

## Abstract

This study aims to investigate the risk factors leading to severe malnutrition in Sindh Province, one of the largest provinces in Pakistan with poor health facilities. To assess malnutrition, three anthropometric measures, namely, stunting, wasting and underweight were considered from Multiple Indicator Cluster Survey for 2017-18. Binary Logistic Regression as well as Quantile Regression are implemented to examine the influence of various factors on these anthropometric measures. Additionally, the study incorporates the World Health Organization's standards for measuring stunting, wasting, and underweight. These standards are utilized to assess the potential risk factors and determine their impact on the aforementioned anthropometric measures. Quantile regression analysis and Multiple Logistic regression were conducted in the study to explore various risk factors. These analyses identified that body Mass Indicator, mother's education, women age, wealth quantile, delivery place division, fever, breastfed, diarrhea, and having cough were significant factors for all indicators of malnutrition (WHO stunting, wasting, and underweight).