III. Ethics, Deontology, Nursing and Public Health Section

1. ADVERSE EVENTS FOLLOWING IMMUNISATION IN THE REPUBLIC OF MOLDOVA

Author: Dolghi Mihaela

Scientific adviser: Ion Berdeu, MD, Associate Professor, Department of Preventive Medicine, Discipline of Epidemiology, *Nicolae Testemitanu* State University of Medicine and Pharmacy of the Republic of Moldova.

Introduction. Vaccination is often considered the most economical and effective strategy for preventing and controlling most infectious diseases. However, any vaccine as well as any medicine may, in some circumstances, induce adverse reactions.

Aim of study. Analysis of the frequency of post-vaccine adverse reactions according to the type of vaccine, their distribution over the study years.

Methods and materials. Statistical reports on vaccines included in the vaccination schedule and frequency of adverse events following immunisation (AEFI) following their administration were used. The data for the years 2010-2020, obtained from the National Agency for Public Health, were analysed.

Results. Analysing the data on vaccinations and AEFI for the years 2010-2020, we established that throughout the period, the most frequent AEFI appeared after the administration of BCG vaccine. The number of AEFIs following BCG administration ranged from 0,12% to 0,35% of the total dose, especially at the first dose, from a total of 40-80.000 doses annually. The most common AEFIs were regional lymphadenitis, followed by cold abscesses at the vaccine site, keloid scars, and ulcers at the vaccine site. In second place as a frequency of AEFI was the pentavalent vaccine DTP-HHVB-Hib, the share of AEFI ranging from 0,001% to 0,01%, with a declining trend in recent years. The number of doses administered annually ranged from 84.728 to 125.909 doses. Following the administration of the DTP vaccine, AEFIs were recorded quite rarely, with an average frequency of 0,002% of an average total of 43777 doses. AEFI after administration of DTP and DTP-HVB-Hib vaccines were manifested by hyperpyrexia, uninterrupted crying, seizures due to fever, local reactions, all ending with recovery after appropriate treatment during 2 days of hospitalisation. AEFI also occurs after the administration of the MMR vaccine, with a frequency of 0,004% to 0,025% of a number of annual doses ranging from 101.043 to 133.350. All cases of AEFI after vaccination with MMR occurred late, in the range of 14-24 days after administration of the vaccine and manifested by moderate fever and swelling of the salivary glands, ending in recovery for 2 days. Following administration of vaccines against polio, HBV, pneumococcal and rotavirus infection, practically no AEFIs have been reported.

Conclusion. All AEFIs have been reported after administration of different vaccine series, with no legality. No cases of severe AEFI were observed and no cases of unsafe handling of the vaccine were observed.