

Supplementary Table 1. Examples of innovations and opportunities for tobacco cessation research in LMICs

Country/ Region	Context & Challenges	Innovations	Opportunities	Reference
Global	No strong evidence to support or refute the use of behavioural support over brief advice, behavioural support plus NRT over behavioural support alone or brief advice, for tobacco use cessation in people living with HIV	Interventions for tobacco use cessation among people living with HIV	Only one out of 17 studies was from a LMIC - South Africa. More research into interventions for tobacco use cessation that are tailored to the needs of people living with HIV, is needed.	Mdege ND, et al. Interventions for tobacco use cessation in people living with HIV. Cochrane Database of Systematic Reviews. 2024; Issue 8. Art. No.: CD011120.
LMICs	Resource constrained public health programmes; accessible/affordable tobacco products including cigarettes; absence of dedicated stop smoking services	Tobacco cessation guidelines tailored for LMICs and adopted by many TB programmes Tobacco cessation intervention pack, tailored for LMICs and piloted in South Asian countries for scaleup	Integration in existing TB programmes Includes capacity building/training resources for healthcare workforce for providing tobacco cessation support to TB patients	Bissell K, Fraser T, Chiang C, Enarson D, Disease L, eds. Smoking Cessation and Smokefree Environments for Tuberculosis Patients. International Union against Tuberculosis and Lung Disease; 2010. Are you a health professional or manager working with people with TB? If so, this website has a set of materials and resources that will help you to support your patients to quit. https://tbandtobacco.org/ . TB & Tobacco Consortium. 2019; University of York.
South Asia (Bangladesh & Pakistan)	Limited resource settings; accessible/affordable tobacco products including cigarettes; absence of a dedicated stop smoking service or a national quitline; high TB burden	Brief behavioural support (10-15 minutes) successful in promoting tobacco cessation in TB patients and deliverable in TB care services. No added benefit of Cytisine in this group.	Integration in existing TB programmes with minimal resource; delivered by health workers supporting TB care and management in the service	Dogar O, et al. Cytisine for smoking cessation in patients with tuberculosis: a multicentre, randomised, double-blind, placebo-controlled phase 3 trial. Lancet Glob Health. 2020;8(11):e1408-e1417.
Pakistan	Limited resource settings;	Intensive behavioural	Integration in existing TB	Siddiqi K, et al. Action to stop smoking in

	<p>accessible/affordable tobacco products including cigarettes; cultural/traditional use of waterpipe/hookah; absence of a dedicated stop smoking service or a national quitline; high TB burden</p>	<p>support (30 - 45 minutes) successful in promoting smoking cessation in presumptive TB patients. No added benefit of Bupropion in this group.</p> <p>Above intervention also found effective in supporting presumptive TB patients to stop using waterpipe/hookah.</p> <p>Varenicline was not more effective than placebo in aiding cessation of waterpipe among people who smoked waterpipe daily.</p> <p>SMS messaging intervention via mobile phones to TB patients over the 6-month course of their TB treatment.</p>	<p>programmes with minimal resource; delivered by health workers supporting TB care and management in the service.</p> <p>Insights into a diverse use of tobacco products in this population.</p> <p>Brief behavioural support was feasible to deliver through community health workers in community settings.</p> <p>High levels of smartphone ownership/affordable call and data packages in the country.</p>	<p>suspected tuberculosis (ASSIST) in Pakistan: a cluster randomized, controlled trial. <i>Ann Intern Med.</i> 2013;158(9):667-675.</p> <p>Dogar O, et al. Effect of Cessation Interventions on Hookah Smoking: Post-Hoc Analysis of a Cluster-Randomized Controlled Trial, <i>NTR.</i> 2014; 16 (6): 682–688.</p> <p>Dogar O, et al. Varenicline versus placebo for waterpipe smoking cessation: a double-blind randomized controlled trial. <i>Addiction.</i> 2018;113: 2290–2299.</p> <p>Siddiqi K, et al. Effectiveness and cost-effectiveness of an mHealth intervention (mTB-Tobacco) for smoking cessation in people with tuberculosis. <i>ISRCTN Registry.</i></p>
Bangladesh	<p>Limited resource setting; accessible/affordable tobacco products including cigarettes; absence of a dedicated stop smoking service or a national quitline; high ST prevalence particularly among women (cultural use)</p>	<p>Co-production of intervention with key stakeholders; tobacco cessation support provided by dentists</p>	<p>Integration in a diabetes hospital setting</p>	<p>Mishu MP, et al. Co-producing an intervention for tobacco cessation and improvement of oral health among diabetic patients in Bangladesh. <i>BMC Oral Health.</i> 2021; 21: 516</p>
India	<p>Limited resource; diversity of tobacco products; high prevalence of tobacco use</p>	<p>A mobile-based strategy for those desiring to quit by giving a missed call to a toll-free number to receive a free call-back from the quitline</p>	<p>Ownership by the Government of India</p>	<p>M-cessation. https://ntcp.mohfw.gov.in/mcessation. National Tobacco Control Programme, Government of India.</p>

South Africa	Limited resource settings; accessible/affordable tobacco products including cigarettes; absence of a dedicated stop-smoking service; people who use ST (cultural use); high TB and HIV burden.	Intensive behavioural counselling (guided by brief Motivational interviewing) was more effective than brief advice in aiding smoking cessation among TB patients at 6 months.	Brief behavioural support was feasible to deliver through trained community health workers in Primary Health Care settings delivering TB treatment.	Louwagie et al. Efficacy of brief motivational interviewing on smoking cessation at tuberculosis clinics in Tshwane, South Africa: a randomized controlled trial. <i>Addiction</i> . 2014;109: 1942–1952.
Kenya	Limited resource settings; high rates of smoking among HIV population compared to general population	Both bupropion and intensive behavioural intervention (guided by the social cognitive theory model) were effective in promoting abstinence from smoking at 36 weeks.	The intensive behavioural intervention was culturally tailored, including iterative feedback from potential participants, to suit the targeted population	Himelhoch SS, et al. Efficacy of smoking cessation interventions among people with HIV in Kenya. <i>NEJM</i> . 2024; 3(11): p.EVIDoa2400090
Malaysia	Limited resource settings	mQuit App.		Yusoff Z, et al. Getting Every Smokers to Participate and Quit Smoking (GEMPAQ): Initial Evaluation among Malaysian Smokers. https://spm.um.edu.my/2022/10/03/kuala-lumpur-nicotine-addiction-international-conference-2022/
Cambodia	Limited resource settings	Mobile cessation	Integration in HIV treatment settings	Bui TC, et al. Mobile-health intervention for smoking cessation among Cambodian people living with HIV: A mixed-methods pilot study. <i>AIDS Care</i> . 2022;34(4):430-439.