

In-vitro evaluation of antimicrobial efficacy of the indigenous formulation, *Karna Bindu* against common pathogens causing otitis infections

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Abstract

This study investigates the efficacy of the formulation named “*Karna Bindu*” which has been used in indigenous medicinal practices to treat ear infections such as otitis media and otitis externa. The objectives are to determine the antimicrobial efficacy of *Karna Bindu* against *Aspergillus niger*, *Candida albicans* and *Pseudomonas aeruginosa* and to compare the efficacy of the indigenous formulation with the conventional antibiotics that are used for the test organisms. By using the agar well diffusion method, the test organisms were cultivated and the relevant antibiotics were used as positive controls while sterile distilled water served as the negative control. The antimicrobial assay revealed that *Karna Bindu* is effective against all three selected microorganisms. The Minimum Inhibitory Concentrations (MIC) of the formulation for *C. albicans* and *P. aeruginosa* were recorded as 500 µL/mL and 750 µL/mL accordingly.

Key words: ear infections, otitis media, otitis externa, *Karna Bindu*