**Fighting Malnutrition in children under five years in refugee camps of Uganda through Electronic detection and Monitoring Systems (EDMS).**

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# **Acronyms and Abbreviations**

UNAP Uganda Nutrition Action Plan

# **Abstract:**

The major cause of morbidity and mortality among children under five years remains malnutrition especially in developing countries. The high burden of wasting and stunting among children under five years of age is of great concern to policy makers and public health practitioners in Uganda. The goal of the UNAP is to reduce malnutrition levels among women of reproductive age, infants, and young children.

Prevention and treatment of malnutrition is a priority in the United Nations 2030 development agenda.

The innovation intends to detect wasting and stunting among children aged 6-59 months in the population of refugee camps of Uganda, recommend possible drugs/ feeds, monitor their treatment progress and disseminate teaching sessions on ways of preventing and fighting malnutrition in children under five years of age.

# **1. Introduction**

Malnutrition remains a major global public health challenge, especially among children under five years of age [1].

Although it performs relatively well against other developing countries, Uganda still experiences a malnutrition burden among its under-five population. As of 2016, the national prevalence of under-five overweight is 3.7%, which has decreased slightly from 5.8% in 2012. The national prevalence of under-five stunting is 28.9%, which is greater than the developing country average of 25%. Conversely, Uganda's under-five wasting prevalence of 3.5% is less than the developing country average of 8.9% [2]. Secondary data from the 2011 Uganda Demographic and Health Survey was utilized. A sample of 2214 children was studied. Bivariate analysis and multivariate conditional logistic regression was used to determine the association between risk factors and childhood wasting and stunting. 5% and 33.5% of the children were wasted and stunted respectively [3]. Malnutrition in Uganda can take many forms, including chronic malnutrition (stunting, or low height-for-age), underweight (low weight-for-age), acute malnutrition (wasting, or low weight-for- height), anaemia, vitamin A deficiency, iodine deficiency, and low birth weight (< 2.5 kg). Almost one-third of children under 5 and 1 of 3 women suffer from malnutrition in Uganda. [4]. 33 percent of children under the age of 5 are stunted (too short for their age) and almost half (49 percent) suffer from anaemia, according to the 2011 Uganda Demographic and Health Survey (UDHS 2011). Stunting (or low height for age) decreased by 5 percentage points from 2006 to 2011 but, even with this progress, more than 2 million children in Uganda are stunted. [5]

## **1.1 Objectives**

### Overall Objective

To fight Malnutrition in children under five years in refugee camps of Uganda through identifying wasting and stunting among children aged 6-59 months, recommending necessary feeds and drugs for sick children, monitoring children treatment progress and disseminating nutrition awareness teaching sessions in form of audio, video and text using electronic systems.

### Specific Objectives

1. To develop an interactive mobile application that will capture children vitals, produce possible results and recommend treatment for the sick children, disseminating nutrition awareness teaching sessions through video, text and audio.
2. To build an open big data platform to collect, fuse, manage, analyze and visualize nutrition information to health workers and other stakeholders (in health value chains) make informed decisions regarding nutrition rate in children under five years in Ugandan refuge camps.
3. To develop a web system exhibiting the malnutrition levels and treatment rates in children under five years, with a platform for uploading teachings on good nutrition practices.

# **References**

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