

Does external support from divisions increase preventive activities in rural Australian general practice?

Erica L James, Lynette Talbot, Chris Fishley

Erica L James, PhD, is a lecturer, Department of Public Health, La Trobe University, Bendigo, Victoria.
 Lynette Talbot, MHLthSci, is Senior Lecturer, Department of Public Health, La Trobe University, Bendigo, Victoria.
 Chris Fishley, RN, is a project officer, Bendigo and District Division of General Practice, Victoria.

General practitioners can play an important role in disease prevention and health promotion.¹⁻³ However, there are a number of barriers including structural disincentives (limited time, remuneration issues, fragmented approaches to policy, lack of health promotion education for GPs, insufficient staff support, lack of reminder/recall systems); practitioner barriers including GP ambivalence about the effectiveness of health promotion activities, and difficulties in evaluating outcomes, and patient barriers.⁴⁻⁷ Possible ways of overcoming these barriers include taking a multidisciplinary approach, technological and structural assistance, engaging practice staff, and linking with other health agencies.^{6,8-10}

We wondered whether support and guidance from an external facilitator leads to an increase in health promotion of rural patients. We based the activities on the 'greenbook', a handbook for GPs promoting preventive activities that emphasises a holistic approach to patient care, wellbeing and health promotion, published by The Royal Australian College of General Practitioners (RACGP).⁶

Method

We designed a nonrandomised trial to evaluate an active dissemination and support intervention. Six rural practices were recruited in response to advertising by the local division of general practice. They were paired by practice size and characteristics; three were nonrandomly allocated to 'active support' while the others acted as controls.

Active support was provided by a division prevention facilitator for six months; working with staff in each practice at least weekly, visiting at least fortnightly. Support took the form of teaching sessions about health promotion initiatives, assistance with displays, and provision of resources and verbal prompts; but did not include supporting computer based management practices. Control practices provided data only, which was then fed back to them.

Face-to-face interviews were conducted with consenting staff and GPs from each practice about preventive activities in the practice before and after the intervention. They focussed on how the intervention influenced preventive activities and which, if any, factors were

important. Practice staff completed a Practice Prevention Inventory.⁶ Practice newsletters were analysed. We directly observed patient waiting areas and the literature provided there.

A patient survey was conducted in each practice of 100 consenting patients randomly selected from patient records (50 aged 20-40 years and 50 aged over 65 years). Practices with electronic patient records randomly selected patient names from the database, while practices with only hardcopy patient records used systematic selection. The Patient Practice Prevention Questionnaire⁶ was mailed to each patient at the beginning of the study and at six months. The questionnaire asked about risk taking behaviours and current health status.

Fisher's Exact test was used to measure differences between patients from intervention and control practices for screening (blood pressure, lipids, Pap tests, mammography), immunisation status (tetanus, polio, rubella), sun protection behaviour, smoking status, physical activity and alcohol consumption. Patients also provided information regarding current nonprescription med-

Table 1. Comparison of patient follow up data from control and intervention practices (n=339)

Screening criteria ¹⁴		Intervention practices n (%)	Control practices n (%)	p value for Fisher's Exact
Screening				
Blood pressure	In past 2 years (6/12 diabetics)	110 (65)	116 (68)	NS*
Lipids	In past 5 years if >45 years	82 (49)	89 (52)	NS
Pap tests (women only)	In past 3 years if 18–70 years	15 (49)	25 (58)	NS
Mammography (women)	In past 2 years if 50–70 years	21 (21)	28 (26)	NS
Immunisation status				
Tetanus	Whether immunisation	63 (38)	62 (37)	NS
Polio	regimen is complete	60 (36)	56 (33)	NS
Rubella	Date of last booster	115 (69)	111 (66)	NS
Behavioural risk factors				
Sun protection	Use of 'SunSmart' advice	51 (68)	94 (75)	NS
Smoking status	Self report current smoker	12 (16)	12 (9)	NS
Physical activity	Activity most days/30 minutes	42 (53)	68 (55)	NS
Alcohol consumption	Harmful levels (6 per day/most days)	23 (14)	27 (16)	NS

* NS = not significant

ications and family history of common diseases. We undertook thematic analysis of the interview transcripts. Ethical approval was granted by both Ethics Committees of La Trobe University Bendigo and the RACGP.

Results

There was a 342 (57%) patient response rate. There were no statistically significant differences in either preventive or health promotion behaviour of patients between the intervention and control groups at baseline or at follow up (Table 1). However, at interview, practice staff described staff from the division of general practice as accessible, supportive, and fulfilling an important role in education. They liked acknowledgment of their role in prevention and promotion and were extremely positive about it.

Two intervention practices implemented changes: generation of practice wide reminder lists of patients to be telephoned individually, review and update of materials in the waiting room, and specific activities linked to national health

promotion campaigns such as Epilepsy Awareness and Diabetes.

Legal and privacy issues limited practice staff from being more involved in health promotion activities, particularly patient reminders. Several events occurred that might have been relevant: two intervention GPs became seriously ill during the study, there were personnel changes in the division prevention facilitators, and a range of new health promotion initiatives to improve the management of diabetes, mental health, asthma and cervical screening became available through Medicare from December 2001.

Discussion

We found an increase in preventive activity in the intervention practices that did not translate into measurable changes at the patient level (confirming previous research⁵⁽¹⁾) and may show the difficulties in evaluating the outcomes of health promotion activities in the general practice setting. Contamination (in which control and intervention practices compared activi-


ties so that some intervention effect leaked to control practices) may have occurred. Perhaps the six month intervention was too short to produce an effect. Perhaps the patient questionnaire acted as an intervention in itself (the 'Hawthorn effect').¹² The low response rate may have introduced a bias. The nonrandomised study design may have caused a selection bias.

External support seems to be an appropriate way to increase general practice health promotion. Divisions of general practice could have a role in this; practice nurses might have a potential role. More rigorous research is required to investigate to what extent external support increases patients' uptake of health promotion.

The current Medicare funding arrangements provide an obstacle to enabling practice nurses to practice independently as health promotion workers,¹³ even though this might overcome the privacy issue we found.

Acknowledgments

Thanks to Sue De Lacy and Helen Musk from



the Bendigo and District Division of General Practice who acted as DPFs, to Jane Remedio and Karen Anderson for research assistance, to La Trobe University Bendigo Research Committee and the Outside Study Program Committee for funding, to participating practice staff, GPs and their patients and Dr Pamela Snow and two anonymous reviewers for valuable feedback on earlier drafts of this article.

Implications of this study for general practice

- External support for health promotion is acceptable to some rural practices.
- It can be provided by divisional staff.
- It may not improve uptake by patients.

Conflict of interest: none declared.

References

1. Bonevski B, Sanson-Fisher R, Campbell E. Primary care practitioners and health promotion: A review of current practice. *Health Prom J Aust* 1996; 6:22–31.
2. Sanson-Fisher R, Webb G, Reid A. The role of the medical practitioner as an agent for disease prevention. In: Better Health Commission. Looking Forward to Better Health. Canberra: AGPS, 1986; 201–212.
3. Wiggers L, Sanson-Fisher R. General practitioners as agents of health risk behaviour change: Opportunities for behavioural science in patient smoking cessation. *Behav Change* 1998; 11:167–176.
4. Raupach J, Rogers W, Magerey A, Lyons G, Kalucy L. Advancing health promotion in Australian general practice. *Health Behav* 2001; 28:352–367.
5. Belcher D W, Berg A O, Inui T S. Practical approaches to providing better preventive care: Are physicians a problem or a solution? *Am J Prev Med* 1988; 4(Suppl 4):27–48.
6. The Royal Australian College of General Practitioners. Putting Prevention Into Practice. 1st edn. Melbourne: RACGP, 1998.
7. Ward J, Gordon J, Sanson-Fisher R. Strategies to increase preventive care in general practice. *Med J Aust* 1991; 154:523–531.
8. Grimshaw J M, Russell I T. Effect of clinical guidelines on medical practice: A systematic review of rigorous evaluations. *Lancet* 1993; 342:1317–1322.
9. Grol R. Personal paper: Beliefs and evidence in changing clinical practice. *BMJ* 1997; 315:418–421.
10. McPhee S J, Bird J A, Fordham D, Rednick J E, Osborn E H. Promoting cancer prevention activities by primary care physicians: Results of a randomised trial. *JAMA* 1991; 266:538–544.
11. Ashenden R, Silagy C, Weller D. A systematic review of the effectiveness of promoting lifestyle change in general practice. *Fam Pract* 1997; 14:160–175.
12. Hennekens C H, Buring J E, Mayrent S L. Epidemiology in medicine. Little Brown and Co., Boston, 1987.
13. Willis E, Condon J, Litt J. Working relationships between practice nurses and general practitioners in Australia: a critical analysis. *Nurs Enq* 2000;7:239–47.
14. Preventive and Community Medicine Committee of RACGP. Guidelines for preventive activities in general practice (5th edn). *Aust Fam Physician* 2002; 31(5): Special Issue.

AFP

Correspondence

Email: E.James@bendigo.latrobe.edu.au