

Abstract

The client factors that influence under - five child guardian compliance to the immunization schedule are interlinked based on household characteristics, socioeconomic status, and maternal health practices. An incentive to motivate the mothers to prioritize their child's health practices especially on vaccination, works perfectly towards the achievement of full immunization coverage. A randomly sampled study carried out within Weonia Location – Trans Nzoia County in March 2014 with target population of under - five children showed the vital role an incentive innovation plays towards immunization coverage. Multinomial logistic regression model was used to analyze the determinant of partial or none - immunized and the parameters estimated using the maximum likelihood estimator (MLE) and the shrinkage estimator - Least Absolute Shrinkage and Selection Operator (LASSO). The shrinkage estimator method gave a sparse model that was easy to interpret and increased the estimated predictability accuracy. Maternal health practices and access to a motivating intervention are significant factors that ensure a guardian's compliance to their child immunization.