



## Brief Communication

## Self-reported medication adherence and treatment satisfaction in patients with epilepsy

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## ABSTRACT

**Objective:** Reports about medication adherence and satisfaction in patients with epilepsy in Arab countries are lacking. The objective of this study was to assess medication adherence and its relationship with treatment satisfaction, number of antiepileptic drugs (AEDs) taken, and epilepsy control in a sample of Palestinian patients.

**Methods:** This cross-sectional descriptive study was carried out at Al-Makhfya Governmental Outpatient Center in Nablus, Palestine, during the summer of 2010. A convenience sampling method was used to select patients over the study period. Medication adherence was measured using the eight-item Morisky Medication Adherence Scale (MMAS); treatment satisfaction was measured using the Treatment Satisfaction Questionnaire for Medication (TSQM 1.4). Epilepsy was arbitrarily defined as “well controlled” if the patient had had no seizures in the last 3 months and was defined as “poorly controlled” if he or she had had at least one seizure in the last 3 months.

**Results:** A convenience sample of 75 patients was studied. On the basis of the MMAS, 11 patients (14.7%) had a low rate, 37 (49.3%) had a medium rate, and 27 (36%) had a high rate of adherence. Adherence was positively and significantly correlated with age ( $P=0.02$ ) and duration of illness ( $P=0.01$ ). No significant difference in adherence was found between patients with well-controlled and those with poorly controlled epilepsy. Similarly, there was no significant difference in adherence between patients on monotherapy and those on polytherapy. Mean satisfaction with respect to effectiveness, side effects, convenience, and global satisfaction were  $73.6 \pm 20.7$ ,  $82.4 \pm 29.8$ ,  $69.5 \pm 15.5$ , and  $68.4 \pm 18.3$ , respectively. There were significant differences in mean values in the effectiveness ( $P<0.01$ ) and convenience ( $P<0.01$ ) domains, but not the side effect ( $P=0.1$ ) and global satisfaction ( $P=0.08$ ) domains among patients with different levels of adherence. Patients on monotherapy had significantly higher satisfaction in the effectiveness domain ( $P=0.04$ ) than patients on polytherapy. Similarly, patients with well-controlled epilepsy scored significantly higher in the Effectiveness ( $P=0.01$ ) and Global Satisfaction ( $P=0.01$ ) domains than those with poorly controlled epilepsy.

**Conclusion:** In our convenience sample, we found that adherence to and satisfaction with AEDs were moderate and were not associated with seizure control or number of AEDs.

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## 1. Introduction

Epilepsy is a common chronic neurological disorder that affects about 50 million people around the world, 10% of whom are in the Middle East [1,2]. In the majority of patients with epilepsy,

antiepileptic drugs (AEDs) effectively control their illness [3]. However, more than 30% of people with epilepsy do not attain full seizure control, even with the best available treatment regimen [4]. One possible reason for treatment failure in epilepsy is poor adherence to AEDs. Non-adherence to AEDs has been found to be high [5,6]. For example, studies using insurance claims databases have reported that approximately 30–50% of patients with epilepsy do not adhere to their prescribed AED regimens [7,8]. Another study found that 70% of patients reported AED dose omissions [9]. Poor adherence to AEDs has been reported to increase morbidity and mortality [7,10], and decrease quality of life and productivity [6]. From a health economic perspective, nonadherence

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