**ABSTRACT**

Pyridine and its analogues are found to exhibit antimicrobial, antitubercular, antihypertensive, bronchodilatory, anticonvulsant and antioxidant activities. Microwave assisted synthesis of 1,4-dihydropyridine was done followed by its reaction with sulphanilamide to get Mannich bases, reaction of them with substitutedaldehydes afforded Schiff bases, which when cyclised with thioglycolic acid yielded novel thiazolidinones. The compounds synthesised were characterized by their spectral data. The antibacterial activity of the synthesized compounds were performed at 10, 20 and 40 μg/ml concentrations against Gram +ve and Gram -ve organisms like Bacillus subtilis, Escherichia coli respectively using ampicillin as standard and antifungal activity at concentrations of 100, 200 and 400 μg/ml against fungal organisms like Aspergillus niger and Penicillum notatum using fluconazole as standard. The in vitro antitubercular activity of the test compounds were performed by measuring their % inhibition against Mycobacterium tuberculosis H37Rv by L J Slope Method, using isoniazid as standard at 0.2 μg/ml concentration.

Keywords: 1,4-dihydropyridine, Mannich base, Schiff bases, 4-Thiazolidinones, Antimicrobial activity, Cup plate method, In vitro ntitubercularactivity, Mycobacterium tuberculosis H37Rv.