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| **Title:**  Enhanced Infection Control Measures in Department of Neurosurgery  **Authors:**  Lam Ming Wai  **Institution(s):**  Department of Neurosurgery, Princess Margaret Hospital (PMH)  **Abstract:**  ***Objective*:**  To reduce hospital-acquired infection (HAI) through changing staff behavior  ***Method:***  3-year retrospective review of the monthly number of hospital-acquired Methicillin-resistant Staphylococcus aureus (MRSA) and multi-drug resistant organism (MDRO) cases in Department of Neurosurgery were analyzed to evaluate the effectiveness of the enhanced infection control measures.    ***Result:***  There were over 80% reduction in the number of newly acquired MRSA and MDRO cases in Department of Neurosurgery in 2021, compared with 2019. The total number of hospital-acquired MRSA and MDRO in 2021 (From January to August) was 10 while there were 57 cases in 2019.  ***Conclusion:***  As neurosurgical patients are prone to acquire MRSA and MDRO and staff behaviors are key contributors to HAI, a series of interventions were implemented to reduce HAI by changing staff behavior in Department of Neurosurgery, PMH since September, 2020. Interventions were mainly focused on staff hand hygiene behavior and infection control behavior through empowering staff to monitor, teach and correct infection control practices in the unit. Enhanced measures included adoption of antimicrobial curtain, use of dedicated equipment, promotion of hand hygiene, enhance cleansing schedule and strategies on improving patient hygiene. To ensure staff compliance to improvement measures, infection control leaders were assigned in each shift of duty. Malpractice and wrong concepts can be stopped and rectified by immediate prompts. Staff awareness on infection control had been raised through reminders and encouragement. As nursing role in infection control is emphasized, nurses were motivated to perform better as role models for new-comers and supporting staff. To conclude, infection control behaviors among staff were improved through regular monitoring and feedback. The enhanced infection control measures by changing staff behavior were effective and HAI were significantly reduced. |

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