<table>
<thead>
<tr>
<th>Title of Case Study/Research Success:</th>
<th>District level AFB Quality control experiences in Pakistan.</th>
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<tbody>
<tr>
<td>1. Title of Research Programme/Project</td>
<td>TB case detection and quality control (TB and Health Systems Strengthening).</td>
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<td>2. Programme/Project Reference Number</td>
<td>COMDIS Pakistan new approach to strengthening communicable diseases control.</td>
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<td>3. Summary of success [250 words]</td>
<td>The project has developed innovative systems of monitoring quality of TB diagnosis using human resources routinely available at health facilities at district and provincial levels. It developed skills of district laboratory supervisors using field tested guidelines and training materials. The approach was adapted for malaria and potentially for other communicable diseases.</td>
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<td>4. “Killer” fact</td>
<td>A logical approach to external quality approval improves quality of diagnosis of TB and malaria</td>
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<td>6. Description of the project and main findings [250 words]</td>
<td>Quality assurance of laboratories is a key ingredient of TB control for ensuring appropriate diagnosis and treatment of patients. However, quality control of peripheral laboratories is carried out irregularly because of the acute shortage of district TB laboratory technicians. This project tested two additional approaches of external quality control using laboratory technicians (microscopists) of other programmes in the district health system. The study compared the feasibility and effectiveness of Lab Technicians working at hospitals and malaria control programme with district TB clinics. Guidelines and tools were developed and piloting conducted in consultation with the National Tuberculosis Programme and the Provincial Reference Laboratory in Punjab. A mix of qualitative and quantitative methods, including participant observation, record review and interviews, were used to gather the required data on the selected indicators. The main findings include: hospital and malaria microscopists acquired comparable skills in carrying out quality control of peripheral laboratories for both malaria and TB. The project has assisted the programme in developing district capacity for introducing a district-based system of EQA – at facility, district, provincial and national levels. Procedures and tools have been developed, evaluated, and revised for scaling up at national level. The experience in the TB programme has been adapted for the malaria control programme. Health managers developed skills to monitor the quality of</td>
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### 7. Potential impact

**Who has benefited already and how?**

[100 words]

The study has improved quality of diagnosis of communicable disease at facility, district and provincial level. The use of an integrated service delivery approach at district level leads to effective control of TB and malaria. The 30 million people living in the 16 districts of Pakistan where these procedures have been implemented – by the Punjab TB and malaria programmes with the technical support of the Association for Social Development (ASD). ASD is supporting the national scale-up of these procedures.

**What is the actual or potential impact of the research?**

[100 words]

The institution of the EQA system at health facility, district, provincial and national levels. The intervention improves the quality TB diagnosis and treatment, case finding. It potentially also prevents the development of TB resistance and deaths from inappropriate therapy.

**Why is your research novel?**

[100 words]

The research is novel because of its degree of “embeddedness” within communicable disease programmes, enabling development and operational research to occur in typical district settings. The interventions are tailored to develop context specific solutions to implementation constraints of communicable diseases control programmes.

**What made your research successful?**

[100 words]

The long-term partnership with the national, provincial and district TB and malaria programmes. This was demand-driven, action oriented research taking a participatory approach to study design and implementation. A systematic approach to developing public health programmes was used. Guidelines and procedures were designed that enable communicable disease-specific activities to function within integrated and decentralised health facilities and management. Products were piloted, evaluated prospectively and revised using the experience of implementation and research finding.

### 8. Human interest

[250 words]

### 9. Names and countries of the Research Institute(s) and Organisations (s)

The national TB programme and Association for Social Development (ASD) Pakistan and Nuffield Centre for International Health and Development, LIHS, Leeds.

### 10. Lead Researchers Names and Organisations


### 11. DFID involvement

**Research programme**

Communicable disease research programme consortia (COMDIS).

**Dates**

2006-8

**Financial spend to date**

Completed.

**Future financial commitment**

None, except COMDIS communication funds.

**Follow-on project**

Further dissemination in Pakistan and South Asia via COMDIS communication funds.

**Name and extension no. of CRD contact person**

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<th>Name and extension no. of RM or Advisor</th>
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<tr>
<td>12. Photographs</td>
<td></td>
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<tr>
<td>13. Further information</td>
<td>See COMDIS and ASD websites. Amir Khan <a href="mailto:asd@asd.com.pk">asd@asd.com.pk</a>, or John Walley <a href="mailto:j.d.walley@leeds.ac.uk">j.d.walley@leeds.ac.uk</a></td>
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Assumptions / Additional Information

Author:  Mengiste Melese
Date:  7th July 08