

A PILOT PROJECT FOR TESTING THE FEASIBILITY OF A VARICELLA AND MMR IMMUNIZATION PROGRAMME FOR HEALTHCARE WORKERS IN THE PUBLIC SERVICE

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Background: Varicella, measles and rubella are recognized nosocomial infections. It is recommended that all healthcare workers (HCWs) should be immune to measles and rubella, and HCWs with frequent contact with pregnant women, immunocompromized or pediatric patients should also be immune to varicella. To support the planning of an extended varicella and MMR immunization programme in the Department of Health, a small project was piloted in the Integrated Treatment Centre (ITC), the department's HIV clinic.

Methods: HCWs were interviewed by a designated nurse for prior history of infection, history of immunization or serological test for evidence of immunity. Those reporting no prior history were offered serological susceptibility testing for determining the presence of antibodies (IgG). Vaccination was offered to those without antibodies and consenting to vaccination. Self-administered questionnaires and small group discussion were used to collect information on their acceptance of the initiative.

Results: Fifteen-three HCWs (doctors, nurses, social workers, and workmen) were identified. Male to female ratio was 1:3.1. Among these 53 HCWs, 31 (58.5%), 35 (66%) and 40 (75.5%) reported prior history of infection, immunization or serological test for varicella, measles and rubella respectively. All of the 16 (30.2%) and 9 (17%) HCWs who underwent serological susceptibility testing for varicella-zoster virus and rubella respectively were tested IgG positive. All except one among 13 (24.5%) tested for measles IgG were tested positive. There were 6 (11.3%), 5 (9.4%) and 4 (7.5%) HCWs with unknown immunity status who refused blood test and vaccination of varicella, measles and rubella respectively. One HCW with serological susceptibility to measles consented and was given MMR vaccination in ITC. Barriers of immunization included fear of injection and concern of side effect from vaccination.

Conclusions: This pilot project illustrated the feasibility of a varicella and MMR immunization programme for HCWs in a clinic setting. Evidence of immunity as indicated by prior history of infection, immunization or serological test was found in up to two-thirds of all eligible HCWs. Another fraction of those who required vaccination would be further screened out following subsequent serological susceptibility testing. Information about infection and vaccination would be useful for planning purpose at clinic level.