

Tuberculosis in the workplace: developing partnerships with the garment industries in Bangladesh

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SUMMARY

OBJECTIVES: To implement and evaluate a public-private partnership model involving garment factories to reduce the tuberculosis (TB) burden in this workforce.

DESIGN: We used operational research to develop and evaluate a mechanism for effective and sustainable TB control in workplaces in three areas of Dhaka, Bangladesh. Strategies, protocols, guides and tools were developed with stakeholders. We assessed the impact of the project using quantitative and qualitative measures: changes in TB outcomes were calculated using standard indicators based on factory and DOTS centre records; changes in TB care-seeking behaviour were assessed using qualitative in-depth interviews with factory managers and medical personnel, and focus group discussions with factory workers, including TB patients.

FINDINGS: The project brought positive changes in knowledge, attitudes and practices of managers, workers and health care providers on TB care and control. During 2008–2010, a total of 3372 workers from a workforce of 69000 were referred for sputum microscopy and 598 were diagnosed with smear-positive TB, 145 of whom received care at their workplace. The overall treatment success rate was 100%.

CONCLUSION: It is feasible to engage factories in TB control activities in Bangladesh, and thereby increase case notifications and improve treatment outcomes.

KEY WORDS: tuberculosis; workplace; Bangladesh

WORKPLACES should be sites of particular interest to national TB control programmes (NTPs) in high tuberculosis (TB) prevalence settings. Workers are vulnerable to TB, both directly due to higher risk of infection as a result of high concentrations of people, and indirectly due to job loss as they are perceived as a workforce threat. A worker with TB leads to absence, work disruptions and reduced productivity;^{1–3} for example, in Uganda, 80% of wage earners with TB stopped working, losing on average 9.5 months of normal activity and incurring substantial costs for employers.⁴ It is estimated that globally TB causes a loss in productivity amounting to US\$12 billion per year.⁵ The introduction of TB control activities in the workplace should therefore be considered as an investment both by the corporate business sector and by governments aiming for countrywide development.

The 5-year Strategic Plan 2006–2010 of the Bangladesh NTP emphasised the involvement of business organisations in providing TB services in the workplace in line with World Health Organization (WHO) recommendations for TB control expansion.^{2,6} However, key questions remained about how to operation-

alise and sustain standardised TB services in the workplace. We used operational research to develop a sustainable workplace TB intervention focusing on garment factories, which could be scaled up nationally. The Bangladesh garment manufacturing sector is a significant employer, with more than 5000 factories employing 3.6 million employees, 80% of whom are poor young women.^{7–9} The underlying hypothesis of our study was that an appropriate public-private partnership model involving garment factories would significantly reduce the TB burden in this workforce. In this article, we present both the process of developing the partnership model and its impact on TB control activities.

MATERIALS AND METHODS

The project had four phases: collection and analysis of data to inform the development of a TB workplace model; development and implementation of a model that could feasibly be scaled up across Bangladesh; collection and analysis of data after implementation of the model for project evaluation; and

dissemination of results and discussion of implications with stakeholders.

The study was embedded within the NTP's TB control activities, which are based on the WHO-recommended DOTS strategy,^{1,2,10,11} and was carried out jointly by a research non-governmental organisation (NGO; the Society for Empowerment, Education and Development [SEED]), three NGO partners (BRAC, the Progoti Samaj Kallyan Protisthan and the Population Services Training Centre) and the Bangladesh Garment Manufacturers and Exporters Association (BGMEA). The BGMEA, which is run by an elected board of directors, is one of the largest trade associations representing the readymade garment (RMG) industry in Bangladesh. Besides its commercial responsibility to promote the RMG trade, the association is committed to ensuring workers' rights and social and environmental standards in factories. It runs 12 health centres at different commercial hubs, seven of which are in Dhaka City.

The research project was implemented in three purposively selected areas of Dhaka City—Mirpur, Dokkhinkhan and Rampura—where the NTP, SEED and one of the NGOs jointly run TB activities.

The research team mapped BGMEA-member factories in the study areas. From the resulting list of 170 factories, we selected 20 that were interested in participating in the study from each area, giving a total of 60 factories. The factories were categorised into three groups: large (>2000 workers), medium (1000–2000 workers) and small (<1000 workers). Twelve garment factories—four from each category—were randomly selected for a baseline survey to assess the extent of TB diagnosed in the factories: existing diagnostic and treatment services; the management's, medical personnel's and workers' knowledge, attitudes and practices regarding TB; willingness to be involved in workplace TB control efforts; and the feasibility of devising an appropriate model for workplace TB control. Data collection methods included a review of factory health service statistics, a questionnaire survey, in-depth interviews and focus group discussions (FGDs). For the survey, 30 workers were chosen randomly from each factory, giving a total of 360 respondents, and interviewed using a pre-tested semi-structured questionnaire: responses were subsequently coded by the interviewers. In-depth interviews were carried out with 29 factory managers and 14 factory medical personnel. Three FGDs were held with 24 workers (2 workers from each of the 12 factories). Appropriate arrangements were made to obtain informed consent from the participants before interviews. The entire process of obtaining informed consent was independently informed and rigorously scrutinised.

Following implementation in the 60 study factories, we monitored TB-related indicators in all 60 using specifically designed forms. Monthly and quarterly information was collected from factory and local TB

centre records. Regular monitoring and supervision, including extensive field visits, were carried out jointly by the NTP, SEED and BGMEA representatives. Data were randomly spot-checked to assess reliability.

We then carried out an end-of-project evaluation to assess how the model was functioning, its impact and the challenges faced. We collected quantitative data from all 60 factories and qualitative data from nine randomly selected factories, three from each category. In-depth interviews were carried out with 14 factory managers and 11 medical personnel using a pre-tested semi-structured questionnaire. Two FGDs were carried out with 19 workers, including TB patients.

Quantitative data were analysed using SPSS, version 14.0 (Statistical Package for the Social Sciences Inc, Chicago, IL, USA) and Microsoft Excel (Microsoft, Redwood, WA, USA). Qualitative data were systematically analysed using a thematic approach based on predefined and emergent themes relevant to the study objectives.

Ethics approval was obtained from the University of Leeds and the National TB Control Programme, Bangladesh.

RESULTS

We present the study results under three broad themes: developing and implementing the model, impact, and major challenges faced during development and implementation.

Developing and implementing the model

Based on the findings of the baseline survey, a systematic process¹² was followed to develop and implement a partnership for a sustainable workplace TB DOTS programme coordinated by SEED. The partners comprised the NTP, the three NGOs, BGMEA and the garment factories. The model included local private medical practitioners (PMPs), as they are popular with TB patients in urban areas of Bangladesh.^{12,13} We engaged PMPs who had a working relationship with SEED, had been trained by the NTP and were located close to the selected factories. To advise on operational issues, a Technical Working Group Committee (TWGC) was formed with representatives of the partners and the PMPs. The TWGC, acting within the scope of the NTP, participated in designing the intervention, contributed to developing the guidelines and materials for implementation and provided technical guidance to the research team.

A task-matrix was developed defining the specific roles of each partner: the NTP provided policy, guidelines, logistics and training; NGOs provided anti-tuberculosis treatment services, including direct observation of treatment (DOT) and follow-up, and TB-related communication activities; selected garment factories agreed to provide a facilitative

environment for implementation and also provided anti-tuberculosis treatment services depending on the availability of onsite medical facilities; and BGMEA committed to providing political support for project activities and participated in monitoring and advocacy, communication and social mobilisation (ACSM) activities. In addition, BGMEA health centres provided space for a DOTS corner and managed additional TB cases, if referred. SEED and the Nuffield Centre for International Health and Development at the University of Leeds provided technical support in developing partnership guidelines, tools and communication materials.

While mapping factories, we found three levels of availability of health-related staff and medical facilities. Smaller factories tended to have less onsite medical provision, but there was no clear correlation between the size of the factory and availability of medical facilities, and we found well-functioning ‘medical corners’ in some smaller factories. To develop appropriate service linkage approaches, we grouped the selected factories into the following three categories based on the availability of onsite medical facilities: Category A, factories with a medical corner and both a doctor and a paramedic; Category B, factories with medical corner and a paramedic only; and Category C, factories with no medical corner.

We developed three approaches based on these three broad categories. For categories A and B, the

doctor or paramedic would refer workers with TB symptoms to a designated NTP, NGO or BGMEA DOTS centre for sputum microscopy. If this proved positive, the factory doctor would diagnose TB and provide anti-tuberculosis treatment in Category A factories, while in Category B factories, the designated DOTS centres would provide TB diagnosis and drugs. In both cases, the paramedic provided DOT and follow-up in the factory premises and kept records of the TB patients. For Category C, all TB suspects were referred to an NTP, NGO or BGMEA DOTS centre by a specially trained factory staff member working in the factory. We also provided factory workers with the addresses of local PMPs so that they could use their services if they preferred. These PMPs would diagnose TB cases and provide treatment, as appropriate, as per NTP guidelines. However, due to the lack of capacity, PMPs were deemed unsuitable to provide DOT and follow-up. The model is summarised in the Figure.

We arranged eight half-day orientation workshops for a total of 171 senior management staff, including owners and managers, to make them aware of issues related to overall workplace TB management. We held day-long training sessions for workers and supervisors on national TB guidelines, TB management principles and project TB management guidelines. We trained 20 factory doctors on NTP guidelines and tools and 39 paramedics to provide DOT, record keeping and follow-up. We arranged quarterly review and

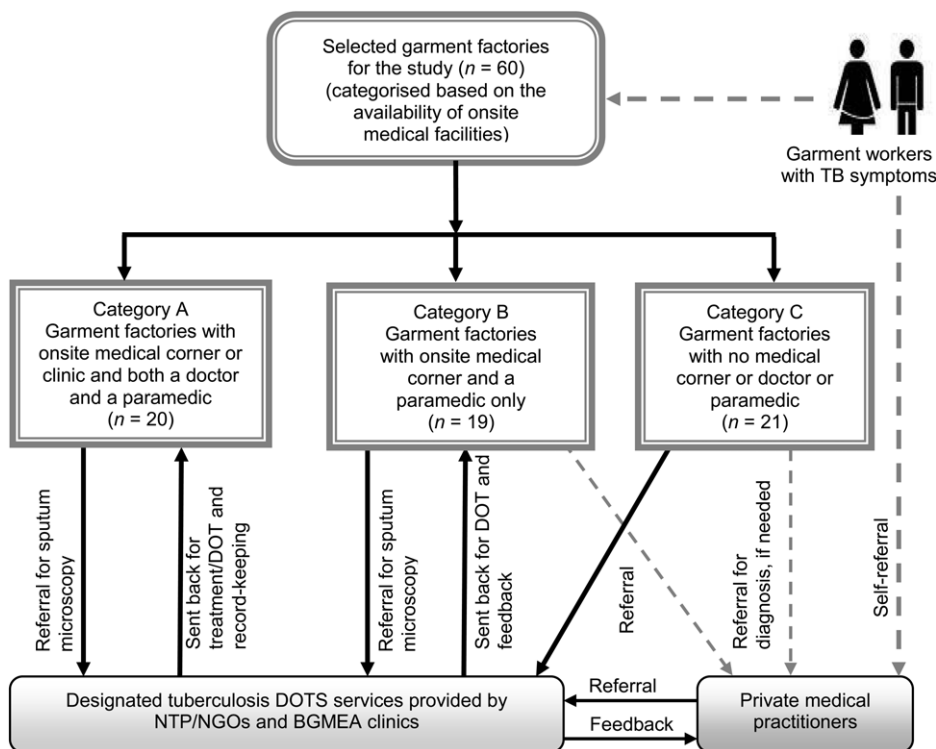


Figure Model for workplace TB control in garment factories in Bangladesh. TB = tuberculosis; DOT = directly observed treatment; NTP = National Tuberculosis Programme; NGO = non-governmental organisation; BGMEA = Bangladesh Garment Manufacturers and Exporters Association.

dissemination workshops to reinforce awareness of TB and TB care.

To develop awareness of TB among workers, we arranged orientation sessions at each factory floor during working hours. This included broadcasting TB-related messages through workplace entertainment systems, and showing video case studies based on real-life stories of garment workers with TB.

We developed DOTS centre address slips and referral slips, and distributed them to factory doctors, paramedics and management staff for use on referring TB patients to designated DOTS centres. The slips were also used to trace TB suspects and patients.

Impact

Changes in TB care-seeking behaviour

Prior to the intervention, there were many misconceptions in the factories about TB and its treatment. Some managers were not aware that TB would be fully cured if treated properly. Workers also had inadequate knowledge of TB and feared this 'non-curable, deadly disease'. A typical statement from a worker was:

When I joined the factory 1 year ago, I found out that one worker was diagnosed with TB, and was still working in the factory. I was scared, as I knew TB could be transmitted to me by breathing the same air. I was really happy when the manager asked her to leave the job, and she left the factory.

Although some factories had a doctor or paramedic who provided treatment for minor illnesses, there were practically no services for TB suspects/patients. Managers and workers did not know the locations of DOTS centres nearby, and workers were not allowed to seek TB care outside the factory during working hours. Workers who suspected they had TB often concealed their symptoms for fear of losing their jobs. Workers could only take a day's leave for illness: any further absence was punishable, generally by a cut in salary. TB patients therefore had to take leave without pay, and were generally not reinstated even if they were fully cured. Consequently, they generally resigned and left the city, often discontinuing treatment.

The end-project evaluation suggests that the project has brought positive changes in knowledge, attitudes and practices of managers, workers and health care providers on TB care and control. Management staff had greater awareness of TB treatment protocols, a changed attitude towards workers with TB, and were committed to allowing TB patients to take treatment during working hours—they now allow TB patients up to 30 days leave (generally paid), with an assured job. The factory managers also allowed TB patients to receive DOT during working hours without any wage cut. Workers became aware of the symptoms of TB, the availability of free anti-tuberculosis treatment at the DOTS centres, and the adverse effects of discontinuation of treatment. They felt able to seek

diagnosis and treatment without fearing dismissal. These changes assisted TB patients in following TB care guidance and in completing treatment. A typical statement from a TB patient was:

After the initial leave of 15 days, my manager allowed me to join the factory again. I am now getting time off to take TB drugs from the paramedic within the factory. All these were possible due to this project.

Change in TB outcomes

Prior to the intervention, no garment workers were recorded at factory clinics as being suspected of TB, diagnosed with TB or referred elsewhere for diagnosis. One TB patient stated that:

When my factory doctor suspected me as having TB, she asked me to do cough test from [name deleted] NGO health centre. But my uncle insisted I do the lab test from a private clinic which he perceived to be better quality. But I learnt from the project that the government [NTP] and NGOs do good quality lab test and provide TB drugs free of cost. That's why I went to the NGO centre for my cough test. I have now been taking medicine from my factory for the last 3 months. This has saved me at least 4000 taka (US\$50). I am better now and working in the factory.

Following the intervention, during 2008–2010, a total of 3372 workers of a total workforce of 69 000 were referred as TB suspects from the factories in the study areas to the designated DOTS centres: 598 were diagnosed with smear-positive TB (Appendix Figure A.1).^{*} These referrals contributed to increased overall case notifications in the project areas. The project-developed record-keeping process tracked patients at every stage of treatment, and thereby reduced the risk of discontinuation of treatment.

During the baseline survey, we found that no worker was receiving anti-tuberculosis treatment in the workplace. Between 2008 and 2010 (following the intervention), 145 smear-positive TB patients received TB care at the participating factories. Of these, 90 (62%) received TB care in factories where both doctor and paramedic were available, 34 (23%) received DOT in the workplace through trained paramedics, and 21 (15%) received DOT and follow-up from a nearby NTP/NGO DOTS centre during working hours following referral (Appendix Figure A.2). All of the smear-positive TB patients who received treatment at the factory level completed their scheduled treatment as per the NTP guidelines (i.e., a success rate of 100%). The remaining 453 smear-positive TB cases continued to receive treatment from the NGO-run

^{*}The Appendix is available in the online version of this article at <http://www.ingentaconnect.com/content/ijutld/ijutld/2012/00000016/00000012/art00015>

DOTS centres after being diagnosed with TB. Recording and reporting of those cases was performed through the NTP. The overall treatment success rates of the partner NGOs varied between 85% and 89%.

Challenges faced during development and implementation

The study faced a number of challenges in the development phases. At the start of partnership development, the owners and senior managers of garment factories were often reluctant to be involved in the project. They were concerned about their roles and the level of participation required in implementation. One manager stated:

I have seen a number of projects, especially with the government sector, who [government] has a tendency to preparing plans without consulting the relevant people and organisation. They [government] impose their rule on us. I think no project can be sustained if it keeps the main stakeholders out of the decision-making process.

We therefore involved all stakeholders at every stage of the project, including project planning and design, partner selection, developing training materials and context-specific ACSM tools, developing service linkages and dissemination of project findings. The TWGC worked as a platform to discuss, review and finally endorse the tools, guidelines and materials by the relevant stakeholders.

Furthermore, high security within many factories, particularly the larger ones, made it difficult for us to gain access at the early stages of the project; authorisation from BGMEA was therefore required to enter these facilities. However, it was encouraging to find that after orientation with managers and frequent factory visits with the NTP and BGMEA officials, we developed a strong relationship based on mutual respect and trust, and ultimately the larger factories showed strong commitment during project implementation and initiated major policy changes.

It was difficult to provide orientation and educational activities for a large number of workers, and managers were reluctant to allocate dedicated time during working hours for this. Managers were also reluctant to allow TB patients to visit DOTS centres during working hours, and to allow workers to continue working once they were diagnosed as TB patients. In some factories, workers were uncomfortable accepting TB patients in the workplace, delaying implementation of the model. One manager stated:

I have around 2000 workers in my factory. I cannot take the risk of infecting them just for 2 or 3 TB patients. My workers will also not accept this and I will face difficulty in recruiting workers.

While a supervisor commented:

If I allow one TB patient to go out for TB treatment during working hours, another worker will

demand time off the next day. How do I know they are really going for TB care? How will I manage the high expectations of my 1700 workers?

In addition, at the beginning of the project, medical staff perceived ensuring a referral mechanism and maintaining treatment records on factory premises as time-consuming. Factories without medical facilities struggled to organise the referral mechanism and to maintain records.

Proper planning and implementation of orientation and training of all relevant stakeholders was found to be crucial to change the attitudes of managers and workers, and maintain sustained commitment, requiring us to devise an acceptable, innovative mechanism to orient and train them. Regular joint monitoring and supervision by SEED, the NTP and BGMEA throughout the project successfully addressed such challenges.

DISCUSSION

Collaboration between corporate businesses, NGOs and the NTP can play an active role in promoting health within the workforce and creating networks for providing better TB care services.^{2,14-16} However, we have found few published studies that describe the process and impact of putting theory into practice, other than in residential settings such as gold mines.¹⁷ Our study demonstrates that it is feasible to engage factories in TB control activities in Bangladesh, and thereby increase case notifications and improve treatment outcomes. Dedicated ACSM activities created awareness among workers and changed the attitudes and practices of managers and supervisors.

To establish a sustainable model with scale-up in mind from the outset, we adopted a systematic process¹² to develop partnerships with the factories, involving stakeholders in all key activities at every stage. Participatory development of practical tools, operational guidelines and communication materials were vital to the success of the model. The TWGC approach of engaging all stakeholders resulted in enhanced trust, ownership and commitment, and thus played a major role in supporting and sustaining this workplace TB control project.^{1,2,14} We have observed growing interest and commitment from the NTP, BGMEA and manufacturers in implementing and scaling up this model, as evidenced by a recently signed memorandum of understanding (MoU) between the NTP and BGMEA to expand TB control activities in garment industries and to 12 health centres run by the BGMEA.¹⁸ However, regular monitoring with BGMEA and continued expert guidance and support from the NTP will be essential to sustain such initiatives.

It was vital to develop linkages between NGO and BGMEA health centres and PMPs, as they are the main

source of health care services for garment workers, while the NTP played a stewardship role.¹⁴ Moreover, differences in the availability of medical facilities within factory premises necessitated the development of three different approaches. Involving PMPs in the project was essential for factories without a medical corner/facility.

It was evident that providing workplace TB control depends on the management's good understanding of TB treatment protocols, and their subsequent commitment to allowing TB patients to continue in employment as well as to visit DOTS centres during working hours. Joint advocacy and orientation activities improved case identification and adherence, and reduced stigma and discrimination.¹⁴ Effective monitoring was also crucial to implementing the service linkage effectively.

More generally, workplaces provide settings for TB control that benefit both workers and businesses.^{2,14} Our experiences can provide evidence for other sectors of the benefits of becoming involved in workplace TB control. However, national policies and funds should be mobilised to provide encouragement and support.

We are acutely aware that the partnership must take active steps to remain sustainable. We are encouraged that focal points have been set up within the NTP and BGMEA that are responsible for ensuring sustainability and scale-up, and that the NTP has signed an MoU with SEED to provide technical support and continue with research and development during the scale-up of this model in other workplace settings. We are confident that the partnership will continue after the research team withdraws from the site.

CONCLUSION

Establishing sustainable partnerships with businesses can be an effective contribution to TB control, both increasing case notifications and improving treatment outcomes. We therefore encourage other NTPs to consider developing models for TB care and control. Different variants may be needed for different organisations, but the general principles are the same. To ensure success and sustainability, the NTP should initiate intensive networking with trade associations and maintain communication and support.

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References

- 1 World Health Organization. Guidelines for workplace TB control activities: the contribution of workplace TB control activities to TB control in the community. WHO/CDS/TB/2003.323. Geneva, Switzerland: WHO & International Labour Organization, 2003.
- 2 World Health Organization. DOTS at the workplace: guidelines for TB control activities at the workplace. SEA-TB-259. New Delhi, India: WHO, Regional Office for South Asia, 2003.
- 3 World Health Organization. TB control in the workplace: report of an inter-country consultation. SEA-TB-269. New Delhi, India: WHO, Regional Office for South Asia, 2004.
- 4 Stop TB Partnership, World Health Organization. Tackling tuberculosis (TB) in the workplace: stopping TB in the workplace makes good business sense. Geneva, Switzerland: WHO, 2011. http://www.stoptb.org/assets/documents/getinvolved/psc/TBinWorkplace_WHO_stopTBPartnership.pdf Accessed September 2012.
- 5 World Bank. Public-private partnerships for health: a review of best practices in the health sector. Washington DC, USA: The World Bank, 2003.
- 6 International Labour Organization. Instructions on tuberculosis guidelines for workplace control activities. Geneva, Switzerland: ILO, World Health Organization Stop TB Partnership, 2003.
- 7 Hasin F, Hassan M R. State of the garments health revisited. *Soc Sci Rev* 2002; 19: 91–106.
- 8 Huque R, Ahmed S, Jahan N A, Sultana N. Introduction of health insurance scheme for the improvement of health status of the garment workers in Bangladesh: a study of selected garment factories. Research Report 11. Dhaka, Bangladesh: Institute of Health Economics, University of Dhaka, 2003.
- 9 World Health Organization. Assessment of tuberculosis control activities in workplaces in Chittagong and Dhaka, Bangladesh. Mission Report. Geneva, Switzerland: WHO, 2007.
- 10 World Health Organization. Treatment of tuberculosis. Guidelines for national programmes. 2nd ed. WHO/TB/97.220. Geneva, Switzerland: WHO, 1997.
- 11 Enarson D A, Rieder H L, Arnadottir T, Trébuq A. Management of tuberculosis: a guide for low-income countries. 5th ed. Paris, France: International Union Against Tuberculosis and Lung Disease, 2000.
- 12 Zafar Ullah A N, Lubben M, Newell J N. A model for effective involvement of private medical practitioners in TB care. *Int J Health Plann Manag* 2004; 19: 227–245.
- 13 Zafar Ullah A N, Huque R, Begum V, Newell J N, Gerein N. Public-private partnership for TB control in Bangladesh: role of private medical practitioners in the management of TB patients. *World Medical Health Policy* 2010; 2: Article 13.
- 14 World Health Organization. Working together with businesses: guidance on TB and TB/HIV prevention, diagnosis, treatment and care in the workplace. WHO/HTM/TB/2012.3. Geneva, Switzerland: WHO, 2012.
- 15 World Economic Forum. TB management in the workplace: an introduction for businesses in India. Geneva, Switzerland: World Economic Forum, 2002.
- 16 World Economic Forum. Protecting your workforce from tuberculosis: a toolkit for an integrated approach to TB and HIV for businesses in South Africa. Geneva, Switzerland: World Economic Forum, 2008.
- 17 Grant A D, Coetzee L, Fielding K L, et al. 'Team up against TB': promoting involvement in Thibela TB, a trial of community-wide tuberculosis preventive therapy. *AIDS* 2010; 24 (Suppl 5): S37–S44.
- 18 Directorate General of Health Services. Report on health situation of Bangladesh. Dhaka, Bangladesh: DGHS, 2011.

APPENDIX

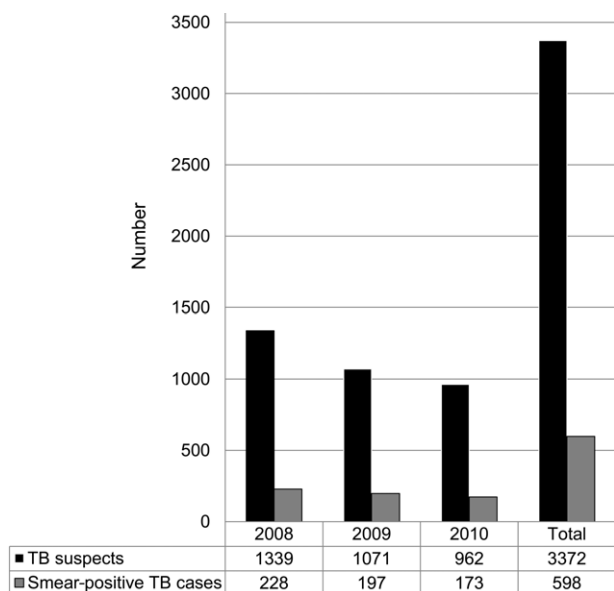


Figure A.1 Numbers of TB suspects and smear-positive TB cases referred by garment factories, post-intervention (2008–2010). TB = tuberculosis.

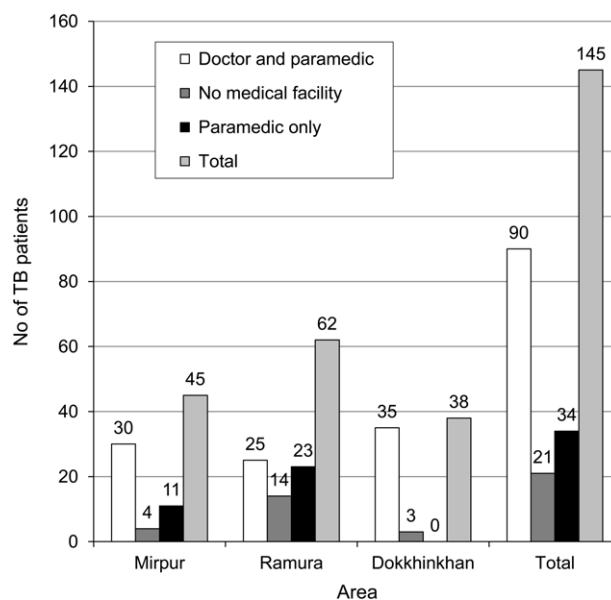


Figure A.2 Numbers of TB patients who received treatment at the workplace by type of onsite medical facility available and by area, post-intervention (2008–2010). TB = tuberculosis.

RÉSUMÉ

OBJECTIFS : Mettre en œuvre et évaluer un modèle de partenariat public-privé dans des fabriques de vêtements afin de réduire le fardeau de tuberculose (TB) de leur personnel.

SCHÉMA : Nous avons utilisé une recherche opérationnelle pour élaborer et évaluer un mécanisme de lutte contre la tuberculose (TB) efficient et durable dans les lieux de travail de trois zones de la ville de Dhaka au Bangladesh. On a élaboré les stratégies, les protocoles, les guides et les outils avec les responsables. Nous avons évalué l'impact du projet en utilisant des mesures quantitatives et qualitatives : les modifications dans les résultats TB ont été calculées au moyen d'indicateurs standard se basant sur les dossiers des fabriques et du centre DOTS ; les modifications de comportement de recherche de soins ont été évaluées grâce à des interviews qualitatives en profondeur avec les directeurs des fabriques

et le personnel médical et grâce à des discussions en groupes focalisés avec les travailleurs de la fabrique, notamment des patients TB.

RÉSULTATS : Le projet a entraîné des modifications positives dans les connaissances, les attitudes et les pratiques des directeurs, des travailleurs et des pourvoyeurs de soins de santé en ce qui concerne les soins TB et la lutte antituberculeuse. Au cours de la période 2008–2010, sur un total de 69 000 travailleurs, 3372 ont été référés pour examen microscopique des crachats et le diagnostic de TB à bacilloscopie positive a été porté chez 598 d'entre eux, dont 145 ont bénéficié de soins sur le lieu de travail. Le taux de succès global du traitement a été de 100%.

CONCLUSION : Il est possible d'engager les fabriques dans des activités de lutte contre la TB au Bangladesh, d'augmenter ainsi les déclarations des cas et d'améliorer les résultats du traitement.

RESUMEN

OBJETIVOS: Introducir y evaluar un modelo de colaboración pública y privada en las fábricas de textiles, con el fin de disminuir la carga de morbilidad por tuberculosis (TB) en sus plantillas laborales.

MÉTODO: Se utilizó la investigación operativa con el objeto de establecer y evaluar un mecanismo eficaz y sostenible de control de la TB en el lugar de trabajo en tres zonas de la ciudad de Dhaka en Bangladesh. Las estrategias, los protocolos, los manuales y los instrumentos se diseñaron en colaboración con los interesados directos. Se evaluó la repercusión del proyecto mediante las siguientes mediciones cuantitativas y cualitativas: se calculó la variación del desenlace de la TB mediante indicadores normalizados con base en los registros de las fábricas y de los centros de DOTS y se analizaron las modificaciones en los comportamientos de búsqueda de atención de la TB mediante entrevistas en profundidad

dirigidas a los gerentes de las fábricas, al personal médico y en debates en grupos de opinión con los empleados de las fábricas, incluidos los pacientes con TB.

RESULTADOS: El proyecto aportó cambios positivos a los conocimientos, las actitudes y las prácticas de los gerentes, los trabajadores y los profesionales de salud en materia de atención y control de la TB. Entre el 2008 y el 2010 se remitieron 3372 trabajadores de una plantilla de 69 000 para examen microscópico del esputo y se diagnosticaron 598 casos de TB con baciloscopia positiva, de los cuales 145 recibieron atención en su sitio de trabajo. La tasa global de éxito terapéutico fue 100%.

CONCLUSIÓN: Es factible lograr la participación de las fábricas en las actividades de control de la TB en Bangladesh y con ello aumentar la notificación de los casos y mejorar los desenlaces terapéuticos.
