The Prevalence of Anaemia among Children in Northern Uganda: Urban-Rural Comparison

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Abstract

Affecting 2.36 billion people worldwide, anaemia is a relevant, global public health problem with far-reaching consequences for human health as well as the social and economic development of a country. More than half of all cases are caused by iron deficiency. According to the World Health Organisation, 56% Ugandan children aged 6 to 59 months are anaemic having a hemoglobin level below 11.0 g dl\(^{-1}\). The aim of the study was to assess the prevalence of anaemia in Northern Uganda among the vulnerable group of children aged 6 to 59 months, focusing on the residence as an influence factor of the multifactorial aetiology of anaemia in developing countries.

A total of 273 children, treated in a health centre in the north of Uganda, were part of the investigation. In addition to the measurement of the haemoglobin level and anthropometric data, a sickle cell test was conducted as well as an interview of the attendant person concerning several determinants of anaemia.

The study detected a prevalence of anaemia in children of 90.8%. Classified by severity, 42.3% were affected by severe, 38.2% by moderate and 10.3% by mild anaemia. The mean haemoglobin concentration was 7.45 g dl\(^{-1}\). Furthermore, the urban-rural comparison showed significantly higher hemoglobin values among children from urban areas, but not a significantly lower prevalence of anaemia. A rural residence was significantly associated with a higher severity of anaemia.

Despite the lower prevalences in comparable previous studies, anaemia remains one of the most important health challenges among children under five years of age, especially in northern Uganda. In future a comprehensive analysis and the identification of the main risk factors of anaemia in this region could be beneficial to improve already existing interventions for the reduction and prevention of anaemia in a more efficient way and furthermore to address the predominantly rural population.

Keywords: Anaemia, influencing factors, residence, rural, Uganda, urban

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