A Stitch in Time Saves Nine: Measures to Prevent the Spread of Tuberculosis in the Israeli Prison System

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The Israeli Public Health Service, headed by one of the authors of the article on tuberculosis in Israeli prisons in this issue of *IMAJ*, was confronted in the 1990s with a rise in the incidence of TB due to immigration from TB-endemic countries, namely the former Soviet Union and Ethiopia. When a study by another of the authors demonstrated a serious problem in the completion of treatment of TB, the "case for action" was complete [1]. The Public Health Service, acting on a circular issued by the Director General of the Ministry of Health, instituted vigorous and effective measures to identify and treat TB in the country at large [2]. Thus, acting on epidemiological data similar to those revealed in the paper in this issue by Mor and colleagues [3], what has become a model National TB program was set in place [4,5].

Mor et al. [3] show that the incidence of TB in the Israeli prison system is 3.5 times higher than in the general population – with no systematic attempt to contain it. This finding runs counter to the policy and achievements of the Public Health Service and the Department of TB and AIDS in the battle to prevent the spread of tuberculosis in Israel. It transpired in the investigation by Mor and collaborators that the Israeli Prison Service did not adopt the recommendations made to it by the Public Health Service. In light of these findings, the paper's title – "Tuberculosis behind bars in Israel: policy making within a dynamic situation" – would have been more appropriate had the second phrase been "playing with fire."

The issues at stake are not only outbreaks in the prison system that affect inmates [6] and prison staff [7], but also that spread to the community [8].

The authorities responsible for the Prison Service and particularly for health in the Prison Service would do well to heed the "case for action" provided by this study and embark on a new course. Implementing the measures needed may not be easy, as was the case in setting up a new national TB program [9], but the stakes are high enough to warrant a sustained effort by those involved until the recommended means are in place.

Tuberculosis in the prison setting is a well-known phenomenon. In parts of the former Soviet Union, multiple drug-resistant tuberculosis is on the rampage and in many western countries it warrants special attention [10,11].

The Public Health Service has no jurisdiction regarding health policy in the prison system. Thus, it cannot intervene in the face of the neglect of this important issue although it is aware, as the paper specifically states, that "TB screening policy is practiced inconsistently in few of the Israeli prisons, upon physician discretion." This omission continues despite the fact that "every new inmate is given a medical examination upon incarceration and is screened for HIV infection."

Multiple drug-resistant and extensively resistant TB entities with less than a 50% chance of cure under most circumstances, were, and continue to be, definite possibilities in a prison population given to drug abuse (as documented by the authors), a major risk factor for these entities. A similar situation in the New York Prison Service led to the deaths of both inmates and prison staff [12]. This serious possibility has not led the prison authorities to take the necessary simple measures required to control TB in a high risk population such as the prison inmates for whom they have total responsibility. Thus, they are exposing both inmates and staff, and the community outside the prison to which prisoners return upon discharge, to unacceptable yet preventable risks.

As pointed out earlier, when the threat of rising TB incidence became apparent, the Israel Public Health Service preempted the spread of TB before the situation became out of control, a move that was not initiated in time in the United States for instance [13], later requiring a tremendous outlay in manpower and facilities [14]. In contrast, it seems that it might take the unfortunate, but in this author's opinion, inevitable, death, of a prison official or an inmate due to multiple drug-resistant or extensively resistant TB, to galvanize those responsible into action.

The appropriate measures recommended in the paper, which are necessary and indeed are standard in many countries, consist simply of screening all individuals for active TB upon entry to the prison system. This is done by means of a short verbal questionnaire. In conjunction, there is a need to identify recent infection in the prison staff at risk. This is possible by a one-time

TB = tuberculosis

extensive application of the tuberculin skin test to all staff in contact with inmates, with appropriate follow-up, as is done for instance for health care workers in general but also by the Israel Defense Forces and the Jewish Agency in select populations as mentioned below.

The administrative and medical authorities of the Prison Service are aware of the steps needed to be taken but have not implemented them on a comprehensive scale. This finding is even more incomprehensible in light of the fact that medical screening of new inmates *is* done, and human immunodeficiency virus, which is infinitely more expensive to screen for (a laboratory test versus six questions to be asked at the medical interview), *is* addressed by the Prison Service. It becomes apparent that a consideration when appointing the director of the Medical Department of the Prison Services should be a sound background in public health.

Many organizations alerted by the Public Health Service to the need for screening for TB in congregate settings, in distinction to the Prison Service, adopted the recommendations for TB control in their constituencies. The Jewish Agency, which runs boarding schools populated by a disproportionate number of immigrants from high prevalence TB areas, screens all new applicants at the recommendation of the Public Health Service. The Israel Defense Force does the same for conscripts who teach high TB risk immigrant populations as part of their military service.

Tuberculosis is a major public health threat if left to its own devices. This, unfortunately, is the current situation in the Israel Prison Services and requires immediate rectification.

References

1. Chemtob D. Completion of tuberculosis treatment in Ethiopian immigrants compared to other population groups, Israel 1990-92. Dissertation for the Master of Public Health (MPH), Hebrew University of Jerusalem, 1995.
2. Chemtob D, Weiler-Ravell D, Berlowitz Y, Leventhal A. Change in health policy for tuberculosis in Israel: from patient to population approach. The 2nd Jerusalem International Conference on Health Policy: The changing face of Health Systems, Jerusalem, Israel, 1998:38.
3. Mor Z, Adler A, Leventhal A, et al. Tuberculosis behind bars in Israel: policy making within a dynamic situation. *IMAJ* 2008;10: 202–6.
4. Chemtob D, Leventhal A, Berlowitz Y, Weiler-Ravell D. The new National Tuberculosis Control Programme in Israel, a country of high immigration. *Int J Tuberc Lung Dis* 2003;7:828–36.
5. http://www.euro.who.int/tuberculosis/TBForum/20070719_1.
6. Chaves F, Dronda F, Cave MD, et al. A longitudinal study of transmission of tuberculosis in a large prison population. *Am J Respir Crit Care Med* 1997;155:719–25.
7. Mitchell CS, Gershon RM, Lears MK, et al. Risk of tuberculosis in correctional health care workers. *J Occup Environ Med* 2005;47:580–6.
8. Jones TF, Charles LW, Francis F. Increased incidence of the outbreak strain of Mycobacterium tuberculosis in the surrounding community after an outbreak in a jail. *South Med J* 2003;96:155–7.
9. Weiler-Ravell D, Leventhal A, Berlowitz Y, Rishpon S, Chemtob D. Circumstances leading to the formulation and implementation of a new TB control program in Israel: a case study in public health and policy. *J Public Health Policy* 2004;25:23–37.
10. Coninx R, Maher D, Reyes H, et al. Tuberculosis in prisons in countries of high prevalence. BMJ 2000;320:440–2.
11. Coker RJ. From chaos to coercion: detention and the control of tuberculosis. New York: St. Martin's Press, 2000.
12. Valway SE, Greifinger RB, Papania M, et al. Multidrug-resistant tuberculosis in the New York State prison system, 1990-1991. *J Infect Dis* 1994;170:151–6.
13. Hamburg MA, Frieden TR. Tuberculosis transmission in the 1990's. N *Engl J Med* 1994; 330:1750–1.
14. Frieden TR, Fujiwara PI, Washko RM, Hamburg MA. Tuberculosis in New York City – turning the tide. N *Engl J Med* 1995;333:229–33.

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