to study the availability of information about the studied population, clinical experience, pharmacokinetic properties, and drug–drug interactions. Using the Systematic Information for Monitoring score, available information was considered clinically applicable if it provided information that could be applied in clinical practice. Missing information was either a statement that information was absent, unjustifiably nonavailable information, or hollow statements (e.g., “caution in older patients”). Descriptive statistics (frequencies) were applied using SPSS 20.0.

Results: The availability of relevant and clinically applicable information ranged between 10% (Belgian Repertorium and BNF) and 20% (FK), except for the PL (mean, 66%). The PL, which is comparable to the European SmPC, appeared a more extensive document (7–32 pages) than the other handbooks (2 pages). In the handbooks, most information was present about drug–drug interactions (range, 30%–75%). Information about patient characteristics and about experience in older people was present in <7% of the handbook texts, except for the PL (48% and 81%, respectively). Clinically applicable information (what to monitor, critical value, how to respond) concerning renal impairment ranged from 4% to 29%.

Conclusion: This study found that the availability and clinical applicability of information about older people for rational prescribing of medicines is incomplete in the investigated European and American handbooks. Because these handbooks are the primary documents that guide prescribing in actual medical practice, the availability and clinical applicability of the information on older individuals should be improved.

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PP228—ADVERSE REACTIONS IN CHILDREN ARE NOT THE SAME IN ADULTS: ANALYSIS OF SPONTANEOUS REPORTS IN 2011–2012 IN CRIMEA, UKRAINE

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Introduction: Adverse drug reactions (ADR) in children are an important medical problem. The ADRs in pediatrics are not the same in adults. Our aim was to define such specificity for periods of childhood and to compare found results with ones of adults.

Patients (or Materials) and Methods: ARCADe (Adverse Reactions in Crimean Autonomy Database) was used for search of ADRs and their analysis. Classification of age stages of American Academy of Pediatrics was used. It defines babies (0–1 y.o.), toddlers (1–3), preschool (3–5), and grade-school (5–12) periods of childhood, and teenagers (12–18). The pharmaceutical groups and drugs were determined using WHO ATC index. WHO classes and Naranjo algorithm was used in causality and FDA criteria in seriousness assessment.

Results: The total amount of ARCADe records in 2011–2012 period is 2528. Amount of ADR reports for pediatric groups: babies, 187 (7.4%); toddlers, 138 (5.5%); preschool, 52 (2%); grade-school, 100 (4%); and teenagers, 52 (2%). Other reports were about reactions in adult patients (n = 1999, 79%). The amount of reports informing about ADR in male decreases with age. In babies, toddlers, and preschool children, ADRs in males are more often (55%–60%); in schoolchildren and teenagers, the ratio for males and females is 1:1, in adults ADRs in females are more frequent (60%). The most frequent clinical presentation of ADR in all groups is skin rash with different severity (including Lyell’s syndrome). In babies, rashes were found in 89.3% of cases; in toddlers, in 77.5%; in preschool and grade-school children, in 75% and in 56%; and in teenagers, in 63.5%. In adults, the frequency of rashes was lower (42%). The incidence of fever varied from 3.2% in babies to 11.4% in preschool children; then in teenagers and adults it decreases to 3.8% to 4%. The seriousness of ADRs was maximal in toddlers (75%); less in babies (71.7%); in other groups it was equal to adult rates (66%). The products caused ADRs most frequently in pediatric groups as well as in adults were antibacterial drugs. For them there was trend to decrease from babies (56.1%) to adults (36.7%) while in teenagers and adult patients the leader drug from this group was ceftriaxone (13.5% and 4.7%); in babies and toddlers ADR was mostly caused by ceftazidime (21.9% and 12.3%). In preschool children, the leader was ibuprofen (7.7%)
and in schoolchildren it was atropine (8%). The “probable” and “possible” class of causality in babies were 57.2% and 17.1% while “certain” class was defined just in 24% of reports. In other groups, doctors were more sure in ADRs cause: “certain” class was reported in 50%.

Conclusion: This analysis confirms results of previous studies which suggest ADRs as significant issues in pediatrics, which gender specificity, clinical presentations, ADR causing agent and seriousness differ from the same in adults.

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PP229—OBSERVATIONS ON THE OXALIS PERDICARIA (MOLINA) BERTERO IN CHILDREN WITH THE PERSISTENT MALNUTRITION DIARRHEA: RANDOMIZED CONTROLLED CLINICAL TRIAL

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Introduction: Elderly people of Bangladesh have a strong belief that Oxalis perdicaria (Molina) Bertero as pulp or extract can control loose motion. The mechanism of action on Oxalis perdicaria (Molina) Bertero extract is not known but the elderly, especially grandmothers, use Oxalis perdicaria (Molina) Bertero extracts for their grandchildren who suffer from the loose motion.

Patients (or Materials) and Methods: Evaluate control of motion and fluid loss as affected by intake of Oxalis perdicaria (Molina) Bertero extract. In the observations, 29 children aged 1 to 2 years, having >5 loose motions/day were randomly advised to take 60 mL of Oxalis perdicaria (Molina) Bertero extract (extracted from 50 leaves with stem). The children were suffering from the persistent malnutrition diarrhea. They were also feed Khichdi made with 300 g of rice, 200 g of vegetables, 2 eggs, 150 g of fish, 150 g of lentils, and 30 mL of soybean oil. The total amount of Khichdi was divided into 3 meals, and after each meal, 60 mL of Oxalis perdicaria (Molina) Bertero extract was given to ingest. They were also advised to drink oral saline in between the meals, and if capable, to eat fruits, such as Aegle marmelos (L.) Corrêa, Citrus maxima (Burm.) Osbeck, Mangifera indica L., Musa acuminata Colla, and Psidium guajava L. The observations were conducted at the multi-center during October 2011 to March 2012. None was admitted to hospital. Urinary excretion and stool of each patient were examined routinely on the first day and fifth day. After 5 days, they were advised to eat normal diets.

Results: On the second day, 6 patients showed controlled motion (2–3 motions a day). Eleven cases showed controlled motion on the third day, 9 cases on the fourth day, and 5 cases on the fifth day. Signs of dehydration were absent in 18 cases on the third day, 9 cases on the fourth day, and 2 cases on the fifth day. Motion and dehydration both were controlled within the 5 days of Oxalis perdicaria (Molina) Bertero therapy.

Conclusion: Treatment of diarrhea with the Oxalis perdicaria (Molina) Bertero, a common herb in Bangladesh, is not yet established, but the observations on 29 cases in the lessons showed 100% cure within 5 days. The indigenously available medicines and technologies can prove an asset in the tropical and developing countries of the world. At the same time, developed countries also can be benefited because of safety profile of the plant extracts.

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PP230—PATTERN OF PARENTERAL DRUG PRESCRIPTION FOR CHILDREN UNDER THE AGE OF 6 IN TURKEY

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Introduction: We aimed to assess parenteral drug (PD) prescription patterns for children under the age of 6 at primary health care centers (PHCC) in Turkey, using some drug use indicators.

Patients (or Materials) and Methods: PD prescriptions were recruited using the databases of the year 2010 recorded in the PHCC of 32 provinces in Turkey. One hundred PD prescriptions per month from each of the 32 provinces were analyzed retrospectively. Of the total 38,400 PD prescriptions, 2369 (6.2%) were written out for children aged 0 to 5.

Results: PD prescriptions were more often written out for boys (56.8%). When age distribution was analyzed, it was found that PD prescriptions were most often written out for children at age 2 (24.1%), followed by age 1 (23.3%), age 3 (17.9%), age 5 (14.5%), age 4 (13.6%), and age <1 children (6.6%). Number of drugs per prescription was 2.8 (1.2), number of PD per prescription was 1.1 (0.3). PDs constituted 57.8% of the total costs of these prescriptions. PDs were more often written out in winter (29.8%), followed by spring (27.0%), summer (24.5%), and autumn (18.7%). Most frequently prescribed PDs were ceftriaxone (31.6%), followed by benzathine benzylpenicillin (14.3%), cefazoline (8.0%) and ampicillin + sulbactam (7.8%). Most frequent diagnoses on the prescriptions were acute tonsillitis (24.5%), followed by acute bronchitis (20.3%), acute pharyngitis (6.1%), and acute upper respiratory tract infection (3.8%).

Conclusion: In small children, PDs were more frequently prescribed for respiratory tract infection, in winter and third-generation cephalosporins were the most frequently prescribed PDs. The overuse of third-generation cephalosporins as revealed in our study represent a major concern for the public health because it could be associated with increased antibiotic resistance.

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PP231—ACUTE HUMAN TOXICITY OF THIOPURINES, MYCOPHENOLATE AND SIROLIMUS

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Introduction: Literature regarding acute human toxicity of thiopurines and mycophenolate (MMF) is limited to a handful of case reports. There are no published reports of sirolimus (SIR) overdose. The aim of this study was to investigate the circumstances and outcomes of overdoses (ODs) with thiopurines, MMF, and SIR using data reported to a single national poison center.

Patients (or Materials) and Methods: A retrospective review was performed of all acute ODs involving thiopurines (azathioprine and 6-mercaptopurine), MMF, and SIR in adults and children (<16 years) reported to the Swiss Toxicological Information Centre (STIC) between 1995 and 2012.