

Campaign measles: Immunization coverage of Health Care Students in Austria
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Measles, mumps, rubella (MMR) and varicella (VZV) are vaccine-preventable diseases. Non-protected healthcare personnel (HCP) is at high risk for acquiring and transmitting MMR and VZV. Based on the recommendations of the WHO the vaccination status of medical personnel should be documented and non-immune personnel should be vaccinated. A total of 1002 students from five Healthcare Education Centres at the Medical University Graz, Austria, were encouraged to bring their vaccination certificates. A completed immunization status was defined with two administered doses of MMR and varicella or positive results from prior serological testing's. Where necessary blood samples were taken and the respective titre (MMR or VZV) were determined. Results: An incomplete immunization status was found in 975/1002 (97.3%) HC-students, including 129/1002 (12.9%) persons, who did not possess a vaccination certificate. A complete vaccination/immunization status was found in 27/1002 (2.7%) HC-students only. Of the HC-students serologically tested 8.3% (18/216), 15% (37/246), 4.1% (15/363) and 3.9% (38/967) were seronegative to measles, mumps, rubella and varicella, respectively. Concerning the different age groups within the HC-students there were significant differences. HC- students aged < 30 years were more likely to be seronegative for measles (12.8% vs. 3.0%, $p < 0.05$) and mumps (18.3% vs. 11.3%, $p < 0.05$) than older HC-students. Determination and documentation of the immunization status of HC-personnel including HC-students is essential for preventing nosocomial infections with MMR or VZV. The Austrian government provides guidelines concerning the immunization status of HCP and more and more the Austrian Healthcare system tries to close the gap of missing vaccinations. Concerning measles the WHO demands an Immunization rate of 95%, which could not be totally reached in this study with 91.7%. A continuously work on that problem is needed to close the immunity gaps in HC-personnel.