

A simple informative intervention in primary care increases statin adherence

M. Casula¹, E. Tragni¹, R. Piccinelli², A. Zambon³, L. De Fendi², L. Scotti³, G. Corrao³, M. Gambera², A.L. Catapano^{1,4}

¹Epidemiology and Preventive Pharmacology Centre (SEFAP), Dept. of Pharmacological and Biomolecular Sciences, University of Milan, Milan, Italy

²Local Pharmaceutical Service, LHU of Bergamo, Bergamo, Italy

³Dept. of Statistics and Quantitative Methods, Division of Biostatistics, Epidemiology and Public Health, University of Milano-Bicocca, Milan, Italy

⁴IRCCS MultiMedica, Sesto S. Giovanni (MI), Italy

Objective To assess the effectiveness of an informative/educational intervention addressed to general practitioners, aimed at improving patients' adherence to statin therapy.

Methods We performed a study in the setting of general practice, local health unit (LHU) of Bergamo, Lombardy (Italy). We prepared a report for each general practitioner with: (i) a synthetic scientific document on dyslipidaemia and statins; (ii) information about aggregated data on statin use and adherence in 2006 for his/her patients compared to the means in the LHU and in his/her working district. Each physician received the listed material (type 1 intervention); furthermore, a sample of 7 districts (randomly selected among the 14 districts of Bergamo LHU area) received also a table of adherence levels for single patients (type 2 intervention). Patient's level data were retrieved from the health care utilization databases of the LHU. Adherence parameters (proportion of patients with only one prescription, medication possession ratio [MPR] and proportion of non-persistent patients) were assessed after one year of follow-up.

Results Overall, 5833 and 4788 new statin users were enrolled before and after the intervention, respectively. The percentage of patients with only one prescription decreased after intervention, from 28.0% to 23.9% ($p < 0.001$). MPR increased from 70.3% to 76.0% ($p < 0.001$) and proportion of patients with $MPR \geq 80\%$ increased from 45.4% to 56.4% ($p < 0.001$). The persistence also showed an improvement, both in terms of decreasing proportion of non-persistent (from 51.9% to 41.4%, $p < 0.001$) and of increasing duration of continued therapy (from 235 to 264 mean days of persistent therapy, $p < 0.001$). The effect of the intervention on the various parameters was not significantly different between type 1 and type 2.

Conclusions This intervention resulted in an overall improvement of the short-term adherence to therapy. This tool can be replicated in other local contexts and with other chronic therapies, where prescription data are available.

Table. Effects of intervention

	PRE-intervention	POST-intervention	p value
Prescriptions			
Patients with only one prescription, N (%)	1636 (28.0%)	1145 (23.9%)	<0.001
Adherence^a			
MPR, mean \pm SD	70.3 \pm 27.6	76.0 \pm 27.0	<0.001
MPR $\geq 80\%$, N (%)	1907 (45.4%)	2056 (56.4%)	<0.001
Persistence^a			
Non-persistent patients, N (%)	2177 (51.9%)	1508 (41.4%)	<0.001
Days of persistent therapy, mean \pm SD	235 \pm 136	264 \pm 130	<0.001

MPR: medication possession ratio

^aexcluding patients with only one prescription