

## Under Five Malnutrition Crises in the Boko Haram Area of Cameroon

Samuel Nambile Cumber<sup>a</sup>, Shalom Jaila<sup>b</sup>, Bongkiynuy Nancy<sup>b</sup> and Joyce Mahlako Tsoka-Gwegweni<sup>a\*</sup>

<sup>a</sup>Discipline of Public Health Medicine, Department of Nursing & Public Health, College of Health Sciences, University of Kwazulu-Natal, Durban, South Africa

<sup>b</sup>Under Privilege Children and Women Assistance (UPCAWA-SWEDEN), Researcher Cameroon Branch, Bamenda, Cameroon

\*Corresponding author, email: tsokagwegweni@ukzn.ac.za

Boko-Haram has increased their attacks along the Cameroon boarder in the Far North region of Cameroon since 2013. The prevalence of malnutrition in the north of Cameroon is high. Regions like the Adamawa, North and Far North regions have a prevalence of malnutrition of 5.2%, 6.7%, 9.0%, respectively; and, in addition to that, 1289 children have been admitted for therapeutic care due to malnutrition from the above regions. This crisis has an impact on access to livelihoods, because insecurity reduces access for farmers to harvest and impacts the upcoming sowing season, which has a direct impact on nutrition. Furthermore, the frequent attacks and displacement of persons in the Far North of Cameroon goes hand-in-hand with other issues, such as water shortage, shelter, food shortages and limitations to other basic needs.

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Malnutrition is one of the major causes of morbidity in children, and this does not only include the acute effects it has on children's health but also the long term effects on their cognitive development and economic growth. At a severe stage, it also leads to mortality.<sup>1,2</sup> The term malnutrition, which refers to both under-nourishment and over-nourishment, has been used by several researchers to describe health disorders in children below the age of five years, and it is due to the practice of inappropriate (insufficient or excessive) intake of food and nutrients, as well as attendant complications.<sup>2-4</sup>

In most cases, malnutrition in its mild stage can present with no obvious symptoms, but in its severe stage is associated with complications that, apart from mortality, impair development and attainment of inherent potential in later life.<sup>1,3-5</sup> A number of interventions for the amelioration of malnutrition among children younger than 5 years of age (under-fives) in Cameroon have been implemented for years, but the outputs have been poor with little significant change to the crisis, bringing us to the question of if the under-fives' malnutrition crisis in Cameroon as a whole will someday improve or be further augmented.<sup>5,7</sup> According to Omole *et al.* 2015, about 35% of all preschool children in developing countries, including Cameroon, are underweight in comparison to children with normal growth.<sup>7,8</sup> The under-fives are more at risk in Cameroon because malnutrition causes fatigue, dizziness, growth impairment (wasting and stunting), vulnerability to infections, severe/irreversible mental and/or physical disability, and morbidity when severe.<sup>2-5</sup>

Boko-Haram has increased its attacks along the Cameroon boarder and in the Far North region of the country since 2013.<sup>7,8</sup> These frequent attacks have resulted in the bombing and killing of civilians, destruction of property, and even kidnapping in the Far North region.<sup>7</sup> These attacks have led to a massive displacement of people along the border of that region.<sup>8</sup> These frequent attacks and displacement of persons in the Far North of Cameroon have created further environmental deterioration, which, apart from its effects on nutritional status, include water, shelter and food shortages, and limits the provision of basic needs for the inhabitants of that region.<sup>7,8</sup>

Severe acute malnutrition rates for children among the under-fives in the Far North region of Cameroon is of urgent concern, as the number of children in need of immediate food assistance has tripled since June 2015 due to disrupted agricultural activities by Boko Haram.<sup>7,9,10</sup> Today, the four regions of Adamaoua, North East and Far North account for 90 per cent (90%) of the 250 000 children under five years of age suffering from global acute malnutrition who will die if not urgently assisted.<sup>7,10</sup> In 2015, 229 000 cases of malnourished children (34% were severe cases) were recorded, compared to 186 000 cases (29% were severe cases) noted in 2014, showing a drastic increase.<sup>2,3,5</sup>

The Far North region of Cameroon suffered from the problem of malnutrition among children under the age of five, with alarming rates recorded in 2013, even prior to the Boko Haram crisis. The situation in this region has intensified with little or no correct statistics on the exact number of malnourished children in the region.<sup>3,5,7,10</sup> The Demographic and Health Survey in 2011, documented that the region suffered from chronic malnutrition, with food insecurity in more than 17.9% of households with 194 500 children at risk of malnutrition, including 64 570 exposed to severe acute malnutrition.<sup>7,10</sup> Today about 80% of the population in the Far North region are either poor or very poor, with limited access to basic services and essential food commodities.<sup>2,5,7</sup> Since 2014, food insecurity has further increased, leading to a deterioration in nutritional status of children in the region.<sup>7,10</sup>

Preliminary results of the Standardised Monitoring and Assessment of Relief and Transitions (SMART) nutrition survey conducted in October 2015 indicate a prevalence of malnourished children (14%) in Global Acute Malnutrition (GAM) in the region, which is very close to the World Health Organization's (WHO) threshold (15%) for regions requiring immediate intervention.<sup>2,5,11</sup> Similarly, the prevalence of Severe Acute Malnutrition (2.2%; SAM), is above the WHO emergency threshold (2%).<sup>11</sup> In essence, the number of people in need of immediate food assistance in that region has tripled since June 2015 and is now 200 000 people, according to the United Nations (UN) Office for the

Coordination of Humanitarian Affairs present in the region.<sup>7,10</sup> Other studies by the National Institute of Statistics in Cameroon (2011) showed that 33% of children younger than five years in Cameroon suffer from chronic malnutrition and over 14% of them are severely malnourished.<sup>2</sup> The Far North and North region of the country in fact have the highest rate of infant malnutrition due to lack of food during the lean season (characterised by heat and lack of rainfall leading to little harvest; also known as the dry season) which lasts from mid-June to end of August.<sup>3,5</sup> These regions also have a low dietary diversity with millet and sorghum as the two main staples.<sup>3,4</sup> We have evidence from our latest survey in 2014 that the rate of stunting or acute malnutrition is going up.<sup>1,5</sup>

Malnutrition continues to be a significant problem in Cameroon especially in children in the Far North region which has been compounded due to the sudden influx and presence of internationally displaced persons (IDPs)/refugees.<sup>7,9,10</sup> By May 2015, the United Nations Agency for Refugees (UNHCR) had registered over 42 242 Nigerian refugees in the Far North of Cameroon who had turned away from Boko-Haram attacks in Nigeria.<sup>7-10</sup> Additionally, poverty, political priorities and violence/war all contribute to the total adverse environment with the most important factor being food unavailability.<sup>1,2,7,9</sup> According to the Office for the Coordination of Humanitarian Affairs (OCHA), by April 2015, an estimated 106 000 Cameroonians living in border communities had also been displaced within the country's Far North region.<sup>7,9,10</sup> Many local health workers have fled the area and some clinics have been closed, further straining the already limited resources.<sup>7,8</sup> This constant movement of people makes the situation worse, especially among pregnant and breastfeeding women, thus affecting the nutritional status of their babies since access to healthcare is difficult.<sup>2,5,8</sup>

The consistent attacks of Boko Haram in the Far North region of Cameroon have also forced many farmers to flee their farmlands.<sup>7,10</sup> As a result, farms and crops are abandoned due to the negative impacts on agricultural communities causing starvation leading to malnutrition.<sup>7,9</sup>

### Recommendation

In order to provide nutritional support, it is very important for stakeholders to implement intervention programs which will help to identify the patients (children) who are approaching the state of malnutrition and immediate care be provided to avoid severe cases of malnutrition in the region.

Health workers should be encouraged and protection provided for them by the Cameroon government, so that they can feel safe in this region which is under frequent attacks from Boko-Haram. Also, more health workers need to be deployed to both

official and unofficial camps. Efforts should be focused on screening early and referring undernourished children to the closest centers, reintegrating returning refugees, and building capacity for early preparedness for future humanitarian emergencies.

Training trauma advisers and building supportive institutions and structures for war time economy should be encouraged as a way to study and understand the impact of the realities encountered by victimised communities.

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