Practice Training Needs Analysis of Nurses in the Implementation of TB and HIV Policy Guidelines

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Conflict of Interest:
The authors report no real or perceived vested interests that relate to this article that could be construed as a conflict of interest
Learning objective of the presentation

• Enable understanding about the challenges that the nurses experience in TB and HIV infections’ policy implementation in the rural public health care sectors in South Africa

• Enable understanding about the importance of continuous training for nurses to update their knowledge and skills on the frequent policy changes and in the management of TB and HIV infections.
Outline of presentation

• Background to the study
• Aim of the study
• Objectives of the study
• Methodology
• Results
• Conclusion
Background

- In 2014 UNAIDS report shows more than 6.3 million people were living with HIV and AIDS in South Africa.
- WHO joint review of 2014 shows the TB incidence rate in SA was the highest in the world (993 per 100,000).
- Out of 9 million people ill with TB in 2013, 1.1 million were co-infected HIV.
- TB and HIV/AIDS is the leading cause of premature morbidity and mortality at 60% in SA.
Cont....

- HIV/AIDS and TB is the leading cause premature mortality at 9.3% & 8.5% respectively in the Overberg district.
- Integrated TB and HIV policy implementation was remained a challenge.
- Health professionals have inadequate knowledge about the policy guidelines that they are expected to implement.
- Most of the training given mainly focused on the clinical aspect of treatment and care.
Aim and Objectives

• **Aim:** To assess the practice training needs of nurses in the implementation of TB and HIV policy guidelines.

• **Objectives**
  - To determine the training given to nurses in the implementation of TB and HIV policy guidelines
  - To identify gaps in knowledge and skills of nurses in the aspects of TB and HIV policy guidelines implementation
Research methodology

• Mixed methods approach with concurrent design was employed.
  – Survey questionnaire; Semi-structure interview
  – The study setting- Overberg district
  – Study population: Enrolled nursing assistants, Enrolled nurses and Registered nurses
  – Sample: Survey (N=60); semi-structure interview (N=14)
  – Data analysis- SPSS programme was used to analyse the survey data. Thematic analysis using Atlas ti-conducted to analyse the qualitative data
Ethics consideration

• Ethical clearance for the study was obtained from the University Senate Ethics Committee and the Provincial Department of Health.
• All participants signed an informed consent form before the data collection process.
Survey results

• Out of the 60 questionnaires distributed 44 questionnaires were returned, with the response rate of 73%.

• Among the respondents:
  – 77% attended training on HIV policy,
  – 64% attended training on TB policy,
  – 46% attended training on STIs and
  – 32% attended on integrated TB and HIV policy
Knowledge on TB infection control measures

<table>
<thead>
<tr>
<th>Administrative</th>
<th>Environmental</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen ALL patients for cough</td>
<td>ALL known sputum positive TB patients and any coughing patient should be seen first</td>
<td>staff in contact with infectious patients to use N95 respirators for personal protection</td>
</tr>
<tr>
<td>Provide all coughing patients with mask or tissues</td>
<td>external sheltered waiting areas</td>
<td>staff are aware of their HIV status</td>
</tr>
<tr>
<td>Ventilate consultation rooms by opening windows</td>
<td>sputum collection outside</td>
<td></td>
</tr>
<tr>
<td>Staff are aware of their HIV status</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TB infection control measures practiced

- Screen ALL patients for cough: 48.7%
- Provide all coughing patients with mask or tissues: 51.3%
- ALL known sputum positive TB patients and any coughing patient should be seen first: 61.5%
- External sheltered waiting areas: 7.7%
- Ventilate consultation rooms by opening windows: 64.1%
- Sputum collection outside: 66.7%
- Staff in contact with infectious patients to use N95 respirators for personal protection: 42.5%
- Staff are aware of their HIV status: 52.5%
## Summary of knowledge of nurses

<table>
<thead>
<tr>
<th>Level</th>
<th>TB</th>
<th>HIV</th>
<th>Integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower level knowledge</strong></td>
<td>Intensive care, MDR management, TB notification</td>
<td>NIMART, ART, PMTCT, ART in children, ACTS and VCT</td>
<td>NIMART, Continuous HIV treatment and management</td>
</tr>
<tr>
<td><strong>Sufficient to high level knowledge</strong></td>
<td>INH therapy, Health promotion, TB diagnostic skills, Infection control</td>
<td>Health promotion, counselling</td>
<td>Knowledge of TB for HIV patient, VCT for TB patient, TB investigation, Knowledge of dispensing co-trimoxazole</td>
</tr>
</tbody>
</table>
Knowledge of nurses on specific TB activities

TB knowledge - specific aspects

<table>
<thead>
<tr>
<th></th>
<th>Poor</th>
<th>Moderate</th>
<th>Sufficient</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB diagnostic skills</td>
<td>0</td>
<td>17</td>
<td>67</td>
<td>17</td>
</tr>
<tr>
<td>TB health promotion</td>
<td>0</td>
<td>12</td>
<td>62</td>
<td>27</td>
</tr>
<tr>
<td>TB infection control</td>
<td>0</td>
<td>14</td>
<td>66</td>
<td>21</td>
</tr>
<tr>
<td>TB contact tracing</td>
<td>0</td>
<td>32</td>
<td>48</td>
<td>20</td>
</tr>
<tr>
<td>TB intensive case finding</td>
<td>14</td>
<td>43</td>
<td>33</td>
<td>10</td>
</tr>
<tr>
<td>TB treatment regimens</td>
<td>4</td>
<td>20</td>
<td>60</td>
<td>16</td>
</tr>
<tr>
<td>INH therapy</td>
<td>9</td>
<td>18</td>
<td>59</td>
<td>14</td>
</tr>
<tr>
<td>MDR/XDR management</td>
<td>29</td>
<td>38</td>
<td>24</td>
<td>10</td>
</tr>
<tr>
<td>TB disease notification</td>
<td>9</td>
<td>30</td>
<td>43</td>
<td>17</td>
</tr>
</tbody>
</table>
Knowledge of nurses on specific HIV activities

<table>
<thead>
<tr>
<th>HIV knowledge - specific aspects</th>
<th>Poor</th>
<th>Moderate</th>
<th>Sufficient</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV health promotion</td>
<td>0</td>
<td>11</td>
<td>61</td>
<td>29</td>
</tr>
<tr>
<td>HIV counselling</td>
<td>0</td>
<td>9</td>
<td>69</td>
<td>22</td>
</tr>
<tr>
<td>ACTS and VCT</td>
<td>4</td>
<td>7</td>
<td>68</td>
<td>21</td>
</tr>
<tr>
<td>PMTCT</td>
<td>32</td>
<td>23</td>
<td>27</td>
<td>18</td>
</tr>
<tr>
<td>NIMART</td>
<td>35</td>
<td>40</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>ART in adults</td>
<td>44</td>
<td>28</td>
<td>22</td>
<td>6</td>
</tr>
<tr>
<td>ART in children</td>
<td>38</td>
<td>23</td>
<td>31</td>
<td>8</td>
</tr>
<tr>
<td>HIV diagnostics</td>
<td>5</td>
<td>33</td>
<td>48</td>
<td>14</td>
</tr>
<tr>
<td>CD4 policies</td>
<td>10</td>
<td>29</td>
<td>43</td>
<td>19</td>
</tr>
<tr>
<td>WHO staging</td>
<td>11</td>
<td>17</td>
<td>50</td>
<td>22</td>
</tr>
</tbody>
</table>
Knowledge of nurses on integrated TB and HIV management

Integrated management - specific aspects

<table>
<thead>
<tr>
<th>Knowledge of TB for HIV patients</th>
<th>Knowledge of offering HIV test to TB suspects</th>
<th>Knowledge of investigating TB when symptoms are present</th>
<th>Knowledge of TB treatment and monitoring</th>
<th>Knowledge of WHO and CDC HIV staging</th>
<th>Knowledge of HIV treatment and management</th>
<th>Knowledge of initiating and dispensing Co-trimoxazole</th>
<th>Knowledge of integrated NIMART</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>moderate</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>sufficient</td>
<td>43</td>
<td>43</td>
<td>43</td>
<td>46</td>
<td>73</td>
<td>45</td>
<td>40</td>
</tr>
<tr>
<td>excellent</td>
<td>57</td>
<td>57</td>
<td>57</td>
<td>54</td>
<td>27</td>
<td>36</td>
<td>50</td>
</tr>
</tbody>
</table>

FROM HOPE TO ACTION THROUGH KNOWLEDGE.
Qualitative Results

The following three themes emerged from qualitative data analysis:
1. Theme 1. training opportunities
2. Theme 2. Inducting new staff members
3. Theme 3. Knowledge transfer
Theme 1: Training opportunities

• The need of training on policies and guidelines for both TB and HIV.
  – “I think it’s important that all the staff must go for HIV and TB training to support these sick people”;
  – “Yes, I think it is important that all of us know about the new changes in TB and HIV policy guidelines.”
• Presenting all cadres of health workers with opportunities to learn in formal setting like in workshops or educational institution is important.

• “... last time I spoke to sister X about further training with regard to TB and HIV in adult and paediatric care. And it is crippling for me because I am very hungry for knowledge and for things as they change”. 
Theme 2: Inducting new staff members

• Lack of orientation for new staff members who have joined the ward/ work area was also reported as a barrier to implementation of the TB and HIV integrated care policies.

• These new staff members are often given responsibilities without them having adequate time to learn and are expected to deliver quality service to the patient.

  — “You see? Just a little bit of background. I was thrown here at section X just quickly and I caught up on the information – asking, asking, asking. And nobody took me by the hand, I’m going to be honest. One need more help”
Theme 3: Knowledge transfer

- Knowledge transfer which is expected from those who have attended training is a facilitator of the implementation of the policy.
- Participants indicated that knowledge transfer is not happening from those individuals sent to a workshop/training in spite of the expectation to give feedback to the others who did not attend.
- “... you know, they go to attend training or workshop and when they come back they do not explain or give feedback to those who did not attend the course”
Conclusion

• The result of the study has indicated that only fewer people attended integrated TB and HIV training, which is supposed to be the current practice.

• The study has demonstrated that nurses at the Overberg district lack adequate knowledge on TB and HIV policy guidelines, particularly on TB intensive care, MDR management, TB notification, and on NIMART, ART for adult and children, and PMTCT.
• The participants’ responses showed poor service coordination and unsatisfactory knowledge of processes which impact on the ease of access for patients

**Recommendation**

• It is recommended that all nurses, including staff nurses be trained in the integrated TB and HIV policy guidelines to improve policy implementation thus patient outcomes
Reference


Acknowledgement

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Thank you!
Enkosi!
Ngiyabonga!
Dumela!

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