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CPS Paper

Anaemia in Preschool aged children in the DR. Congo: Finding from a Nationally Representative Survey

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Paper

Brief Description

Anaemia, a condition in which there is a reduced haemoglobin concentration is a serious worldwide public health problem.

Recent evidence suggests that 30% of the world population is anaemic [1].

Children aged between 0 and 5 years and women of reproductive age are the most affected.

The latest World Health Organisation anaemia estimates suggest a global prevalence of 40% in children aged between 0 to 5 years, and 30% in women, and 60% in children aged between 0 to 5 years in Africa [1].

Anaemia in children is defined as a haemoglobin concentration of <11dl at sea level [2].

Anaemia weakens the person's immune system exposing the individual to infections.

In children anaemia is associated with long-lasting developmental effects [3].

Even at its mild stage anaemia can impair cognitive development of children.

This retrospective cross-sectional study uses nationally representative data, the 2014 Democratic Republic of Congo Demographic Health Surveys (DRC- DHS) to study potential risk factors of anaemia in children in the DRC.

Geographical disparities were explored and presented using maps.

Using three-levels random effect models, potential factors were grouped into individual, maternal, household, and community factors to account for observed and unobserved anaemia contributing factors.

The data suggest that anaemia in children is a severe public health concern in the DRC (60% prevalence rate) and there are significant disparities in anaemia prevalence within provinces in DRC, and anaemia significantly varies by households.

The age of the child, malaria, whether the mother is anaemic, whether the mother was given drugs for intestinal parasites(hookworm), household wealth and the source of drinking water are factors associated with anaemia in children in the DRC.
This study is evidence-based on representative country data.

Significant associations between anaemia and other infections including malaria and hookworm call for appropriate interventions to reduce haematological deleterious impact of both infections.

The results highlight the need to utilise socio-ecological approaches to reduce the burden of anaemia in children in the RDC.

Abstract

Anaemia in Preschool-aged children in DR. Congo: Finding from a Nationally Representative Survey
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Anaemia, a condition in which there is a reduced haemoglobin concentration is a serious worldwide public health problem. Recent evidence suggests that 30% of the world population is anaemic [1]. Children aged between 0 and 5 years and women of reproductive age are the most affected. The latest World Health Organisation anaemia estimates suggest a global prevalence of 40% in children aged between 0 to 5 years, and 30% in women, and 60% in children aged between 0 to 5 years in Africa [1]. Anaemia in children is defined as a haemoglobin concentration of <11dl at sea level [2]. Anaemia weakens the person's immune system exposing the individual to infections. In children, anaemia is associated with long-lasting developmental effects [3]. Even at its mild stage anaemia can impair the cognitive development of children.

This retrospective cross-sectional study uses nationally representative data, the 2014 Democratic Republic of Congo Demographic Health Surveys (DRC- DHS) to study potential risk factors of anaemia in children in the DRC. Geographical disparities were explored and presented using maps. Using three-level random effect models, potential factors were grouped into individual, maternal, household, and community factors to account for observed and unobserved anaemia contributing factors.

The data suggest that anaemia in children is a severe public health concern in the DRC (60% prevalence rate) and there are significant disparities in anaemia prevalence within provinces in DRC, and anaemia significantly varies by household. The age of the child, malaria, whether the mother is anaemic, whether the mother was given drugs for intestinal parasites(hookworm), household wealth and the source of drinking water are factors associated with anaemia in children in the DRC.

This study is evidence-based on representative country data. Significant associations between anaemia and other infections including malaria and hookworm call for appropriate interventions to reduce the haematological deleterious impact of both infections. The results highlight the need to utilise socio-ecological approaches to reduce the burden of anaemia in children in the RDC.