

Abstract

The epidemiology of vaccine preventable diseases has been modified by use and implementation of various vaccination programs in many countries. However, because of observed suboptimal vaccination rates debate has emerged on the benefits of such vaccines worldwide. Maternal and childhood vaccinations have been evaluated and found extremely effective at preventing illness in pregnant women and new-borns despite low uptake of such vaccines in many areas. The objective of this study was to determine the vaccination coverage and factors that influence uptake of newly introduced vaccines among children aged 0 to 23 months in Laikipia North Sub-County. The study used multistage sampled parents and guardians of children aged 0-23 months of age but residents of Laikipia North Sub County within Laikipia County. Trained interviewers visited sampled households and administered a standardized pretested questionnaire. Mothers and guardians were interviewed and asked to show the interviewers Mother-Child Post Natal Booklets for the study enrolled children. Key informant questionnaires were also administered to Health facility staff. Data entry and analysis were performed using SPSS and Microsoft Excel. Chi Square for proportion and regression were used to assess factors influencing uptake of vaccines in the sub county. The study found that slightly above half (59%) of the caregivers indicated that their child had been vaccinated. Majority (61%) of the caregivers had their children given rotavirus vaccine while an equal number (61%) had their children given Pneumococcal vaccine. 52% of the caregivers indicated that their children were given IPV (Inactivated Polio Vaccine). 53% of the children who were given rotavirus vaccine received the required 2 doses. Among social-cultural factors, the need for permission from mother-in-law ($p=0.003$), belief that vaccination makes girls infertile ($p=0.046$) and belief that vaccination at a very young age can harm the child ($p=0.021$). Migration with animals or nomadic lifestyle ($p=0.033$) and the need for permission from my husband to have child immunized ($p=0.038$) were significantly related to uptake of vaccination among the caregivers. Occupation of the caregiver ($p=0.044$), the breadwinner in the family ($p=0.025$) and the means of transport used to go to the facility ($p=0.007$) and average household income ($p=0.033$) were also significantly related to uptake of vaccination. None of the health system factors under investigation was found to significantly relate relate to uptake of vaccination. Religion ($p=0.000$) remained significant in the regression analysis . The study finding indicate that low uptake of vaccination was due to social cultural and social economic factors and recommends that Health education campaigns on the

need of vaccination should target all members of the population. It further recommends that poverty eradication measures should be stepped up in the study area.