

Tuberculosis control among homeless persons in the European Union: more than words alone

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Introduction

The changing epidemiology of tuberculosis (TB) across the EU is characterised by a concentration of disease in certain sub-groups of the metropolitan population. Large cities harbour a disproportionate number of socially excluded inhabitants belonging to risk groups for TB, specifically immigrants, homeless persons, illicit drug users, alcoholics, street dwellers with psychiatric co-morbidities and persons with a history of imprisonment. Some of these risk factors commonly overlap and are especially over-represented in prison populations.¹ The prevention and control of TB among these risk groups is complicated by delayed diagnosis, onward transmission and poor treatment adherence leading to the development of drug resistant forms of TB. A recent international study on risk factors for TB transmission in low-incidence countries highlighted homelessness, injection drug use and alcohol abuse as the main factors associated with uncontrolled TB transmission in the community.² In 2002 and 2003 one out of six of all notified TB patients was homeless, illicit drug user or (ex)prisoner in Rotterdam, the Netherlands, and London, United Kingdom, respectively.^{3,4}

Homeless persons have poor access to health care or delay seeking help and their lifestyle may also camouflage TB-related symptoms. Therefore TB in homeless persons more frequently progresses to advanced and infectious forms of disease before it is diagnosed. Homeless people commonly share confined air spaces in poorly ventilated congregate settings such as hostels, day centres, methadone dispensing posts or safe drug consumption rooms. The problem is further compounded because their general health is poor, compromising immunity to TB. Collectively these factors exacerbate one another resulting in major outbreaks of TB involving homeless persons. Such outbreaks have been documented in many EU countries where extremely high rates of TB have been consistently demonstrated (between 500 and 3000 TB patients per 100,000 homeless persons). This makes TB a common pan-EU problem,^{1,3-15} and also a problem for future EU member states.¹⁶

There has been no new drug for the treatment of TB for almost half a century and, while highly effective, current treatment is long and can be complicated by side effects to medication. Once diagnosed, poor adherence with treatment and loss to follow-up care is common among homeless persons. Poor treatment adherence leads to further transmission and is the cause of drug resistant strains of the disease. The concentration of TB in socially excluded and vulnerable groups also affects staff working with these groups and the general population.^{5,6}

Framework Action Plan to fight tuberculosis in the European Union

In February 2008, following consultation with FEANTSA and other relevant organisations, the European Centre for Disease Prevention and Control (ECDC) published the "Framework Action Plan to fight tuberculosis in the European Union", providing directions and proposals on what needs to be done in EU member states to decrease the burden of TB.¹⁷ The report recognises the concentration of TB in "hard to find" and "hard to reach" populations as a major challenge to TB control efforts across the EU, besides problems such as multi- and extensively drug resistant TB and TB-HIV co-morbidity. The report states that "tackling the TB situation in vulnerable populations must be a key element in any comprehensive strategy to reduce and eventually eliminate TB".

The Action Plan is built on four principles:

1. *ensure prompt and quality care for all*, e.g. through developing services tailored to the needs of vulnerable populations. This requires a sustained commitment of resources that reflect the complexity of delivering tailored interventions such as outreach services for Directly Observed Therapy (DOT).
2. *strengthen the capacity of health systems EU-wide*, e.g. health systems must be accessible, flexible and patient-centred without cultural, social and economic barriers.

3. *develop new tools, such as tools that enhance the operational components of TB control, e.g. proper evidence-based public health interventions that can cut the chain of TB transmission as early and effectively as possible, such as active case-finding in vulnerable groups.*
4. *build partnerships and collaboration with countries and stakeholders, e.g. the Action plan states that EU institutions in collaboration with partners can support the identification, development and dissemination of good practice models in TB control.*

Realising these principles are essential to effective TB control among “hard to reach” groups throughout the EU, and FEANTSA welcomes the explicit references to this cause within the Framework Action Plan. The publication of this report provides for the first time an opportunity to re-think TB control among homeless and other vulnerable populations across the EU. We see this as a call to action to strengthen TB control across Europe through the exchange of experiences, collaborative research, advocacy and co-operation.

FEANTSA's views**

1. TB is a key public health challenge for the 21st century that demands co-operation and concerted action across the EU.
2. TB treatment is one of the most cost effective health interventions.^{18,19}
3. TB remains highly stigmatised and strongly linked to poverty, poor housing and social exclusion.
4. TB cannot be tackled without addressing the social causes.
5. Those groups with the highest burden of disease in the EU are those same groups who have poorest access to health services and are least likely to complete treatment.
6. Standard approaches to TB control, such as contact tracing, and self supervised treatment are largely failing “hard to reach” groups.
7. TB services that are not geared towards the needs of urban hard to reach groups carry a future risk of higher rates of TB and drug resistant strains, rendering the disease once again untreatable.
8. There is an urgent need for more accessible and flexible TB services with capacity to proactively engage those most at risk.
9. TB cannot be controlled at a population level without specific targeted efforts to tackle the disease among “hard to reach” groups

TB control models

TB is not only a medical disease but has strong social roots and components.²⁰ The evidence to date suggests it is not possible to control TB among homeless persons and similarly vulnerable populations through a solely biomedical hospital based approach. Hospital services must be complemented by public health community based TB initiatives tailored to the needs of homeless persons and other vulnerable groups. The success of the Dutch TB control model provides an important example where TB is controlled through close collaboration between hospital based services and public health TB clinics in the community. These services are complimented by two former TB sanatoria, now acting as tertiary in-patient TB treatment centres for patients with complex medical or psycho-social needs and where the consultants provide a daily telephone expert advice service to TB professionals and medical specialists in the field. The hospitals concentrate on in-patient and clinical care while the public health TB clinics work through a network of local health and social care agencies to provide contact tracing, preventive treatment, out-patient care and DOT; and active case finding among homeless and other vulnerable populations with appropriate targeted interventions, such as mobile digital X-ray screening.^{3,5} The public health clinics also have epidemiological responsibilities for surveillance and outbreak investigation. In the Netherlands TB control physicians, specialist nurses (who often also act as social workers) and practice assistants work under one roof and the TB clinic is a one-stop-(TB)-shop for all basic diagnostic (tuberculin skin testing, chest radiography and smear microscopy) and treatment facilities. This model is especially beneficial to socially excluded groups who often require intense case management and DOT to prevent lost to follow-up. The Netherlands has one of the lowest TB rates in the EU despite a significant concentration of homeless people and illicit drug users in the major cities of Amsterdam and Rotterdam where all vulnerable groups are periodically and successfully screened.^{3,20} The Action plan states that EU institutions in collaboration with partners can support the identification, development and dissemination of good practice models in TB control. The Dutch model is only one of such examples that is likely to be applicable and beneficial to other EU countries.

Exchange and research

There is an urgent need to develop the knowledge base on optimal strategies for effective diagnosis and treatment of “hard to reach” groups in the EU. There is some experience in different countries – often emerging from pilots – but more has to be done in order to translate this expertise into effective policy and practice. Here there is a clear role for the EU to add value, by fostering exchange and mutual learning in this area, supporting the dissemination of ‘best practice’ and helping member states drive forward their TB strategies. Exchange visits and development of educational material and courses aimed at multi-disciplinary staff (medical, nursing, social) working in public health TB control and with people who are homeless and illicit drug users in the EU should be established. TB among people who are homeless and illicit drug users, especially in urban settings, should be one of the key areas in the EU context for basic, applied, and operational research. For example, the EU can help to identify specific areas for action, supported through bilateral and multi-lateral EU and non-EU organisations or mechanisms, to promote early diagnosis among these vulnerable groups and ensure that the subsequent treatment is available, accessible, affordable, appropriate and most importantly successful.

EU Action

International borders are no barrier to TB. Increasing population mobility means that TB control is now a common responsibility across all EU countries. Uncontrolled transmission among “hard to reach” groups, coupled with the threat of emerging drug resistant TB is a major public health challenge, especially in urban centres across Europe. TB in the EU cannot be controlled without specific provision to reach and fully treat vulnerable communities. There is a clear role for the EU to protect the health of citizens against TB. FEANTSA hopes that the “Framework Action Plan to fight tuberculosis in the European Union” is more than words alone and results in real action, specifically regarding one of its key elements, i.e. tackling the TB situation in vulnerable populations. We call for an EU supported collaboration of partner organisations across member states to provide leadership and strategic direction, the evidence to inform policy and practice, and advocacy and support for those most at risk from TB today.

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** for more details, see FEANTSA's [Response to the Stakeholder Consultation](#) on the "Proposal for an Action Plan to fight Tuberculosis in the European Union", December 2007.

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