## ACTIVITIES AND COMPETENCES OF INFECTION CONTROL STAFF

Research period 2019 April-December.

Relevance of the research. The study was carried out due the implementation of the 2017–2021 Prevention and control of antimicrobial resistant microorganisms' plan, that was approved by the Minister of Health of the Republic of Lithuania in 2017 July 7 by order no. V-857. Healthcare-associated infections (HAIs) are a major economic burden worldwide, but a significant proportion of HAIs could be avoided. HAIs management in healthcare settings is one of the key activities to ensure patient safety and improve the quality of healthcare provided. The management of HAIs should involve all staff of the healthcare institution, but an effective management requires infection control (IC) staff. It is important to ensure enough employees and sufficient their competencies.

**Aim.** To evaluate the activities and competencies performed by the infection control staff working in institutions providing inpatient health care services.

**Objectives.** 1. To evaluate the number of infection control staff. 2. To evaluate the activities and competencies of infection control staff. 3. Assess the need for professional development of infection control staff.

**Methodology.** To implement the first task, a questionnaire survey of general, specialized and nursing hospitals was conducted, which assessed the number of persons working in the field of infection control. 64 institutions agreed to participate in the study. To implement the second and the third tasks, an online questionnaire survey of the infection control staff was conducted, which assessed the activities performed by the staff, their competences, and their need to improve qualification. 51 filled questionnaires were received. Descriptive statistical methods were used for data analysis. The competencies of infection control staff were assessed on a five-point Likert scale (based on a subjective assessment provided by respondents). When analyzing the data, the values of the competence scales were calculated according to the average.

**Results.** The surveyed institutions had a total of 79 people working in the field of IC (including 50 IC doctors / specialists and 29 IC assistants. 45.3 % of the institutions participating in the study did not have a specialist working in the field of IC (51.6 % of all surveyed institutions did not have any IC doctor / specialist, and 71,9 % did not have an IC assistant). The evaluation of the infection control functions showed that all the interviewed respondents controlled hygienic skills of employees. The majority also advised staff on infection management issues (98.0 %) and organized staff training on IC topics (94.1 %). The least number of respondents participated in the preparation of the description of the rational use of antibiotics (52.0 %). Based on calculated averages of Likert scale scores, it was found that for most of functions, respondents rated competence as "good" and only for three functions as 'average': organization of outbreak localization and eradication; participation in the analysis of information about the susceptibility of pathogens to antibiotics; participation in the preparation of a description of the procedure for the rational use of antibiotics. The study also aimed to assess the improvement of respondents in infection control topics. 92.2 % improve their competences in Lithuania and only 19.6 % abroad. 98.0 % wanted to improve their knowledge and skills in the future. Most respondents want to improve in the field of implementation of infection prevention measures (79.1 %) and a similar proportion expressed the need to improve in the field of antimicrobial resistance (74.4 %). Slightly fewer respondents would like to improve in the analysis of hygiene condition of the health care institution (60.5 %) and outbreak research (60.5 %). In addition, study participants expressed the need for management, communication, and leadership training. Seminars and courses are the most preferred forms of improvement (79.1 %

each). 76.1 % would like to improve in conferences, slightly less respondents (58.1 %) in internships.

**Conclusions.** 45.3 % of the health care institutions participating in the study did not have a specialist working in the field of IC. All respondents performed control over staff hygiene skills and infection prevention measures and rated their competence best for this function. Most of the respondents advised the staff on infection management issues and organized staff training on infection control topics. The least number of respondents participated in the preparation of rational use of antibiotics procedure description, the respondents rated the competence for this function the worst. The majority of respondents would like to improve their knowledge and skills in the future.

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