

THE ASSESSMENT OF HEALTHCARE-RELATED INFECTION MANAGEMENT AND SELF-MEDICATION WITH ANTIBACTERIAL MEDICINE

Project implementation period: 2012-2013

Fragment I. The assessment of healthcare-related infection (HI) management in Lithuanian hospitals

Aim – to assess the HI management in Lithuanian hospitals.

Tasks: 1. To make a list of applicable infection control (IC) activity assessment indicators. 2. To assess the HI prevention and control activity in hospitals. 3. To assess the IC human resources.

Material and methods. Continuous study was carried out. HI management indicator list was created by applying expert assessment method. The indicators were selected by experts according to criteria of relevance and applicability. A questionnaire was prepared according to the indicator list and was sent to hospitals.

Results. 86.9% of general hospitals (GH), 79.2% of nursing and supporting treatment hospitals (NSTH), and 80.0% of specialised hospitals (SH) participated. HI management inconsistencies among hospitals were determined. Not all the hospitals conduct HI epidemiologic monitoring (EM), 91.4% of GHs, 81.1% of NSTHs, and 75% of SHs have approved HI EM procedure, 73.6% of GHs conduct continuous EM RITS (reanimation-intensive therapy), while 77.3% of GHs conduct surgical wound infection care. The use of hand antiseptic in GHs differed 58 times, among NSTHs – 104 times, among SHs – 32 times. 65% of GHs, 59.5% of NSTHs, and 50.0% of SHs have antimicrobial agent prescription procedure, 44.1% of GHs, 8.8% of NSTHs, and 33.3% of SHs collect and analyse the data on the spread of microorganisms and immunity. 74.1% of GHs, 69.7% of NSTHs, and 67.0% of SHs conduct the record of HI outbreak. Every fifth GH has an IC department, every second has an IC doctor or an IC specialist and/or their assistants. The number of beds allotted to and IC doctor differed 10 times, while that allotted to an IC doctor assistant – 2 times. Only 41.8% of specialists work full-time. Mostly general practice nurses are responsible for IC in hospitals. Only 25.0% of specialists thought that they have enough knowledge and skills required by their job. 60.0% of all the respondents would like to improve their knowledge and skills.

Conclusion. The completed infection management and human resources assessment showed the present infection management and IC human resources situation in Lithuanian hospitals, the current inconsistencies among hospitals of the same type and the HI management activity areas to be improved.

Fragment II. The assessment of Lithuanian residents' self-medication with antibacterial medicine and their knowledge about the medicine.

Aim – to assess Lithuanian residents' knowledge and attitude towards antibacterial medicine and the extent of self-medication.

Tasks: 1. To determine residents' knowledge and attitude towards antibacterial medicine and the extent of self-medication. 2. To assess the factors influencing self-medication and the influence of EAAD events on knowledge, attitude, and residents' self-medication.

Material and methods. Quantitative and qualitative researches were carried out. When carrying out the quantitative self-medication research, 1506 randomly selected adult Lithuanian residents were surveyed. Information on the influence of EAAD events in 2008-2012 was collected from public health offices. A focus group was organised for the qualitative research.

Results. 30.3% used antibiotics in the last 12 months, 14.6% of them – for self-medication, which accounts for 4.4% in the general population. Doctors mainly prescribed antibiotics for bronchitis (18.7%) and upper respiratory tract infections (13.3%), while flu (20.8%) and genitourinary infections (11.1%) were treated the most often in the self-medication group. In most cases antibiotics for self-medication are purchased in an apothecary store without a prescription (37.5%), or leftovers are consumed (34.7%). The logistic regression analysis of factors with possible influence on self-medication showed that respondents in management positions (odds ratio 3.51) and people on their maternity/paternity leave, housewives (odds ratio 3.85) were more likely to carry out self-medication with antibiotics. Analysis also showed the influence of correct knowledge in antimicrobial immunity area on self-medication. Almost half of the respondents said that they received most of the information on antibiotics from their doctor (47.6%). Only

32.5% responded correctly that antibiotics are ineffective against viruses. After sorting the respondents according to events organised by public health offices for EAAD no differences among groups were determined.

Conclusion. Self-medication with antibiotics decreased but residents indicated that these agents can be purchased in apothecary stores without a prescription. Knowledge about antibiotics are insufficient, effective awareness measures are necessary.

Contacts: dr. Rolanda Valintėlienė, e-mail rolanda.valinteliene@hi.lt