

# **DIFFERENTIALS IN TREATMENT SEEKING FOR COMMON CHILDHOOD ILLNESSES IN TANZANIA: DOES ECONOMIC STATUS MATTER?**

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## **Abstract**

**Background:** The World Health Organization estimates that seeking prompt and appropriate treatment could substantially reduce child deaths due to diarrhoea and acute respiratory infections. Health system of Sub-Saharan Africa is characterized by sub-optimal use of health facilities for common childhood illnesses, however few studies have examined the reasons of underutilization. Proper assessment of the inequalities and disparities in treatment seeking for widely prevalent childhood morbidities in African countries has been inadequately attempted. The present paper is an attempt to fill the void in understanding the role of economic status towards influencing treatment seeking for diarrhoea, fevers and acute respiratory infections among children in Tanzania, the largest country of eastern Africa and one of the poorest in the world.

**Objectives:** The main aim of the present paper is to examine the extent of differentials in treatment seeking for common childhood illnesses in Tanzania, and observe the role of economic status in influencing provider choice.

**Methods and Materials:** We have used the Tanzania Demographic and Health Survey 2004 (TDHS 2004), a representative survey of 10329 eligible women, to address the study objectives. Apart from observing the unstandardized coefficients of prevalence and

service utilization for common ailments, cross-classified by the DHS Wealth Index, we apply binary logit and multinomial logit models to study the predicted probabilities of provider-specific, treatment seeking choices and observe the influence of economic status in influencing the outcomes.

**Results:** The paper finds higher burden of diarrhoea and fever on the poorer households, not so distinct for cough and ALRI. There is substantial difference in treatment seeking across the wealth quintiles; while 45% received medical treatment for diarrhoea in the poorest quintile, 58% in the richest quintile did so. For fever/cough/ARI 46% in the poorest quintile received medical treatment, but in the richest quintile 67% received medical treatment. The association between highest educational level of the mother of the child and treatment seeking for diarrhoea is not significant but highly significant association between educational level and seeking treatment for fever/cough/ARI. Seeking any form of treatment for fever/cough/ARI in rural areas is significantly less than the same in urban areas by around 10 percent points, while for seeking medical treatment for these diseases the difference increases to about 16%. The paper also finds no significant sex-differentials or effect of birth orders in treatment seeking. From the binary logit models, economic status in terms of the wealth index was seen to have no statistically significant effect on treatment seeking for diarrhoea, while male and children of higher age are more likely to get any treatment. However, economic status has a strong positive influence on seeking any form of treatment for fevers or cough or ARIs. It was also seen from the multinomial logit models that economic status is not a significant predictor for seeking treatment for diarrhoea, but has a strong influence on the same for fevers, cough and ARI among children. Children from better-off households have higher

likelihood of getting treated either from public, private or non-medical sources. Again, although not significant statistically, likelihood of obtaining non-medical and public care was higher among the poorer households, controlling for other relevant covariates like age, gender, mother's education, religion and place of residence. Education and religion were also found to have moderate effects on treatment seeking, especially for fevers and ARI.

**Conclusion:** The present paper concludes that there is a definite economic gradient in treatment seeking for childhood illnesses in Tanzania. While for diarrhoea, the effect is moderate, for fevers, cough/ARI, economic status has a strong positive influence on the probability of seeking treatment. Taking note of the unobserved heterogeneity, there is a felt need for in-depth studies in the region to probe the various dimensions of treatment seeking for the children. Government and international efforts aimed at reducing child morbidity and mortality in Tanzania and other countries of Sub-Saharan Africa should consider economic influence on treatment seeking patterns and intervene accordingly.

(641 words)

**Keywords:** Economic gradient in treatment seeking, diarrhoea and ARI, health differentials in Tanzania, treatment-seeking behaviour