

# Strategies to Improve Tuberculosis Treatment Adherence

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## DESCRIPTION

Tuberculosis (TB) remains a global health concern, with millions of people affected each year. Successful TB treatment relies on strict adherence to a lengthy and complex regimen of antibiotics, typically lasting six months or more. Non-adherence to treatment not only jeopardizes the health of the individual but also fuels the emergence of drug-resistant TB strains, making the disease even more challenging to control. To combat this issue, patient-centered interventions have emerged as effective strategies to improve TB treatment adherence.

### The challenge of TB treatment adherence

TB treatment is demanding, involving a combination of multiple antibiotics taken daily over an extended period. This complexity can lead to challenges in adherence, which, in turn, can result in treatment failure, relapse, or the development of drug-resistant TB strains.

### Various factors contribute to non-adherence

**Stigma and social isolation:** The stigma associated with TB can deter individuals from seeking care or openly discussing their diagnosis, making it difficult to access support.

**Treatment side effects:** Some TB medications may have side effects, including nausea, dizziness, or skin rashes, which can discourage patients from continuing their treatment.

**Economic and social barriers:** Limited access to healthcare facilities, transportation costs, and the need to take time off work can pose significant barriers to treatment adherence.

**Psychosocial factors:** Patient's mental health, including depression or substance use disorders, can also hinder adherence.

**Healthcare provider factors:** The quality of the patient-provider relationship, communication, and counselling can influence adherence.

### The significance of patient-centered care

Patient-centered care is an approach that prioritizes the patient's

values, preferences, and needs throughout the healthcare journey. In the context of TB treatment, patient-centered care recognizes that individuals are more likely to adhere to treatment when they are actively engaged in their care and have a voice in decision-making.

### Key patient-centered interventions

**Education and awareness:** Comprehensive patient education about TB, its treatment, and the importance of adherence is foundational. Providing clear, culturally sensitive information helps patients understand the disease and their role in managing it.

**Treatment plans tailored to individual needs:** Recognizing that one size does not fit all, healthcare providers should work with patients to create treatment plans that accommodate their unique circumstances, including work schedules, childcare responsibilities, and transportation limitations.

**Patient counselling and support:** Ongoing counselling and emotional support are critical for patients throughout their treatment journey. This includes addressing fears, concerns, and any misconceptions about TB and its treatment.

**Community-based care:** In some cases, community health workers or outreach programs can help bridge the gap between patients and healthcare facilities. These workers can provide education, monitor treatment, and offer social support to patients in their communities.

**Digital health solutions:** Mobile applications and text messaging reminders have shown promise in improving treatment adherence. These tools can send patients reminders to take their medication, provide educational resources, and connect them with healthcare providers.

### Impact on patient outcomes

The adoption of patient-centered interventions in TB treatment has yielded positive results:

**Improved adherence rates:** Studies have shown that patient-centered approaches significantly enhance TB treatment adherence.

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Patients who actively participate in their care are more likely to complete their treatment regimens.

**Enhanced healthcare quality:** Patient-centered care not only improves adherence but also fosters trust between patients and healthcare providers, resulting in better overall healthcare quality and patient satisfaction.

**Economic benefits:** Improved adherence reduces the economic burden of TB by preventing treatment failure and the costly management of drug-resistant TB cases.

### Case studies in patient-centered TB care

**Directly Observed Therapy (DOT):** DOT is a patient-centered approach where a healthcare worker observes and records the patient taking their medication. This approach has been effective in improving adherence and is widely used in TB control programs globally.

**Community Health Workers (CHWs):** In settings with limited access to healthcare facilities, CHWs have played a crucial role in TB care. They provide education, support, and help monitor patient's treatment, bridging the gap between the healthcare system and the community.

**Mobile health solutions:** Mobile health applications and text message reminders have been successful in improving treatment adherence. For instance, the "99DOTS" system in India uses mobile phone calls and SMS messages to remind patients to take their medication and notify healthcare providers of missed doses.

### Challenges and future directions

While patient-centered interventions have proven effective in improving TB treatment adherence, several challenges remain:

**Resource limitations:** Implementing patient-centered care approaches requires resources, including trained healthcare workers and infrastructure. In resource-constrained settings, scaling up these interventions can be challenging.

**Data and monitoring:** Collecting and analyzing data on the impact of patient-centered interventions is crucial for evaluating their effectiveness and making evidence-based improvements.

**Mental health integration:** Addressing patients' mental health needs, such as depression and anxiety, is essential for comprehensive care and treatment adherence.

### CONCLUSION

Patient-centered care is at the forefront of efforts to improve TB treatment adherence and, by extension, TB control and prevention. Recognizing that patients are active participants in their healthcare journey and tailoring interventions to meet their unique needs can yield significant benefits. As healthcare systems worldwide continue to evolve, the integration of patient-centered approaches into TB care is not only essential for achieving better health outcomes but also for respecting the dignity and autonomy of individuals affected by this challenging disease.