Adequacy of use of asthma inhalational medication administration in children: A cross-sectional study in gondar university referral hospital, Northwest Ethiopia

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Asthma can be effectively treated by inhaler therapy. Yet all too often, patients do not get the full value of their inhaled medications because they use their inhaler incorrectly. The objective of the study was to evaluate the knowledge and appropriate use of asthma inhaler therapy among asthmatic children and their parents. A cross-sectional study was conducted from April 15 to May 20, 2013 on 161 children (87% of the total asthmatic children at the hospital) who were provided asthma care in the pediatric inpatient and outpatient departments of the Gondar University Teaching and Referral Hospital. The mean age of the asthmatic children was 4.7 ± 3.7 years; 35 (57.4%) were males and 26 (42.6%) were females. One hundred sixteen (72.1%) children were under the age of five. Fifty three (86.9%) asthmatic children were not rinsing the mouth after inhaling, 40 (65.6%) had slow rate of breathe through the inhaler and 23 (37.7%) did not shake before inhaling. One hundred eight (67.2%) asthmatic children used mask; 116 (72.1%) did not clean the spacer (bottle), 44 (72.1%) were not cleaning the devices at all. There were significant mistakes related to inhaler use that could affect the treatment outcome. These mistakes were associated to the device used, lack of giving appropriate instructions, some parents give too much responsibility to the child for treating their asthma. The inhalation device used in the hospital should be modernized. Health care workers should provide simple verbal and written instructions and information on treatment for children and their parents.

Biography
Bayew Tsega Abebe has completed his MSc at the age of 26 years in Clinical Pharmacy from Jimma University School of Pharmacy in 2011. He has been working as director of Drug Information Center, chief clinical pharmacist and lecturer at University of Gondar Referral and Teaching Hospital for the last two years. Mr. Abebe has published more than 11 original research articles in peer-reviewed journals. Mr. Abebe was awarded Golden Cup by the Ethiopian Pharmaceutical Association in 2007 and Gold Medal by the Ethiopian President in 2008 for his outstanding academic achievements in pharmacy.

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