Strengthening Preparedness through a Nurse-led High-Level Isolation Unit PPE Training Programme at Mater Misericordiae University Hospital's National Isolation Unit

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Introduction

- The emergence of high-consequence infectious diseases (HCID) underscores the critical importance of robust preparedness and response strategies within healthcare institutions^{1,2}.
- Mater Misericordiae University Hospital recognises the importance of equipping its healthcare professionals with the knowledge and skills to manage HCID cases effectively.
- This study describes the efficacy of a nurse-led High-Level Isolation Unit (HLIU) Personal Protective Equipment (PPE) training program at the hospital, targeting multidisciplinary healthcare personnel, including Infectious Disease Consultants, Infectious Diseases Registrars, nurses, and healthcare assistants.

Methods

- A structured training program was developed and implemented over two months, incorporating theoretical instruction and practical exercises.
- Each three-hour session was organised to accommodate optimal attendance, with between six and ten participants per session.
- The training sessions were facilitated by experienced Clinical Nurse Manager 2 and Staff Development Facilitators, ensuring alignment with existing policies and procedures within the HLIU.
- The curriculum focused on the National Isolation Unit (NIU) Activation Overview and PPE donning and doffing procedures essential for effective HCID management.









Results

- nurses from Infectious Diseases Wards, 83%(5) Infectious Diseases Registrars, 40%(4) Infectious Consultants and 50%(5) Healthcare Assistants completed the training program.
- Feedback responses participants revealed significant from improvements in participants' knowledge and skills related to HCID management and PPE utilisation.
- The interactive nature of the sessions fostered active engagement and facilitated effective learning among participants.

Conclusion

- Implementing a comprehensive HLIU PPE training program at Mater Misericordiae University Hospital underscores the commitment to enhancing preparedness for managing HCID outbreaks.
- By equipping healthcare professionals with the necessary expertise, the aim is to ensure a prompt and effective response to potential outbreaks, protecting healthcare workers' and patients' health and safety.
- Continued investment in regular training, adherence to established protocols, regular simulation and ongoing participant evaluation are essential for sustaining readiness and resilience in the face of emerging infectious disease threats.

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