

Multisectoral Approach to Addressing Poor Health Status of School-age Children in Indigenous People Communities in Selected Provinces in the Philippines

University of the Philippines Manila

Vicente Y. Belizario, MD, MTM&H

Carlo R. Lumangaya

Problem addressed by the initiative: Soil-transmitted helminthiasis (STH) or worm infections is the most common and widespread of the neglected tropical diseases worldwide. School-age children (SAC), one of the at-risk groups for STH, harbor the highest worm burden. Heavy intensity infections cause detrimental effects on their nutritional status, physical growth, and cognitive development.¹ Indigenous peoples (IPs), comprising approximately 13% of the Philippine population², are more vulnerable to STH³ as they settle in geographically isolated and disadvantaged areas. However, data on the health status of these groups are very limited.

How the initiative was implemented: An innovative, integrated and multisectoral approach involving parasitologic^{4,5} and nutritional⁴ assessments in IP SAC was implemented to generate data that provided evidence for enhancement of policy and improved service delivery.

Achieved or intended outcomes: The study provided data on the parasitologic and nutritional status of IP SAC in selected sites. The project also provided a model for the use of existing platforms for collaboration, such as the existing public-private partnerships in one area and the Regional Inter-Agency Committee for IPs' Health in Davao del Norte, in developing approaches aimed at improving intestinal helminthiasis control and achieving desired health outcomes in these marginalized groups.

Lessons Learned: Results revealed high prevalence and intensity of STH in IP SAC^{4,5}, with significantly higher ($p < 0.05$) burden in IP SAC than in non-IP SAC in Davao del Norte.⁴ Undernutrition was also seen in IP SAC in these communities.⁴ Limited access to health services such as mass drug administration, water, sanitation, and hygiene (WASH), quality health education, as well as current knowledge, attitudes, and practices pertaining to worm infections and WASH further contribute to the persistence of STH in IP communities. A multisectoral approach proved useful in improving surveillance and service delivery in these groups. An integrated surveillance for parasitologic and nutritional status revealed the need to address the coexistence of parasitism and poor nutrition. This can be done through utilization of existing platforms to contribute to attaining control program targets and desired health outcomes especially in marginalized groups like IPs.

1. Hall, A., Hewitt, G., Tuffrey, V., & de Silva, N. (2008). A review and meta-analysis of the impact of intestinal worms on child growth and nutrition. *Matern Child Nutr*, 4(s1), 118-236.

2. Department of Health, National Commission on Indigenous Peoples, Department of Interior and Local Government. (2013). Joint Memorandum Circular No. 2013-01: Guidelines on the Delivery of Basic Health Services for Indigenous Cultural Communities/Indigenous People.
3. World Health Organization. (2009). Neglected tropical diseases, hidden successes, emerging opportunities. In «WHO/HTM/NTD/2009.2».
4. Belizario VY, Totañes FIG, de Leon WU, Lumampao YF, Ciro RNT. (2011). Soil-transmitted helminth and other intestinal parasitic infections among school children in indigenous people communities in Davao del Norte, Philippines. *Acta Trop.* 120(SUPPL. 1):12-18.
doi:10.1016/j.actatropica.2011.02.010
5. Belizario, V.Y., Ladia, M.A.J., Sison, O.T., & Cubarrubias, D.L.P.F. (2019). Deworming outcome project: soil-transmitted helminthiasis in school-age children in selected indigenous people communities in Pampanga and Davao del Norte. Manuscript for submission.