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Decreasing antibiotic use through a joint intervention targeting physicians and pharmacists.

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Abstract

AIM: To decrease population antibiotic use through an educational intervention targeting primary care physicians' and community pharmacists' attitudes and knowledge.

METHODS: We designed a pragmatic cluster-randomized trial covering all National Health System primary care physicians and all community pharmacists' in a region in the north of Portugal. The study protocol was registered on ClinicalTrials.gov (identifier: NCT02173509).

RESULTS: After adjustment for baseline values and comparison with the control group, the intervention was associated with a significant reduction in overall antibiotic use in the year following the intervention. The effect was most marked for tetracyclines, macrolides and cephalosporins. No statistically significant differences were observed for fluoroquinolone consumption.

CONCLUSION: Multifaceted interventions involving physicians, pharmacists and general public proved effective in reducing antibiotic consumption in the population.

KEYWORDS: antibiotic consumption; antibiotic policies; community pharmacists; educational interventions; microbial resistance; primary care physicians

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