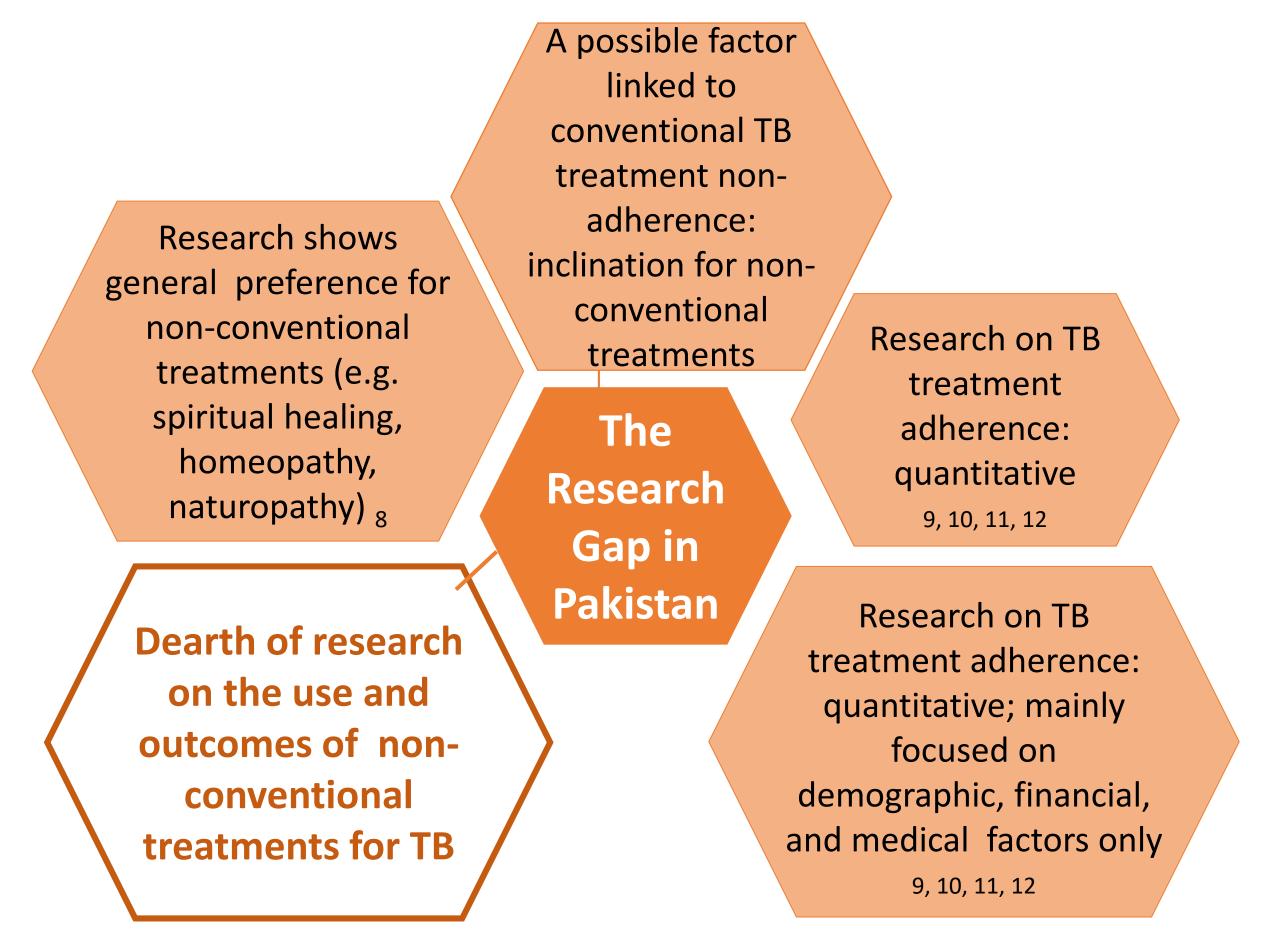
# Exploring the barriers and facilitators influencing the decision to seek non-conventional treatments for tuberculosis — A qualitative study with people affected by tuberculosis in Pakistan

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## 1. Background **Tuberculosis (TB): a preventable and curable disease** Leading cause of death worldwide Ranking among high TB burden countries globally 5<sup>th</sup> n Pakistan TB incidence per 100,000 population, compared to **127** global₁ TB treatment coverage TB 8% -Post-treatment lost-to-follow-up (LTFU) in TB, compared 20% to **11%** global<sub>1</sub> Non-adherence to conventional TB Treatment • TB mortality <sub>5.6</sub> • Spread of disease <sub>5.6</sub> Leads to Aggravation of disease: drug-sensitive (DS) to drug-resistant (DR) TB <sub>7</sub>



## 2. Aims and Objectives of the Study

Aim: address the research gap by exploring peoples' views on, experiences with, and motivations for, the use of non-conventional treatments for TB

## **Objectives:**

- Investigate whether there is a preference for non-conventional treatment for TB among people diagnosed with TB
- Investigate whether there is an inclination toward switching to nonconventional treatment during conventional TB treatment
- Investigate whether an inclination for non-conventional treatment barricades adherence to conventional TB treatment
- Explore the factors that negatively and positively influence the decisions to take up non-conventional treatments for TB

## 3. Study Design

#### **Exploratory qualitative study**

Location: The Indus Hospital and Health Network (IHHN), Karachi, Pakistan: provides free conventional TB treatment as per the international guidelines

Sampling and recruitment: Recruitment through purposive sampling Inclusion criteria:

- Adult (>=18 years old)
- Ever registered for conventional TB treatment
- Clinical condition stable enough for sitting in a lengthy interview Exclusion criterion:
- Falls in a any of these categories of vulnerable population: refugees, prisoners, minors, persons with diminished mental capacity
- Recruitment continued until thematic saturation was reached, and total 12 participants were recruited from 01-Mar-2023 till 17-Apr-2023

**Data collection:** Semi-structured interviews

Data Analysis: Inductive thematic analysis

#### **Ethics approvals provided by:**

- University of Edinburgh's Usher Master's Research Ethics Group (UMREG)
- Indus Hospital & Health Network Institutional Review Board (IHHN IRB)
- National Bio-ethics Committee of Pakistan (NBC)

## 4. Findings

- Non-conventional treatment use was limited to spiritual healing, used **concurrently** with conventional treatment.
- Participants who visited non-conventional healers like naturopaths for TB symptoms prior to the TB diagnosis, received a misdiagnosis and an **inappropriate treatment**, resulting in worsening of the condition.
- Factors (identified as 'themes') associated with decisions regarding conventional/non-conventional treatment uptake were:

Themes	Influence (sub-themes in bold)
<b>Trust in medical</b>	Being provided with adequate knowledge by clinicians about
treatments	the disease and its treatment (and expected side effects),
	having a satisfactory experience at the clinic, and seeing
	improvement in one's own condition after treatment
	initiation, made people develop trust in conventional TB
	treatment and adhere to it
Influence of	Certain familial and community beliefs and norms
family and	pressurized people to take some form of non-conventional
community	treatment before initiating the conventional treatment.
	Past success of conventional TB treatment among family
	made people more inclined toward continuing the
	conventional TB treatment
Financial and	Easy access and free-of-cost model of conventional TB
geographical	treatment made people continue the conventional treatment
enablers	
<b>Religious beliefs</b>	Certain religious beliefs made people use spiritual therapies
and practices	concomitantly with the conventional treatment

## 5. Limitations

Inability to recruit people who had abandoned conventional TB treatment (due to resource and time constraints)

## 6. Conclusion and Recommendations

The **limited**, **concurrent** use of nonconventional treatment for TB did **not** interfere with conventional treatment.

**Prior misdiagnosis by non-conventional healers:** indicates a need for referral linkages with these healers for timely diagnosis and correct treatment. For future research: including people who abandon conventional TB treatment may generate valuable information on a possible association between nonconventional treatment uptake and non-adherence to conventional treatment

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