Response to comment on Sanjay Kalra et al (J Pak Med Assoc. 2017; 5: 810-813)
Malaria, red blood cells turnover and glycated hemoglobin: Pitfalls and challenges
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The authors acknowledge the observations of the reviewer. The pitfalls and challenges with HBA1c assessment and interpretation in patients with malaria, especially severe malaria, where the red blood corpuscle (RBC) turnover is increased, is the reason why we have not highlighted the use of HbA1c for diagnosis and management of diabetes in malaria.1 Any condition which is associated with decreased RBC lifespan (increased turnover) will be associated with inappropriately lower HbA1c values. There is a more than 23 year old report, documenting lower than expected HbA1c in a diabetic patient with malaria and severe anaemia.2 In that study, patients with different haemoglobinopathies consistently had lower than expected HbA1c.2 Hence staggered self/home monitoring of blood glucose is the best way to assess glycaemic control in patients with malaria, especially those with severe malaria. Fructosamine may represent a reasonable alternative for short term assessment of glycaemic control.

Reference