

## Impact of pharmacist-led patient education on adherence to antibiotic therapy in primary care

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### Abstract

The aim of this research was to evaluate the beneficial effects of patient education by community pharmacists on adherence to antibiotics.

**Methods:** Prospective, controlled trials were conducted among patients in two community pharmacies, in Istanbul [n=60], and Kars (Eastern Turkey) [n=199]. Patients receiving prescribed antibiotics completed a questionnaire, the first part of which was conducted before starting treatment, the second part by telephone the day after therapy ended. Patients in the study group were informed about antibiotic usage and resistance, and a brochure detailing how patients should self-administer their antibiotics was provided. Patients in the control group did not receive extra verbal or written information apart from that related to dose and frequency. Adherence was assessed using a tablet count and self-report method.

**Results:** The study in Kars demonstrated that non-adherence rates based on tablet counts, were higher in the control group ( $p < 0.05$ ). Similarly, patients who did not consciously quit antibiotic treatment, and who subsequently reported having recovered from their infections were more frequently found in the group that had received pharmacist-led patient education ( $p < 0.05$ ). The Istanbul study also indicated that patients prescribed a once-a-day dosage regimen for short duration were more adherent ( $p < 0.05$ ). In addition, more mature patients (over 30 yo) were more adherent than younger patients. By contrast, the Kars study did not observe any significant effect of age on adherence.

**Conclusions:** Higher adherence rates to antibacterial therapy and improved reported clinical outcomes were found in patients educated by the community pharmacist.

**Keywords:** Adherence, antibacterial agents, patient education, questionnaire, pharmacist.

### Biography

Caglar MACIT graduated with a B.Sc. in 2007 from Yeditepe University Faculty of Pharmacy, where he is still currently employed as a Research Assistant in the Clinical Pharmacy Department. He completed his M.Sc. Degree in Clinical Pharmacy from Yeditepe University in 2010, with a thesis entitled "Assessment of the Knowledge about Epilepsy among Epileptic Patients, Nonepileptic Patients and Community Pharmacists and The Provision of Education on Epilepsy". He is presently working towards a PhD in Pharmacology at Marmara University Faculty of Pharmacy. He has published several papers in reputed journals and has presented a number of posters at international conferences.

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