individual requirements, establish a consistent schedule of follow-up appointments, and actively engage patients in shared decision-making to enhance medication adherence among individuals with mental health disorders. In addition to clinicians, other healthcare professionals, such as nurses, pharmacists, and psychologists, have a vital role to play in enhancing medication adherence. They can contribute by educating and counselling patients, monitoring potential side effects, and emphasizing the significance of adhering to the prescribed medication throughout the treatment. Pharmacists also can monitor the consistency of medication refills and detect any indications of non-adherence. On the other hand, administrators can provide critical support by investing in health information technology to disseminate refill reminders through automated systems or direct communication with patients, thereby assisting them in adhering to their prescribed medication regimens. Furthermore, administrators should prioritize thorough training for all healthcare staff concerning medication adherence and the principles of PCC.

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