Reducing the risk of DOTS supporters acquiring TB during home visits in Bloemfontein and Welkom

Ntombi Nyembe, Nandipha Jacobs and Dineo Mofokeng
17 May 2012
Health care workers have an increased risk of acquiring TB.

Risk of TB transmission is reduced by infection prevention and control measures.

Majority of TB infection control (IC) studies focus on doctors and nurses and are facility based.

Few studies have been conducted on TB infection control among community health care workers.
The introduction of primary health care re-engineering emphasizes the increasing role of community health workers in health care provision and the necessity of TB infection control measures in the household and community setting.
Objectives

- Identify possible risk factors for TB among DOTS supporters;

- Identify and assess strategies used by DOTS supporters to reduce TB transmissions; and

- Assess the impact of the training intervention on TB prevention and control strategies adopted by DOTS supporters.
Method

- Pre and post test research design
- 23 DOTS supporters were purposively sampled from local NGOs (N=10 Bloemfontein; N=13 Welkom)
- Questionnaire was adapted from the simplified checklist for TB IC & used the Knowledge, attitudes and beliefs regarding TB IC assessment tool
- Conducted face to face interviews with DOTS supporters using structured questionnaires
- Observed and completed a personal protective equipment audit tool during visits with TB patients
The intervention was designed using pretest questionnaire results and existing materials from the Siyayingqoba treatment literacy series and TB IC in the era of expanded HIV care and Treatment.
Intervention

- The intervention was a 2 day training session for DOTS supporters
- Topics covered during the training were:
  - TB and the DOTS strategy
  - HIV and TB co-infection
  - Infection control including administration and environmental controls
  - Exercises/practicals on hand hygiene, cough etiquette, personal protective wear, etc.
Data analysis

- Data was captured and analysed using SPSS
- A limitation of the study is that findings cannot be generalised to all DOTS supporters in the province
Results

- **Socio demographics:**

  1. Females – majority older than 30 years (N=9/10 Bloemfontein; N=9/13 Welkom)

  2. Almost half have worked as DOT supporters for 3 years (N=7/10 Bloemfontein; N=6/13 Welkom) and the rest for longer–up to 10 years
Results

- Knowledge, attitudes and beliefs regarding TB IC

Motheo

- Transmission: 65% Baseline, 75% Post intervention
- Infection control: 66.7% Baseline, 95% Post intervention
- Beliefs: 86% Baseline, 100% Post intervention
Results

Knowledge, attitudes and beliefs regarding TB IC

Lejweleputswa

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Post intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission</td>
<td>69.6</td>
<td>95</td>
</tr>
<tr>
<td>Infection control</td>
<td>48.4</td>
<td>66</td>
</tr>
<tr>
<td>Beliefs</td>
<td>70</td>
<td>84.3</td>
</tr>
</tbody>
</table>

%
Results

Knowledge, attitudes and beliefs regarding TB IC

Problem areas identified:

- TB infection control guidelines and procedures (household and community settings)
- Separation of coughing patients not prioritised
- Sputum collection procedures: toilets, indoors
- Inadequate protective measures: surgical face masks, hand washing irregular, disposal of tissues and handkerchiefs after use
Results
Health and safety

Main findings:
1. DOTS supporters are unaware of the importance of accessing vaccinations and IPT
2. Non-protective and poor quality PPE
3. HIV positive DOTS supporters – access to HIV and AIDS testing and treatment services but no job relocation
4. MDR and XDR TB – no N95 respirators
5. Reporting of health and safety problems
6. TB IC training needs
Personal protective equipment audit tool

Important observations:
1. Ventilation
2. Irregular hand washing
3. Washing of hands whilst wearing gloves (after care)
4. PPE removal sequence
5. Removal of surgical masks whilst in room
Recommendations

- TB IC guidelines for households and community settings to be developed— NGO’s
- TB IC – stand alone training for DOTS supporters
- Protective and good quality personal protective equipment to be improved
- Vaccinations and IPT
- Refresher and in-service training (TB and HIV knowledge)
- Debriefing sessions for dealing with their workload and the death of patients
Thank you
Enkosi
Re a leboha

Questions