CADTH

CADTH Health Technology Review

Community Supports for People With Tuberculosis

Technology Review

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Key Messages

- A limited literature search was conducted to identify evidence about the use of peer support workers, community support workers, or social workers to assist people with tuberculosis who are facing barriers and the types of interventions used by these workers.

- Fourteen reports are included in this report that describe strategies used by support workers to engage people with tuberculosis who face barriers.

- The interventions identified that support continued engagement and reduce attrition of people with tuberculosis focused on involving the clients in the decision-making process and overcoming potential hurdles to treatment. Strategies included culturally relevant education at all levels (e.g., worker, patient, family, community), referral to applicable programs or care, incentives, and enablers.

Context

Tuberculosis (TB) is a disease that disproportionately affects certain groups and communities in Canada, including people who are foreign-born and people who encounter specific social barriers (e.g., people experiencing homelessness, people who inject drugs).[1] For these people, a less clinical approach to treatment may be required to promote engagement and prevent attrition. The use of support workers (e.g., peer support workers, community support workers, social workers) may be a strategy to help support care in people with TB who are facing barriers.

The purpose of this report is to identify and describe the strategies, and the evidence of their use, that support workers and allied health professionals use to facilitate completion of treatment protocols in people with TB who require additional assistance with care.

Research Questions

1. What is the evidence to support the use of peer support workers, community support workers, or social workers to reduce the number of people with tuberculosis who face barriers and are lost to care?

2. What interventions do support workers use to effectively maintain continued engagement of people with tuberculosis who face barriers and to reduce patient attrition from tuberculosis care?

Methods

This report is not a systematic review and does not involve critical appraisal or include a summary of study findings. Rather, it presents an annotated list of citations and a summary of the key components of TB programs and initiatives used by support workers and allied health professionals to engage populations and people with TB who face barriers to facilitate

TB treatment. This report is not intended to provide recommendations for or against a particular intervention.

Literature Search Methods

A limited literature search was conducted by an information specialist on key resources, including MEDLINE, Cumulative Index to Nursing and Allied Health Literature (CINAHL), the Cochrane Database of Systematic Reviews, the International HTA Database, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy comprised both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. The main search concepts were support workers and tuberculosis. No filters were applied to limit the retrieval by study type. If possible, retrieval was limited to the human population. The search was completed on November 11, 2022, and was limited to English-language documents published since January 1, 2017.

Selection Criteria and Methods

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in Table 1. Open-access, full-text versions of guidelines, guidance documents, and program evaluations were reviewed when available and the relevant information was summarized; otherwise, full-text publications were not reviewed.

Exclusion Criteria

Articles were excluded if they did not meet the selection criteria outlined in Table 1, they were duplicate publications, or were published before 2017. Reports focused on screening and diagnosis of TB and contact tracing were also excluded. If articles reported on included and excluded topics (e.g., strategies used to encourage people who face barriers to complete screening and treatment for TB), the article was included but the excluded topic(s) were not summarized. Additional references of potential interest that did not meet the inclusion criteria are provided in Appendix 1.

Table 1: Selection Criteria

Criteria	Description
Population	People diagnosed with tuberculosis requiring assistance with care
Intervention	Use of support workers and allied health professionals to support care for people with tuberculosis
Comparator	Programs without specific support workers for the care of people with tuberculosis; no comparator
Outcomes	Q1. Improved patient engagement with, and adherence to, their care plan or treatment regimen completion, reduction of attrition or loss to follow-up

Q2. Description of the interventions used (e.g., how the programs are designed, what supports are offered) |
| Study designs | No restriction on study design |
| Location | Canada, UK, Australia, New Zealand, among others |

Overall Summary

Fourteen relevant references about the strategies used by peer support workers, community support workers, or social workers to engage their clients with TB who face barriers were identified for this report.[2-15] Guidance describing engagement with people with TB by TB programs were published in reports from Canada,[2-5] the UK,[8-10] Europe,[6,12,13] and globally.[7,11] A retrospective cohort study and a descriptive survey study were from the UK[14] and Europe,[15] respectively.

The information included in this report covered people diagnosed with TB requiring assistance with care from several specific populations, including people who:

- are foreign-born or seeking asylum
- are experiencing homelessness or unstable housing
- have an alcohol use or a substance use disorder
- inject drugs
- need mental health support
- are in contact with the criminal justice system
- have known or suspected nonadherence to TB treatment.

The types of support workers and allied health professionals identified included:

- district and provincial TB coordinator
- social worker, case worker, outreach worker
- community health worker, cultural link worker, employee or volunteer from an allied organization or initiative
- alcohol, drug, or substance use counsellor
- mental health counsellor, therapist
- peer counsellor, community champion, religious or spiritual leader
- prison staff or immigration removal centre staff
- pharmacist, pharmacy technician
- primary care receptionist
- interpreter.

The major themes of support identified included:

- Address the stigma surrounding TB diagnosis through patient, community, and health care and allied health care worker education.
- Identify the basic social, mental, and health needs of a person with TB and connect them with appropriate and culturally relevant resources or referrals (e.g., enrolling a client with a primary care physician, referral to mental health services, coordinating housing arrangements).
- Involve the person with TB in decision-making and developing their own care plan.
- Help to ease the person with TB through the entire duration of their treatment course through the use of incentives and enablers. This includes reassuring the client that any financial, legal, or social costs are minimized or eliminated.
  - Incentives can be monetary or material (e.g., cash, food vouchers, clothing).

- Enablers can be anything that directly or indirectly helps a person with TB access treatment (e.g., directly observing therapy in the home, accompanying their clients to appointments, providing bus tickets or childcare).
- Liaise with organizations with aligned mandates (e.g., serve the same population).

Annotated Reference List

A total of 14 reports were included in the current report. Guidance documents, including evidence- and consensus-based guidelines and synthesis reports, are summarized in Table 2. Nonrandomized studies are summarized in Table 3. Further details can be found by consulting the individual article citations.

Table 2: Summary of Included Guidance Documents

Criteria	Description
Canadian Tuberculosis Standards (2022)[2] Chapter 10: Treatment of active tuberculosis in special populations	
Study design	Guidelines, consensus-based
Development group	Canadian Thoracic Society
Location	Canada
Population	People with alcohol use disorder; people who inject drugs
Specific types of support workers mentioned	Alcohol or drug use counsellor
Strategies identified	• Community-based DOT • Incentives (monetary or material) • Peer support • Concurrent opioid agonist therapy
Supporting evidence	"Enhanced adherence supports…can improve adherence to TB treatment and monitoring. Several studies have highlighted that, with adequate adherence support, high treatment completion rates and good outcomes can be achieved in people who inject drugs" (p. 157).
Good practice statement	"People with an alcohol-use disorder should receive supportive care, including community-based direct observed therapy, to ensure optimal adherence, and should be linked to alcohol counseling and support services while undergoing TB therapy" (p. 157). "People with drug-use disorders should receive supportive care, including community-based directly observed therapy, to ensure optimal adherence, and should be linked to drug-use counseling and support services while undergoing TB therapy" (p. 157).
Canadian Tuberculosis Standards (2022)[3] Chapter 13: Tuberculosis surveillance and tuberculosis infection testing and treatment in migrants	
Study design	Guidelines, consensus-based
Development group	Canadian Thoracic Society
Location	Canada
Population	People who are foreign-born

Criteria	Description
Specific types of support workers mentioned	Cultural case manager Interpreter
Strategies identified	• Provide culturally sensitive care (e.g., use of cultural case managers and interpreters) • Work in partnership with community leaders and local organizations • Offer services in a variety of locations (e.g., primary care, community centres, home visits) • Family support • Offer incentives • Offer digital aids and reminder systems • Shorter treatment regimens
Supporting evidence	"Engagement with community members and community-based organizations and offering services in diverse settings such as integrated care in a primary care setting or community centers have been successful. Language-concordant encounters between immigrants and health care workers, use of cultural case managers and community engagement and education are key to successful programs" (p. 198). "Several interventions have been found to improve completion of steps along the TB infection care cascade, including patient incentives, health care worker education, home visits, digital aids and patient reminders" (p. 198).
Good practice statement	"TB infection testing and treatment programs should aim to provide linguistically tailored, culturally sensitive and trauma-informed care that is sensitive to the barriers patients may face in accessing care and completing testing and treatment requirements" (p. 198).
Canadian Tuberculosis Standards (2022)[4] Chapter 15: Monitoring tuberculosis program performance	
Study design	Guidelines, consensus-based
Development group	Canadian Thoracic Society
Location	Canada
Population	People facing social barriers (e.g., homelessness)
Specific types of support workers mentioned	Social worker
Strategies identified	• Enrol patients with a primary care provider • Provide housing solutions for patients experiencing homelessness • Assess the housing conditions of patients with active TB
Supporting evidence	Precedent: "A specific program performance indicator about whether TB programs have dedicated social worker support could not be located. Recommendations, however, to meet the psycho-social needs of patients and clients who suffer the effects of TB infection and disease are common, but practical guidance about how to achieve this remains limited. As a result, this indicator is included as a means to generate information about the practical steps programs take to address the impacts of structural, and social determinants of health in the lives of clients/patients served" (p. 240).
Recommendation	The following key performance indicator is included as part of the suggested TB program performance monitoring framework: "Does the TB program have dedicated social worker support to provide patient-centered care? Target: Yes" (p. 231).

Criteria	Description
Canadian Tuberculosis Standards (2022)[5] Chapter 5: Treatment of tuberculosis disease	
Study design	Guidelines, consensus-based
Development group	Canadian Thoracic Society
Location	Canada
Population	People experiencing social and economic marginalization; people with substance use or mental health disorders; people experiencing homelessness or unstable housing; people with suspected or known nonadherence to TB therapy
Specific types of support workers mentioned	Social worker
	Peer counselling
	Interpreter

Strategies identified	• Early engagement by social workers and appropriate government and community organizations
	• Meaningful and culturally appropriate engagement, education, and support through the use of:
	  ○ education and counselling about the treatment
	  ○ professional interpreters
	  ○ person-centred language
	  ○ information review at return visits
	  ○ incentives and enablers
	• Suggested incentives and enablers include:
	  ○ peer counselling
	  ○ patient reminders
	  ○ integration into primary or specialty care (e.g., HIV care, dialysis, mental health services, methadone delivery)
	  ○ monetary support
	  ○ social assistance for housing and health care services
	  ○ assistance with transportation and childcare
	  ○ reminder systems
	  ○ home visits
	  ○ blister packing medications
	  ○ video DOT
	• Treatment decisions (e.g., DOT) should be made in collaboration with the patient
	• Community-based DOT (e.g., home, school, workplace)

Supporting evidence	"Adherence is optimized when TB medications are delivered as part of a comprehensive, patient-centred program that promotes patient understanding and removes barriers to adherence, rather than a focus on adherence to pharmacologic therapy alone" (p. 70).
Good practice statement	"The decision by a care provider to initiate treatment of TB disease implies a commitment to ensuring that a person with TB completes their TB therapy safely and with minimal interruption. This is best done by providing a comprehensive, patient-centred treatment program, which may include incentives and enablers" (p. 70). "People with TB disease should be provided all medications and services required to successfully complete TB therapy free of charge, regardless of their insurance coverage or residency status in Canada" (p. 70).

Criteria	Description
WHO (2021)[6]	
Study design	Health Evidence Network Synthesis Report, evidence-based
Development group	WHO
Location	Europe
Population	People who are facing barriers, including those who are foreign-born or seeking asylum
Specific types of support workers mentioned	Outreach teams and mobile units Peer support and community champions Social support networks Interpreting and translation services Culturally relevant counselling
Strategies identified	Table 2 (p. 8) lists a series of strategies for TB control recommended by the European Centre for Disease Prevention and Control to engage patients who face barriers, including those who are foreign-born or seeking asylum. Table 8 (p. 39-41) summarizes the results of a thematic analysis of a targeted literature review. Barriers and facilitators encountered by people who are foreign-born at each systems level are listed.
Supporting evidence	NR
The Union (2021)[7]	
Study design	Guidance document
Development group	International Union Against Tuberculosis and Lung Disease
Location	Global
Population	People with TB who need psychosocial support
Specific types of support workers mentioned	Social care worker, social worker Community health worker Peer supporter Trained community volunteer NGO worker Religious and spiritual leader Drug and alcohol worker Therapist, mental health worker
Strategies identified	Social care worker, community health worker, social worker • Provide nonclinical support (e.g., psychological, emotional) that enables people with TB to complete their treatment plans • Link people with TB to appropriate social and economic programming and assistance (e.g., treatment costs, housing, nutrition, legal and immigration, transportation, clothing, and other types of incentives and supports) Peer supporter • Provide support for the emotional and physical aspects of diagnosis • Work with people with TB one-to-one or in support groups

Criteria	Description
	Religious or spiritual leader and faith-based organizations
	• Provide spiritual support
	• Provide social assistance in the form of shelter, food, and clothing
	Drug and alcohol worker, therapist
	• Provide focused support
	• Refer people with TB, as needed, to more specialized levels of mental health support and treatment
Supporting evidence	NR
National Institute for Health and Care Excellence (2019)[8]	
Study design	Guidelines, evidence-based
Development group	NICE
Location	UK
Population	All people diagnosed with TB, including those with complex social needs
Specific types of support workers mentioned	TB case manager
	TB support worker
	Social worker
	Voluntary sector and local housing representatives
	Pharmacist
	Peer supporter
Strategies identified	TB case manager
	• Oversee enhanced case management (e.g., DOT)
	• Consult with the person diagnosed with TB to identify individual needs and create a "health and social care plan" for treatment
	• Identify potential barriers to the treatment plan (e.g., housing, substance misuse, contact with the criminal justice system, health conditions, language and literacy, mobility and transport, employment and benefits, immigration status) and methods to overcome them (e.g., enablers and incentives, lost to follow-up action plan)
	• Connect with relevant organizations, professionals, and key workers, as needed
	• Connect with prison and immigration removal centre health services to ensure and arrange continuity of care for people being released or transferred
	Multidisciplinary TB team (including representatives from social support, local housing, and volunteer organizations, pharmacists, and peer advocates)
	• Encourage treatment plan compliance (e.g., by communicating via a variety of means, home visits, providing information on overcoming the cost of treatment, social support, advice for caregivers, incentives, and enablers)
	• Assess housing needs of people diagnosed with TB and connect with the relevant agencies if a need is identified
	• Ensure arrangements for DOT and housing to cover treatment duration for people diagnosed with TB being released from custody
	TB support worker
	• Support the person diagnosed with TB to attend appointments

Criteria	Description
	• Collect samples and trace contacts • Administer DOT
Supporting evidence	NR
Recommendations	Improving adherence: case management including directly observed therapy; refer to 1.7.1 (p. 64-67) Other strategies to encourage people to follow their treatment plan; refer to 1.7.2 (p. 67-68) Strategies in prisons or immigration removal centres; refer to 1.7.3 (p. 68-69) Commissioning multidisciplinary TB support; refer to 1.8.7.1 (p. 81-83) Nonclinical roles including TB support workers; refer to 1.8.8 (p. 83-84) Accommodation during treatment; refer to 1.8.11 (p. 86-88)
Public Health England (2019)[9]	
Study design	Guidance document
Development group	Public Health England
Location	UK
Population	Underserved populations in general, including people who are foreign-born or seeking asylum, people in contact with the criminal justice system, people with alcohol use or substance use disorder, people living with a mental health problem, and people experiencing homelessness or unstable housing
Specific types of support workers mentioned	Pharmacist or pharmacy technician Case worker
Strategies identified	Pharmacist or pharmacy technician • Community pharmacies are an ideally situated point of access to TB services for underserved populations • Provide DOT to TB clients similar to the provision of supervised pharmacological drug misuse therapy regimens • Provide DOT to TB clients alongside opioid substitution therapy Case worker • Allow client to choose location of appointments (e.g., in office, in the community, by phone) • With permission, can provide information to health care workers on the client's behalf • Assess need for social services and connect with the appropriate agencies and resources
Examples of specific programs	Find and Treat • Mobile health unit that provides point-of-care screening, treatment, and social care for TB clients in underserved populations • A multidisciplinary team of specialists, including social workers, substance misuse professionals, and peer advocates • Provide clients with the necessary supports to ensure treatment completion
Supporting evidence	"As evidence of its impact and support to patients the Find and Treat service has managed to locate and re-engage on treatment 75% of patients 'lost to follow up' by local TB services and assisted 84% of TB cases diagnosed on the Mobile Health Unit to complete treatment as compared with 83% of all cases nationally, whether homeless or not" (p. 127).
Recommendations	Refer to general recommendations 1 to 10 (p. 10-11)

Criteria	Description
Underserved population: People who are foreign-born or seeking asylum	
Specific types of support workers mentioned	Cultural link worker TB champions
Strategies identified	Cultural link worker • Advocate for clients and families • Facilitate communication between non–English-speaking clients and their health care providers • Promote cultural and religious awareness in the TB program and other relevant organizations • Accompany clients to outpatient appointments and medical procedures or accompany the TB nurse to home visits • Provide DOT • Assist clients with accessing appropriate resources • Raise TB awareness with local groups and services • Receive client feedback TB champion • A volunteer from the community of interest (e.g., people who immigrated from countries with a high incidence of TB) • Receive training and learn about TB awareness and available local resources, especially regarding key messages (e.g., TB is preventable, TB is curable, TB screening and treatment are free) and myths • Engage and educate community • Promote registration with a primary care provider
Supporting evidence	NR
Recommendations	Refer to section 2.5 (p. 32-34)
Underserved population: People in contact with the criminal justice system	
Specific types of support workers mentioned	Community rehabilitation company
Strategies identified	Coordinate DOT with services already provided through pharmacies and drug and alcohol treatment (e.g., opioid substitution therapy)
Supporting evidence	NR
Recommendations	Refer to section 3.6 (p. 54-56)
Underserved population: People with alcohol use or substance use disorder	
Specific types of support workers mentioned	Social worker Key worker Peer support Outreach worker
Strategies identified	Social worker, key worker, peer support • Address issues such as housing, social support, immigration, legal advice, and no recourse to public funds by contacting the relevant agencies

Criteria	Description
	Outreach worker • Provide continuing support through an outreach service (e.g., Find and Treat)
Supporting evidence	NR
Recommendations	Refer to section 4.5 (p. 65-67)
Underserved population: People living with a mental health problem	
Specific types of support workers mentioned	Mental health support workers
Strategies identified	• Provide DOT • Encourage simultaneous prescriptions of opioid substitution therapy and TB medication
Supporting evidence	NR
Recommendations	Refer to section 5.4 (p. 74-76)
Underserved population: People experiencing homelessness or unstable housing	
Specific types of support workers mentioned	Primary care receptionist Social worker Residential unit support worker Substance misuse professionals Peer advocates
Strategies identified	Primary care receptionist • Assist people experiencing homelessness to register with primary care providers and receive treatment Social worker • Work with local agencies to provide "fast-track access" to suitable housing Residential unit support worker • Assist residents with access to benefits and employment, resettlement, coaching, chaos management, and reconnection support • Provide DOT and support TB treatment completion • Provide one-to-one and group support Peer advocate • Act as an "authentic voice" between clients and the TB team
Examples of specific programs	Olallo House • Residential unit for clients diagnosed with TB experiencing material poverty • Run by a multilingual team of trained support workers • Individual care plans City and Hackney Service Level Agreement • TB clients without adequate housing and no recourse to public funds are provided with a short-term housing arrangement • Monthly bus passes are provided to attend clinic-based DOT • Nonadherence results in eviction • TB case workers provide social and psychological support

Criteria	Description
Supporting evidence	"Since 2008, every patient housed via the SLA has completed treatment. City and Hackney have not had a lost to follow up patient since 2008" (p. 94).
Recommendations	Refer to section 6.4 (p. 84-86)
Public Health England (2019)[10]	
Study design	Guidance document
Development group	Public Health England
Location	UK
Population	People who are in prison or immigration removal centres
Specific types of support workers mentioned	Prison and immigration removal centre staff
Strategies identified	Support individuals receiving treatment for TB by: • motivating people diagnosed with TB to complete the full course of therapy • providing DOT • helping people diagnosed with TB to keep their follow-up appointments
Supporting evidence	NR
The Union (2019)[11]	
Study design	Guidance document
Development group	International Union Against Tuberculosis and Lung Disease
Location	Global
Population	People with TB, including those from populations experiencing barriers
Specific types of support workers mentioned	District TB coordinator Provincial TB coordinator
Strategies identified	At the basic management unit (district) level: • identify challenges and apply solutions to the function of TB services by taking part in operational research • provide data-driven feedback to staff on how to improve the quality of services and support them in implementation • arrange DOT by a trained treatment support worker • ensure all people receiving TB treatment access appropriate care (e.g., counselling, testing and referral for comorbidities such as HIV, diabetes, and smoking) At the provincial level: • coordinate with relevant agencies and mobilize resources, especially to improve access to services by populations experiencing barriers (e.g., mobile clinics) • lead operational research and provide data-driven feedback and support to the basic management units
Supporting evidence	NR
European Union Standards for Tuberculosis Care (2018)[12]	
Study design	Guidelines, consensus-based
Development group	European Respiratory Society and the European Centre for Disease Prevention and Control

Criteria	Description
Location	European Union countries
Population	People with "illnesses known to affect treatment outcome" (e.g., people with alcohol use or substance use disorder, people with other psychosocial problems)
Specific types of support workers mentioned	NR
Strategies identified	This report recommends that providers refer patients to any services and supports needed as part of an "individualized plan of care." Examples given include several potential allied health supports: • drug and alcohol addiction services • treatment of "other psychosocial problems" • prenatal and well-baby care
Supporting evidence	NR
Recommendation	Refer to Standard 17 (p. 12)
WHO (2018)[13]	
Study design	Health Evidence Network Synthesis Report, evidence-based
Development group	WHO
Location	Europe
Population	People who are foreign-born or seeking asylum, including those who are experiencing homelessness
Specific types of support workers mentioned	Social care worker (outreach)
Strategies identified	• Patient involvement in treatment decisions • Coordinate treatment services
Supporting evidence	"Mobile medical outreach teams have operated in Paris since 2000: loss to follow-up rates for TB treatment among homeless and undocumented migrants have fallen from more than 50% in 2000 to less than 10% in 2016; similar successes have been reported in other countries" (p. 26).

DOT = directly observed therapy; NGO = non-governmental organization; NR = not reported; TB = tuberculosis.

Table 3: Summary of Included Nonrandomized Studies

Criteria	Description
Izzard et al. (2021)[14]	
Study design	Cohort (retrospective)
Location	UK
Population	People who face barriers that could affect treatment adherence (e.g., people who experience homelessness, people with alcohol use or substance use disorder, people in contact with the criminal justice system)
Specific types of support workers mentioned	Social care team

Criteria	Description
Strategies identified	Intensive casework support for: • homelessness and housing • benefits • debt • immigration
Intervention	Patients referred to the social care team (n = 170)
Comparator	Patients not referred to the social care team (n = 734)
Outcome	TB treatment completion
Author's conclusion	Patients referred to the social care team were more likely to complete TB treatment
Jansen-Aaldring et al. (2018)[15]	
Study design	Descriptive; survey results
Location	European countries with low incidence of TB
Population	Patients with active or latent TB, including patients from groups experiencing social or economic marginalization
Specific types of support workers mentioned	TB coordinator
Strategies identified	• Appoint a TB coordinator responsible for arranging support for patients • Organize a treatment plan meeting with patients, providers, and stakeholders • Provide enablers • Organize culturally sensitive community support • Dispense pill cases
Evidence reported	Overview of policies and practices for patient support during TB treatment • Proportion of countries providing patient support such as treatment supervision, and treatment adherence interventions • Countries with patient support guidelines • Best practices for patient support

TB = tuberculosis.

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Appendix 1: References of Potential Interest

Previous CADTH Reports

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Systematic Reviews

Alternative Population: People Being Screened for Tuberculosis

Hamilton K, Tolfree R, Mytton J. A systematic review of active case-finding strategies for tuberculosis in homeless populations. *Int J Tuberc Lung Dis*. 2018; 22(10): 1135-1144. PubMed

Heuvelings CC, Greve PF, de Vries SG, et al. Effectiveness of service models and organisational structures supporting tuberculosis identification and management in hard-to-reach populations in countries of low and medium tuberculosis incidence: a systematic review. *BMJ Open*. 2018; 8(9): e019642. PubMed

Unclear Population: People Diagnosed With Tuberculosis Requiring Assistance With Care Not Specified

Law S, Daftary A, O'Donnell M, Padayatchi N, Calzavara L, Menzies D. Interventions to improve retention-in-care and treatment adherence among patients with drug-resistant tuberculosis: a systematic review. *Eur Respir J*. 2019; 53(1): 01.

Liu Y, Birch S, Newbold KB, Essue BM. Barriers to treatment adherence for individuals with latent tuberculosis infection: A systematic search and narrative synthesis of the literature. *Int J Health Plann Manage*. 2018; 33(2): e416-e433. PubMed

Non-Randomized Studies

Alternative Location: US

Hovell MF, Schmitz KE, Blumberg EJ, Hill L, Sipan C, Friedman L. Lessons learned from two interventions designed to increase adherence to LTBI treatment in Latino youth. *Contemp Clin Trials Commun*. 2018; 12: 129-136. PubMed

Alternative Location: Belarus

Harrison RE, Shyleika V, Falkenstein C, et al. Patient and health-care provider experience of a person-centred, multidisciplinary, psychosocial support and harm reduction programme for patients with harmful use of alcohol and drug-resistant tuberculosis in Minsk, Belarus. *BMC Health Serv Res*. 2022; 22(1): 1217. PubMed

Unclear Intervention: Support Workers Not Specified

Bedingfield N, Lashewicz B, Fisher D, King-Shier K. Systems of support for foreign-born TB patients and their family members. *Public health action*. 2022; 12(2): 79-84. PubMed

Thomas D, Summers RH. Patients' perceptions and experiences of directly observed therapy for TB. *British Journal of Nursing*. 2022; 31(13): 680-689. PubMed

Kim H, Choi H, Yu S, et al. Impact of Housing Provision Package on Treatment Outcome Among Homeless Tuberculosis Patients in South Korea. *Asia Pac J Public Health*. 2019; 31(7): 603-611. PubMed

Additional References

Research Program: Alternative Population — People Being Screened for Tuberculosis (Unclear Intervention, Support Workers Not Specified)

Story A, Garber E, Aldridge RW, et al. *Management and control of tuberculosis control in socially complex groups: a research programme including three RCTs.* NIHR Journals Library. 2020; 10.

Guidance Document: Alternative Population — First Nations Communities

First Nations Health Authority Tuberculosis Services Community Programming Guide. West Vancouver (BC): First Nations Health Authority. https://www.fnha.ca/WellnessSite/WellnessDocuments/FNHA-Tuberculosis-Services-Community-Program-Guide.pdf Accessed 2022 Nov 22.
> *Refer to TB Wellness Champions on pages 10, 15, and 16.*