

**ASSESSMENT OF THE KNOWLEDGE,  
UTILISATION AND OPINIONS OF  
HEALTHCARE WORKERS REGARDING HIV  
POST-EXPOSURE PROPHYLAXIS AT A  
SELECTED HOSPITAL IN GAUTENG  
PROVINCE, SOUTH AFRICA**

**Researcher** : M.M Rasweswe

**Supervisor** : Prof M.D Peu

Department of Nursing Science, University of  
Pretoria, South Africa.

# OUTLINE

- Introduction
- Background
- Objectives
- Methods
- Findings
- Discussion
- Limitations
- Nursing implication
- Conclusion
- References

•

•

# INTRODUCTION

- Healthcare workers, specifically nurses, are at the frontline in providing health care ([WHO] 2010:10).
- These put them at risk of exposure to BBFs.
- WHO established guidelines on how to prevent the exposures whilst providing health care to others (WHO 2010:45-47).
- It is extremely important that all healthcare workers are knowledgeable about the existing guidelines and practice safely at all times.
- However in the healthcare setting, exposure to BBF occurs regardless of the various preventive measures available.
- Hence there are Post Exposure Prophylaxis (PEP) protocol.



# BACKGROUND

- The World Health Report 2002 estimates that 2.5% of HIV cases among health care workers worldwide are the result of occupational exposure.
- The distribution of exposures to blood borne pathogens among different cadre of HCWs show that nurses are the most frequently exposed HCWs to blood borne fluids (Lamichane, Aryal & Dhakal 2012:1396, Vaz et al. 2010:171 & Efstathiou, Papastavrou, Raftopoulos & Merkouris 2011:np).
- PEP is offered in order to prevent transmission of infection such as HIV after the exposure.



# BACKGROUND

- New York State DoH AIDS Institute (2012:55) revealed that if PEP is given within 72 hours after exposure to infected BBFs, the transmission can be reduced by up to 81% .
- Although HCWs are offered PEP services for free, they should report the accidental exposure and go through HIV testing.
- Studies show that a large number of health care workers fail to report exposures and reluctant to seek PEP services (Kessier et al. 2011:129, Rahul, Rasania, Verma & Singh 2010:75-76, and Zungu, Senyane & Setswe 2008:48).
- This confirms an urgent need to assess their knowledge, utilisation and opinions regarding HIV infection within their practice.

# OBJECTIVES

- to determine HCWs knowledge regarding HIV PEP in a selected hospital in Gauteng, South Africa
- to determine the utilisation of HIV PEP by HCWs at a selected hospital in Gauteng, South Africa
- to describe the opinions of HCWs regarding HIV PEP in a selected hospital in Gauteng, South Africa.

# METHODS

## Approach

Quantitative, non-experimental, descriptive

- Data collected using a questionnaire consisting of closed and open questions.

## Population

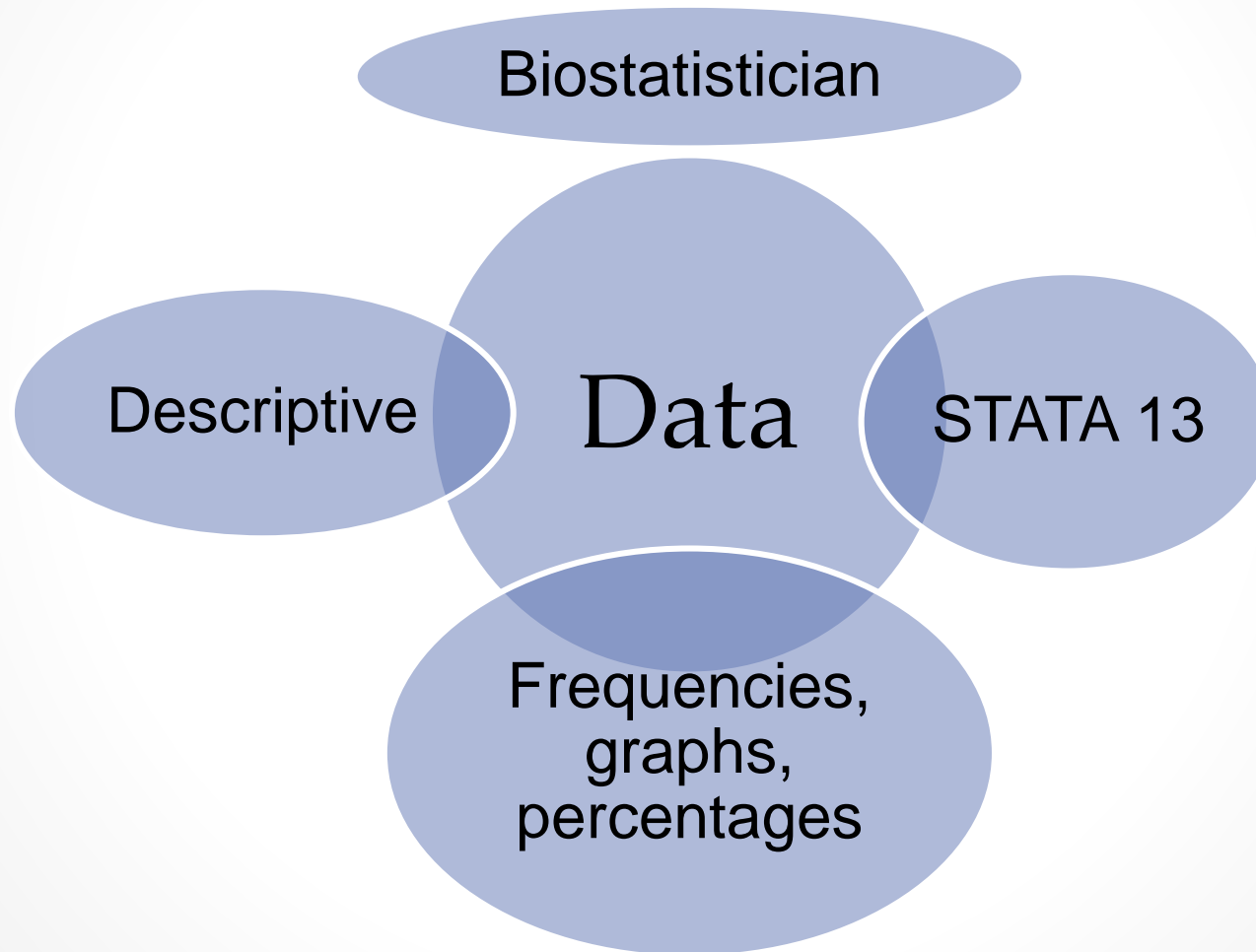
Male & female nurses (18yrs & above), who had worked in the specialised area for 3months & above.

## Sampling

Systematic method of probability sampling. A total of 100 all categories of nurses were sampled.

- Only 94 nurses completed & returned the questionnaire.

# DATA ANALYSIS





# FINDINGS

**90%** heard about  
HIV PEP

**55%** knew protocol  
of reporting(72hrs)

**75%** informed by  
Clinical area

**61%** couldn't  
identify drugs for  
HIV PEP

**80%** knew the  
basic concept of  
HIV PEP

**18%** didn't know  
where to report

# FINDINGS

43%

Exposed  
to BBFs

Through  
Sharps,  
Splashes or  
both

54%

didn't  
report or  
sought  
PEP

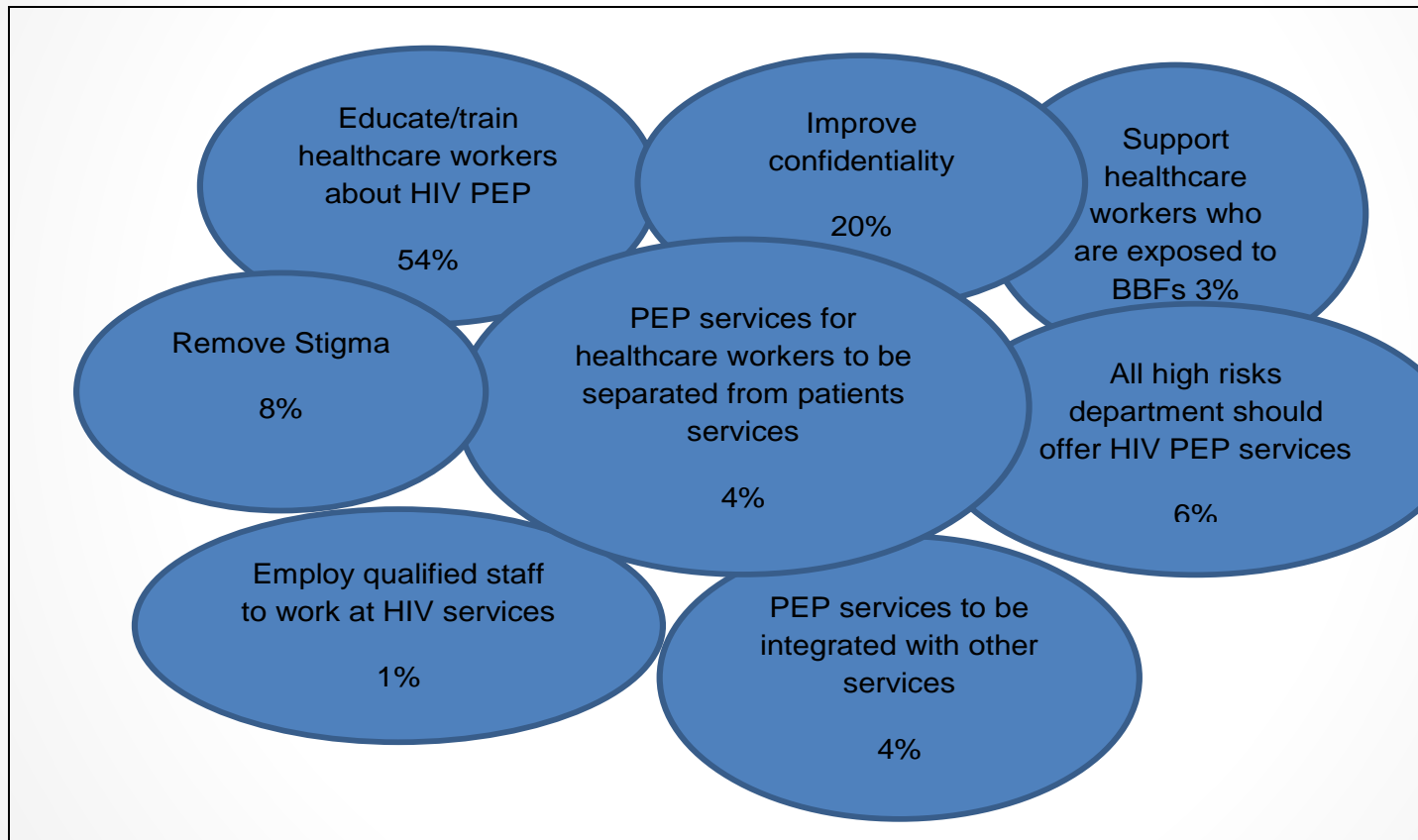
Giving  
different  
reasons for  
not reporting

# FINDINGS

## Reasons for not reporting:

- *“I did not know where to report”*
- *“I found it unnecessary as I always use protective clothing”*
- *“I fear testing HIV positive”*
- *“I fear to be stigmatized”*
- *“I did not want to take ARVs”*
- *“procedure tiring”*
- *“ignorance”*
- *“I was busy”;*
- *“needle was not yet used”*
- *“I washed the affected area with running water”*

# FINDINGS ON OPINIONS



# DISCUSSION

- Although in the current study the majority (90%) of nurses had heard about PEP, the percentage is lower compared to the other studies where 95%-100% were aware of PEP services (Tesfaye, Gebeyehu & Likisa 2014:468, Owolabi et al. 2011:3), considering that all the respondents were nurses who ought to be conversant with HIV PEP in order to meet their own needs and those of the clients as well as to teach the public about PEP services.
- Despite the high level of been informed mostly by clinical area (75%) nurses working at the selected hospital had a fair level of knowledge about HIV PEP protocol.

# DISCUSSION

- Occupational exposures to BBFs among nurses at the selected hospital appear to be high. However (54%) respondents did not report the incidents irrespective of been informed of the PEP services and its benefits. The findings implies that there is underutilisation of the service.
- The findings of the present study revealed that nurses in the selected hospital are still at risk of accidental exposures to BBFs and were not utilising the PEP service.

# DISCUSSION

- Various opinions and suggestions outlined by the respondents on how utilisation of PEP services can be improved revealed that healthcare workers had needs that were not being met by the PEP service in their facility.
- Among the suggestions, the need for training about PEP was prominent. This implies that if healthcare workers have adequate information about PEP they will effectively utilise it.



# LIMITATIONS

- The study population was confined to nurses working in a selected hospital and selected discipline; therefore, generalisation of the results was limited to the nurses of the selected hospital.



# NURSING IMPLICATIONS

- Based on the findings of the study it was evident that gaps still exist in reporting work-related exposure to BBFs and obtaining post exposure prophylaxis treatment among respondents.
- There is a dire need for continuous training and retraining on current issues about HIV/AIDS and treatment, In-service training on HIV and PEP should be offered to keep healthcare workers up to date with current developments about HIV and AIDS issues.
- The hospital should develop posters and fliers that will educate the personnel about HIV and PEP and should avail this information by displaying it on the noticeboards in order to ensure easy access.
- Follow up and proper supervision should be done to ensure that nurses actually utilize what they have acquired from various trainings.

# CONCLUSION

- Another study should be conducted on a larger scale to involving other healthcare workers in order to assess the effectiveness, efficiency and acceptability of PEP services by the healthcare workers.
- Furthermore, a study identifying the factors that influence the utilisation of PEP services should be conducted.

# REFERENCES

- Efstathiou, E, Papastavrou, E, Raftopoulos, V & Merkouris, 2011, 'Factors influencing nurses' compliance with standard precautions in order to avoid occupational exposure to microorganisms: a focus group study', *BMC Nursing*, vol. 10. [Accessed: 19 October 2014]. <http://www.biomedcentral.com/>.
- Kessier, CS, McGuinn, M, Spec, A, Christensen, J, Baragi, R & Hershow, RC 2011, 'Underreporting of blood and body fluid exposures among healthcare students and trainees in the acute care setting: 2007', *American Journal of Infection Control*, vol. 39, no. 2, pp. 129-134.
- Lamichanne, J, Aryal, B & Dhakal, KS, 2012, 'Knowledge of nurses on post-exposure prophylaxis of HIV in medical colleges of Chitwan district, Nepal', *International Journal of Pharmaceutical & Biological Archives*, 2012, vol. 3, no. 6, pp. 1394-1399.[Accessed: 19 October 2014]. [www.ijpba.info](http://www.ijpba.info).
- Owolabi, RS, Alabi, P, Daniel, O, Oqundriran, A, Akande, TM & Onafowokan, T 2011, 'Knowledge and practice of post-exposure prophylaxis infection among healthcare providers in a tertiary hospital in Nigeria', *Journal of the International Association of Physicians in AIDS Care*, 2011 Apr 21. [Accessed: 19 October 2014]. <http://www.ncbi.nlm.nih.gov/pubmed>

# REFERENCES

- Rahul, S, Rasania, SK, Verma, A & Singh, S 2010, 'Prevalence and response to needle stick injuries among healthcare workers in a tertiary care hospital in Delhi, India', *Journal of Community Medicine India*, vol. 1, pp. 74-77.
- Tesfaye, G, Gebeyehu, H & Likisa, J 2014 'Knowledge, attitude and practice towards HIV post-exposure prophylaxis of health professionals of Gimbi town in Ethiopia: a cross-sectional study', *Journal of International Medical Research*, 2014, vol. 2, pp. 468-471.
- Updated USA 2013. Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Post-exposure Prophylaxis 2013, CDC, Prepared by the USA Public Health Service Working Group.
- Vaz, K, McGrowder, D, Alexander-Lindo, R, Gordon, L, Brown, P & Irving, R 2010, Knowledge, awareness and compliance with Ups among healthcare workers at the University hospital of the West Indies', Jamaica, *Int Journal of Occupational Environmental Med*, vol, 1, no. 4, pp. 171-181.
- Zungu, LI, Sengane, ML & Setswe, KG 2008, 'Knowledge and experiences of needle prick injuries among nursing students at a University in Gauteng, South Africa', *SA Family Practice*, vol. 50, no. 5, p. 48.

# ACKNOWLEDGEMENTS

The author acknowledge the following :

- Prof MD Peu = supervisor
- University of Pretoria
- Selected hospital
- Respondents (Nurses )
- Dr SAS Olorunju (Biostatistician)
- Ms S. Swart (Editor)

# THANK YOU

**BE STRONG, BUT  
NOT RUDE; BE KIND,  
BUT NOT WEAK;  
BE BOLD, BUT NOT  
BULLY; BE HUMBLE,  
BUT NOT TIMID;  
BE PROUD, BUT  
NOT ARROGANT.**