Sickle Cell Disease in Burundi- An unexplored terrain?

Dinesh Pendharkar¹ and GARIMA Nirmal¹

¹Sarvodaya Hospital

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Abstract

Introduction: Sickle cell disease (SCD) is one of the most common cause of mortality and morbidity in Africa. There is paucity of data on SCD from Burundi. Methods: A cross-sectional study was conducted using a predetermmined questionnaires that included socio-demographic characteristics, basis of diagnosis, common clinical scenarios, transfusion requirements, usage of hydroxyurea, usage of folic acid, and knowledge about bone marrow transplantation. Results: Participants were 174 patients with SCD with male: female ratio of 1:1. The median age was 10 years (1.3 - 42 years). The diagnosis of SCD was made by Emmel test in 139/168 (82.74 %) and electrophoresis in 29/168 (17.26%) patients. Nearly 150/164 (91.4%) patients had 1 episode of Veno-occlusive crisis in the preceding year. Out of 165 patients, 77 (45.8%) required >3 admissions, 55 (39.4%) >3 times and 24 (14.5 %) patients reported no admission in past 1 year. Out of 166 patients, 131 (79%) reported no usage of hydroxyurea, while 35 patients (21%) reported taking hydroxyurea. Among 35, only 17 were taking hydroxyurea on regular basis and 18 were taking irregularly. Majority of patients (96.5%) were unaware of bone marrow transplantation as a curative treatment option. Conclusion: Our data from Burundi points towards an urgent need to make hydroxyurea available and affordable. Health systems strengthening with focus on education and training of the healthcare professionals is a priority.

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