Using Behaviour Change Theory to Train Health Workers on Tobacco Cessation Support for Tuberculosis Patients: A Mixed Methods Study in Bangladesh

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**BACKGROUND**

Low- and middle-income countries (LMICs) are disproportionately impacted by interacting epidemics of tuberculosis (TB) and tobacco consumption. Smoking tobacco almost doubles the risk of acquiring TB infection and progressing from TB infection to TB disease, and negatively affects TB treatment outcomes, increasing the risk of dying from TB. Research indicates behavioural support delivered by health workers effectively promotes tobacco cessation. There is, however, a paucity of training to support LMIC health workers deliver effective tobacco cessation behavioural support. The TB and Tobacco Consortium undertook research in South Asia to understand factors affecting TB health workers’ delivery of tobacco cessation behavioural support, and subsequently developed a training package for LMICs.

**METHOD**

A mixed-methods research was conducted.

**Qualitative component**

Qualitative information was collected to understand a range of issues affecting the integration of tobacco cessation within NTP practice at the level of individuals, facilities and national institutions.

We analysed 7 semi-structured interviews (SSIs) and one Focused Group Discussion (FGD) with health workers, TB facility in-charges, district and national level NTP staff members.

Qualitative data collection was undertaken primarily at two case-study sites in each country. The sites were purposively identified from 17 facilities in Bangladesh.

An urban NGO-run clinic and a rural government centre were selected as TB services are delivered through government and NGO facilities and the urban and rural contexts vary very different from each other.

**Quantitative component**

Quantitative data on TB health workers’ confidence in delivering tobacco cessation support was obtained using an interviewer-facilitated questionnaire, adapted from a UK National Centre for Smoking Cessation and Training (NCST) questionnaire.

Researchers used convenience sampling to approach at least one TB health worker from all 17 facilities. The questionnaire was completed by TB health workers.

**RESULTS**

We analysed the result with the help of a COM-B framework.

**Qualitative results:**

- **Capability:**
  - Clear understanding that tobacco use was harmful for TB patients
  - Desire for training on tobacco and TB
  - Patients, especially women and young people, dislike to talk about tobacco use
  - Need for effective health worker communication

- **Opportunity:**
  - Health workers’ opportunities to provide behavioural support were affected by resources limitations
  - Patient load as a major obstacle to providing support
  - Lack of sufficient staff support through supervision and monitoring
  - Lack of NTP prioritisation of tobacco cessation, and consequent absence of the issue from professional context

**Motivation**

- Lack of resources and professional support affect health worker’s motivation to provide tobacco cessation behavioural support
- Health workers indicated a vocational motivation to provide patients with such support
- Training, adequate and specified work space, fixed workloads, and financial assistance, training and certifications were the main suggestions proposed to address factors affecting health worker motivation.

**Quantitative results**

- Echoing qualitative findings, respondents indicated lower confidence in assisting with setting a quit date and emphasising and checking patients’ understanding of sudden cessation
- Both male and female health workers felt less confident in engaging with patients of the opposite sex
- Moderate confidence in delivering tobacco cessation support

**CONCLUSIONS**

Factors affecting TB health workers delivery of tobacco cessation support can be identified using the COM-B framework and include issues such as individuals’ knowledge and skills, as well as structural barriers like professional support through monitoring and supervision. While structural changes are needed to tackle the latter, we have developed an adaptable and engaging health worker training package to address the former that can be delivered in routine TB care.

**REFERENCES:**

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