

High Prevalence of Alpha- and Beta-Thalassemia in the kadazadusuns in East Malaysia: Challenges in Providing Effective Health care for an Indigenous Group.

Abstract

Thalassemia can lead to severe transfusion-dependent anemia, and it is the most common genetic disorder in Malaysia. This paper aims to determine the prevalence of thalassemia in the Kadazandusuns, the largest indigenous group in Sabah, East Malaysia. α - and β -thalassemia were confirmed in 33.6% and 12.8%, of the individuals studied respectively. The high prevalence of α - and β -thalassemia in the Kadazandusuns indicates that thalassemia screening, genetic counseling, and prenatal diagnosis should be included as part of their healthcare system. This preliminary paper serves as a baseline for further investigations into the health and genetic defects of the major indigenous population in Sabah, East Malaysia.