A local public campaign reduces outpatient antibiotic prescribing in Italy

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Nick Francis
Institute of Primary Care and Public Health, School of Medicine, Cardiff University, Cardiff, UK

Correspondence to Nick Francis, Institute of Primary Care and Public Health, School of Medicine, Cardiff University, 5th Floor, Neurdd Meirionnydd, Heath Park, Cardiff, CF14 4YS, UK; francisna@cf.ac.uk


Implications for practice and research
■ Public health campaigns can reduce antibiotic prescribing, although the effect is likely to be mediated primarily through changes in clinician behaviour rather than patient-consulting behaviour or expectations for antibiotics.
■ More research is needed on the key components of antimicrobial stewardship activities: the effects on antimicrobial resistance, the cost-effectiveness and the sustainability of effect.

Context
Antimicrobial resistance (AMR) is an important and growing international health threat.1 Exposure to antibiotics is the primary driver of AMR; therefore, efforts to tackle this problem commonly focus on reducing unnecessary prescribing. Most antibiotic prescribing occurs in primary care, and the majority of prescribing is for respiratory tract infections and other ‘minor’ infections where antibiotics confer little, if any, benefit.2 Because patient expectations for antibiotic treatment are often cited as a reason for prescribing in primary care, public health information campaigns have been used to try and modify public perceptions about the need for antibiotics. This study aimed to evaluate a local public information campaign in the north of Italy.

Methods
A public health campaign, focusing mainly on the use of antibiotics for upper respiratory tract infections, was run over a 4-month period in two provinces in northern Italy. Other provinces within the same region were used as a control group. Randomisation was not used to select provinces. The campaign’s key messages were developed by a group of local doctors and the campaign involved posters, brochures, mass media and a local newsletter. Public knowledge and attitudes relating to the campaign involved posters, brochures, mass media and a local newsletter. Public knowledge and attitudes relating to the campaign messages worsened in both areas. Knowledge and attitudes consistent with campaign messages worsened in both areas.

Findings
There was a reduction in antibiotic prescribing during the evaluation period compared with the same period the year before in intervention (11.9% reduction; from 22.7 to 20 defined daily doses/1000 inhabitants per day) and control (7.4% reduction; from 22.7 to 21) areas. Using a linear regression statistical model of health district-level data, they found a 4.3% (95% CI −7.5% to −1.5%) reduction in prescribing in the intervention area compared with the control area. Recall of campaign slogans and graphics was similar in both areas. Knowledge and attitudes consistent with campaign messages worsened in both areas.

Competing interests None.

References