

Abstract

Development and pilot testing of a questionnaire to assess the knowledge-level and attitudes of junior doctors on infectious diseases and antimicrobial resistance [†]

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Abstract: *Introduction:* Appropriate professional competencies and attitudes are of critical importance for healthcare-personnel to effectively prevent, diagnose and treat infectious diseases, and to curb the spread of antimicrobial resistance. *Aims:* The aim of our study was to evaluate the knowledge and attitude of junior doctors on infectious diseases and antimicrobial resistance in Hungary. *Materials and methods:* A self-administered, 47-item questionnaire was developed by an expert panel, including questions on demographic characteristics, source of knowledge on antimicrobials, knowledge-level (30 items, three different subject areas) and attitudes (10 items). Following instrument development, pilot testing was performed among junior doctors at the Faculty of Medicine, University of Szeged, between January–December 2018. Descriptive statistics and nonparametric tests were performed by IBM SPSS Statistics 22.0. Internal consistency measures (Cronbach's α , Kuder–Richardson KR-20) and the test-retest analysis both showed acceptable reliability. Based on the responses to the questionnaire, an attitude score (0–7) was determined. *Results:* Among the n=146 respondents, 57.5% (n=84) has polled female, with an average age of 29.1±3.2 years. 41.8% (n=61) and 42.5% (n=62) of respondents cited the Internet and scientific papers as relevant sources of information, respectively. 71.2% (n=104) were satisfied with their academic achievements during their graduate studies. The number of correct answers among the respondents were 15.5±3.8 overall (range: 2–22), 36.3% did not reach an acceptable (≥ 15) score. Number of correct answers from the respective subject areas were: medical microbiology 6.0±1.8, epidemiology/infection control 5.4±1.7, and infectology 4.3±1.6. Good academic achievements corresponded to better results in the knowledge-based questions (13.7±3.7 vs. 16.3±3.6; $p < 0.001$). Spearman-correlations were significant among the number of correct answers within the individual subject areas and with the overall number of correct responses. 95.1% of residents presented with an appropriate attitude (score ≥ 5), while no correlation was shown between attitude scores and knowledge levels. *Conclusions:* Our instrument may be an effective tool for the identification of knowledge gaps related to infectious diseases among young prescribers in the early years of their professional career.

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