

Population and public health in Australian general practice

Changes, challenges and opportunities



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Public health and medicine have evolved into different disciplines with (at times) competing values and philosophies. The public health role in general practice is expanding. This article reviews the interface between population health, public health, and 'new' public health and general practice, and suggests educational strategies to foster collaboration between these disciplines.

Expansion of the public health role of general practice is being promoted internationally.¹⁻⁷ These proposals tend to focus on collaborative models of cooperation between general practitioners and government funded health departments. In these models, services provided to individuals include both preventive activities such as immunisation and cervical screening, and treatment of infectious diseases. Additionally, GPs are being asked to provide services including participation in surveillance systems, managing divisional projects that promote health and, in some instances, advising on resource distribution to address health needs.^{6,8}

Public health and general practice have the potential to complement each other by working collaboratively; however, there are barriers that limit this approach.^{2,4} True collaboration requires agreement from all parties as to their respective functions.⁹ In order to do this, GPs need to understand the roles and functions of other disciplines.

Methods

A literature review was conducted using Medline from 1966–2004 to explore the interface between public health and general practice. The keywords 'family practice' or

'general practice' were combined with the terms 'population health' and 'public health', yielding 43 and 640 articles respectively. Subsequently, public health review articles with the terms 'interface', 'integration', 'definition' or 'relationship', and all identified population health articles were reviewed. This yielded two, 10, four, 25 and 43 articles respectively.

Definitional issues

The literature shows that population health is an ill defined term.¹⁰ It can refer to a concept, in this case referring to the health of a defined population or a field of study that links health outcomes, determinants of health, and interventions. A variety of competing definitions are attached to the term 'public health', but many health professionals consider public health to be broader and more encompassing than population health.

The Royal Australian College of General Practitioners (RACGP) curriculum states that: 'population health in the context of general practice' can include 'epidemiology, public health, prevention, family influences on health and resources'. Competence in this domain is achieved in part by recognising 'the importance of a public health perspective in general practice'.¹¹

Public health began with a social movement to advocate improved living conditions in the 19th century. It focussed on sanitation and housing, and had limited initial involvement with medical practitioners.¹²

Today, public health has a collective focus and continues to consider the health of all people. It includes environmental health, health promotion, prevention of disease, the assessment of community needs, and provision of services to address this need.^{13,14}

Promoters of 'new' public health support an expansion of its scope to include social development.^{12,15} Important concepts of 'new' public health are: 'health status is influenced by many factors in society; it cannot be improved unless communities actively participate in the process and good health can be a tool for social development'.¹⁵

Labonte¹⁶ supports linking biomedical and behavioural models of disease with social and environment determinants of health. Facilitation of this process requires modification of policy legislation, education, partnerships and advocacy. The advocacy role of GPs for their patients has some overlap with this philosophy.¹¹ Lack of clear boundaries between the role of utilising a population health approach in their surgery

and that of a 'new' public health advocate means there is scope for role expansion for interested GPs. *Table 1* uses an example of childhood obesity to outline how the different disciplines interrelate.

In Australia, the Joint Advisory Group on General Practitioners and Population Health (JAG), a subcommittee of the National Public Health Partnership, has identified key performance areas for improving the health of Australians within general practice.^{17,18} These focus on interventions that target the behavioural risk factors of smoking, nutrition, alcohol and physical activity (SNAP) to practice populations. The 'new' public health movement has criticised these approaches as being too biomedically focussed.¹² They argue that these measures fail to address the needs of those patients who do not access a GP. Evidence about the benefits of GP involvement in these preventive activities is mixed. General practitioners are seen as the most credible source of preventive advice by rural patients.¹⁹ Their role in screening and immunisation have a significant impact upon the health of Australians.¹² However, GPs' impact in promoting lifestyle change is more limited.²⁰

Significantly, another use of the term 'public health' by media and government refers to health care delivered in the government funded sector. It is important not to confuse this use, which relates to providing medical care to individuals, with public health in the context of general practice.

Drivers of change

A collaborative public health role in general practice reflects broader changes in GPs' roles and functions. Kamien³ views these changes as being driven by government funding of general practice services to optimise health outcomes. These processes have limited input from patients and their GPs.

The environment of general practice is also changing. Campos-Outcalt⁴ views bioterrorism, new emerging diseases and poor public health infrastructure to be opportunities for American GPs to expand their public health role. Workforce shortages and an aging popu-

Table 1. An example of interrelation – childhood obesity

Sally, a GP in a small rural town, has seen 10 children aged less than 8 years with obesity in the past 2 months

GP approach incorporating population health

Individual advice about diet and exercise is provided to both child and parent. Sally recalls these patients for regular review. Preventive care is provided (eg. immunisation) to ensure the surgery meets immunisation targets. Sally excludes other medical conditions to explain the obesity. She asks whether the number of obese children she is seeing reflects an increase in obesity in the town overall, or if her surgery population is different to the overall population. She contacts the area health service child health clinical stream coordinator for discussion

Public health approach

A GP with divisional funding to address childhood health contacts Sally. They define a case definition of childhood obesity in consultation with the education department, and develop a proposal to research this issue. After ethical approval, a cross sectional survey of children and a survey of parents is conducted to determine risk factors. The data is compared to published NSW health data on urban children. The research team identifies parents as a key source of nutritional advice, and that they tend to underestimate their children's weight. A health promotion project is developed, including a media campaign. This project is evaluated

'New' public health approach

Focus groups with parents from the research report that children are bored in town. Additionally, fruit and other fresh foods are expensive due to the community's remoteness and high cost of transport. Sally liaises with the department of community services and assists parents to write a grant. A youth group is formed using volunteers. Their first project is to develop a basketball competition to improve children's participation in exercise. With parent involvement, fresh foods are subsidised at the local school canteen by a premium placed on fatty foods

Advanced leadership in public health and general practice

A GP with advanced skills in public health and general practice research methods, working for the University Department of Rural Health, advises GPs, divisions of general practice and public health units on the best approach to address this public health issue. Collaboration between stakeholders is a primary goal. They have input into a national childhood obesity policy

lation require different models of general practice using teams of health professionals to be developed to meet health needs.¹⁸ Reimbursement of GPs using a fee for service model develops a market to provide these services. Julian Hart²¹ described the inverse care law in 1971, observing that: 'the availability of good medical care tends to vary inversely with the need for it in the population serviced. This operates more completely where medical care is most exposed to market forces, and less so where such exposure is reduced'. In Australia, poorer disadvantaged groups, while utilising acute services in general practice, are the lowest users of preventive care.²² These opposing perspectives impact upon GPs' work.

The RACGP curriculum

Australian general practice strives to meet the needs of both individuals and communities. It is primarily based within the private sector. The RACGP states:

'General practice is part of the Australian health care system and operates predominantly through private medical practices, which provide universal unreferral access to whole person medical care for individuals, families and communities. General practice care means comprehensive, coordinated and continuing medical care drawing on biomedical, psychological, social and environmental understandings of health'.²³

This overlap between meeting different needs is reflected in the development of the

RACGP curriculum.¹¹ Learning objectives are based on a matrix of: 'What GPs need to know (the domains of GP), why most people seek the services of a GP (common presentations), and the health needs and priorities of Australia's population (national health priorities)'. The first area is determined by the profession, the second by socioeconomic determinants of health and patient expectations, and the third by government policy.¹¹

The RACGP curriculum endorses 'public (population) health as a core component of general practice'.²⁴ The JAG promotes this role of public/population health in the work of GPs.^{17,18} The extent of this role, however, can vary based on the interest of the GP, community needs, willingness of other stakeholders to work with GPs, and workforce shortages.

Educational strategies

In order for GPs to make an informed decision about what their role in public health will entail, they need a clear understanding of this domain of general practice, as well as an appreciation of other stakeholders' ideas. The nuances between interpretations of the terms 'population health' and 'public health' are significant, as enhanced primary care is extended (integrating GPs' roles with other health disciplines) and divisions of general practice expand their health promotion role in communities.

All GPs need competence in applying a basic population health approach to their surgery populations. This includes immunisation, screening and SNAP risk factor modification. This approach begins in most undergraduate curricula and extends to the present RACGP curriculum.¹¹ What becomes apparent is that, depending on the interest of the GP and community need, this domain has considerable scope to offer GPs variety through expansion of their roles. In some settings, such as rural regions^{4,25} and Aboriginal medical services,¹⁷ there is scope to combine the roles of GP and public health practitioner, including health service planning, environmental health, and promoting community participation in health promotion projects.

Core competencies have been identified for the practice of public health medicine.¹⁴

Higher order skills in epidemiology, health program management, evaluation, biostatistics, and health economics can provide advanced training in this area. A model of this training already exists with special skills posts in population/public health being developed for general practice registrars.^{26,27} The next step in development would be to encourage more GPs to obtain a Masters of Public Health, with incentives of a joint training program between RACGP and AFPHM.

Conclusion

Integration of public health and general practice is feasible in Australia. Promotion of this career pathway to general practice registrars requires specific recognised educational pathways to be developed. Using these public health skills in general practice requires a range of structural reforms to the way GPs work, relate to other health professionals and receive remuneration.^{2,17,18}

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