Drug-related problems in Parkinson’s disease identified and solved by community pharmacists

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Parkinson’s disease (PD) is a neurological disorder which affects the neurons in the substantia nigra of the brain. Prevalence estimates say that worldwide 6.3 million people are affected by the disease. The impaired nerve cells lead to a number of symptoms which include tremor, muscle rigidity, changes in walking, handwriting and speech, orthostatic hypertension and also depression. The complexity of symptoms requires the use of usually more than 5 drugs at the same time resulting in numerous drug related problems. To evaluate the effects of a structured care programme for patients in their pharmacy a new questionnaire was developed focusing on symptom measures that incorporates the patients’ perspective complementary to the PDQ-8 with regard to the impact of medication side effects on nonmotor symptoms. The questionnaire was validated and used for a community pharmacy based study. In addition a counselling guideline was provided to community pharmacies for the detection of DRPs in Parkinson patients. A cross-sectoral study was conducted in a community-based sample of 235 patients with PD who were assessed with standardized questionnaires and provided with a structured care programme. 331 drug related problems were identified and solved in 113 patients. Patients in the intervention group showed improvements with regard to their quality of life, drug induced nonmotor symptoms, their mobility as well as their emotional and cognitive deficiencies. Limitations of the study refer to the lack of randomization between intervention and control group and a possible selection bias during the recruitment of patients by pharmacists. The developed questionnaire allows a differentiation with regard to the impairment to health caused either by the disease itself or by the prescribed drugs. The check list of the structured care programme proved to be suitable for this kind of studies and the medication management improved patients’ wellbeing.

Biography
Marion Schaefer is an expert in pharmaco-epidemiology and social pharmacy issues in Germany. Since 1998, she has held the position of Professor of Pharmacoepidemiology and Social Pharmacy at Humboldt University in Berlin, Germany and since 2002 with the Medical Faculty/Charité where she is running the postgraduate Master Program Consumer Health Care. She studied pharmacy at Martin-Luther University, Halle (Germany) and subsequently took tenure at Humboldt University. She has been visiting professor at the Schools of Pharmacy in Philadelphia (US), Utrecht (Netherlands), and at the University of Illinois in Chicago. Within F.I.P she has served as the secretary of the Administrative Pharmacists Section since 1998 and was elected as President of the section in 2006.

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