



Household wealth, residential status and the incidence of diarrhoea among children under-five years in Ghana

Akwasi Kumi-Kyereme, Joshua Amo-Adjei *

College of Humanities and Legal Studies, Faculty of Social Sciences, Department of Population and Health, University of Cape Coast, Ghana

Received 31 July 2014; received in revised form 1 May 2015; accepted 10 May 2015
Available online 10 June 2015

KEYWORDS

Wealth status;
Residence;
Diarrhoea;
Children;
Ghana

Abstract This study examines the impact that the joint effect of household wealth quintile and urban–rural residence has on the incidence of diarrhoea among Ghanaian children. Data for this paper were drawn from the Ghana Multiple Indicator Cluster Survey (MICS) of 2006. Descriptive and logistic regression was applied to analyse data on 3466 children. Rural residents are less likely, albeit insignificant, to report diarrhoea compared with those in urban areas. Significant wealth gradients are manifested in childhood experiences of diarrhoea. However, an interaction of wealth with residence does not show significant disparities. Controlling for other important covariates of childhood, the odds of diarrhoea incidence were significantly higher among: the rural poorer (OR = 4.869; 95% CI = 0.792, 29.94), the rural middle (OR = 7.477; 95% CI = 1.300, 42.99), the rural richer (OR = 6.162; 95% CI = 0.932, 40.74) and the rural richest (OR = 6.152; 95% CI = 0.458, 82.54). Apart from residential status and wealth quintile, female children (OR = 0.441; 95% CI = 0.304, 0.640), older children (OR = 0.968; 95% CI = 0.943, 0.993), having a mother with secondary and higher education (OR = 0.313; 95% CI) had lesser odds of experiencing diarrhoea. The findings show that there is a need to apportion interventions intended to improve child health outcomes even beyond residential status and household wealth position.

© 2015 Ministry of Health, Saudi Arabia. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Diarrhoea is one of the major causes of morbidity and mortality among children, particularly in developing countries, and this could be an obstacle

* Corresponding author. Tel.: +233 244092814.

E-mail addresses: akkyereme@ucc.edu.gh (A. Kumi-Kyereme), joshua.amo-adjei@ucc.edu.gh (J. Amo-Adjei).

to the achievement of the Millennium Development Goal on reducing child mortality. Globally, there are about 4 billion incidents of diarrhoea, and this accounts for about 20% of deaths in children less than five years; a child in a developing country can be predicted to have 3–5 episodes of diarrhoea, resulting in an estimated 800,000 deaths among children per annum [1,2]. Apart from its grave influence on child mortality, diarrhoea can result in long-term health effects, including depletion of immune strength and under-nutrition, as well as making children susceptible to other diseases [3]. Diarrhoea is more of a symptom than a disease. It is often a reflection of gastrointestinal infection and other diseases, such as typhoid, cholera and shigella [3].

Diarrhoea is considered a symptom of wider socioeconomic inequality within and between populations [4]. Directly or indirectly, developing countries such as Ghana continue to undertake development projects that contribute to reducing the risk of early death, and, in the last two decades, it has been reported that some improvements have been made, including improvement in water and sanitation [4]. However, the problems of diarrhoea persist, and it is reported to be the third among the top ten causes of childhood morbidity and mortality [5]. Within developing countries where diarrhoea is prevalent among children, the phenomenon is generally attributed to the standards of living as shown in levels of income, literacy level, adequacy of water supply and sanitation and access to health services, as well as behavior of households and individuals, including breastfeeding and weaning practices [6–9].

Though the enduring solution to the problem lies in improving living conditions of households, in the meantime, there is a need to examine variables that can be exploited to provide some immediate solutions to diarrhoea, since it is one of the avoidable causes of childhood mortality. Previous studies in Ghana have explored the phenomenon from different perspectives. Among these studies, only one used a nationally representative data [4], which focused on household water quality and toilet facilities. The others are limited in scope, for instance, Osumanu [10] explored household environmental factors that increased the vulnerability of children to diarrhoea. The objective of the present study is to ascertain how household wealth status, coupled with type of place of residence, correlates with the incidence of childhood diarrhoea in Ghana.

The departure of the current study from previous studies lies in its interaction of residence

(urban–rural) and wealth to first explore their joint effect and, secondly, controlling for other child-level, household-level and maternal-level characteristics on the incidence of childhood diarrhoea in Ghana. The assumption is that children whose parents are within the upper wealth quintile and also resident in urban areas will have better chances of escaping the problems of childhood diarrhoea. Residence was combined with wealth in the light of the increasing spate of urbanization unfolding in Ghana with the attendant ‘slumanization’. Some studies [11,12] have suggested that urban poverty can be far worse than rural poverty owing to the high cost of living in urban areas, which increasingly subjects the urban poor to cyclic squalor and, in turn, results in poor access to a life-sustaining infrastructure, such as water and sanitation. In effect, by interacting household wealth quintile with residential status (urban–rural), the present study anticipated disentangling the dual impacts of these factors on childhood diarrhoea in Ghana. In the end, tailored interventions could be designed for populations in greater need.

2. Setting

The major environmental conditions that heighten the incidence of diarrhoea in the country are largely influenced by access to quality and quantity of water and sanitation [13]. The performance of the urban water supply by the Ghana Water Company Limited is about average (60%) [13]. About 50% of the Company’s water production is still lost through unaccounted-for water, and the total coverage of rural water is around 53%, which is largely comprised of boreholes, hand-dug wells and small-piped systems [13]. Presently, the population with improved access to sanitation is 13%. Disaggregated by residence, the proportion of rural residents with improved sanitation is 8%, while in urban areas the proportion with improved access is 19% [14]. There are also indications about individual behavioural dispositions about Ghanaians that can enhance the incidence of diarrhoea. For instance, hand-washing attitudes of many Ghanaians have not improved, in spite of a number of behavioural change messages on the practice. A comparative study of Ghana and other African and Asian countries paints a grim picture about the practice in the country. The study revealed that 3% of respondents washed their hands with soap after using the toilet, while only 1% washed their hands before feeding an index child [15].

Download English Version:

<https://daneshyari.com/en/article/3327430>

Download Persian Version:

<https://daneshyari.com/article/3327430>

[Daneshyari.com](https://daneshyari.com)