

BIOLOGICAL HAZARDS

QLL118

AT PAEDIATRIC WARD, TAIPING HOSPITAL, PERAK:
TOWARDS IMPROVING INDOOR AIR QUALITY



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INTRODUCTION

POOR INDOOR AIR QUALITY (IAQ) IN HOSPITAL (MICROBIOLOGICAL FACTORS)

- Linked to Healthcare-associated infections (HCAs)
- Endanger both patients and staff
- Taiping Hospital - top 5 hospitals with the highest cases of VRE (MOH: 2016 - 2017)

THIS STUDY AIMS TO EVALUATE THE IAQ IN THE PAEDIATRIC WARD

- Review hand hygiene compliance
- Assess the levels of Knowledge, Attitude, and Practice (KAP) among staff
- To improve infection control through targeted interventions:
"32 Hours Infection Control Education Programme"

METHODOLOGY

KAP Levels Assessment

- Questionnaires adapted from the CDC

Bacterial Concentrations Measurement

- Measured by Anderson Bio Samplers

Statistical Analyses

- Pearson correlation & linear regression
- SPSS Version 26

Hand Hygiene Compliance Evaluation

- WHO's "Five Moments for Hand Hygiene" tool

DISCUSSION & CONCLUSION

The study showed the intervention:

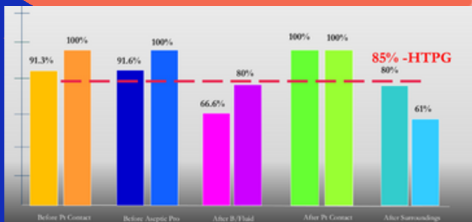
- Improved hand hygiene
- Reduced bacterial concentration
- Creating a safer healthcare environment
- The link between knowledge & practice highlights the importance of education
- Ongoing efforts are needed to sustain and improve the outcomes to ensure patient and staff safety

INTERVENTION

32 HOURS INFECTION CONTROL EDUCATION PROGRAMME

- 1 INFORMATION RELATED TO HCAI
- 2 HAND HYGIENE TOOLS & PPE
- 3 ENVIRONMENTAL HYGIENE
- 4 WASTE MANAGEMENT
- 5 STERILIZATION & DISINFECTION

ANALYSIS



R E S U L T

Air Bacterial Concentration Reduction

- Dropped from 456 to 289 CFU/m³

Hand Hygiene Improvement

- 100% compliance achieved for three parameters
- Two parameters remained < 85.0% standard
- "After procedures" compliance increased from 66.6% to 80%

High KAP Levels

- Positive correlation between knowledge and practice
- This relationship explained 14.4% of the variance