Factors Influencing Nurses Compliance With Tuberculosis Standard Precaution: The Experience Of Malaysian Nurses

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CONTRIBUTING FACTORS TO NURSES COMPLIANCE WITH TUBERCULOSIS STANDARD PRECAUTION: THE EXPERIENCE OF MALAYSIAN NURSES

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OUTLINE

- Introduction and Significance
- Aims
- Methodology
- Findings and Interpretations
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- Recommendations
- Conclusion
High incidence of occupational exposure to microorganisms occurs among nurses, which many could cause serious or even lethal infections.

Despite the known risk of tuberculosis (TB) nurses compliance with local TB infection control guidelines is still low.

Dony, 2011, Transforming the fight: Towards elimination of tuberculosis.
INTRODUCTION

• Nurses involvement in caring and treating patients infected with TB starts from the time patient is admitted, during DOTs treatment and till the patients has completed treatment. However, there are no studies that specifically examine nurses’ experience when caring for these patients.

• There is lack of information concerning the realities faced by nurses in implementing TB prevention control measures. The level of awareness may vary according to the demographic factors such as years of service, education, age and of the behaviors (Edginton Me et al 2002)
The objective of this study is to explore nurses’ experiences when caring for patients with tuberculosis infection and handling prevention control at government hospitals within Malaysia context.
SPECIFIC OBJECTIVE

1. To explore the nurses experience in compliance with the tuberculosis standard precaution.
2. To explore the nurses personal perception on the seriousness of the disease
3. To explore the barriers in compliance to the standard precaution
This qualitative study utilised a Heidegger phenomenological approach.

Purposive sampling was used to recruit the respondents.

2 focus group discussions were conducted by utilizing an interview guide.

24 nurses (12 in each FGD) from 3 tertiary hospitals in Kuala Lumpur.

The data was analysed using thematic analysis.
HEIDEGGER'S HERMENEUTIC CIRCLE

Hermeneutic Phenomenology

- Hermeneutics: The art of understanding and interpretation of verbal or non-verbal expressions as well as prior aspects that influence communication, including presuppositions, assumptions, the meaning and philosophy of language.

- We all experience and use Hermeneutic phenomenology in our daily lives

- All of the components or parts of experience are interrelated and contextual

"Words and language are not wrappings in which things are packed" (Martin Heidegger)
Thematic Analysis – Guidelines by Krueger and Casey (2009)

- FGD interviews transcribed verbatim by the main researcher
- Transcript were supplemented with the field noted and non-verbal responses
- Read transcript again for 3 times
- Coding and fitting to emerged themes on factors influencing compliance to IPC
- All members analyze the content of the transcript
- Analysis following guidelines by Krueger and Casey
FINDINGS AND DISCUSSIONS

Theme 1: Sub Theme

a. Problematic Infection Control Prevention (IPC) arrangements
b. Workload
c. sense of duty of care

• Excerpt:
  
  .. We can't do a proper cleaning because the ward is so full and patient turnover is too fast....we can't afford to do proper cleaning...(SN)

  ...I feel that putting patient in a mixed ward increasers the exposure for staff and other patient...(SN)

  ... there is no negative pressure room and lack of isolation rooms also to isolate infected patients..we only cohort the patients...(SN)

Discussions

1. These situations inhibits nurses from implementing standard precautions. It is also noted that heavy workload and pressure, requiring fast action the nurses have no time to follow the standard practice guideline.

2. Lack of time has also widely described in studies done by Madan A (2002, Kelen GD (1990), Oliveria AC (2010)

3. Understaffed and workload made the management on TB became ineffective. TB management has 3 scopes of services which is screening, treatment and health education. These 3 services should be conducted almost at every time. If understaffed, the service given would not be conducted properly. (Abdul Rahman & Mokhtar, 2015)
FINDINGS AND DISCUSSIONS

Excerpt:

- **Misusage of PPE**

  “We are instructed by our sister to use N95 for 1 day before we can discard it...but doctors waste it by changing every time they enter the patients room..(SN)

- **Preference on the brand of the N95**

  “...I feel I am suffocating when I wear N95 but I know I still have to wear and I prefer Kimberly Clark( Duck mouth)(SN)

  “...I can't breathe well when I use N95 or a face mask (SN)

- **Lack of supply especially mask**

  “Many times I want to use N95, but the mask is not available. And it’s quite common... most of the times sisters kept it in their rooms and locked so we are unable to take it..(SN)

  “I don’t like to use mask because it ruins my make up so I wear it loose”(SN)

Discussion

1. It is vital for nurses to have the protective equipment at their disposal for use when necessary. Similar findings were reported in other studies (Osborne S, 2003, Oliveira AC, 2010, Henry K, 1994).

2. In infectious disease/medical ward nurses are advised to use N95 whenever dealing with suspected or infected patient whereas patients themselves are instructed to use surgical mask.

3. N95 masks provides a high filtration barrier to protect HCWs from inhaling tuberculosis bacilli. WHO recommends that N95 should be worn when providing care to infectious MDR-TB and XDR-Tb or people suspected of having this infections, (WHO, Policy on TB infection control in health care facilities, 2009)

4. Study suggests that surgical masks worn by infectious patients with multidrug-resistant TB in a hospital ward reduced transmission from patients by 56% compared with periods when masks were not worn, (Ashwin 2012)
Excerpt:

“I follow my senior…..if they don't wear glove or mask..i just follow them..” (SN)

"It's ok if I get the disease...at least I can loose weight then“ (Male nurse)

Discussion

1. Nurses may feel there is no necessity to follow guidelines, especially if these are not routinely used in the department they work in. In addition the negative behavior, regarding complying with the use of PPE, displayed by more experienced colleagues may affect younger nurses compliance.

2. Respondents feel there is no necessity to follow guidelines, especially if these are not routinely used in the department they work in.

3. Reluctant to seek treatment even if they are unwell and waits until being told by ward sister or friends and generally they don’t disclose because of stigma

4. Despite comprehensive CPG and policies are in place but HCW still fail to implement it (Farley Je et Al, 2012)
FINDINGS AND DISCUSSION

Excerpt:

• Availability of guideline
  “... I know there are a few guidelines near the nurses counter but I never bother looking at it....” (Staff nurse)
  “...I think there is guideline on TB ... but not sure... I think its black color book” (Staff nurse)
  ‘.i kept all the guidelines in the counter ..as a preparation for audit purposes....(nursing sister)

• Ineffective security services
  “... security does not control the patient... most of the time they will not be in the place...so patients can go and come as and when the like... “ (Staff nurse)

Findings: Theme 4
Availability of guideline, training, practice of infection control

DISCUSSION
1. Participants are not aware about the availability of the guidelines. Some admits that they know about the availability of the guideline but did not take the interest to look or read it.
2. No documentation whether staffs read the guidelines
3. Ineffective security services
4. Nurses are unable to control patient and some patients refuse to listen to the nurses.
5. Location of the nurses counter in some wards are not strategic, unable to monitor movement of patients.
6. Patients are allowed to be seen by relatives outside the ward and usage of proper PPE is questionable
1. The findings from this study may be used to develop more effective interventions for promoting nurses compliance to TB prevention guidelines.

2. Several intervention such as distributing leaflets among nursing personnel, scattering small posters in various places of wards, and continuous reminders from ward sisters about the benefits of complying with Standard Precautions and the possible consequences of the exposure to microorganism to be a useful way to keep nurses in line with protective guidelines.

3. As this study was only conducted among nurses from Klang Valley, it is suggestive to conduct further research for a larger and more diversified population of nurses across Malaysia.
1. **Nurses Empowerment**

- Nurses should be empowered as bed managers to do the placement by not mixing infected and suspected cases.
- Physician and doctors must discuss the cases with nurses prior to any placement of patient.
2. Supply of PPE (mask)

- Supply of PPE especially mask should not be compromised. Thus the ward sister need to keep track to avoid any breakdown of supply.
- Staffs should not wear 1 mask for more than 1 shift to avoid any risk of infection
- Proper information should be given to all new staffs such as doctors and other HCW to avoid wastage of PPE
- A simple survey should be done among the staffs about the preference on the type of mask to avoid non compliance
3. Education

- All staffs and patients must be well educated about standard precaution procedures
- All guidelines pertaining to the diseases must be made available to the staff
- Posters, pamphlets and other education materials must be made available in every ward
- Ward managers must educate staffs on the guidelines. It can be done by conducting CNE sessions
- Ward sisters are encouraged to bedside teaching and case discussion diligently
- Special sessions to be included in the orientation program for new nurses.
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