

# Creating a safe environment for patients and staff in the Bronchoscopy theatre at Universitas Academic Hospital



**ME MOTLOHELOA**

**H MADIEHE**

**ML MAGERMAN**

**MJ MORWENG**

**A SMUTS**

**TC WALAZA**

**EA WIESE**

## BACKGROUND



Health care workers (HCW) are in direct contact with tuberculosis (TB) infected patients in Bronchoscopy theatre where invasive procedures are done putting HCWs at high risk.

# OBJECTIVES

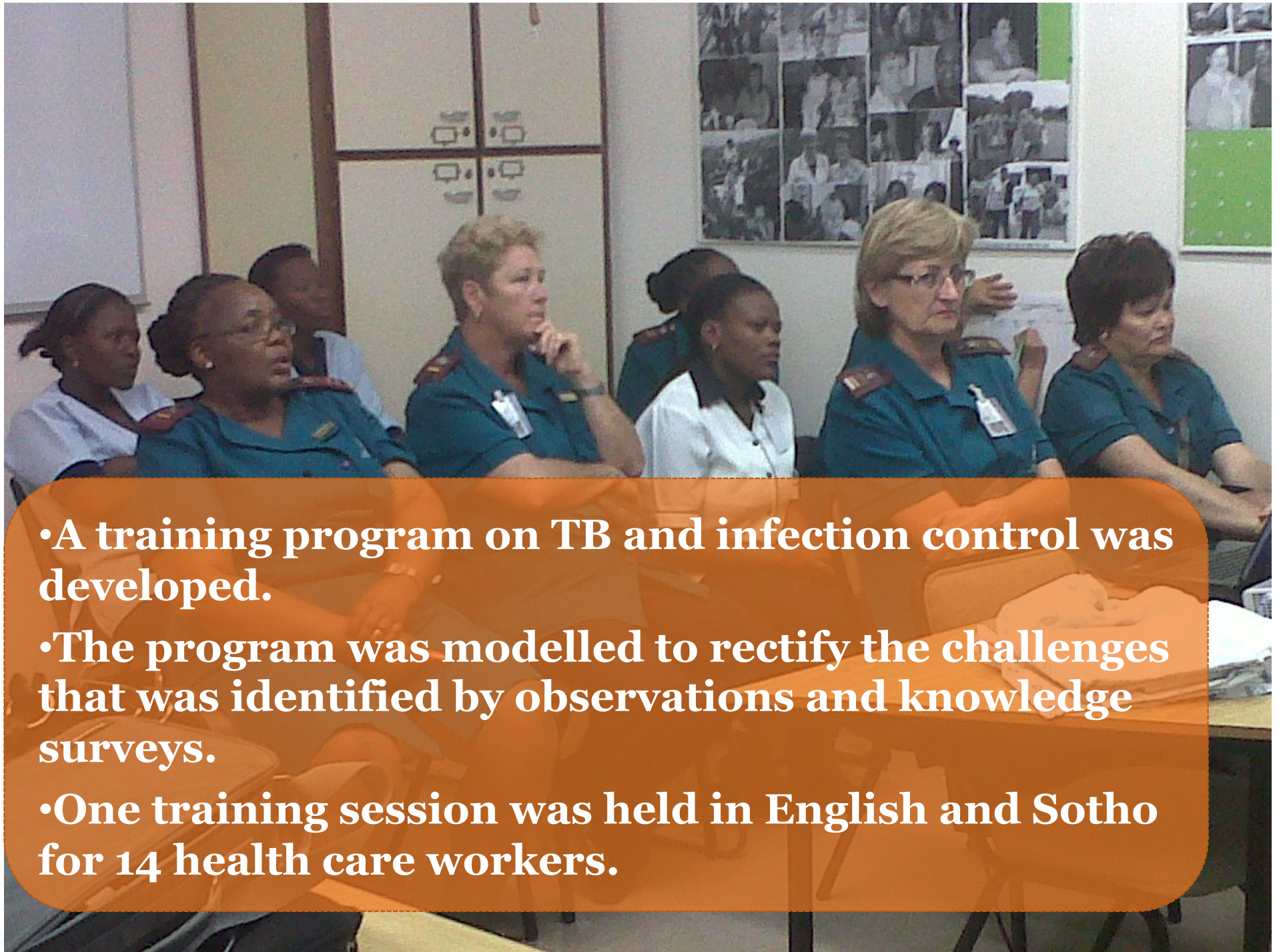


- To improve staff knowledge and practice regarding TB prevention and control in the Bronchoscopy theatre.
- To evaluate the effectiveness of TB Infection Control (IC) training with knowledge and practice questionnaires and recorded observations.
- To screen patients on admission in the clinic by assessing coughing and providing applicable PPE
- To develop an educational tool for health education to patients.
- To perform a risk assessment in order to provide recommendations.

# METHODOLOGY



- Pre and post observations were done to evaluate practice and behavior in the Bronchoscopy theatre and in the waiting area
- Knowledge and practice questionnaires were issued to evaluate basic knowledge and practice of PTB transmission, use of PPE, etc.
- Environmental risk assessment was done by means of physical observation.



- A training program on TB and infection control was developed.
- The program was modelled to rectify the challenges that was identified by observations and knowledge surveys.
- One training session was held in English and Sotho for 14 health care workers.

Ebang ho se dipampitshana tsa ho mina kapa maseke (mask) ya sefahleho, phahamisa sephaka mme o kwahele nko le molomo ka bokahare ba setsu ha o kgohlola kapa o thimola.

If no tissues or face-masks are available, lift arm up and cover nose and mouth with the inside of the elbow when you cough or sneeze.

As geen tissues of maskers beskikbaar is nie, lig arm op en bedek neus en mond met binnekant van elumboog wanneer hoes of nies.



Diteko le meriana ya TB ke mahala.  
Tests and medicine for TB is free.  
Toetse en medikasie vir TB is gratis.

**IMPORTANT / BELANGRIK**  
**Complete your TB treatment.**  
**Voltooi u TB behandeling.**

**Qeta nako ya ho nwa meriana ka botlalo.**

For more information contact your local clinic.

Vir meer inligting besoek u plaaslike kliniek.

Bakeng sa dipatlisiso etela kliniki e haufi le wena.

ML Magerman: 0514053832

HM Madiehe: 0514052958

ME Motlohelo: 0514053775

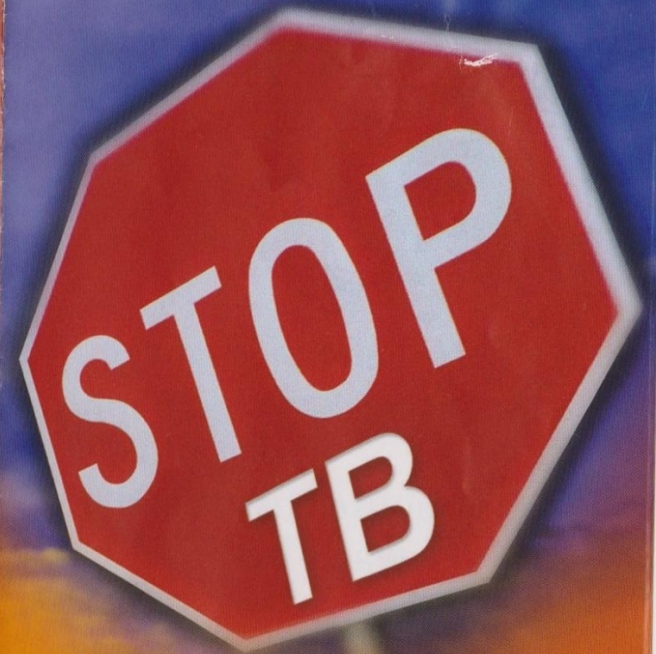
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**Pamphlet**



**Cover your cough to stop the spread of TB.**

**Thibela ho ata ha sefuba.  
Kwahela dinko le molomo ha o kgohlela.**

**Bedek jou hoes om die verspreiding van TB te voorkom.**

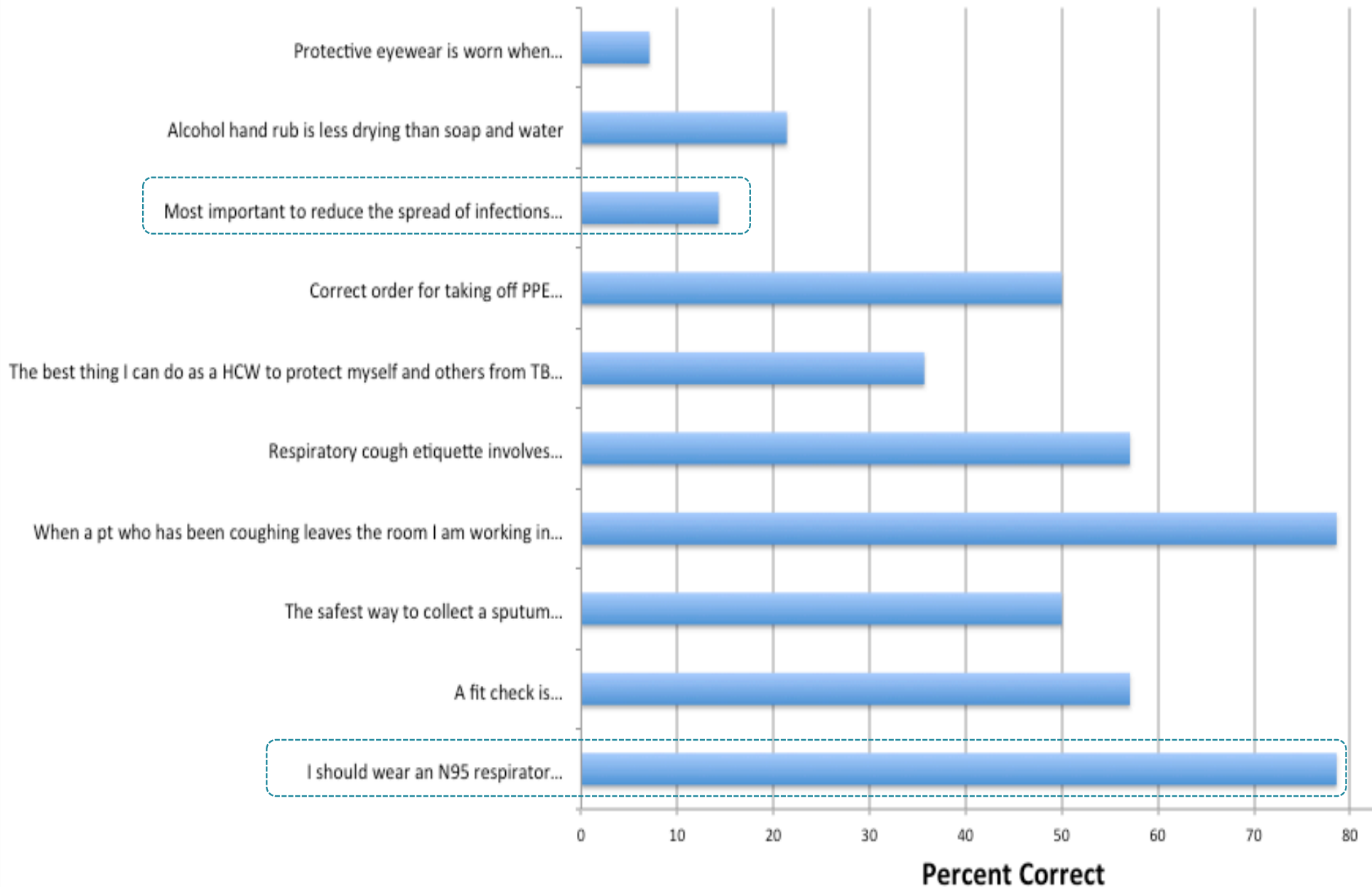
# RESULTS



- **COMPARISON BETWEEN PRE- AND POST OBSERVATION IN BRONCHOSCOPY THEATRE**

<b>PRE-OBSERVATION</b>	<b>POST-OBSERVATION</b>
Hibitane & alcohol hand rub not available	Available
Hand washing not done before donning of PPE	Washed hands
N95 worn by only 2 out of 9 staff in theatre	15 out of 15 worn N95
Fit check of N95 not done	Done
Goggles not worn by staff performing procedure	Goggles worn
46% compliance	83% compliance

# Knowledge Questionnaire Results





# PRACTICE QUESTIONNAIRE



<b>Sample self- reported practice questions</b>	<b>Percent "Most of the time"</b>
<b>My colleagues wear a respirator when they obtain a sputum sample from a patient</b>	<b>46</b>
<b>When a patient is coughing my colleagues give them a surgical mask to wear</b>	<b>91</b>

# RESULTS CONTINUE



- Environmental risk assessment:
- Challenges:
  - Poor ventilation
  - No negative pressure
  - Overcrowded
  - Hand basin for hand washing not available
  - Surfaces cluttered

# RESULTS: PATIENT OBSERVATIONS



- In the waiting room:
  - a) Pre intervention
    - Coughing patients were not separated and not provided with a surgical mask
  - b) Post intervention
    - Coughing patients were separated and provided with a surgical mask

# CONCLUSIONS AND RECOMMENDATIONS



- Move Bronchoscopy theatre to operating rooms
- Develop a DVD on the procedure for medical- and nursing students to be viewed in the lecture room to reduce overcrowding.
- If not moved to operating rooms then the following need to be done:
  - Remove curtains
  - Install extractor fans
  - Identify or add a ante room for putting on and taking off of PPE
  - Add a basin for washing of hands
  - Add a sluice room for equipment cleaning
- Formulation of a policy on TB infection control

Thank you!



***Any comments or question?***