

## Drug susceptibility of *Candida* isolated from the surfaces of mobile phones and hands

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### ABSTRACT

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**Introduction:** The mycological literature currently devotes much attention to the issue of reduced fungal susceptibility to commonly used antifungal drugs.

**Purpose:** To assess drug susceptibility of *Candida* strains isolated from samples collected from the surfaces of mobile phones and the hands of their owners. A total of 175 mobile telephones belonging to students and lecturers of the Medical University of Białystok and University Hospital personnel as well as 175 hands of these phone owners were included in the mycological evaluation.

**Results:** The rate of *Candida* contamination of personal mobile phones was more than 70.0%. *C. glabrata* strains were primarily isolated from the

collected material (89.1% - hands; 74.9% - mobile phones). *C. albicans* strains showed susceptibility to most antimycotics, with the highest susceptibility to 5-fluorocytosine, and the lowest to fluconazole. *C. glabrata* showed the lowest susceptibility to fluconazole and miconazole, and the highest to ketoconazole. *C. krusei* were relatively very sensitive to antibiotics, except for fluconazole. None of the isolated strains showed resistance to more than three types of drugs.

**Conclusion:** This study demonstrated that mobile phones are potentially vehicles for pathogenic *Candida* strains in a university and hospital settings.

**Keywords** *Candida*, isolated, mobile phones