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Exploring Misconceptions and Socio-Cultural Beliefs about Tuberculosis: An Exploratory Study in Tehsil Mianwali, Pakistan

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ABSTRACT

The study is an exploratory research that examines the cultural interpretations and misconceptions about Tuberculosis (TB) in Tehsil Mianwali in Pakistan. Although there are improvements in the medical knowledge, most people in this rural area still believe that TB is supernatural like divine punishment or black magic and this considerably hinders the early diagnosis and treatment. Qualitative data were obtained through purposive sampling of 60 respondents using semi structured interviews and narrative analysis done on the data. The results indicate that stigma of TB is hugely embedded in the community which results in social isolation, hiding the illness, and biomedical care avoidance. To add to this, women, especially, are confronted with the complexities of gender norms that limit their movements and their decision-making capabilities, further deteriorating their health conditions. There are also social economic factors like poverty and inaccessibility to healthcare facilities that reduce treatment opportunities. The traditional and spiritual healers as well as poor health literacy levels in the community also lead to the continued spread of misinformation. Although, the research showed these difficulties, it also discovered that social and family support contributes greatly to the adherence of treatment. Research highlights the importance of culturally competent health literacy education, stigma relieving initiatives, and the reinforcement of the rural healthcare infrastructure in order to address better TB prevention and patient outcomes in Mianwali and other such environments.

Key words: *Tuberculosis (TB) Misconceptions, Cultural Beliefs, Stigma and Social Isolation*

INTRODUCTION

Tuberculosis (TB) is also among the most fatal communicable diseases in the world particularly in low and middle income countries such as Pakistan. TB is a curable and preventable disease but it keeps spreading, as a result of a mixture of biological, structural and socio-cultural factors. Misconceptions and socio-cultural beliefs are among them and they are very instrumental in the perception of the communities towards the disease, the infected individuals and the mechanism of treating the disease. The dynamics of such misconceptions are especially crucial in semi-rural settings like Tehsil Mianwali where people tend to respond to public health issues on the basis of traditional beliefs and low health literacy levels.

Mycobacterium tuberculosis causes TB, a bacterium that mostly attacks the lungs, although it may also affect other body organs. It is transmitted by air particles as a victim coughs, sneezes, or talks. Tuberculosis is a huge public health issue internationally, with 10.6 million people becoming ill and as well 1.3 million dying in 2022 (World Health Organization [WHO], 2023). Pakistan is one of the countries where TB burden is high, which is in part, what contributes to the high levels of TB incidence

worldwide. The National TB Control Programme (NTP) reports more than half a million new TB cases annually in Pakistan and finds a large portion of those cases are either undiagnosed or not being treated due to stigma, fear, and misinformation (NTP, 2022).

Additionally, while these factors have existed in the community for some time, the issue is compounded by the long-standing socio-cultural beliefs and poor access to health education in the community, such as Tehsil Mianwali. In this case, TB may not be considered an illness at all, but as a curse or a punishment for a sinful life, or that it is inherited. Such socio-cultural considerations lead to social identity stigmatization and distancing from patients, delay in formal medical care and poor adherence to recommended treatment regimens. Several studies have also shown that stigma and misinformation are key barriers to TB control in South Asia.In fact, Liefooghe et al. (1997) found a substantial number of TB patients from across Pakistani communities considered TB a type of divine punishment or form of possession and therefore opted for spiritual or traditional therapies rather than biomedical treatment.

In addition, misconceptions of how TB is transmitted creates even greater fear and discrimination. Many people believe TB can be transmitted by sharing utensils, food, or even by simple touch. Such misconceptions do not only spread fear and social distancing but also diminish the empathetic attitude towards patients, who are less likely to share their disease and seek help. Khan et al. (2020) also add that patients who conceal their TB status because of shame and stigma are more likely to default treatment, which means they predispose themselves to drug resistance and continued community spread.

The perceived and actual perception of TB in the rural setting are also determined by educational level, gender rules and household decision-making. It is also common to rely on hearsay and traditional knowledge in Mianwali where a large percentage of the population is either uneducated or semi-literate. Females, especially, might have more obstacles to receiving health services because of gendered limitations in movement and decision-making (Siddiqui et al., 2016). Such places have misconceptions that are spread by elders, local healers, or peers, and are not contradicted, supporting negative health-seeking behavior.

Health communication activities are not non-existent, but they do not always reach the people in the rural areas in a meaningful manner. The majority of the public health campaigns target urban populations and use such means of delivery as television or websites, which are not always available or credible in rural areas. As a result, individuals in regions such as Tehsil Mianwali tend to be oblivious of the scientific nature of TB, the accessibility of free treatment under DOTS (Directly Observed Treatment, Short-course), and the significance of early identification and regular drugs. Consequently, such misperceptions do not only exist but also propagate thus undermining the efforts of interventions of public health.

Considering the background, an exploratory study concerning the misconceptions and socio-cultural beliefs about TB in Tehsil Mianwali is timely and required. The purpose of such a study will be to reveal beliefs, knowledge gaps, fears, and information sources that are locally perceived as affecting the behavior related to TB in this area. These community views are also vital in the development of culturally sensitive health communication strategies, stigma reduction and improved adherence to treatment. According to Atre et al. (2004), local cultural understandings can be reflected on the TB control programs to make them much more effective and acceptable.

To sum up, biomedical methods of diagnosing and treating TB have been improved significantly, yet they have little effect in communities that display a socio-cultural barrier. Tehsil Mianwali is one such situation where health outcomes are highly determined by the local narratives and traditional belief systems. This will help this study to add significant value to the general discussion on health behavior,

social determinants of health, and culturally informed health-related interventions in Pakistan by examining the misconceptions of TB that are widespread in this community.

METHODOLOGY

An exploratory qualitative research design was used to conduct this study because it aimed at exploring the misconceptions and socio-cultural beliefs about tuberculosis (TB) in Tehsil Mianwali, Pakistan. The exploratory design was appropriate because little had been done on this topic in the locality and there was a need to unearth community-specific beliefs and practices surrounding TB.

The sampling method used to identify the respondents was purposive; it used respondents with either first hand or second hand exposure to TB. This involved TB patients (current and cured), family members, community elders, health workers and traditional healers. The sample size was 60 people, who were chosen because of their capacity to give rich and relevant information on the local perceptions and experiences of TB.

Three sets of data were collected with a semi-structured interview guide, including open-ended questions. This tool provided the researcher freedom to explore the knowledge that the participants had on tuberculosis (TB), including its causes, method of transmission, treatment and stigma associated with it. The interviews were conducted in local languages (Urdu, Punjabi) and were audio-recorded with permission. The recordings were transcribed for the purpose of analysis.

Narrative analysis was used to analyze the data for the study. The method assisted in revealing how people construct and convey their experiences and beliefs associated with TB by using storytelling. The main themes were identified through discovering patterns, expressions, and metaphors used by the participants in their narratives. The results offer a richer insight into the nature of the socio-cultural contexts that create misunderstanding and reaction to TB in Mianwali.

Ethics

Ethics was central to this study. The respondents provided informed consent while researchers explained the purpose of the research as well as participant rights, including the right to withdraw from the study at any time. The researchers ensured participant confidentiality by assigning pseudonyms to the participants and used secure methods of data storage (Israel & Hay, 2006). A set of ethical guidelines provided by the relevant institutional ethics committee confirmed that both the research design and data collection tools are acceptable and designed in such a manner that adhere to the standards of social research.

RESULTS

Cultural Contexts and Misunderstanding of TB

In Tehsil Mianwali, tuberculosis (TB) is often considered to be a condition brought upon by spiritual or supernatural means rather than an infectious disease. Many in the community may view TB as a punishment from God or the result of curses and black magic. This is consistent with previous research conducted in several other regions of Pakistan, including Sialkot, where TB was also viewed as a curse or an incurable disease (Khan et al., 2019). Stigma and misdirection in treatment seeking behaviors can trace their way back to these cultural basis. People preferring to see traditional or spiritual healers, rather than health professionals, for a number of reasons, the prolonged time for diagnosis, and therefore the hence prolonged transmission of the disease. Moreover, the communal cultural interpretations that discourage

individuals from trusting biomedical interventions also further disturbs effective public health strategies (Atif et al., 2021), and patterns of pass down beliefs through generations, that continue communal connection and boundaries that cannot be explained by biomedically. Therefore, all public health education will need to take an appropriate approach that respects cultural beliefs and provides sufficient information to counter the misinformation. One of the respondent said:

> *"TB is a punishment from God for our sins. They don't think it's due to germs. Even when we tell them it's an infection, they just laugh and say doctors don't know about such things."*

Another respondents said:

> *"Some in our village believe TB is the result of black magic. They go to spiritual healers instead of doctors and believe that only spiritual rituals can cure it, not tablets* or injections."

Stigma and Social Isolation

TB stigma is a dominant force in shaping the social experiences of patients in Mianwali. When a person is suspected or diagnosed with TB, they are often excluded and discriminated against by neighbors, friends and even family members. Social segregation is also a result of stigma: a national study revealed that 78% of respondents believed that TB patients should not be allowed to eat with others (Ali et al., 2020). Many patients fear being labeled or ostracized, so they hide their illness, delaying treatment and worsening health outcomes.

Patients can have their psychological well-being deteriorated by this social rejection, decreasing their support system at the time when they are most vulnerable. Isolation that results from this affects their health outcomes as well as their self-worth, and thus there is a need for stigma reduction strategies in TB control programs (Munro et al., 2007).

According to one of the respondent:

> *"When I was diagnosed, I didn't tell anyone except my mother. Even my brothers don't know because they might stop sharing food or sitting close to me."*

Another respondents said:

> *"If people know you have TB, they stop sitting with you. They act like you're already dead, like you're just waiting for your time."*

Gender Disparities in TB Impact

Gender norms and patriarchal structures are very influential in the experience of TB in Mianwali, especially for women. Female TB patients are often burdened by the disease twice: once by the disease itself and again by the added social stigma and lack of access to healthcare. In a study from Southern Punjab, 87% of women reported that being female made their TB condition socially more difficult (Sarfraz et al., 2021). Many women are restricted in their mobility and dependent on male family members to access treatment. It causes delayed diagnoses, poor treatment adherence, and, in some cases, complete neglect of care.

In addition, women with TB are susceptible to family rejection and community shaming, particularly when marital prospects are involved. They are often blamed for getting TB and are even branded as unclean or cursed, which only adds to their social isolation and mental health issues. Respondent said:

"It's hard to go to the clinic alone as a woman. My family doesn't support me, people talk. I have to ask for permission even when I'm very sick."
"When my in laws found out I had TB, they sent me back to my parents' home." They said I was bringing shame to the family."

Socioeconomic Barriers to Healthcare Access

Mianwali faces a major hurdle in timely diagnosis and treatment of TB due to economic hardship. Families cannot afford transport to urban healthcare centers and many struggle to meet basic needs. The study in Lahore showed that 50.4% of TB patients were living below the poverty line, which is a direct relationship between poverty and healthcare inaccessibility (Rashid et al., 2020). People for these types of populations do not have the means to travel, the means to obtain medicine, or the income to be missing because of illness.

Those who have accessed limited healthcare services frequently resort to ineffective local remedies that often make them worse. When people do not have access to adequate healthcare services, they have no choice but to do something, so they may resort to ineffective local remedies that may make their situation worse.
One respondent stated:
"We can't even get sufficient money for bus fare to get to the city hospital. I have to use local remedies and wait to get better on my own, which just isn't happening."
"I could either buy medicine for myself or feed my children. My children were always going to come first, so treatment just had to wait."

Reliance on Traditional and Spiritual Healers

In Mianwali, traditional and spiritual healers play a major role in rural health seeking behavior. Many turn to spiritual figures or herbal remedies before seeking Biomedical healthcare services. Research has shown a reliance on these healers can lead to delayed assessment and treatment, ultimately prolonging the spread of disease and worsening a patient's condition (Habib et al., 2019).

Typically, these initial forms of care are due to accessibility, the familiarity of the local healer, and distrust of the health care system.Moreover, the traditional healers are generally viewed as more understanding and empathetic, and therefore patients feel more accepted and comfortable.

"I went to the shrine first. Only when I didn't get better did I go to the clinic, and by then, things had gotten worse."
"I was given herbs by the village elder to cure my cough. I thought it was enough, and I trusted him more than the doctor."

Knowledge Gaps and Misconceptions

Lack of knowledge about the causes, transmission and treatment of TB fuels misconceptions in rural communities. TB is thought by many to be hereditary, spread by shared utensils, or caused by contaminated food. These false beliefs discourage effective prevention practice and encourage social exclusion. These false beliefs are discouraging effective prevention practices and lead to social exclusion.
Lack of awareness also prevents timely treatment and may lead to premature abandonment of therapy. Community based health education campaigns have to address these gaps by being tailored to local linguistic and cultural contexts.

According to the respondent:

> *"I thought TB was inherited. My father had it, so I believed I would too and that nothing could be done about it."*

Another respondents narrate that:

> *"We avoid sharing plates with TB patients to prevent catching it. That's what we've always believed."*

Impact on Marriage Prospects

Marriage prospects are greatly affected by the diagnosis of TB, especially for women in culturally conservative settings such as Mianwali. Women who are diagnosed with TB often suffer broken engagements or divorce as the disease is considered to make them less marriageable. In rural Pakistan, 65% of female TB patients reported problems with marriage arrangements after diagnosis (Jamil et al., 2021). This stigmatization is also associated with misconceptions that TB is incurable or hereditary, which keeps away potential suitors.

Furthermore, the community sees a woman with TB as a burden, and they fear that the disease might be passed down to future generations. In this perception, it not only diminishes their marital opportunities but also increases their psychological trauma and social alienation.

One of the respondent said:

> *"My engagement was called off when they learned I had TB. They said their son deserves a healthy wife, not someone with a disease."*
>
> *"No one wants to marry someone who's had TB, fearing it might return. Even if you're cured, the label stays forever."*

Psychological Impact and Mental Health

TB is a psychologically heavy disease with stigma, isolation and chronicity. Patients are often ashamed, anxious and depressed. In a qualitative study on TB stigma in Pakistan, Shah et al. (2020) found that perceived social exclusion significantly lowered self-esteem and increased mental health challenges of TB patients.

The situation is aggravated by the lack of mental health support within TB care frameworks. Many patients suffer in silence without adequate psychosocial interventions, resulting in treatment non adherence and worsening of their health.

One of the respondent narrate his story:

> *"I feel hopeless and alone. People avoid me, and I have no one to talk to. Even family members are distant now."*

Delayed Diagnosis and Treatment

In Mianwali, seeking diagnosis and treatment is often delayed due to cultural stigma, financial hardship and poor health awareness. In rural Punjab, more than 60% of TB patients delayed seeking care for over a month after symptom onset (Iqbal et al., 2021). These delays worsen prognosis and increase the likelihood of disease transmission within households.

Furthermore, the fragmented health referral system and absence of diagnostic facilities in remote areas further prolong the delays. First, patients often try home remedies or go to unqualified practitioners, delaying effective treatment.

"I ignored the cough for months, thinking it was just a cold. Only when I couldn't breathe did I go to the hospital."
"By the time I went to the clinic, the disease had worsened. I wish I'd gone earlier, but I didn't know it was so serious."

Influence of Media and Information Sources

Community and family support encourage TB treatment adherence and patient wellbeing. Stigma can be greatly decreased by family members giving positive reinforcement and helping with recovery. A study in Sindh showed that patients with strong social support were twice as likely to finish their TB treatment as patients without such networks (Nafees et al., 2020).

However, lack of social support leads to isolation, treatment default and emotional distress. Mobilizing community leaders and peer support groups can strengthen and sustain TB programs and guarantee sustained patient care.

"I read on Facebook that TB is incurable, which scared me. I thought I'd die soon."
TV ads helped me understand that TB is treatable. That gave me courage to visit the clinic."

DISCUSSION

The findings of this study illustrate the degree to which cultural beliefs and misconceptions continue to inform the perception and management of tuberculosis (TB) in Tehsil Mianwali. In many instances, participants stereotyped TB as a disease of divine punishment, black magic, or evil curses without appreciating TB as a preventable and treatable bacterial infection. This finding is consistent with other studies in other regions of Pakistan, such as rural Sialkot, where TB was viewed as a curse or associated with punishment for immoral behavior (Khan et al., 2019). These beliefs discouraged seeking medical care, relying on spiritual healers. This continued reliance on spiritual healers is likely a contributing factor in the spread of the disease and complicated treatment regimens amongst patients (Habib et al., 2019). Stigma was a major factor leading to social isolation, and distress in patients with TB. Several respondents claimed they were ostracized by family members or neighbors; these aspects of social rejection led to lying about their status and not seeking timely treatment.

The above findings are consistent with previous research, which reports that stigma is a barrier to treatment adherence and is the fundamental barrier to effective TB management (Munro et al., 2007, Ali et al., 2020). Women are especially the victims of stigma because of their positionality in society due to their gender roles and their reliance on social networks. The researchers found that women with TB were experiencing additional social stresses such as decreased mobility and an inability to enhance marriage prospects. This additional victimization, amongst others, was reported in Sarfraz et al. (2021) in Southern Punjab.

The research also indicated that considerable socioeconomic obstacles, and poverty were among the most important factors delaying their access to healthcare. Respondents indicated that they had to choose between buying food and medicine, and that they were also limited by having no means of transportation to a health facility. These results correspond with those of Rashid et al. (2020), who reported that more than half of TB patients in Lahore were below the poverty line, thereby making it unaffordable to diagnose and treat them in a timely manner.

Use of traditional and spiritual healers also compromises the biomedical TB responses. Most patients turn to spiritual leaders or resort to herbal medicine because they think it is more convenient or culturally acceptable. Whereas this finding agrees with that of Habib et al. (2019), it also indicates a severe lack of trust and communication between the rural population and formal healthcare providers.

The other important lesson is the lack of proper information about TB which is everywhere. There are still myths of TB being inherited, spreading through use of shared utensils or incurable. Such misconceptions do not only raise the stigma but also deter the preventive practices and adherence to treatment. Atif et al. (2021) and Shah et al. (2020) emphasized the importance of dealing with such beliefs through culturally appropriate health educational campaigns, which is a vital precursor to addressing the lack of community knowledge and engagement.

Diagnosis of TB was significantly affecting marriage chances with particular respect to women, in particular. Most of the women respondents had experienced either broken engagements or family rejections due to stigma. This is also evident in society in general, as Jamil et al. (2021) noted women with TB were socially repugnant due to myths of heredity and contagion.

Further, it was common for respondents to undergo psychological pressure and stress, particularly those without family or community supports. Experiences of shame, isolation and hopelessness were related to non-compliance with treatment. These results align with those of Shah et al. (2020), who found that stigma related to TB causes psychological trauma and depression, especially in rural areas where there is a low level of mental health care.

Late diagnosis is a significant problem and most patients overlook the symptoms or resort to self-medication. Such a practice poses more danger of transmission of the disease both in homes and in the society. A study conducted by Iqbal et al. (2021) also revealed that more than 60 percent of TB patients in rural Punjab took longer than one month to seek medical help even after the onset of symptoms.

Positively, the study has found out that good family support can go a long way in enhancing adherence to treatment and emotional strength. Those who had family or peer support were more optimistic and regular in the taking of medication. This confirms the study result by Nafees et al. (2020), which revealed that social support is a positive factor on the outcome of treatment among TB patients in Sindh.

Finally, media and information sources were also identified to have an ambivalent role. While there are participants who were misled by social media, there are also people who learned helpful information from TV campaigns. It suggests mass media can be both a curse and a blessing at the same time as mass media can either just reinforce the negative mythology or be a useful medium where TB can be raised depending on how the message is framed (World Health Organization, 2022).

All in all, the author suggests, with the findings from this study in Mianwali, TB control cannot be achieved by only biomedical interventions. Cultural beliefs, gender relations, economic conditions, and weaknesses of the healthcare system themselves are important factors that affect community responses to TB. Addressing the issues includes community-based education, improving access to health services, and diminishing stigma will serve as the foundation for TB control.

CONCLUSION

This paper examined cultural beliefs, social perceptions, and structural barriers that impact community responses to tuberculosis (TB) in Tehsil Mianwali. There is still evidence of misconceptions, including

the belief that TB is curse, punishment from God, and black magic, which still shape health-seeking behaviour. Cultural beliefs combined with social stigma, gender inequality, economic hardship, and lack of access to health services adds significantly to the delay in diagnosis and treatment. Women, who face social exclusion and diminished capacity to accesses healthcare, are at greater risk.

A reliance on traditional healers, misinformation gained informally, and distrust of biomedicine adds further barriers to TB control. Furthermore, there is a psychological component to the disease, with the stigma and associated isolation, and fear of exclusion. However the family context, and access to accurate information, was important for increased adherence and emotional support in the research.

To effectively address TB in Mianwali, a culturally sensitive community-based approach is needed that goes beyond medical treatment. Public health education campaigns to counter harmful myths, decrease stigma, and empower individuals including women to access care and increase health literacy need to be included in the public health agenda. Improving health services infrastructure and engaging with local community leaders and media could assist with changing how people perceive health and the dimensions of better TB outcomes in the context of rural Pakistan.

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