

Epidemiology of Sickle Cell Disorder in Western Maharashtra

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Abstract

Background: Sickle cell disease is a major genetic disorder amongst Scheduled Caste (SC), Scheduled Tribe (ST), and Other Backward Communities (OBC) population groups of Maharashtra. We modified diagnosis technique and developed simple laboratory technology to identify carrier (Hb SS) and sufferer (Hb AS) suitable for field work. **Methods:** This cross-sectional study was done in hematology clinical laboratory of T.N Medical college and B.Y.L Ch Nair Hospital Mumbai from August 2021 to February 2022. All 287 patients were informed about the work and written informed consent was taken from each patient and following test were done. Solubility Test and Electrophoresis of Hemoglobin. **Results:** In order to find out prevalence for sickle cell disorder we screened major communities from the state and found high prevalence amongst SC, ST and OBC. The overall prevalence amongst SC, ST and OBC is 3.48 %. Severe joint pains and milder type of jaundice are peculiar symptoms amongst sicklers from the state of Maharashtra. **Conclusion:** High prevalence is observed in the rural area from Eastern part of Maharashtra and hence population is at high risk in this area. It is necessary to establish community control program involving people, doctors, social workers, and sympathizers. This program will undertake diagnosis, treatment, management and counselling. Government of Maharashtra is aware of these facts but unable to undertake major projects because of financial constraint and needs support from Central agencies.