SUCCESSFUL INTRODUCTION OF THE HOSPITAL POLICY IN A POLISH PEDIATRIC WARD RESULTED IN A SIGNIFICANT DECREASE OF THE ANTIMICROBIALS USE

A. Nitsch-Osuch¹, E. Kuchar², E. Gyrczuk¹, K. Życińska¹, K. Wardyn¹, K. Miśkiewicz², K. Korzeniewski³

¹Department of Family Medicine, Warsaw Medical University, Poland

²Department of Pediatric Infectious Diseases, Wroclaw Medical University, Poland

³Department of Epidemiology and Tropical Medicine, Mililtary Institute of Medicine, Warsaw, Poland

Hospitalized children are very often treated with antibiotics. However, 30-75% of antibiotic treatment in pediatric hospitals are administrated incorrectly or unreasonably. Implementation of the hospital antibiotic policy (HAP) should improve the antibiotic consumption patters in pediatric wards. The objective of our study was to determine the effectiveness of the implementation of HAP by assessing antibiotic consumption in the General Pediatrics Ward in Warsaw (Poland) before and after this intervention (years 2012-2013). The antibiotic use was calculated in daily defined doses (DDDs) per 100 patient days and DDDs per 100 admissions. The antibiotics were ranked by volume of DDDs and the number of antibiotics, which accounted for 90% and 100% of the total volume, respectively: DU90% and DU100% (where DU stands for drug use). The total antibiotic consumption decreased after introduction of the HAP: the total DDDS was 2177,46 before and 1335,35 after implementation of HAP. The number of DDDs/100 admissions was also lower after introduction of HAP (24,9 vs 36,3). After introduction of the HAP a decreased use of ceftriaxone and cefuroxime was observed. DU100% rateremained the same (8 antibiotics), while DU90% increased (from 3 in 2012 to 5 in 2013. The most often used antibiotic was amoxicillin with clavulanic acid (respectively 48,7% and 34% of used DDD after and before implementation of the HAP). The introduction of the HAP resulted in significant and positive changes in antibiotic consumption patterns after just one year of the implementation of the strategy.