

In order to ensure a smooth change over in all operational and technical aspects in line with the international standards, training of health workers is one of the areas, which is very crucial for its success. The training on Pentavalent Vaccine in Kenya started three days before its launch. The preliminary evaluation indicated that this was inadequate time for training all the health workers who provide childhood immunization in the country. The aim of the study reported in this thesis was to establish the level of knowledge of the health workers on the Pentavalent Vaccine management after its introduction into the national programme. In a cross-sectional study, 297 health workers from both public and private health facilities in Nairobi were interviewed using a structured questionnaire to assess their knowledge on Pentavalent Vaccine management. The respondents included 277 nurses, 13 doctors, 3 Clinical Officers, and 4 Public Health Officers, out of which 16 were key members of the health management teams at provincial and district levels. Among the cadre of health workers, the doctors had the highest proportion (92%) of those who knew both the vaccines and the diseases related to Pentavalent Vaccine. The Kenya Enrolled Nurses (KEN) had the lowest proportion (5%) in knowledge of vaccines and the Public health officers/Registered Clinical Officers (RCO/PHO) had the lowest proportion (14%) in knowledge of diseases. In storage and administration of Pentavalent Vaccine, the nurses had higher proportions (Kenya registered Nurse (KRN) 48% and KEN 42%) than other cadre where the doctors had the lowest proportion of 23%. The health workers from the hospital facilities had the highest proportion (13%) of respondents with knowledge of all the five vaccines in Pentavalent Vaccine, and also of the five diseases (49%). The dispensary staff had the lowest proportion of both in knowledge of vaccines (9%) and in diseases (18%), an indication of inadequate flow of information to the grass root level. The respondents from the private health facilities had higher proportions both in knowledge of vaccines (11%) and diseases (36%) compared to those from the public facilities who had proportion of 9% in knowledge of vaccines and 20% in diseases. Due to lack of standardized training tools and proper organization, the trained health workers had minimal difference in level of knowledge of both the five vaccines and the five diseases with the untrained respondents. The trained health workers had a low proportion of 19.7% in knowledge of vaccines and 43.3% in diseases, as compared to the untrained health workers who had equally low proportion of 8.2% in vaccines and 22.4% in diseases. There was a significantly higher proportion (60%) of trained respondents with knowledge of storage and administration of Pentavalent Vaccine than in untrained staff who had 29% ($\chi^2 = 28.296$, $df = 1$, $P < 0.000$). The outcome of this study will benefit the children who are under five years old who will receive potent vaccines through improved cold chain maintenance of Pentavalent Vaccine. On the other hand, there will be more health workers with knowledge on Pentavalent Vaccine through improved additional updates.