# ABSTRACT

The present work aimed to explore the antioxidant potential of antihypertensive drugs by using some *in-vitro* methods. The antioxidant drugs were initially selected then collected from the pharmaceutical industry and solution in methanol were employed to evaluate antioxidant potential. The antioxidant activity or radical scavenging potentials of these drugs were evaluated by employing following contemporary methods, including 2,2′-azinobis (3 ethylbenzothiazoline-6-sulphonic acid) radical cation assay (ABTS), 2,2′-diphenyl-1-picrylhydrazil assay (DPPH), Super oxide radical anion scavenging activity, Ferric thiocynate (FTC) assay and Metal chelating activity. The Trolox equivalent antioxidant capacity (TEAC) values for selective antihypertensive drugs samples were ranged from 1-12mM of Trolox equivalent and % age inhibition were ranged from 9.12-89.01%. Methyldopa showed the excellent result among the selective drugs. The %age remaining of DPPH values of drugs were found to be in range 17.821-102.94%. Results revealed that methyldopa had the least value of % remaining of DPPH so it had the highest antioxidant potential among the selective antihypertensive drugs. The percentage bound iron for metal chelating activity varied from17.74-31.55% for drugs; Telmesartan showed the maximum value of percentage of bound iron. The %age scavenging of superoxide radical anion was ranged from 53.34-89.81%, showing high value for Nobivilol. FTC method results revealed that Valsartane and Timilol have good antioxidant activity. All drugs showed different antioxidant potential in different assays against various mechanisms of antioxidant activity. The overall scavenging activity of Methyldopa remained excellent against super oxide radical anion, $ABTS^{+}$ and $DPPH^{\cdot}$.