**Introduction**. There is a global effort to control and ultimately eliminate malaria in all ramifications. Irrespective of this global fight, transfusion transmitted malaria (TTM) remains an issue of concern in most malaria endemic countries like Nigeria, because blood donors are not routinely screened before transfusion. This study was carried out to uncover the level of malaria parasitaemia among donors in the National Hospital Abuja-Nigeria, using a cross-sectional study design.

**Methodology**. Three hundred and forty (340) donors in September and October who consented to participate in the study were randomly selected after passing eligibility test and screened for malaria using microscopy and Rapid diagnostic test (RDT).

**Result**. The prevalence of malaria parasitaemia was found to be 46.2%, with Plasmodium falciparum being the sole causative agent. There was variation in the results of microscopy and RDT with microscopy detecting more positives, and blood group AB having the highest prevalence rate of malaria. The RDT had low sensitivity and hence generated high false positives. There was a relationship (P<0.05) between rates of infection and age and also between voluntary (39.9%) and replacement (51.6%) donors. There was higher prevalence rate among replacement donors than voluntary donors.

**Recommendations**. Screening of blood donors using microscopy is recommended, without unnecessary exclusion of potential donors through prolonged deferrals. It is further recommended that intending donors be initially screened, and if positive, they should be treated ahead of time before blood donation. This will nip the risk of TTM in the bud. Finally, more advocacy and campaign will enhance voluntary blood donation.