

**Title:** Multifocal Assessment Reveals Anemia-related Program Gaps and Implementation Challenges in Ghana

**Brenda A.Z. Abu<sup>1</sup>, Rachel Stefanic<sup>1</sup>, Olivia Garror<sup>1</sup>, Nicole Buttner<sup>1</sup>, Adam Sandow<sup>2</sup> and Kingsley Pereko<sup>3</sup>.**

1. Wegmans School of Health and Nutrition, Rochester Institute of Technology, USA
2. PointHope International, Ghana
3. School of Medical Science, Department of Community Medicine, University of Cape Coast, Ghana.

### **Abstract**

**Objectives:** Despite existing program efforts in Ghana, incidence of childhood anemia remain high. This study describes existing childhood anemia prevention and treatment strategies and assessed implementation gaps.

**Methods:** A cross-sectional study using purposive sampling/snowballing technique identified organizations implementing childhood anemia prevention and treatment programs. Interview guides constructed around UNICEF's conceptual framework of malnutrition identified programs addressing each cause of anemia. Interviews were administered via in-person and phone in August 2018. Interviews were audio-recorded, transcribed, and coded/analyzed using Dedoose software version 8.1.8.

**Results:** Twenty-five officials from Universities (n=2), local non-governmental (n=4), government departments (n=6) and international (n=2) agencies completed interviews. Reported contextual immediate causes of anemia were malaria, diarrhea, worm infestation and inadequate dietary intake. All organizations implemented programs addressing  $\geq 1$  of the immediate causes, with many overlapping programs from different organizations addressing inadequate dietary intake in the same district. Government-assisted programs and Universities reported national scope; nongovernmental/ private organizations had regional/district focus. The contextual underlying causes reported were inadequate nutrition knowledge, food safety and environmental hygiene, food insecurity and health services. All organizations were implementing programs addressing  $\geq 1$  of these underlying causes. Few programs addressed the reported basic causes namely, inadequate human resources (n=5) and housing/water/toilet facilities (n=3) and poverty/financial resources (n=2). Reported program gaps included inadequate human resources and scarce funding for projects. The main observed gap was insufficient communication and integration between programs implementer.

**Conclusions:** Multiple programs, sometimes with overlapping focus in the same region were addressing anemia. Re-designing programs to prioritize communication between current program may result in efficient use of limited funding and human resources. New programs may focus on improving financial investment in programs and more personnel.

**Funding Source:** RIT Miller Chair Grant for Global Experiential Research

**Key words:** Multifocal assessment, iron deficiency anemia, prevention and treatment programs, implementation gaps and challenges, Ghana.