Analytic Hierarchy Process (AHP) - Vulnerability Analysis of the Proportion of Children Aged 6 to 35 Months With Anaemia in Peruvian Departments

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Abstract. *Anaemia is a significant public health concern, particularly among children aged 6 to 35 months, due to its adverse effects on cognitive development and overall well-being. This problem shows significant regional variations throughout various departments in Peru. Therefore, to identify high-risk locations and efficiently prioritize interventions, a thorough vulnerability analysis of the percentage of children with anaemia is required. The AHP is a multi-criteria decision-making technique that enables systematic evaluation and prioritization by structuring complex problems into a hierarchical framework. In this study, the sociodemographic, healthcare, and environmental data are combined with the AHP framework to analyse anaemia vulnerability. The indicators are quantified and their weights within the AHP model are determined using data from national surveys, official publications, and relevant literature. The relative importance of each criterion is then used to calculate vulnerability indices for Peruvian departments and this information will be used to design an anaemia vulnerability map to facilitate decision making and the creation of public policies.*

Keywords. Analytic Hierarchy Process, Anaemia, Vulnerability, Perú.

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