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**Original article
Comparison of prevalence of G6PD deficiency in General Population and admitted symptomatic children of Gandhi Memorial Hospital associated to Shyam Shah Medical College, Rewa,MP,India.
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 **ABSTRACT**

**Introduction:** Malaria and infectious diseases both are highly prevalent in Rewa region. Anti-malarial drugs and oxidant antibiotics are the mainstay of treatment and these drugs sometime became disastrous when given to G6PD deficient individuals.In G6PD deficient individuals, sthese oxidant drugs cause hemolysis manifesting as moderate to severe morbidity; and in severe cases may lead to mortality. Therefore, knowledge of prevalence of G6PD deficiency in Rewa division is important, so that essential steps could be taken to avoid and combait complications related to G6PD deficiency.

**Methods:** The present study was conducted on 600 children; 300 from general population group (control group) and 300 from symptomatic group (admitted in hospital).G6PD quantitative test was used for the diagnosis of G6PD deficiency.

**Observations and Results:** Prevalence was found 1.7% in general population and 3.7% in admitted symptomatic children but no significant difference was found (P>0.05). The enzyme deficiency non-significantly involved male gender more than female gender (P>0.05) and the disease was found to be significantly more concentrated in the tribal community than the other communities (P<0.05).The disease was precipitated by both, drugs and infections.

**Conclusion:** From the study, we concluded that, all symptomatic children (anemic or jaundice) of Rewa division should be investigated for G6PD deficiency before giving them any oxidant drugs. Government should launch educational awareness program along with investigating facility at community health centers (CHC). There is need to train the pediatricians for cost effective management of G6PD deficient patients.

**Keywords:** G6PD deficiency, oxidant drugs, hemolysis, G6PD prevalence