

ORIGINAL RESEARCH

Predisposing Factors of Rickets in Children Aged 6-59 Months at Mbagathi Hospital, Nairobi.

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Abstract

A child's health and survival are highly dependent on optimal maternal infant and young child nutrition practices. In Kenya, under-nutrition is a leading cause of death of children. For infants and children under the age of two, the consequences of under-nutrition are particularly severe, often irreversible, and far reaching in future. Rickets is a disease associated with bone deformity that is caused by inadequate mineralization in growing bones, mainly associated with deficiency in either vitamin D, calcium or both. If untreated it could lead to lifelong disability. Despite, the declines in the prevalence of nutritional rickets since the discovery of vitamin D and role of ultra violet light in prevention of the disease, the condition is still a concern in many affluent and developing countries. In Kenya, there is scanty data on the predisposing factors associated with the re-emergence of rickets, yet recent research shows increasing numbers of cases of rickets being reported at health facilities. A case control study of the children with rickets (cases) and those without rickets (controls) was conducted in 2019 at Mbagathi Hospital to establish the predisposing factors that influence the occurrence of rickets in children aged 6-59 months Nairobi County, Kenya. The results of the study show that large household size ($p=0.04$), low birth weight ($p=0.000$), birth order ($p=0.03$), use of family planning methods($p=0.000$), malnutrition (wasting & underweight) ($p=0.000$), exclusive breastfeeding ($p=0.008$), lack of sun bathing (0.000), positioning children under the shade during sunbathing and attending day care (0.037) were significantly associated with the occurrence of rickets. The study recommends that caregivers should adopt sunbathing their children under direct sunlight, that further studies be conducted on the following factors household size, birth weight, birth order and attending day care in relation to occurrence of rickets. It also recommended that the Government of Kenya through the Ministry of Health and relevant bodies should formulate an elaborate policy on rickets,