

## Evaluation of concomitant therapy in people with epilepsy potential drug drug interactions and patient awareness

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People with epilepsy (PWE) may use prescription and over-the-counter drugs for the treatment of concomitant diseases. Combination of these drugs, as well as dietary supplements, with antiepileptic drugs (AEDs) may lead to reduced control of seizures and of co-existing medical conditions and to increased risk for adverse drug reactions. The aims of this study were to obtain comprehensive lists of medications, dietary supplements, botanicals, and specific food components used by adult PWE through inspection of their medication bag and interview by a pharmacist and to evaluate the potential for interactions which involve AEDs and patient awareness of such potential interactions.

We conducted a prospective questionnaire-based study in PWE attending the Epilepsy Clinic at Hadassah-Hebrew University Medical Center, Ein-Kerem Campus. DDIs were analyzed via the online database Micromedex. Of a total of 179 patients who attended the clinic on the study days, we interviewed 73, of which 71 were included in our final analysis. The mean number of AEDs per patients was  $1.7 \pm 0.8$ . Forty (56%) PWEs were also treated with other prescription and over-the-counter medications and 48% used dietary supplements. As groups, antipsychotic agents, selective serotonin reuptake inhibitors and statins were more prone to DDIs with AEDs. Two thirds of participants knew that DDIs may lead to ADRs, but only a half knew of the potential for reduced seizure control. This study provides for the first time a comprehensive picture of prescription and over-the-counter drugs and food supplements used by PWE. Despite considerable potential for AEDs interactions, patient awareness is limited, highlighting the importance of patient education.

### Biography

Sara Eyal is a graduate of the Hebrew University's School of Pharmacy. Her post-doctoral fellowship took place at University of Washington. Her current research focuses on barriers to drug distribution, e.g. the blood-brain barrier and the placenta, and on individualization of pharmacotherapy with CNS drugs. She also serves as the Head of Research of the Hebrew University Pharm.D. program.

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