

Senior Fellowship for Dr. Nilsa de Deus: The effect of rotavirus vaccine in gastroenteritis hospitalization and rotavirus evolution in Mozambique (pre and post vaccination introduction study)

Initiative: Wissen für morgen – Kooperative Forschungsvorhaben im subsaharischen Afrika (beendet)

Ausschreibung: Postdoc-Fellowship-Programm "Neglected Communicable Diseases and Related Public Health Research"

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Rotavirus A causes severe diarrhoea in infants and young children worldwide. Many unusual combinations of G and P genotypes have been observed in rotaviruses circulating in developing countries. In 2010 Dr. Nilsa de Deus was awarded a Junior Fellowship by the European Foundations Initiative for African Research into Neglected Tropical Diseases (EFINTD) to investigate the prevalence of rotavirus disease in Mozambique. Surveillance focussed on a rural (Manhiga) and an urban site (Maputo) and established a rotavirus infection rate, in children less than 5 years of age hospitalized with acute diarrhoea, of higher than 40% in both sites. Genotyping determined a high proportion of unusual genotypes combination such as G12P[6]/G12P[8]. Mozambique will introduce routine vaccination against rotavirus in September 2015 in the national immunization program. In order to estimate the impact of rotavirus (RV) vaccination through comparison of rotavirus related outcome in children less than 5 years, before RV vaccine introduction to the same rotavirus related outcome in the post- vaccination period in three Mozambican provinces, a surveillance system will be extended to Beira and Nampula cities located in the centre and north of the country respectively. In Maputo, surveillance is still ongoing. Faeces samples will be collected from children and processed by ELISA. Positive samples will be then genotyped to determine the strains in circulation.

Projektbeteiligte

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Rotavirus A strains obtained from children with acute gastroenteritis in Mozambique, 2012-2013: G and P genotypes and phylogenetic analysis of VP7 and partial VP4 genes.