37TH ASIA-PACIFIC NURSING AND MEDICARE SUMMIT OCTOBER 20-21, 2017 OSAKA, JAPAN

Pediatric over-the-counter medicine dosing labels and tools

Mi-Ae You Ajou University, Republic of Korea

Most medications for children are produced in liquid form. To prevent dosing errors, parents must be able to understand medicine labels and measure the correct dosage amounts. This study aimed to examine different types of pediatric Over-The-Counter (OTC) medication in the liquid form, the measuring tools, dosing labels and the measurement accuracy of OTC medications purchased at pharmacies. We purchased OTC medications at pharmacies near one university hospital and four local pediatric clinics in January 2017. The OTC medications were analyzed by type, units used on medication bottle label, marked dosage and enclosed measuring tools. To examine the accuracy of measuring cups, two examiners measured nine different medicines in the liquid form using the enclosed dosing cups and repeated the measurement using syringes. A total of 27 OTC oral liquid medications in eight therapeutic categories from 13 pharmaceutical companies were analyzed. The criteria of medication amount on label were age-based dosing and/or weight-based dosing. The dosing tools comprised: Dosing cup, dropper, measuring spoon and oral syringe. Errors in measurement were identified. Overdose or underdose was measured with enclosed dosing cups of OTC medications. The mean of the measurement error was 7.2% in two examinations: 6.7% (0.2-2.0 mL) and 8.7% (0-1.8 mL), individually. Pediatric OTC medicine design needs to be improved, existing safety labels should be revised and standard dosing devices should be developed to improve parental comprehension and enhance child safety.

Biography

Mi-Ae You is a Professor in College of Nursing, Ajou University and teaching students about Pediatric Nursing. She has published research papers in international journals and has been serving as a Reviewer. One of her research interest is safe administration of medication.

dew218@ajou.ac.kr

Notes: