

Impact of an integrated community case management programme on uptake of appropriate diarrhoea and pneumonia treatments in Uganda: A propensity score matching and equity analysis study

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Community health workers assess for malaria, pneumonia and diarrhoea

Conclusions

Integrated community case management (iCCM) has the potential to equitably increase access to appropriate treatment for sick children, however, this requires functional drug supply chains and advocacy to ensure improved uptake of the treatments.

Despite significant increase in the uptake of ORS for diarrhoea attributable to iCCM, the uptake of zinc lagged behind. Innovative approaches, such as co-packaging of ORS and zinc, may be necessary to improve zinc uptake and effective treatment of diarrhoeal diseases.

Introduction

Diarrhoea and pneumonia unduly affect children. Integrated community case management (iCCM) for diarrhoea and pneumonia in addition to fever is recommended in countries with a high disease burden.

Objective

To assess the effect of iCCM as the first point of care on equity and uptake of appropriate treatments for pneumonia and diarrhoea among children aged 2-59 months.

Methods

- Data were drawn from a cross-sectional household survey two years after implementation of iCCM
- Socioeconomic inequalities in treatment uptake and use of iCCM were examined using Erreygers' corrected concentration index
- Average treatment effects among the treated (ATT) were estimated using propensity score matching

Results

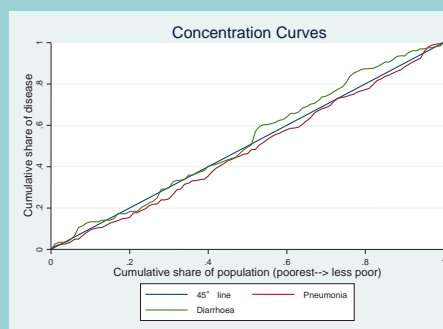
Disease prevalence and treatment (N=1476)

Disease/treatment	Total (prevalence)
Pneumonia	453 (30.7%)
Diarrhoea	229 (15.6%)
Pneumonia treated with antibiotics	301 (66.4%)
Diarrhoea treated with ORS	117 (51.1%)
Diarrhoea treated with ORS + zinc	27 (11.8%)

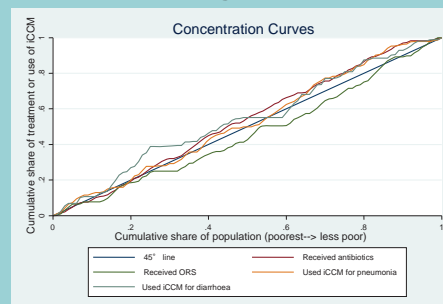
Average treatment effects among the treated for appropriate pneumonia and diarrhoea treatment

Outcome	Number treated	Number in control	ATT	SE	t-stat
Pneumonia treated with antibiotics	166	190	0.327	0.050	6.548
Diarrhoea treated with ORS	74	106	0.400	0.074	5.405
Diarrhoea treated with zinc plus ORS	74	106	-0.145	0.063	-2.288

Distribution of disease among wealth quintiles



Distribution of appropriate treatment and use of iCCM among wealth quintiles



Concentration curves and indices show no evidence of inequities in disease prevalence, receipt of treatment and use of iCCM services

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