ABSTRACT

Efforts to reduce the child mortality in southeastern Asian countries are impressive as compared to African countries. This study has been done to identify the risk factors to control the diseases and mortality through proper interventions. Multiple Indicator Cluster Sampling (MICS) data administered in 2014 was used to identify the children death to women aged 15-49. The response variable is the number of children death that is a count variable. The results of the study show that the Poisson regression model is not a proper choice to predict the response in the presence of over dispersion. To address the over dispersion Negative Binomial Regression (NBR), Zero-Inflated Poisson Regression (ZIPR) and Zero-Inflated Negative Binomial regression (ZINBR) are fitted to data. Among these models Zero-Inflated Negative Binomial regression (ZINBR) fits the data best. Women's age, women's education, women's age at marriage, Women's age at first birth, time interval between marriage and first birth, division of residence, source of water, toilet type and smoking status are statistically significant factors related to children mortality in Punjab. Identification of these risk factors is an important child issue to fully understand the risks of child mortality.