

Editorials

Equity and the social determinants of health <i>Fran Baum and Liz Harris</i>	163
A global perspective on health promotion and the social determinants of health <i>David Sanders</i>	165
The social determinants of health: what are the three key roles for health promotion? <i>Dennis Raphael</i>	167
Are social determinants of health the same as societal determinants of health? <i>Barbara Starfield</i>	170

Policy

Building healthy and equitable societies: what Australia can contribute to and learn from the Commission on Social Determinants of Health <i>Fran Baum and Sarah Simpson</i>	174
Social determinants, political contexts and civil society action: a historical perspective on the Commission on Social Determinants of Health <i>Orielle Solar and Alec Irwin</i>	180
The role of the People's Health Movement in putting the social determinants of health on the global agenda <i>Ravi Narayan*</i>	186
The social determinants of health: is there a role for health promotion foundations? <i>Barb Mouy and Ali Barr</i>	189
The role of health promotion: between global thinking and local action <i>Lesley King</i>	196
The health system: what should our priorities be? <i>Anne-marie Boxall and Stephen R. Leeder</i>	210
Equity, by what measure? <i>Shane Houston</i>	206
Sustainable communities: what should our priorities be? <i>Valerie A. Brown and Jan Ritchie</i>	211

Research

Federal, State and Territory government responses to health inequities and the social determinants of health in Australia <i>Lareen Newman, Fran Baum and Elizabeth Harris</i>	217
Smoking, not smoking: how important is where you live? <i>Christine Migliorini and Mohammad Siahpush</i>	226
Evaluation of the Outreach School Garden Project: Building the capacity of two Indigenous remote school communities to integrate nutrition into the core school curriculum <i>Antonietta Viola</i>	233
Scoping supermarket availability and accessibility by socio-economic status in Adelaide <i>Lisel A. O'Dwyer and John Coveney</i>	240

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Food insecurity in three socially disadvantaged localities in Sydney, Australia	247
<i>Michelle Nolan, Glenys Rikard-Bell, Mohammed Mohsin and Mandy Williams</i>	

Utility stress as a social determinant of health: exploring the links in a remote Aboriginal community	255
<i>Eileen Willis, Meryl Pearce, Carmel McCarthy, Tom Jenkin and Fiona Ryan</i>	

Point of View

The war on obesity: a social determinant of health	262
<i>Lily O'Hara and Jane Gregg</i>	

Social determinants of health and health inequalities: what role for general practice?	264
<i>John Furler</i>	

The NSW Social Determinants of Health Action Group: influencing the social determinants of health	266
<i>Suzanne Gleeson and Garth Alperstein</i>	

Book Review

Community Research in Environmental Health: Studies in Science, Advocacy and Ethics	268
<i>By Doug Brugge and H. Patricia Hynes.</i>	
<i>Reviewed by Cordia Chu</i>	

Index

<i>Health Promotion Journal of Australia</i> Volume 17, 2006 – Author Index	269
<i>Health Promotion Journal of Australia</i> Volume 17, 2006 – Subject Index	271

Reviewers

<i>Health Promotion Journal of Australia</i> Reviewers in 2006	273
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Guest Editors

This theme issue of the Journal focuses on a critical but surprisingly neglected aspect of health promotion practice, the social determinants of health. As Guest Editors, Liz Harris and Fran Baum have done an absolutely outstanding job in attracting high quality papers and overseeing the reviewing and revision processes. They have delivered, on time, not only the largest ever issue of the Journal, but a substantial contribution to the international health promotion literature. Many, many thanks from the Joint Editors!

Chris Rissel, Adrian Bauman and Jan Ritchie

Equity and the social determinants of health

Fran Baum and Liz Harris

This special issue comes at a time when interest in the social determinants of health is increasing internationally. In the face of rapid economic globalisation and the emergence of significant infectious and chronic health problems of potentially pandemic proportions, the social and economic effects of public and private sector policies on health and its determinants are becoming too stark to ignore.

During the 20th Century life expectancy increased significantly. Between 1901 and 2001, life expectancy at birth rose by 23 years for men and 24 years for women in Australia.¹ Yet while there have been absolute increases in life expectancy for most groups around the world, considerable inequalities remain between people from different social classes, ethnic backgrounds and gender. Many of these differences result from differential access to the conditions that promote health, such as employment, education and basic health hardware such as safe drinking water, waste disposal and sanitation systems, these differences can be considered unfair or inequitable. The promotion of health across populations and ensuring that this is done in a manner that reduces these inequities is crucial. We agree with Starfield's editorial that much of the research and comment on the social determinants of health does not have an equity focus and that it should do so.

Recognition of the importance of the social determinants of health is not new. The public health reformers of the 19th Century clearly recognised their importance. Among the most progressive, the Silesian doctor Virchow, was clear that the health of workers in the 1840s was directly related to the working conditions they experienced.² The sanitary reforms in 19th-Century Britain were based on an understanding that environmental conditions had a direct affect on health. The work of McKeown noted that the 20th-Century life expectancy improvements had more to do with changing living conditions than to do with medical therapies.³

Szreter's analysis added further to the understanding that local government civic reforms played a crucial role in the environmental improvement.⁴ These reforms did not just happen as a matter of course, but often resulted from significant social and class struggle.^{5,6} That there is a new focus on social determinants in the early 21st Century may reflect the fact that the current form of economic globalisation is tending to increase inequities within and between countries,^{7,8} and the logic of focusing on social and economic change is compelling.

Public health has largely assumed that life expectancy would continue to rise. The experience of several regions of the world now negate that expectation and, from a global perspective, sustainable and equitable health advancement is not yet secure. In Africa, an HIV/AIDS pandemic has resulted in falls in life expectancies in many countries.⁸ In eastern Europe, following the fall of the Soviet Union and the rapid introduction of market reforms, life expectancies of men fell.⁹ Predictions are being made that in the rich countries younger generations may experience falling life expectancies compared with their baby boomer parents because of increased chronic diseases, partly attributable to the impact of the ways in which the social and built environment are affecting physical activity and nutrition.¹⁰

The formation of the Commission on the Social Determinants of Health by the World Health Organization in 2005 is a clear sign of the recognition that there needs to be greater focus on these upstream determinants or, as the Commission has called them, the "causes of the causes".¹¹ The Commission has positioned itself as emerging from the tradition of Alma Ata and the Ottawa Charter, as Solar and Irwin make clear in their paper on the historical legacy inherited by the Commission. This legacy is also noted by Baum and Simpson in their paper, which cites as examples of early actions on social determinants the work of past Australian governments such as Menzies federally and Dunstan at the State level in South Australia. The Commission will report in 2008 and is challenging countries to base their public health policies on an understanding of the importance and centrality of the social determinants of health to improving health equitably.

A social determinants approach poses many challenges for health promoters. Perhaps most significantly, much health promotion starts with a focus on individuals and, in the past, has been strongly associated with attempts to change behaviour. The limitations of this approach have been noted,¹² but the individualism associated with it still dominates much health promotion research and practice. While some attempts to change behaviour have met with success (such as smoking and reducing fat consumption), the focus on individuals has been supported by policy change and has had more success with better-off people. Thus, the net effect has been to increase inequities.

The social determinants require a focus on policies, organisations and social structure. Some papers in this issue provide evidence of a shift in focus. Migliorini and Siahpush consider how where you live may affect your likelihood of smoking. Viola looks at

the question of how schools integrate nutrition into core school curriculum in remote Indigenous communities. Willis et al considers the importance of the cost and supply of an essential service such as electricity, O'Dwyer and Coveney detail the existence of food deserts in Adelaide, and Nolan et al looks at the factors behind food insecurity. In each case, these pieces of research do not focus directly on individual health or health status but look upstream to how the structures people live in shape their health experience. This should be an increasing focus of health promotion research so that we develop a better evidence base about the "causes of the causes" of illness and about the factors that create health and well-being.

The ways in which the social determinants affect the health of individuals is obviously complex – the "causes of the causes" requires looking upstream to social and economic structures that shape our chances of health and illness. Unlike behaviours that are evident and obvious, these structures are largely invisible in everyday life. These structures need to be recognised and the history, values and assumptions on which they have been based clearly understood.

King demonstrates the need for this to change and for health promotion to be a sustained effort. Mouy and Barr point to the important work done by the Victorian Health Promotion Foundation in shaping programs around the structures that determine behaviours rather than the behaviours themselves. The commissioning of this issue on the social determinants by the Australian Health Promotion Association reflects its growing leadership in focusing on social determinants and equity as a means of promoting health. This is very welcome and further development of this work encouraged.

While most health is created outside the formal health sector (that can more accurately be described as an illness care sector), this sector does have a vital role as the place in government that has a particular responsibility for health. Boxall and Leeder call for significant reform to the operation of health systems that would include more co-ordination and focus on health promotion. Newman et al. review the action each Australian jurisdiction takes in regard to health inequity and demonstrates that Australia can still claim to be one of the world leaders in terms of social determinants action for equity, but that our performance is patchy. There is certainly much room for improvement.

A focus on the social determinants of health has to be seen in a global context because so many of the determinants themselves are affected by global trends. This is reflected in contributions in this issue. Sanders demonstrates the massive inequities in health that exist globally but especially in sub-Saharan Africa. He argues very convincingly that the global economy does not promote health for the majority of the world's population and is the most fundamental determinant of health. He particularly sees global trading patterns as in need of reform. Brown and Ritchie point to the global nature of the environmental crisis we face, rightly noting that unless action for sustainability is taken humans face a bleak future on this planet.

Given that the distribution of the social determinants will always have to be argued for against powerful forces whose interests may be threatened, the need for advocacy is a common theme in many of the papers in this collection. Sanders discusses the need for social mobilisation to advocate against unfair trade. Baum and Simpson suggest that the Commission on the Social Determinants of Health provides a great opportunity for advocates to use the work of the Commission and its Knowledge Networks as a powerful advocacy instrument in arguing for policy change. They also note that the Commission is one of the first such bodies to involve civil society in a central way.

King argues that health promotion has a responsibility to undertake advocacy for social change. Irwin and Solar show that the history of social determinants has been one of social struggle before positive change is achieved. Narayan points to the growing People's Health Movement as a vibrant network of social movements that take action on the social and economic determinants of health as fundamental to improving the health of the world's poorest people. Gleeson and Alperstein point to the work of a New South Wales-based advocacy group that is bringing together professional associations to look at how they can collectively lobby for change. Furler writes about the potential role of general practitioners and their professional associations.

Our hope is that the coming years will see action on the social determinants of health as part of the core business of health systems. Across the world it is being recognised that this action will be based on across-government action. This raises important questions about who should take responsibility for ensuring this co-ordination happens and that progress towards improved and more equitable health is monitored.

Such leadership is difficult for our existing health systems. However, there are some signs that this may be changing as the social and economic benefits of preventing chronic health problems, developing systems to combat emerging infectious disease, and addressing health inequity are outweighing the costs of inaction. Across Australia we are beginning to see some evidence that these issues are being taken seriously. Investment in cross-sectoral programs in the early years of life, community strengthening and crime prevention programs, the promotion of physical activity and improvements in urban design are signs of this change.

The extent to which the health sector can lead or value add to the work of other sectors on these issues will require change in priorities and practice. The lessons from history would suggest that this change will take time, be contested, and require change in the ways in which we all think about what we are doing. In the short term, this may involve lobbying for a specific proportion of health budgets to be allocated to prevention and early intervention, bi-annual reporting of progress against an agreed set of cross-sector social indicators for health and well-being, and open debates on the values upon which we want our society to be built. In the longer term, health promoters need to be

advocates and implementers of policies that will create a fair and just society where opportunities for health are equitably distributed.

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A global perspective on health promotion and the social determinants of health

David Sanders

The development of the health promotion strategy and growth of the associated health promotion movement since the late 1980s is based on five interrelated components: the integration of policy in all health-related sectors and issues; the creation of supportive environments; the strengthening of community action; the development of individuals' skills in applying health knowledge and undertaking advocacy; and the reorientation of services towards the promotion of well-being.¹

This strategy employs a combination of advocacy, community mobilisation, capacity building, organisational change, financing and legislation to secure its implementation. This policy action has been focused on such settings as cities (in the Healthy Cities initiative), and subsequently in schools, markets, workplaces, hospitals and districts.² Many of these initiatives have garnered political support and encouraged local agencies and sectors to reassess and change their policies and practices in influencing health.

While such initiatives have often catalysed significant activity and effective health action, their impact, replication on a large scale, and sustainability face continuing challenges. Using Africa's health crisis and its current trade dispensation as a focus, this editorial will argue that such challenges are likely to grow and to increasingly compromise both the process and impact of health promotion initiatives unless the dominant pattern of neo-liberal economic globalisation is reversed, or at least substantially moderated.

What, then, is the global health situation and what is the role of social determinants in influencing this? Many recent authoritative documents, including the Commission on Macroeconomics and Health (The Sachs Report),³ have emphasised the widening gap in health experience between rich and poor countries, the rapidly increasing and intolerable burden of ill-health affecting the poor, especially in sub-Saharan Africa (SSA) with its deepening poverty and devastating HIV/AIDS epidemic.⁴ Indeed, it is partly in response to this crisis that most of the world's governments committed themselves at the United Nations General Assembly in 2000 to the Millennium Development Goals (MDGs). Three of the goals, which involve reducing child and maternal mortality and reversing the spread of HIV/AIDS, malaria, and other communicable diseases, are explicitly health related. Four others directly address crucial social determinants of (ill) health, such as extreme poverty, undernourishment, living in slums, the subordination of women, and lack of access to education, safe water and basic sanitation.⁵ They are therefore also directly relevant to health equity.

The best available data indicate that while substantial progress has been made towards achieving the MDG targets in some regions, in others the situation is grim. An assessment prepared for the first World Health Organization High-Level Forum on the Health Millennium Development Goals in January, 2004, concluded that: "Even if economic growth accelerates ... and even if progress toward the gender and water goals were to be substantially accelerated, the developing world will wake up on the morning of January 1, 2016 some way from the health targets – sub-Saharan Africa a long way".⁶ In SSA, key health indicators are at much worse levels than those in any other of the world's developing regions (with the exception of malnutrition in children under five in South Asia, but there – unlike SSA – the situation is improving⁷).

At the heart of the poor state of health in Africa lies a failure to tackle extreme poverty, with 44% of the population living on less than \$1 per day – a greater proportion than 15 years ago.⁸ While the number of people living in poverty (less than \$2 per day) in SSA increased from 289 million to 514 million between 1981 and 2001, world GDP increased by \$18,691 billion. Africa's situation is due to several interrelated factors – mainly economic stagnation with the related debt crisis. IMF and World Bank support for countries with crippling debt has been contingent upon governments adopting painful structural adjustment programs, entailing strict ceilings on government spending in the social sectors, limits on public sector recruitment and trade liberalisation. More recently, Poverty Reduction Strategy Processes (PRSPs) have been introduced that may include "trade-related conditions that are more stringent, in terms of requiring more, or faster, or deeper liberalization, than WTO provisions to which the respective country has agreed".⁹ Thus, many developing countries have decimated their domestic economic sectors, such as textiles and clothing in Zambia¹⁰ and poultry in Ghana,¹¹ by lowering trade barriers and accepting the resulting social dislocations as the price of global integration. Similarly, in Mexico, the liberalisation of the corn sector under the North American Free Trade Agreement led to a flood of imports from the United States, where agribusiness is massively subsidised. Mexican corn production stagnated while prices declined. Small farmers became poorer and 700,000 agricultural jobs disappeared. Rural poverty rates rose to more than 70%, the minimum wage lost more than 75% of its purchasing power, and infant mortality rates among the poor increased.¹²

In addition, national institutions in many African countries are frequently weak, leaving governments open to corruption; and conflict has affected several African countries with devastating consequences for health. The HIV/AIDS emergency has undoubtedly contributed, with on average one in every 14 adults infected with HIV – a rate far in excess of that in any other part of the world. Although itself a major health problem, HIV/AIDS is also a potent determinant of greater impoverishment and thus of further ill-health.

Trade is increasingly important in influencing social determinants of health, not just in poor but also in rich countries. For example,

the Global Strategy on Diet, Physical Activity and Health, which is key to reducing the alarming rise in obesity and related chronic diseases, failed to get beyond a limited 'sanitary education focused strategy' partly because of opposition from the food and beverages industry whose financial resources far exceed WHO's budget and whose interests were strongly represented by US representatives at WHO.¹³

Liberalisation of trade in services relevant to health is accelerating, partly as a result of the implementation in many countries of aspects of the World Trade Organization-administered General Agreement on Trade in Services (GATS). There is, for example, compelling evidence from some South African cities of how the pressure for local government to become more 'entrepreneurial' is leading to privatisation and escalating costs of basic services such as water and sanitation, and increasing numbers of water cut-offs because of non-payment in poorer neighbourhoods.¹⁴ The consequences for health are likely to be adverse.

Trade is but one of the dimensions of globalisation that has a big impact on (especially poor) countries' abilities to implement healthy public policies. Other important factors undermining equitable economic growth and investment in public sector service provision are unregulated financial flows ('hot money'), corporate and individual tax evasion, and dwindling development assistance.

It is clear, then, that the formulation and implementation of national public policies that involve addressing the social determinants of health are increasingly circumscribed by factors that derive from global economic structures and geopolitical relationships. This is especially the case for poor countries whose health needs tend to be more profound and urgent. In her Leavell Lecture in 2003, Ilona Kickbusch, one of the architects of health promotion, in calling for a "Third Public Health Revolution", urged a move from a charity model of public health to one that recognises rights of citizenship and to a focus on the political determinants of health and globalisation, insisting that: "We need to build a global system of responsibility that ensures access to basic health even when states fail". Her model has at its centre the strengthening of global governance structures as the means to achieve this.¹⁵

The history of public health has shown social mobilisation to be the key factor that has rendered governments – both national and global – accountable and responsive. In this regard it is urgent for the public health community to continue to advance health promotion strategies but also proactively (re)assume its historic role of supporting social mobilisation through, at a minimum, producing evidence of the negative aspects of globalisation and its effects, and of the positive health impact of equitable policies. In this way we may contribute to the achievements of the laudable – but receding – goal of responsible and responsive local and global governance and thereby address the determinants of ill-health.

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The social determinants of health: what are the three key roles for health promotion?

Dennis Raphael

Renewed interest in the social determinants of health represents yet another cycle of recognition of their importance that began in earnest in the 1850s with the writings of Frederick Engels¹ and Rudolph Virchow.² For more contemporary health promoters, the focus on early life, education, employment and working conditions, food security, health care services, housing, income and its distribution, social safety net, social exclusion, and unemployment and employment security³ produces a déjà vu experience recalling the Ottawa Charter's health prerequisites of peace, shelter, education, food, income, stable ecosystem, sustainable resources, social justice, and equity.⁴ There was excitement then about addressing these structural determinants of health. There is excitement now about addressing the structural determinants of health. Restraining this enthusiasm and its policy outcomes in 1986 was the reality that the world's English-speaking nations were on the cusp of a neo-liberal resurgence in public policy that served to effectively squash attempts to restructure society in favour of health.⁵ Now, 20 years later in the midst of neo-liberal inspired economic globalisation, we are again being urged to identify and modify the structural determinants of health that have since decayed in the interim.⁶ How likely are we to succeed in these efforts?

The renewed focus on social determinants of health as exemplified by numerous volumes on the topic^{3,7} and various international,⁸ national,⁹ and regional initiatives¹⁰ can be traced to efforts by researchers to identify the specific exposures by which members of different socio-economic groups come to experience varying degrees of health and illness.¹¹ While it was well documented that individuals in various socio-economic groups experienced differing health outcomes, the specific factors and means by which these factors led to illness remained to be identified – at least by social epidemiologists unfamiliar with the sociology of health literature!¹² It is no accident that the term 'social determinants of health' made its contemporary appearance in a United Kingdom volume concerned with policy, social organisation, and health.¹³ Certainly, focus on structural determinants of health is a vast improvement over the dominant health promotion paradigm and activities associated with the holy trinity of risk of tobacco use, diet, and physical activity.¹⁴ It also represents an approach more consistent with the empirical evidence concerning the determinants of individual and population health.¹⁵

The importance of the political and economic context

But a focus on the social determinants of health raises another important question that is infrequently considered by health

promoters in English-speaking nations: What are the determinants of the social determinants of health? Income and its distribution, the quality of early life, food and housing security – as examples – do not exist in a vacuum. The quality of these social determinants of health is itself shaped by political, economic, and social forces that differ by nation, region, and municipality. While editing the volume *Social Determinants of Health: Canadian Perspectives*, I received a quick education by numerous contributors of how the quality of the social determinants of health of early childhood, employment security and working conditions, and the social safety net were predicted by whether a nation was identified as a liberal, conservative, or social democratic political economy as described by Gosta Esping-Andersen.^{16,17}

Nations with what is termed a liberal political economy such as Australia, Canada, New Zealand, the United Kingdom (UK), and the United States (US) see relatively little government action in support of the social determinants of health; nations with social democratic political economies such as Denmark, Finland, Norway, and Sweden much more so. Nations with conservative political economies such as France, Germany and The Netherlands fall in the middle. Australia, for example, spends 18% of its GDP on social expenditures – 4.7% of GDP on pensions, 2.8% on families, and 2.3% on incapacity or disability benefits.¹⁸ These figures are high in relation to the US (14.8% of GDP total social expenditure) and Canada (17.8%), but low in relation to the social democratic nations (Denmark 29.2%; Norway 23.9%; Sweden 28.9%, and Finland 24.8%) as well as conservative nations (France 28.5%; Germany 27.4%; Belgium 27.2% and Switzerland 26.4%) – among others. Indeed, Australia is ranked 22nd of 30 OECD nations in social spending.¹⁸ Liberal nations also have higher rates of poverty and greater degrees of income and wealth inequalities.¹⁹ And not surprisingly, indicators of population health tend to parallel these classifications: liberal nations show highest rates of infant and premature mortality; social democratic nations less so.

The three roles for health promoters

Type of political economy determines societal receptiveness to the concept and policy implications raised by a social determinants of health approach. Consider the difficulties health promoters experience having these issues addressed in liberal nations governed by neo-liberal governments. This is not a problem of evidence, it is a problem of political will. Such an analysis suggests that there are three key roles that health promoters should play in addition to their day-to-day efforts to promote healthy public policy in each and every area influenced by the social determinants of health. These three roles are education, motivation, and activation in support of the social determinants of health. These roles are about building the political supports by which public policy in support of the social determinants of health can be implemented. Each is considered in turn.

Educate

In nations governed by liberal political economies, the public remains woefully uninformed about the social determinants of

health. The population has also been subject to continuous messaging as to the benefits of a business-oriented laissez-faire approach to governance.⁵ What this messaging has not included is the societal effects of this approach: increasing income and wealth inequality, persistent poverty, and a relatively poor population health profile.²⁰ These effects are profound and objectively influence – for the worse – the health and well-being of a majority of the population.¹⁷

There are hundreds – if not thousands – of Australians whose occupations are concerned with health promotion. These workers could take advantage of the citizenry's continuing concern with health and the wealth of evidence of the importance of the social determinants of health to begin offering an alternative message to the dominant biomedical and lifestyle discourse. At a minimum, health promoters can carry out – and publicise the findings from – critical analysis of the social determinants of health and disease. This is not a question of being subversive – it is rather a simple matter of information and knowledge transfer.

There is no shortage of areas in which health promoters could engage: social determinants of health such as poverty, housing and food insecurity, and social exclusion appear to be the primary antecedents of just about every affliction known to humankind.²¹ My short list of such afflictions includes coronary heart disease, type II diabetes, arthritis, stroke, many forms of cancer, respiratory disease, HIV/AIDS, Alzheimers, asthma, injuries, death from injuries, mental illness, suicide, emergency room visits, school drop-out, delinquency and crime, unemployment, alienation, distress, and depression. Examples of such analyses and critiques of the dominant paradigms are available.^{22,23}

Motivate

Health promoters can shift public, professional, and policymakers' focus on the dominant biomedical and lifestyle health paradigms to a social determinants of health perspective by collecting and presenting stories about the impact social determinants of health have on people's lives. Ethnographic and qualitative approaches to individual and community health produce vivid illustrations of the importance of these issues for people's health and well-being.²⁴ There is some indication that policymakers – and certainly the media – may be responsive to such forms of evidence.²⁵ In Canada, such research clearly constitutes a small proportion of health promotion and health services research.²⁶ This is probably the case in Australia as well.

There is increasing recognition of the importance of community-based research and action.^{27,28} But frequently, these activities are narrow and seem unwilling to allow citizens to raise issues of public policy concerned with income distribution, employment and labour issues, and fundamental questions of citizen participation in governmental priorities and actions. Such activities can be a rich source of insights about the mainsprings of health and means of influencing public policy. Such a perspective allows community members to provide their own

critical reflections on society, power and inequality. At a minimum these approaches allow the voices of those most influenced by the social determinants of health to be heard and hold out the possibility of their concern being translated into political activity on their part and policy action on the part of health and government officials. Ultimately, the end of such activities should be the creation of social movements in support of health. The People's Health Movement is but one example of such a movement in support of health.

Activate

The final role is the most important but potentially the most difficult: supporting political action in support of health. There is increasing evidence that the quality of any number of social determinants of health within a jurisdiction is shaped by the political ideology of governing parties. It is no accident that nations where the quality of the social determinants of health is high have had greater rule by social democratic parties of the left. Indeed, among developed nations, left cabinet share in national governments is the best predictor of child poverty rates, which itself is associated with extent of government social transfers.²⁹ Nations with a larger left-cabinet share from 1946 to the 1990s had the lowest child poverty rates and highest social expenditures; nations with less left-share had the highest poverty rates and lowest social expenditures. It has also been documented that poverty rates and government support in favour of health – the extent of government transfers – is higher when popular vote is more directly translated into political representation through proportional representation.³⁰ Australia, like the other liberal nations of Canada, New Zealand, Ireland, UK, and the US, is among the nations with the lowest left cabinet share (7%) and among the highest in child poverty rates (14.7%) in the 1990s (providing a poor poverty standing of 18th of 26 OECD nations). Australia also does not have proportional representation, the lack of which is associated with higher poverty rates. Proportional representation is important because it provides for an ongoing influence of left-parties regardless of which party forms the government.

Conclusion

A political approach recognises that the social democratic nations create the conditions necessary for health. These conditions include equitable distribution of wealth and progressive tax policies that create a large middle class, strong programs that support children, families, and women, and economies that support full employment:

*[F]or those wishing to optimize the health of populations by reducing social and income inequalities, it seems advisable to support political forces such as the labour movement and social democratic parties which have traditionally supported larger, more distributive policies.*³¹ (p. 490)

While it is apparent that Australian public policy has been moving more and more towards a neo-liberal US-type model, reversals are possible. Indeed, New Zealand took a similar neo-liberal course

during the 1990s, but has now reversed direction. Ideologies are malleable and national social policies can be changed.

For more than 10 years I have been attempting to understand the growing gap between Canadian health promotion rhetoric and action. My analysis of developments in wealthy developed nations indicates that health promotion activities operate within the confines of the dominant political and economic discourses within a society.³² In many nations the rise of neo-liberal approaches to governance has made concern with the social determinants of health not only unpopular among governing circles but actually threatening to agency funding and individual health promoters' career prospects.

Nevertheless, the best means of promoting population health through a social determinants of health perspective would involve agencies, organisations, and even government employees navigating the difficult task of informing citizens about the political and economic forces that shape the health of a society. Once so informed, they can consider political and other means of influencing these forces. I am not sure how this can be easily done. United Ways across Canada – the major charitable organisations in Canada – have been successful in raising fundamental issues about societal governance in a non-threatening manner. The Canadian Public Health Association and Health Canada workers continue to produce documents that clearly explicate the importance of fundamental issues such as income and wealth distribution.^{33,34} However, there has been little uptake – with some exceptions – of these developments on the ground. Taking up this challenge is not a role that health promoters have considered their own. It appears rather a daunting task, but one that holds the best hope of promoting the health of citizens in Australia and elsewhere.³⁵

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Are social determinants of health the same as societal determinants of health?

Barbara Starfield

Despite the widespread appeal of the phrase 'social determinants of health', it erroneously suggests that health depends primarily on interrelationships among individuals as this is what 'social' means in most dictionary definitions. Inequities in health, however, involve systematic differences in health across population subgroups,¹ thus changing the focus of influences from social interactions to societal characteristics.

Figure 1 captures the characteristics addressed by the large social determinants of health literature. In this literature, social characteristics of individuals and groups are considered to influence health, which is conceptualised as 'average health'. The clusters of influences on the right side of the figure describe the focus of conventional social medicine. Extending the focus more to the left describes the domain of community medicine, which also includes characteristics of physical and social environments in which individuals live and work. Largely ignored by social medicine researchers is the context in which these actions and interactions exist.²

Figure 2 captures the types of societal influences on equity in health. It explicitly recognises the importance of distributions of health in populations and the likelihood that different interactions among influences may produce different mechanisms of illness generation and progression in different population subgroups. The figure also recognises that, where illness differs systematically across population subgroups, it is societal factors (represented by political and policy contexts) that generate and maintain social hierarchies that are the focus of 'social medicine' and 'social influences'.

The importance of societal antecedents is increasingly recognised by scholars and researchers who are devising policy to reduce inequities in health. Most notably, the World Health Organization (WHO) Commission on Social Determinants of Health, formed in the early years of the 21st Century, is deliberately considering the role played by political factors as well as the supranational economic policies constituting globalisation and the commodification of influences on health.³ Which societal determinants should receive the most attention in the search for effective strategies to reduce inequity in health? Studies have suggested a variety of likely foci, including (but not limited to) social pacts between labour, management, and government; percentage of people covered by public medical care; corporate and state profits; wage inequality; female literacy, enfranchisement, and involvement in political decision-making;⁴

generosity of social welfare programs by government;⁵ and characteristics of a country's involvement in global trade.⁶ One recent long-term comparison of Canada and the United States demonstrates how a focus on national policies for public spending on health and social programs in Canada was associated with greater improvements in life expectancy in Canada than in the US (pers. comm.). However, all of these studies examine impact on average health, not on distribution of health in populations.

It is critical to recognise that average health, as reflected in national or regional health statistics, has little to do with the distribution of health within populations and that improvements in health often do not improve the distribution of health. For example, in 13 of 21 countries, improvements in under-five mortality between 1996 and 2000 mask the lack of change or worsening of inequities in under-five mortality in 17 of the countries.⁷ Only one recent study specifically addressed inequity in health;⁸ in contrast to previously demonstrated relationships between type of political regime and average health, trends in inequality in mortality in middle-age men in several industrialised countries had no relationship with type of political regime.

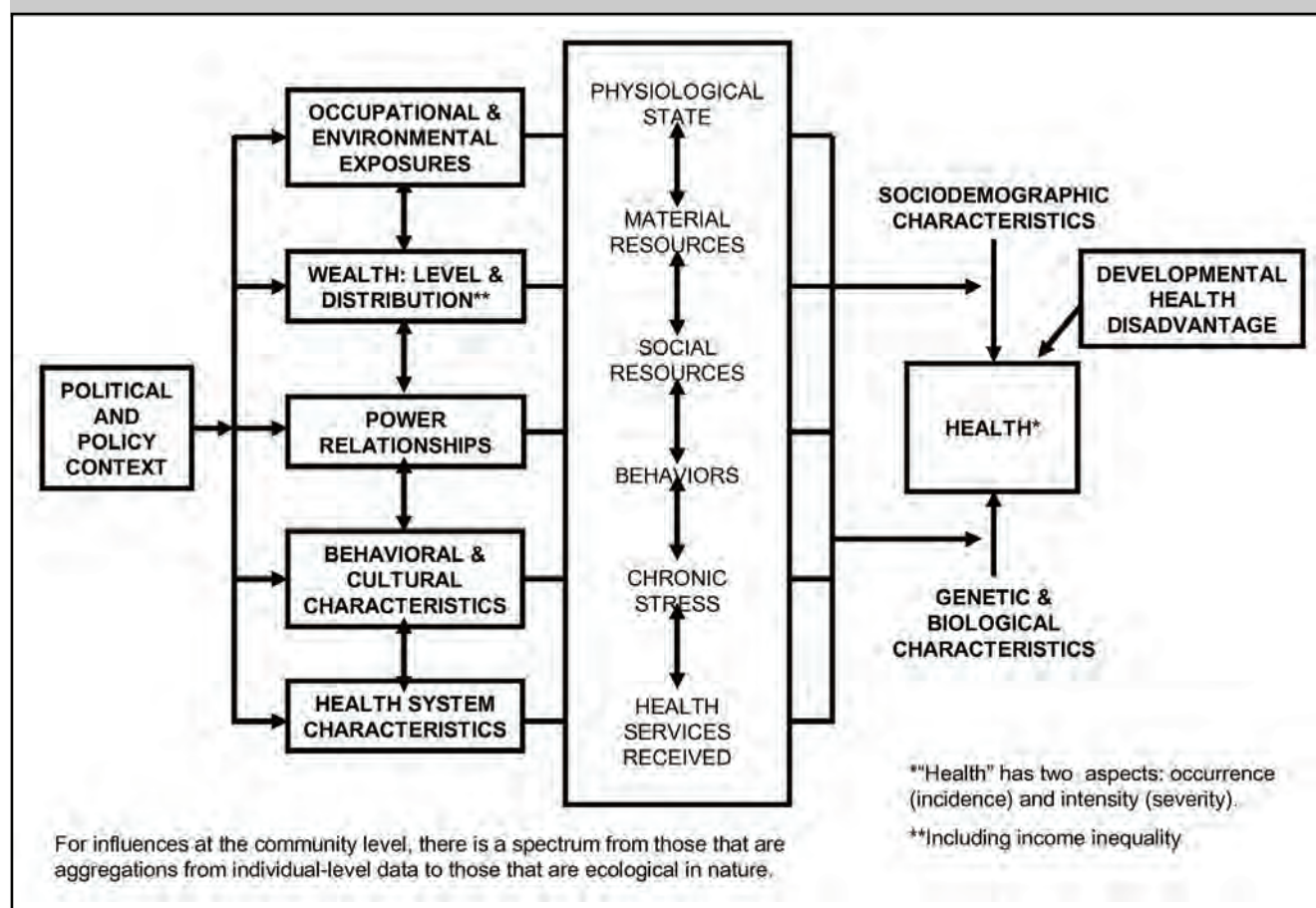
Income redistribution, as a societal strategy, has received the most attention as a mechanism to reduce inequity in health, but the evidence on the association between income inequality and better equity in health is weak.⁹ Why should better

distribution of income reduce inequities in health? Such an effect would only be plausible if income redistribution disproportionately benefited deprived social groups either through psychological stress-reducing effects on individuals in these groups and/or through programs to provide health-inducing interventions such as healthy diets, beneficial physical exercise, healthy environments, and better health services. These must be in place when income is redistributed.¹⁰

In contrast to the absence of evidence of impact on equity in health of the variety of societal characteristics that have been proposed as influential, a strong primary care infrastructure in health systems shows the potential for societal programs directed at improving the health of disadvantaged populations more than the health of more advantaged populations. Primary care does this by three mechanisms:

1. By providing services that are nearer to people and more accessible, focusing on people's health problems in their entirety rather than on specific diseases one at a time, providing a broader ranges of services in one setting and co-ordinating all aspects of care, primary care achieves better outcomes and better distribution of health at lower costs.¹¹
2. By maximising the likelihood of management with less expensive and more appropriate interventions for the populations, primary care reaches people at risk so that the

Figure 1: Influences on the health of individuals.



overall effect is greater, even though the marginally greater benefit on any given individual may be greater with newer and more expensive technology and pharmaceuticals.¹²

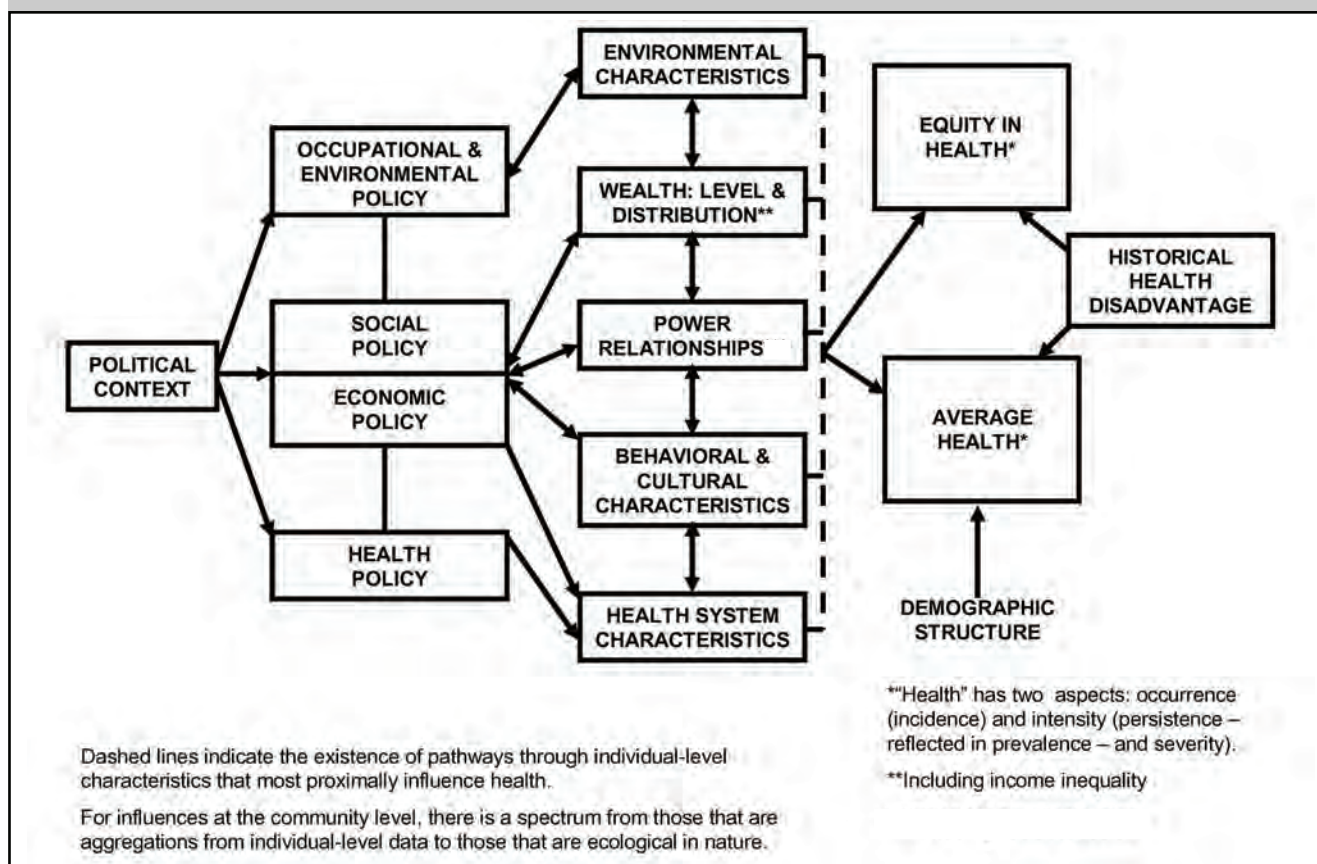
- By training practitioners in the community rather than in hospital settings, primary care practitioners are a well-set filter to more expensive and less accessible specialty services,¹⁴ thus reducing unnecessary visits to specialists and the adverse effects resulting from seeing multiple physicians,^{15,16} and by reducing adverse effects from the cascade of diagnostic tests ordered by medical personnel whose training and experience lead them to overestimate the likelihood of serious illness in the patients they see.¹⁷

Equity in health, as a societal goal, will require societal strategies that influence the evidence-based chain of mechanisms, from those at the global and national levels through community and social characteristics. Intervening later in the chain runs the risk of changing interactions within the chain in ways that interfere with the achievement of the goal. Health impact assessments of societal policies, despite their challenges, have the potential to improve attention to the societal determinants of health.¹⁸ Well-conceived theory, buttressed by empirical evidence of benefit, is the only hope for more rapid improvements in equity in health.

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Figure 2: Influences on health equity.



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Early Child Development. Well-established evidence illustrates that opportunities provided to young children are crucial in shaping lifelong health and development status.

http://www.who.int/social_determinants/knowledge_networks/childdev/en/index.html

Globalisation. The scope is to examine how globalisation's dynamics and processes affect health outcomes: trade liberalisation, integration of production of goods.

http://www.who.int/social_determinants/knowledge_networks/globalization/en/index.html

Health Systems. The focus will be on innovative approaches that effectively incorporate action on social determinants of health. Recommendations will be relevant for countries with tight resources.

http://www.who.int/social_determinants/knowledge_networks/systems/en/index.html

Measurement and Evidence. The focus is on leading the development of methodologies and tools for measuring the causes, pathways and health outcomes of policy interventions.

http://www.who.int/social_determinants/knowledge_networks/measurement/en/index.html

Urban Settings. The focus will be on urbanisations, particularly broad policy interventions related to healthy urbanisation, and will closely examine slum upgrading.

http://www.who.int/social_determinants/knowledge_networks/settlements/en/index.html

Employment Conditions. It will help to develop measures to clarify how different types of jobs and threat of unemployment affect workers' health.

http://www.who.int/social_determinants/knowledge_networks/employment/en/index.html

Social Exclusion. It will examine the relational processes that lead to the exclusion of particular groups of people from engaging fully in community and social life.

http://www.who.int/social_determinants/knowledge_networks/exclusion/en/index.html

Priority Public Health Conditions. It will review factors in the design and implementation of programs that increase access to health care for socially and economically disadvantaged groups.

http://www.who.int/social_determinants/knowledge_networks/phconditions/en/index.html

Women and Gender Equity. It will focus on mechanisms, processes and actions that can be taken to reduce gender-based inequities in health by examining different areas.

http://www.who.int/social_determinants/knowledge_networks/gender/en/index.html

Building healthy and equitable societies: what Australia can contribute to and learn from the Commission on Social Determinants of Health

Fran Baum and Sarah Simpson

Introduction to the Commission on Social Determinants of Health

The Commission on Social Determinants of Health (the Commission) was launched by the World Health Organization (WHO) in 2005 and will complete its initial work by reporting to the World Health Assembly in May 2008. The commissioners comprise 20 leading innovators in science, public health, policy making and social change to support countries and global health partners to act on social factors leading to ill-health and health inequalities. In addition to the commissioners, there are five streams of action:

1. Organisation of knowledge to inform health policy proposals and action on the social determinants of health, through nine knowledge networks (KNs).
2. Demonstrating and highlighting the opportunities and possibilities of action, which is being formalised in country partnership agreements and action plans – the country work stream.
3. Social mobilisation and long-term political sustainability of the social determinants of health (SDH) agenda, which is being organised through an extensive civil society process.
4. Promoting action across United Nations institutions on equity in health and providing specific policy proposals for improved action on health – global initiatives.
5. Developing the plan for institutional change at WHO so

that it can also provide long-term support to countries in advancing the SDH agenda after the Commission has ended.^{1,2}

The Commission brings an impetus to national, regional and international efforts to act on the social determinants of health in order to improve health equity. Its focus is not only on knowledge about the impact of social determinants on health and what can be done to make the health impact more health promoting (KNs will develop inventories of policy and program actions), but also on taking action through the civil society and country work streams. The country work stream involves more than 10 countries and, at the time of writing, partners include Sri Lanka, Chile, Canada, England, Sweden, Kenya, Iran, Brazil, and Bolivia.

The Commission is paying attention to what it can learn from previous experience to improve health equity, particularly:

1. The enabling factors that will result in change upstream.
2. Identifying existing programs, policies and initiatives that can, have or are improving health equity.
3. How to move from theory to practice – collecting knowledge that is policy and advocacy relevant.³

Australia has significant knowledge and experience in the area of social determinants and the Commission offers an important opportunity for Australia to have an input on existing and previous programs and policies. It is important that the

Abstract

The Commission on Social Determinants of Health (the Commission) was launched by the World Health Organization in 2005. It aims to support countries and global health partners to act on social factors leading to ill-health and health inequalities. Taking action on the social determinants of health is not new for Australia. This paper provides a description of the work of the first 18 months of the Commission and relevant Australian examples. Taking action on the social determinants of health is never simple or easy even in the most supportive of policy environments. The global focus of the Commission should ensure that knowledge and examples of successful action will be collected from a diverse range of country and policy environments, particularly low to middle-income countries. Given Australia's experience, we encourage practitioners to contribute to the deliberations of the Commission. It is also critical that Australian practitioners engage with the Commission's different actors and stakeholders, particularly knowledge networks, to derive important policy lessons from the knowledge generated by the Commission.

Health Promotion Journal of Australia 2006;17:174-9

opportunity is taken to contribute Australian knowledge to this global process to ensure that the knowledge and experience collected is contextually relevant. Without input from Australia, the findings of the Commission will be less easily translated into action, particularly where context is critical. Thus the focus of this paper is on looking at the present and future implications of the Commission's work for Australia, especially in terms of action to improve health equity.

Policy attention to social determinants in recent Australian history

Attention to the social determinants of health is not new for Australia. State and federal governments have been investing in activities that promote health since at least the Second World War. The conservative Menzies Government, which was in power for 18 years, had a program of action that stacks up very well against the areas that the Commission has defined as important to health.^{4,5} These initiatives included a high top marginal tax rate (compared with contemporary rates), investment of state resources in crucial infrastructure including roads, schools and public housing, and a full employment policy.

In the early 1970s, during the three-year term of the Whitlam Government, many of the changes introduced reflected a strong, progressive social determinants of health approach across many sectors. Key examples were the Community Health Program,⁶ which foreshadowed many of the messages of the WHO 1978 Alma Ata Declaration⁷ that launched Health for All by the Year 2000; making university attendance free; and an Australian Assistance Plan that focused on social development.

At State government level, the Dunstan Government of the 1970s in South Australia brought about many changes that improved the quality of life for poorer South Australians and for the first time gave land rights to Indigenous Australians (a crucial determinant of health) and used social planning to develop communities. The Menzies, Whitlam and Dunstan governments are all examples of periods when governments were prepared to invest government resources in nation building with measures that tended to have equitable outcomes. This approach to nation building was progressively lost from the 1980s, when a small government and economic rationalist policy direction came to dominate thinking about public policy in Australia.^{5,8} Despite this, there have been some important developments that have attempted to keep a focus on health inequities and the crucial role social determinants have in policies designed at reducing them.

A few of these initiatives are described to demonstrate that as well as its nation-building legacy in the three post-war decades, Australia has further examples of progressive thinking about the social determinants of health.

Equity policy in New South Wales

In 2004, New South Wales (NSW) Health released the NSW Health and Equity Statement *In All Fairness*,⁹ a policy statement that included actions that could be taken by the health sector within NSW to improve health equity – including working with

other sectors. The statement was developed on the premise that while knowledge of action that could be taken to improve health equity was not perfect, the 'glass was half full' and so *In All Fairness* provides a framework for NSW Health to build on existing work.

A key aim of the policy is to integrate equity into the core business of NSW Health. There are six key focus areas for action, from which strategies have been developed:

1. Investing in the early years of life.
2. Engaging communities for better health outcomes.
3. Developing a strong primary health care system.
4. Regional planning and intersectoral action.
5. Organisational development.
6. Resources for long-term reduction in health inequities.

While the statement has not been fully implemented, it has provided a foundation document for practitioners to act by consolidating what they know, as well as a mandate for some to strengthen their efforts.¹⁰ It has also contributed to strengthened or new action (particularly at the organisation or system level) to increase the equity focus of the system. For example, the NSW Chief Health Officer's Report¹¹ provides data on equity and so practitioners have a mandate to act on and monitor action to improve equity. One example of a new initiative is the NSW Health Impact Assessment (HIA) project, a five-year investment to build capacity in developing healthy public policy through the use of HIA for improved policy/program development.

The Commission is well aware that action on the social determinants is not new and is particularly interested in what can be learnt from previous experience to improve health equity. Therefore, a valuable contribution to the Commission would be to reflect on what works, what doesn't work, and what could be strengthened in developing and implementing a state policy to integrate equity into the health system. A more detailed assessment of the NSW equity policy that answers these questions would be one that the Commission's country partners would find particularly useful.

Family violence

Since the 1980s, federal and State governments have introduced a series of policies and campaigns designed to reduce domestic or intimate partner violence. These policies, especially at the State level, have had a strong intersectoral flavour and have provided shelters for women and children leaving violent relationships, trained police in appropriate responses, re-educated the judiciary with the message that violence in the home is a crime and should be treated as such, started campaigns to encourage people to disclose sexual abuse, and then increased institutional determination to prosecute perpetrators.¹² This concerted cross-sector and jurisdiction approach has meant that domestic violence and child sexual abuse are no longer hidden and are widely seen as determinants of health and responded to as such.

Community health services

The community health sector (started as a result of the Whitlam Government's Community Health Program in 1973) has left a strong legacy in Victoria and South Australia. In both these States, investment in this sector continued once Commonwealth funding was withdrawn.¹³ These centres have been innovators in terms of action on the social determinants of health. Examples of this work are described in the collection on South Australia in Baum,¹⁴ nationally in Legge et al.,¹⁵ and in relation to women's health centres in Broom.¹⁶

Data for social determinants

Australia has also been a trailblazer in producing information to support a focus on the social determinants of health. The first Social Health Atlas was published in 1990 and since then atlases have been published for Australia as a whole and for States and Territories.¹⁷ They include a broad range of data on social inequity in general and on health inequity and provide an important policy tool for governments that want to monitor their progress on reducing inequality.¹¹

Data on health inequities has also been produced by Turrell, Oldenburg et al.¹⁸ in association with the Health Inequalities Research Collaboration (which was funded by the Federal Government)¹⁹ and subsequently in association with the Australian Institute of Health and Welfare.^{20,21} While these documents do not address social determinants to any significant degree, they are important in documenting the extent of inequities that other evidence indicates is largely a result of the impact of social determinants. Australia, therefore, has a sound knowledge base from which to act and is ahead of many other nations that may not even have vital registration systems, let alone data on the extent of inequalities.

Implications of the Commission for Australia in the future

Our considerations of the implications of the Commission for Australia are provided in terms of action in and outside of the health sector.

Outside the health sector

The Commission is well aware that action on the social determinants of health requires a whole-of-government approach and particularly the backing of the head of state in recognition that their support would be essential to any national effort on social determinants. As part of their regular meetings, the commissioners meet with the government of the country hosting the meeting including the head of state, minister for health and other ministries including ministries for planning, education and employment. By the end of 2006, the commissioners will have met in Chile, Egypt, India, Iran, Kenya and Brazil.

An equity focus in healthy public policy

For Australia, the importance of whole-of-government

approaches is relevant to each jurisdiction – federal, State and local. Building healthy public policy requires cross-sectoral approaches with the involvement of communities. Increasingly, HIA is being used to strengthen the development of healthy public policy with a focus on health inequities. HIA is a structured process for improving a proposal by providing decision makers with information on potential health effects (positive and negative, intended and unintended) and recommendations for improving the proposal, thereby contributing to improved policy development.²² Australia has been a leader in the development of environmental health frameworks where health effects are usually considered as part of environmental impact assessment processes.²³

More recently, Australia has explored the use of HIAs for policy development. This has resulted in a range of activity at both the State and national levels,²⁴ including the development of a framework for the systematic consideration of equity in each step of HIA, the equity-focused health impact assessment (EFHIA) framework.^{24,25} The framework for EFHIA provides practitioners of HIA (within or outside of the health system) with a structured approach for identifying the potential differential effects of a proposal on the health of specific groups within a population and to assess if these differential effects are inequitable (unfair, unjust and potentially remediable). The framework was tested in six sites in the Australasian context.

The work of the Commission provides an opportunity for further testing of the EFHIA framework, including by working with the Commission's country partners to undertake EFHIAs of their proposed new or revised programs to address the social determinants of health, and/or undertaking EFHIAs of programs recommended by the Commission's knowledge networks. Australian practitioners could benefit from such exercises because they can add to knowledge about the relevance and applicability of such frameworks in different policy contexts.

Importance of social solidarity

Action on the social determinants of health is not a value-free enterprise. It is unlikely that a government will be committed to take action unless it has a philosophical belief that equity results from government action (rather than it reflecting individual agency) and a belief that increasing social solidarity is an important goal of government.²⁶ Stretton⁵ has noted the growing individualism of Australian governments of the past two decades. He notes that investment in creating a fairer Australia will rely on government action in the following policy areas: employment, housing, explicit policy support for child rearing (he proposes a parent wage), health, education, and income distribution. His solutions depend on increasing government intervention, financed by increased taxation for the purpose of investment in these areas. The investment would be explicitly targeted to reduce inequities and increase social solidarity. While increasing taxes may not seem a feasible policy option, there is evidence that Australians are becoming more willing to pay higher taxes if it means better investment in health and education services.²⁷

Some State governments are clearly committed to the value of social solidarity through working to build it through government policy on social exclusion. The South Australian Government has a Social Inclusion Board supported by a unit.²⁸ Key goals are to reduce homelessness, increase school retention and improve the inclusion of people with mental illness in society. The Department of Victorian Communities²⁹ is developing a range of projects to increase social inclusion and strengthen local communities. The Commission's civil society work might provide some useful insights for Australian practitioners on how to improve social solidarity, particularly knowledge from civil society organisations that operate in constrained political environments.

Need for planned, vision-driven approaches

Beyond this broad policy picture, which is crucial to shaping policy responses, action on the social determinants will depend on co-ordinated policy and practices responses. At State level, broad strategic plans that integrate social determinants into a statewide response appear a very sensible approach. The article by Newman, Baum and Harris (this issue) describes the way in which the South Australian strategic plan incorporates several equity indicators and provides a framework for action to improve the social determinants of health across all government sectors. It appears to give public servants a sense of the way their particular work contributes to making their State a better place to live. In that sense, it is akin to the Healthy Cities projects that have stressed the importance of a sense of vision to creating healthy communities.³⁰

More locally and regionally, we suggest that a series of multi-agency healthy community initiatives should be funded. These should draw on the lessons from the WHO Healthy Cities project,^{30,31} the Local Agenda 21 initiatives, and other projects that stress cross-sector working with meaningful community involvement. Funding would be for 10 years (given our knowledge of the limitations of short-term project funding) and granted to communities where a range of agencies and organisations express a desire, keenness and energy to work together to promote health and well-being with a focus on equity and a range of social determinants. Drawing on lessons from Healthy Cities,³² the establishment of a change catalyst unit that would work with local agencies and communities to facilitate and encourage local initiatives is likely to be important. The change catalyst unit would draw up a vision and action plan with a built-in monitoring and evaluation cycle including impact evaluation. It would be valuable to our own efforts to test these proposals with the Commission's different actors, particularly the knowledge network on urban settings and other country partners.

Within the health sector

Health sectors have responsibility for protecting and promoting the health of the communities they serve. In Australia (like elsewhere), it has tended to be the health sector that advocates for action on the social determinants of health. But this advocacy

generally comes from the margins of the system – public or community health workers. In the main, health systems spend the vast majority of their time planning for and managing acute hospital services. The sector is most properly described as the illness care system. A key platform of the Commission is that health systems should be taking a major role in advocating for and encouraging the action across sectors to improve social conditions that have an impact on population health status and the distribution of health. The article in this issue by Newman, Baum and Harris shows that each State and Territory is taking at least some action on these issues, but that there is significant room for more concerted action.

Health promotion as a discipline in Australia has strong roots in behavioural understandings of health.^{4,33} Appreciating the limitations of behaviourism is an important aspect of achieving health promotion action on the social determinants of health. This will require retraining and including much more about the social determinants of health in medical, nursing and other health discipline training courses. A very positive sign is that the Australian Health Promotion Association has taken a strong stand on the social determinants of health.³⁴ For health promoters to be able to implement a health promotion approach based on social determinants, however, requires organisational change of a quite significant nature within our health service organisations.³⁵ These are still largely based on medical understandings and elevate the importance of curative interventions and at best pay lip service to the importance of social factors as determinants of population health. The work of the Commission will act to strengthen the hand of the increasing number of health promoters keen to base their work on an understanding of the ways in which social and economic factors affect people in their day-to-day lives. For instance, there is a strong focus on treating and preventing chronic disease in all Australian jurisdictions. Most effort focuses downstream and the Commission's work will point to the importance of understanding the more distal determinants of chronic diseases if the projected epidemic is to be curtailed.

Most health promoters and other health professionals who engage in health promotion, such as general practitioners, will work at a local or regional level and typically will find that the actions that they can take concerning the social determinants of health is limited. What is crucial, however, is that programs and initiatives are planned in a way that appreciates the constraints people face in changing their behaviour and that the health promoter engages in action to remove the structural constraints to healthy behaviour. Thus, in a remote Aboriginal community it is little use telling people to eat a healthy diet if their community store stocks a lot of high-sugar drinks and high-fat food and only sells very expensive fruit and vegetables. A key role for the health promoter in this case is to advocate for improved food supply. Many health promotion programs still have a strong focus on directly changing behaviour, despite the evidence that doing so meets with very limited success especially with people living in disadvantaged economic and social

circumstances. The Commission's message that behaviours are strongly shaped by social and economic circumstances is one that health authorities across Australia need to hear and act on in the design of all health promotion initiatives.

The focus of the ninth Commission knowledge network is on priority public health conditions, including non-communicable and therefore some chronic diseases. This aims to review the equity effectiveness of public health programs (including pro-poor initiatives) and ultimately to improve the equity focus so that health outcomes are equitably distributed across the population. The network is just being established and Australia could easily contribute case studies (for example, taking an equity focus in the design of services for people with diabetes) and/or learn about integrating an equity and social determinants focus into primarily behavioural health promotion programs.

The special case of Indigenous health

The most burning area in which Australia needs to take urgent action to address social determinants of health is in relation to Indigenous health. There are many statistics that document the vast difference in health status between Indigenous and non-Indigenous Australians, but perhaps one of the most telling is that while 70% of Indigenous peoples die before they are 65, only 21% of non-Indigenous Australians do so.³⁶ The Co-operative Research Centre in Aboriginal Health (CRAH) has adopted the social determinants of health as one of its five core program areas (the others are primary health care, chronic disease, social and emotional well-being and healthy skin). This approach clearly says action inside and outside the health sector is crucial and acknowledges that access to health services is, in itself, one of the social determinants of health. The CRAH Program Statement for the Social Determinants³⁷ uses work from the Commission to justify and support its case and notes that the conditions set by employment, education, housing and other physical infrastructures are crucial to improving health status. The physical infrastructure in many remote Australian communities is appalling – the housing is often inappropriate to the harsh, remote conditions, basic infrastructure such as plumbing and drainage does not work, food choices are extremely limited and expensive, poverty levels are much higher than in the general population, there is little to engage young people, and employment opportunities are very limited.

The CRAH Program Statement also sees racism as an important and under-researched influence on health status. The history and legacy of more than 200 years of colonisation, including periods in which children were stolen from families, is a fundamental social determinant that has to be understood in order to inform action on Indigenous health.³⁸ So much of this history has meant that Indigenous people have had very little control over their lives and our recent knowledge indicates that lack of control is bad for health.³⁹ We hope that mutual learning can be encouraged between the Commission and researchers and practitioners in Indigenous health in Australia. To this end,

it is hoped a workshop on Indigenous health will be held with the Commission in Australia in 2007.

Conclusions

In conclusion, it is clear that Australia has a strong basis from which to act – both in terms of our sound data on health inequalities and knowledge of actions on the social determinants of health that do work or show promise. Australia can make an important contribution to the work of the Commission and global knowledge on how to act, including contributing case studies to the knowledge networks and connecting with country partners and civil society organisations. Such contributions will help ensure that the Commission findings are more contextually relevant to Australia. There are lessons to be learned from practitioners who make a difference while operating in resource and policy environments that are significantly more constrained than the Australian environment.

The work of the Commission offers an important opportunity for Australian health promoters and health promotion researchers.⁴¹ The Commission is creating a network of activity on the social determinants of health by bringing together researchers, civil society activists, policy makers and health promotion practitioners in a way that encourages dialogue and the development of innovative ideas. This should lead to new forms of policies and action around the world. We are not saying that this is simple or easy. However, Australia's experience means it is well placed to both make a crucial contribution to these discussions and to benefit from the Commission's deliberations.

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Social determinants, political contexts and civil society action: a historical perspective on the Commission on Social Determinants of Health

Orielle Solar and Alec Irwin

Introduction

New opportunities are emerging to improve health and tackle health inequities through action on the social determinants of health (SDH). The March 2005 launch of the World Health Organization's (WHO) Commission on Social Determinants of Health (CSDH) signals a commitment among global health leaders to promote policy action on social determinants and to support developing countries, in particular, in implementing SDH policies.¹

Many of the ideas underlying a social determinants approach are hardly novel. For some observers, the messages emerging from the CSDH thus far may have a flavour of *déjà vu*, recalling the WHO discourse of the late 1970s 'Health for All' period in which a social vision of health was prominent. This resemblance is by no means necessarily negative – it may be the best news from WHO in some time.² However, the perceived failures of Health for All raise questions about the capacity of the CSDH to deliver on its promises and

about the overall viability of a social determinants agenda.

To evaluate opportunities for action on SDH and understand which strategies will raise chances of success requires a critical historical perspective. Plans for addressing SDH should be developed with an awareness of past similar efforts and factors that contributed to their success or failure. This article provides elements for such an analysis. We begin by examining key milestones in the history of action on SDH over the past half century, with special attention to the Health for All agenda and its political-economic context. We then move from the global level to highlight specific contributions of the Latin American tradition of social medicine. We argue that this tradition, too little known outside its region, provides tools for understanding and responding to the historical challenges confronting movements for health equity. Using these inputs, we frame recommendations for the CSDH and the contemporary agenda on social determinants, in particular around issues of civil society participation.

Abstract

Issues addressed: To evaluate opportunities for action on social determinants of health (SDH) requires a historical perspective. Plans for addressing SDH should be developed with an awareness of past similar efforts and factors that contributed to their success or failure.

Methods: Review of published historical literature on analysis and action on SDH, in particular from the Latin American social medicine movement.

Results: In the period since World War II, global public health has oscillated between a social vision of health and a more individualistic, technological and medicalised model. Action on SDH was central to comprehensive primary health care as promulgated at the 1978 Alma-Ata conference and championed by the movement for 'Health for All by the Year 2000'. Subsequently, commitment to addressing SDH declined under the impact of restrictive interpretations of 'selective primary health care' and the pressure of neo-liberal economic and health policies.

Conclusions: Through its critique of politically naive medical and public health approaches and of neo-liberal ideology, the Latin American social medicine tradition offers important lessons for today's efforts to advance action on SDH. Key lessons concern: (1) the model of *praxis*, consciously uniting reflection and action for political change; and (2) the importance of civil society and community participation in action on SDH.

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So what?

Opportunities exist today for significant progress in addressing SDH through national action and global mechanisms such as the Commission on Social Determinants of Health. Historical analysis suggests that civil society participation will be crucial for the success of these efforts.

Action on social determinants: a historical overview

The awareness that people's chances to enjoy good health depend heavily on their different positions within society may be as old as society itself. Giovanni Berlinguer, following Henry Sigerist, found evidence of a lucid recognition of the inequitable effects of occupation and social status on health in Egyptian papyri written thousands of years before the Common Era.^{3,4} In the 19th Century, understanding the impact of social factors on health enabled the achievements of public health pioneers such as German epidemiologist Rudolf Virchow, who asked: "Do we not always find the diseases of the populace traceable to defects in society?"⁵

In the period since World War II, global public health has oscillated between the embrace of a social vision of health and the rejection of this vision in favour of more an individualistic, technological and medicalised model. A social approach to health was enshrined in the 1948 Constitution of the World Health Organization (WHO), which famously defined health as a "complete state of physical, mental and social well-being" and mandated intersectoral action to improve health by addressing social and environmental factors.⁶ However, this view was eclipsed during the 1950s and 1960s as WHO focused on attacking diseases through technology-driven vertical campaigns, rather than on the positive development of health.

Social determinants in the Health for All era

Action on SDH gained prominence again through the landmark 1978 Alma-Ata Conference on Primary Health Care and the global movement towards 'Health for All by the Year 2000', to which the conference gave impetus.⁷ Werner and Sanders have shown how the Alma-Ata model of primary health care (PHC) grew out of community-based health programs pioneered during the 1960s and 1970s, whose common points included a holistic model of health attentive to social and environmental determinants and a fundamental commitment to community participation and empowerment in health action.⁸ China's rural health workers (figuratively referred to as 'barefoot doctors') famously exemplified one aspect of this approach, but community-based initiatives flourished in numerous African, Asian and Latin American countries.⁹ In the Philippines, for example, some groups practised community-based 'structural analysis' through which community members traced the social and political roots of their health problems.⁸

Many of the principles and practices tested in community-based programs were taken up in the model of primary health care (PHC) promulgated at Alma-Ata and promoted by WHO under the leadership of Halfdan Mahler, head of the organisation from 1973 to 1988. For Mahler, PHC was the fundamental mechanism to achieve health for all people. PHC, properly understood, included the rapid expansion of basic health care services to disadvantaged communities but also action to address non-medical determinants. "Health for all," Mahler argued, "implies the removal of the obstacles to health – that is to say,

the elimination of malnutrition, ignorance, contaminated drinking water and unhygienic housing – quite as much as it does the solution of purely medical problems".¹⁰ Accordingly, the pillars of WHO's PHC strategy included intersectoral action to address health determinants.

The Alma-Ata declaration specified that PHC required action across multiple policy sectors, including agriculture, education, housing and industrial policy.⁷ Following Alma-Ata, WHO altered its own organisational structures to lend greater support to intersectoral action on social and environmental health determinants.¹¹ From the mid-1980s, SDH were also given prominence in the emerging health promotion movement. The 1986 Ottawa Charter on Health Promotion famously identified eight key determinants ('prerequisites') of health: peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice, and equity.¹²

The retreat to 'selective PHC'

From early on, both the potential costs and the political implications of a full-blown version of PHC were alarming to some constituencies, particularly those with an economic and/or ideological stake in market-based, individualistic models of health care. 'Selective PHC' was rapidly proposed in the wake of the Alma-Ata conference as a more pragmatic, financially palatable and politically tolerable alternative.¹³

Rather than pinning hopes for health progress on utopian visions of social transformation, advocates of selective PHC maintained that, at least in the short term, developing countries should concentrate their efforts on a small number of cost-effective health interventions aimed at major sources of mortality and morbidity. Selective PHC focused particularly on maternal health and child health, seen as areas where a few simple interventions could dramatically reduce illness and premature death. The most famous example of selective PHC was the strategy for reduction of child mortality known as 'GOBI' – short for growth monitoring, oral rehydration therapy, breastfeeding and immunisation.

By prioritising wide implementation of these interventions in developing countries, proponents argued, rapid progress could be made in reducing child mortality without waiting for the completion of long processes of health systems strengthening, much less for structural social and political change.¹⁴ Accordingly, the GOBI strategy became the centrepiece of the 'child survival revolution' promoted by UNICEF in the 1980s.¹⁵

For proponents of selective PHC, progress in child survival during the 1980s confirmed the superiority of this less ambitious but more pragmatic approach. For its critics, then as now, selective PHC betrayed the Alma-Ata vision and sanctioned a destructive retreat from holistic, pro-equity approaches in health.^{8,16} The prolonged and often bitter debates between defenders of comprehensive and selective PHC take on fresh relevance in the context of current efforts to promote action on SDH through mechanisms such as the CSDH.

The failure of Health for All and the ascendancy of neo-liberal models

The decades that followed the 1978 Alma-Ata Conference saw scant progress towards the more ambitious Health for All goals in many of the countries where needs were and are greatest.¹⁷ In some settings, significant advances were made towards the less ambitious objectives associated with selective PHC and child survival. However, in some of the most vulnerable countries and communities on the planet, particularly in sub-Saharan Africa, not only did Health for All remain a distant dream, but key health and social indicators actually went backwards during the decades between the Alma-Ata conference and the Health for All target year of 2000.¹⁸

The reasons for the failure of Health for All have been widely debated. While numerous factors exerted influence, the increasing impact of neo-liberal economic doctrines on global and national policy contexts in the 1980s and 1990s contributed decisively to derailing the Alma-Ata ideal.^{19,20} The core of the neo-liberal vision was (and is) the conviction that markets, freed from government interference, “are the best and most efficient allocators of resources in production and distribution” and thus the most effective mechanisms for promoting the common good, including health.²¹ Neo-liberal doctrines have affected health through two main mechanisms: (1) the macro-economic structural adjustment programs (SAPs) imposed on numerous developing countries by donor governments and the international financial institutions as a condition for debt restructuring and other forms of international support; and (2) health sector reform packages that have applied market-oriented, neo-liberal approaches specifically to the health system. Research has demonstrated negative effects of SAPs and neo-liberal health sector reforms on vulnerable populations in many instances.^{18,22,23} Most significantly for the current discussion, drastic cuts to public sector social spending mandated by neo-liberal theory negatively affected key social determinants of health and weakened the capacity of many developing country governments to intervene on SDH.^{8,24}

The Latin American social medicine tradition

One global region that has been heavily affected by neo-liberal economic and health policies – but which has also developed critical tools for understanding and acting on the social and political dimensions of health – is Latin America. The Latin American tradition of social medicine offers a rich body of critical reflection on health and society that remains too little known by practitioners unable to read Spanish and Portuguese.²⁵ In Brazil, the social medicine movement has adopted the name ‘collective health’. The term underscores the rejection of disease and medical intervention as the sole axis of reflection on health. Instead, health/illness is conceptualised as a collectively constructed process. The concept of collective construction describes both the forms in which health and illness express themselves in a society and the possibilities for shared action to bring change.

Historical trajectory

Originating in the middle decades of the 20th Century, the Latin American social medicine movement drew from progressive European social and political thought and challenged the established disciplines of hygiene, public health and preventive medicine.²⁶ The movement was and remains rooted in political practice with explicit ideological objectives.^{26,27}

Political commitments were clear, for example, in the work of Salvador Allende, pathologist and later president of Chile, who contributed centrally to the early flourishing of Latin American social medicine beginning in the 1930s. In 1939, Allende, then Minister of Health, published his groundbreaking book *La Realidad Médico-Social Chilena (The Chilean Socio-Medical Reality)*, which focused primarily on health problems generated by the poor living conditions of the working class: maternal and infant mortality, tuberculosis, sexually transmitted and other communicable diseases, emotional disturbances, and occupational illness.²⁸ Allende concluded his study with proposals for health improvement that emphasised social change rather than medical interventions: income distribution, a national housing program, and industrial reforms.²⁹ Allende’s example shows that attention to social determinants and health equity – and the effort to translate these ideals into political action – has been central to the Latin American tradition since its beginnings.

Conceptual and methodological aspects

Debora Tajer³⁰ has described the core elements of the Latin American social medicine tradition:

- A conceptual framework that highlights the economic, political, subjective, and social determinants of the health/disease/care process within human collectivities.
- A political dimension represented by political and social movements in Latin America that have valued the improvement of health status and equitable access to health services as pillars of the liberation of the people.
- A view of the concept of subjectivity theoretically and practically based on the Marxist tradition that considers the subject as historically conditioned and at the same time a maker of history.

Iriart, Waitzkin and colleagues, along with others, have clarified the theoretical-methodological approach used by Latin American social medicine. Social medicine considers the population and also social institutions as a whole that transcends the individuals that compose them.^{25,31,32} For this reason, social medicine’s main analytical categories include: social reproduction, social class, economic production, culture, ethnicity and gender.³³ Only in light of these categories can individual specificities such as sex, age, or education have explanatory relevance.

Social medicine considers health-illness as a dialectical process and not as a dichotomy. It studies the health-illness process within its social context, considering the effects of social changes over time. Tracing the epidemiological profile of a given society requires a multi-level analysis to understand why and how social

conditions crystallise into different ways of life that characterise groups situated in different positions within power structures. Different social positions determine differential access to favourable-protective or unfavourable-destructive health conditions, defining the dynamic that shapes health-illness.³⁴ In this light, as A.C. Laurell and others have stressed, a social medicine approach restores the importance of the concept of social class, defined in terms of relations of economic production. The concept of ideology is another theoretical axis for the social medicine tradition. Ideology includes the specific ideas and doctrines of a particular social group.³⁵⁻³⁷ A 'hegemonic' ideology tends to justify the interests of the classes that dominate a given society in a particular historical period. The demystification of dominant ideology in the contemporary context is part of the theoretical and political task Latin American social medicine sets itself.³⁸⁻⁴⁰

Praxis and participation

To describe the link between theory and practice, social medicine uses the concept of *praxis*, which is understood as the interrelationship of thought and action. In this sense, the social medicine movement, influenced by Italian Marxist philosopher Antonio Gramsci, underscores the two-way process of theory. Theory contributes to efforts tending towards social change, but theory is at the same time nourished by these efforts.²⁵ Accordingly, in many cases, the research activities of social medicine practitioners are developed together with trade unions, women's groups, coalitions of Indigenous people and community organisations.⁴¹ Thus, inseparably linked to the model of praxis in social medicine is the concept of people's right to participation in the decisions and actions that affect their health and well-being.⁴²

In summary, the Latin American social medicine tradition offers the example of an approach to understanding health that gives central importance to the social context and which also grasps the process of scientific reflection on health as necessarily linked to a project of political transformation. Health is understood as belonging to the arena of social policy, and in the end the task of social medicine necessarily lies in the political arena. For this reason, the movement recognises alliances with grassroots groups and social and political movements as vital.

Grasping new opportunities for action on SDH: the role of civil society

Knowledge of history prohibits facile optimism about the chances for rapid progress in addressing SDH. On the other hand, historical comparison also helps us appreciate the strategic opportunities emerging today. Scientific knowledge about SDH and health inequities has grown substantially in the past decade, although the bulk of research remains focused in wealthy countries. Increasingly, as well, concern with health inequities has moved beyond the scientific community into broader public and political forums, although again with a disproportionate share of the debates occurring in high-income countries. Today,

a small but growing number of countries have begun to put in place interventions, and in some cases broad national public health policies, oriented to the social determinants of health.^{43,44} Meanwhile, WHO's launch of a global Commission on Social Determinants of Health signals a fresh concern among some key global public health institutions – bolstered by an explicit commitment to engage middle- and low-income countries.

It is vital to take advantage of these opportunities to advance SDH agendas. History suggests a number of lessons for how today's movement for action on SDH can increase chances of long-term success. One of the most vital of these lessons concerns the participation of civil society in designing and implementing SDH policies. The success of national efforts to reduce health inequities through action on social determinants, and the relevance and impact of global exercises such as the CSDH, will depend heavily on the extent to which these processes: (1) engage civil society and communities as committed yet autonomous partners; (2) empower civil society and community groups for knowledge and leadership on SDH; (3) empower and support civil society for ongoing social monitoring of SDH conditions and policy responses.

The CSDH has pledged to incorporate partnership with civil society as a core component of its program. In contrast to some other international bodies, the CSDH has tried to create space for autonomous, critical civil society participation. To this end, the CSDH has invited civil society groups themselves to define their terms of engagement and preferred strategies for collaboration with the commission. CSDH civil society strategies have been developed through consultative processes led by civil society groups in four global regions (Africa, Asia, the Eastern Mediterranean and Latin America/Caribbean). The civil society networks facilitating regional strategy development, and which will also have responsibility for co-ordinating implementation, are called CSDH regional civil society facilitators (CSFs).

Four themes appear especially relevant for understanding how civil society and communities can contribute to successful action on SDH:

1. The knowledge of SDH emerging from civil society and communities, 'civil society knowledge' being understood as rooted in collective daily experience and leading to people's empowerment.
2. The role of civil society in advocacy and dissemination of findings on social determinants.
3. Civil society's capacity for social monitoring of SDH policy processes at local, national and global levels.
4. The need for a nuanced view of civil society organisations themselves, avoiding romantic clichés and acknowledging civil society's internal diversity and conflicts.

Recalling the history of SDH action, and in particular experiences emerging from Latin America, prompts us to underscore the following lessons for the CSDH. The commission should orient itself to the concept of *praxis* as reflection inseparably interwoven with action for political change – implying a break with

conventional postures of scientific 'neutrality'. At the same time, the CSDH and other institutions driving action on SDH must strive to make civil society participation a reality. Often such participation has been altogether absent, or else civil society and community groups have been instrumentalised as contributors to processes they do not own or control. The challenge is to integrate civil society participation not as a means but as an end in itself – the democratic space in which social control of institutions (including the CSDH) becomes real.⁴² This will not be easy to achieve and maintain, because it implies a change in the concrete distribution of decision-making power. If the CSDH succeeds in sustaining such a model of genuine partnership with civil society, this in itself will constitute a meaningful legacy for future collective action on social determinants of health.

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Marilyn Wise, from the Australian Centre for Health Promotion, responds:

This paper addresses one of the most significant contemporary issues for health promotion across the world. It draws on a body of knowledge and experience that is not readily accessible to English-speaking Western readers and expands our understanding of the perspectives of other parts of the world. It is important in its own right and a reminder of the power of comparison among theories, traditions, and experience. It is also a reminder of the relationship between history and contemporary social and economic conditions and of the lessons we can learn from history. Furthermore, it is an example of one of the positive outcomes of this period of globalisation – of the expansion of knowledge to incorporate a wider range of philosophy, theory, experiences, and cultural perspectives.

However, in my view there are some aspects of the paper that merit deliberation.

Although intuitively the argument for praxis and the high level of engagement of civil society is completely synchronous with the evidence of effective health promotion, it is necessary in this age to examine the rhetoric in light of practice and evidence. For example, where has the model been translated into action in Latin America and what have been the results? What is the evidence of the effectiveness of the Latin American approach in improving the health of populations – proximal or not?

The only evidence of improved health outcomes included in the paper actually points to a World Health Organization success with its model of primary health care, at least in the short term. Of course, this model means that the pool of need (mothers and children) is unlikely to have been reduced because the model of intervention and care has not addressed the social determinants of poor maternal and child health. But nonetheless, the fact that there is evidence of progress and that many women's and children's lives have been saved and improved seems to contradict the authors' point about primary health care, praxis and engagement of civil society. Rather, it points to the contribution that highly focused efforts can make – and the fact that this is an example of what's possible when the right combination of commitment and resources is applied to a health issue. I am not arguing against the Latin American model – quite the reverse. It is the question of evidence that is at issue here.

The paper is based on a strong ideological stance and expresses values with which I happen to agree strongly. I also agree strongly with the authors' analysis and criticisms of the dominance of neoliberal economic and health policies and the harm they are wreaking on people, communities and countries. However, I believe that there is real danger in substituting one ideological stance for another without evidence. I also believe that there is evidence to support the policy directions being proposed in this paper and that it should be used. Although their empirical work is based on national data, Navarro et al.'s paper on politics and health in the *Lancet* demonstrates, again, that even in Western democracies there is a significant positive difference

in the health of populations in countries in which strong welfare and civic engagement approaches have guided democratic decision making.

A final point of discussion in the paper is the emphasis on the engagement of civil society and the building of a social movement. Clearly, the widespread, profound social changes implied by a focus on improving the distribution of the social determinants of health will require the active engagement and mandate of civil society. These are vital in their own right as a social determinant of health (as the authors point out). However, the argument presented in the paper leaves government, private industry (particularly large corporations), and global organisations untouched.

But governments, global organisations, and corporations are the instruments of we, the citizens. On our behalf, as citizens, they play central roles in creating and distributing the determinants of health. It is, of course, true that civil society can and should agitate and advocate for change and should hold decision-makers in all sectors accountable for their/our decisions and their consequences. But it is through the instruments of government and non-government agencies and through private sector organisations that the actions that actually redistribute power and resources must be taken ultimately. Our purpose is to ensure that every citizen of every country has, throughout their lives, access to the conditions they need to become and stay healthy (and to achieve a high level of well-being). We cannot wait for governments and industry to make bad decisions (or decisions that are bad for health) and then bring civil society (and health promotion for that matter) to bear on these. Our goal is to have them make the right decisions in the first place.

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The role of the People's Health Movement in putting the social determinants of health on the global agenda

Ravi Narayan*

The People's Health Movement (PHM) is a global network of people-oriented health professionals and activists, academics and researchers, campaigners and people's organisations that have been one of the most active advocates in putting the social determinants of health on the global agenda. They have done this through promoting their charter, their advocacy strategies, and their proactive and assertive promotion of these deeper determinants of health and health care. This short paper highlights some of the key events and initiatives in this direction.

From 4-8 December 2000, the first Global People's Health Assembly took place in Savar, Bangladesh, when 1,453 participants from 75 countries gathered to share people's voices and testimonies about distortions of primary health care and the neglect by governments and international agencies of the Health for All Goals. This collective and interactive dialogue led to the evolution of a People's Charter for Health, which became the manifesto of a People's Health Movement.

This manifesto is the strongest consensus statement on the social determinants of health in the international scene. The preamble of the charter¹ states, perceptively, that: "Health is a social, economic and political issue and above all a fundamental human right. Inequality, poverty, exploitation, violence and injustice are at the root of ill-health and the deaths of poor and marginalized people". The principles of the charter that follow reiterate that "health is primarily determined by the political, economic, social and physical environment and should, along with equity and sustainable development, be a top priority in local, national and international policy-making".

Finally, in the Call for Action that forms the major part of the charter, a series of actions on the broader determinants of health – including the economic challenges, the social and political

challenges, the environmental challenges, and the challenges of war, violence, conflict and natural disasters – are enumerated. The charter also makes a plea for a people-centred health sector and for stronger involvement of people's organisations and movements in the health decision-making processes at all levels.

This charter, now translated into more than 50 language editions and distributed widely all over the world, has become an expression of the movement's common concerns; of its vision for a better and healthier world; a tool for advocacy; and a call and rallying point for radical action, especially on these deeper social determinants.

At the time of the First Assembly, the director-generals of the World Health Organization (WHO) and UNICEF were invited to participate, since these United Nations (UN) organisations had co-sponsored the Alma-Ata Conference in 1978 that gave the world the 'Alma-Ata Declaration on Health for All'.² This declaration had been considered an equally significant document on social determinants.

The declaration had noted that "the existing gross inequality in the health status of the people is politically, socially and economically unacceptable" and "economic and social development is of basic importance to the fullest attainment of 'Health for All'." In spite of this historic recognition of social determinants in health by these UN organizations in an earlier era, their leadership was conspicuous by their absence at the People's Health Assembly in 2000. This absence was significant and noted in the final report of the Assembly and in many articles and reports that followed.

However, the irony of the situation, as was noted by Claudio Schuftan,³ was that "the World Bank – an institution heavily criticized by the delegates from the world over, did show up to participate in the meeting in which its actions in health were put under heavy scrutiny and received unanimous condemnations".

The People's Health Movement decided in its charter to call on people of the world to demand a radical transformation of the

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Abstract

The People's Health Movement (PHM) is a global network of people oriented health professionals and activists, academics and researchers, campaigners and people organizations that have actively promoted the re-endorsement of the 'Health for All' principles of the Alma Ata Declaration and the importance of social determinants of health and health care. The paper outlines a series of ongoing advocacy initiatives through a PHM - WHO advocacy circle that has consistently since 2001 nudged WHO to reaffirm the Alma Ata principles and focus on the social determinants of health. This has led to an evolving dialogue with PHM and the setting up of the WHO commission on social determinants of health, in which the PHM, is actively engaged.

World Health Organization so that "it responds also to health challenges in a manner which benefits the poor, avoids vertical approaches, ensures intersectoral work, involves people's organizations in the World Health Assembly and ensures independence from corporate interests".¹ Soon after the First People's Health Assembly, the evolving movement set up a small WHO advocacy circle that began to use every opportunity to engage with WHO and encourage it to rediscover its original mandate and commitment to the social determinants of health. Over the next three years, this continuous engagement led to a series of interesting events and dialogues that began to put people pressure on WHO in different ways. These included a set of provocative in-house workshops at WHO headquarters by a PHM-linked health policy resource person in April 2001. These workshops led to the announcement of the Civil Society Initiative by the WHO Director-General and an invitation for dialogue to a group of PHM leaders at the next World Health Assembly in May 2001.

In November 2001, the Global Forum for Health Research, at its Forum 5 in Geneva, also invited PHM resource people to its meetings to share concerns from the charter and noted in its forum report⁴ that "poor people are also more likely to suffer from the degradation of the environment and from discriminations. Once trapped in this vicious cycle, the chain of causality is very difficult to break, as pointed out by numerous reports, including the People's Charter for Health".

By May 2002, the WHO began to respond to this pressure and invited PHM to present the People's Charter for Health as part of a technical briefing at the 55th World Health Assembly (the first ever example of civil society facilitation of a WHO technical briefing). More than 35 PHM delegates from all over the world participated in this briefing session and the occasion was also used to make a strong plea to WHO to become a strong advocate for poverty eradication; promote comprehensive approaches; strengthen public sector health; involve people's organisations in WHO work; and to promote more participatory, relevant and transparent public health policy processes and initiatives. It was also suggested that WHO should make a greater commitment to the social determinants of health. This dialogue and engagement was reported in the popular and medical press including the *Lancet*, some internal documents of WHO, and many other papers.

In May 2003, which was also the 25th anniversary of the Alma-Ata Conference and Declaration, PHM released an Alma-Ata anniversary pack⁵ that again emphasised the need for research, policy and programmatic action, especially on the social determinants. Eighty-two PHM delegates attended the World Health Assembly that year, including Halfdan Mahler, the WHO-DG Emeritus who also participated under the PHM banner. These delegates made their presence felt in defence of comprehensive primary health care and the social determinants through various advocacy strategies. The late Dr Lee Jong Wook, the then WHO Director-General elect, invited PHM for a dialogue and assured them that it was vital for WHO to listen to

the voices of the communities they represented.⁶ Dr Lee followed up this meeting by involving PHM formally in the Primary Health Care Policy Development consultation in Madrid in October 2003, and by identifying some areas of dialogue between PHM and WHO in November 2003 which included HIV-AIDS, GATS, WTO, primary health care and civil society partnerships.

In July 2003, at a World Civil Society Forum held in Geneva, the then PHM global co-ordinator commented on the inadequacies of the WHO report of the Commission on Macro Economics and Health and made a plea for a 'Poverty and Health Commission' to be appointed in the 25th anniversary year of Alma-Ata Declaration, consisting of civil society organisations such as PHM and UN organisations including WHO and the Global Forum for Health Research. This commission was to be mandated to tackle the determinants of health and not the end products (disease) and to do this with a human rights perspective and a commitment to building community partnerships.

In January 2004, this informal but sustained dialogue led to a complete role reversal in WHO vis-à-vis its relationship with the movement. From a total non-participation in the First People's Health Assembly, the WHO moved towards a proactive participation. Four headquarters staff were sent by the WHO Director-General to participate in the Third International Health Forum in Defence of People's Health and the special health session at the World Social Forum, Mumbai, entitled '25 years after Alma-Ata – Globalisation and Health for All Challenge', which were organised by the People's Health Movement.

The dialogue initiated at this event led to some interesting developments. The Mumbai Declaration⁷ released after these events noted that while "WHO has recently become stronger in its technical support to HIV-AIDS, the movement is concerned that the 3x5 initiative focuses on treatment alone, ignoring the complexity of the epidemic; promotes long-term dependence on donors; has inadequate involvement of people with and affected by HIV-AIDS and civil society in the planning and implementing of the program", and pays inadequate attention to "improving health systems or to life skill education, women's health empowerment or utilization of traditional system of medicine". This process ultimately resulted in the People's Charter for HIV AIDS⁸ a few months later, which was presented by PHM and its civil society partners at the World AIDS Conference at Bangkok in 2004, a conference that had WHO as one of the co-sponsors.

In May 2004, 30 PHM delegates again attended the World Health Assembly and continued to advocate for comprehensive primary health care and action on the social determinants. Later in the same year, PHM resource persons were invited to preparatory meetings organised by the WHO on its proposed WHO Commission on Social Determinants of Health. The sustained pressure over the years had begun to take definitive shape. These PHM resource persons, along with other colleagues, continued to work closely with the secretariat team

that was set up to evolve and support the commission. In the same year, PHM resource persons were also invited to be members of the WHO Task Force on Health Systems Research to add their concerns on social determinants and their effects on health systems. This led to various papers by PHM resource persons on pushing the international health agenda towards equity and effectiveness and drawing attention to research efforts on the social, political and economic determinants of health.⁹

By end of the year, PHM's contribution to the importance of social determinants of health was recognised even in academic circles during discussions on perspectives on global development and technology and effects of globalisation on health. It was recognised that the People's Charter for Health "lays out a blue print for the transformation of the existing global order through democratization at all levels of the existing (health) system and through ... a globalization (of health) from below".¹⁰

In March 2005, when the WHO Commission on Social Determinants of Health (CSDH) was formally launched in Chile, this role of PHM was recognised by the invitation to Dr Fran Baum, the PHM Australia convener, to be a commissioner, and by the acknowledgement at the opening ceremony of PHM's role in the evolution of the idea. Subsequently, this process has continued with the participation of the chairperson of the CSDH and a commissioner at the Second People's Health Assembly in Cuenca, Ecuador, and an increasing engagement with PHM and other constituents of civil society in the Asia, Africa, Middle East and Latin American regions with the CSDH. PHM is involved with other civil society actors in different ways in engaging with the CSDH and its knowledge networks in collecting the evidence on the social determinants of health from all over the world.

Three important developments at the Second People's Health Assembly in Cuenca, Ecuador, in July 2005 symbolised this special interest and contribution of PHM. The Cuenca Declaration,¹¹ which was an important output of the second assembly, is another forceful consensus document on the social determinants of health. *The Global Health Watch*¹² (also called *The Alternative World Health Report*), which was released at the Second People's Health Assembly, is a compilation of evidence on the social determinants of health by more than 150 academics, researchers and activists in solidarity with the Global Health Watch process facilitated by People's Health Movement, Medact, and Global Equity Gauge Alliance.

Finally, the late Dr Lee Jong Wook, in a special video message to the assembly,¹³ noted that: "People's health depends to a very large extent on the social conditions in which they live. Policies that can improve those conditions are among the best

means we have of protecting health ... The commissioners (of the Commission on Social Determinants) are seeking ways to make use of the vast amount of knowledge and potential for action represented here today in the People's Health Assembly. I am delighted that the commission as well as senior staff members of WHO will be actively involved in the discussions here this week ... Our objectives are the same and our methods complement each other: working with governments and with non-governmental groups to protect and promote the health of all peoples. By combining our strengths and uniting our efforts, we have achieved a great deal and we will achieve a great deal more together."

In conclusion, while the PHM has played its own small but significant role in bringing the social determinants of health higher on the global agenda, symbolised by the WHO Commission on Social Determinants of Health, much more needs to be done if the action on the social determinants is to become part of international public health policy and action. As noted in a recent report,¹⁴ "we need a continuous sustained and collective effort", and to remind ourselves through the People's Health Charter that a long road lies ahead in the campaign for 'Health for All'. Are we all ready for this commitment?

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The social determinants of health: is there a role for health promotion foundations?

Barb Mouy and Ali Barr

Introduction

A vexing challenge faces health promoters. Even with great prosperity and improvements in population health overall, marked social differences in health and life expectancy negate these achievements. Evidence of these social variations is compelling and consistent across the globe.^{1,2} Acting on social determinants of health (SDH) to address these health inequities requires an understanding of a complex policy environment and other factors that shape the responses of a range of key actors, including the state. In this context, the paper examines the potential of health promotion foundations (HPFs), a semi-autonomous arm of the state, to act at several policy and program intervention points to address SDH and reduce health inequities.

What are health promotion foundations?

HPFs are organisations established through a general or specific Act of Parliament with the primary purpose of promoting health.³ Most often they are statutory authorities, as is the case in

Australia; namely, the Victorian Health Promotion Foundation (VicHealth) and the Western Australian Health Promotion Foundation (HealthWay), although some are nested within central government, such as ThaiHealth. HPFs have been established in many countries in Europe and Asia and at the State level in Australia and Canada. New foundations are emerging in developing countries (most recently in Malaysia).

Foundations have several objectives prescribed in their enabling legislation to promote the health of the people in whatever government jurisdiction (nation or state) they are enacted.⁴⁻⁶ In line with, and to give substance to, these objectives a fundamental statutory function of many HPFs is to administer a long-term health promotion fund, also established by the enabling legislation. Money is collected through a range of mechanisms, including hypothecated tobacco and alcohol taxation, indexed grants from consolidated revenue and revenue raised through individual sickness insurance premiums.

Statutory authorities are part of a broad group of quasi-governmental organisations (QUAGOs) that undertake activities and administrative functions outside of the central functions of the state.^{7,8} The rationale for this form of organisation is to link public purpose with the enterprise and innovation potential of

The views expressed in this article are the authors' and do not represent those of the Victorian Health Promotion Foundation, the International Network of Health Promotion Foundations, or any other organisation.

Abstract

Issue addressed: If they are to respond effectively to health inequities, organisations involved in health promotion need to refocus on the social determinants of health (SDH) and the distribution of resources for health.

Methods: This paper examines the potential of health promotion foundations (HPFs), a semi-autonomous arm of the state, to act at several policy and program intervention points to address the SDH and reduce health inequities.

Conclusion: The public purpose, enterprise and innovation potential of health promotion foundations provides them with unique capacity to respond to SDH. In the complex and contested policy environment surrounding action on the determinants of health, the role that foundations can most usefully play is that of a change agent in a broader social movement seeking health equity.

Key words: Social determinants of health, health inequities, health inequalities, health promotion foundations.

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So what?

No single model, approach, sector, organisation or group will be effective in reducing health inequities, although some may be more important players. It is valuable for health and other organisations – government, non-government and private alike – to reflect on their place in the apparatus of change and how they can most usefully work with others to achieve greater health equity.

being outside centralised government or in the private sector.⁷ While the reasons for establishing a statutory authority will vary, in general the advantages of HPFs in promoting health result from a combination of factors related to their organisational independence and longevity, stable funding and potential for innovation (see Table 1).

The last feature listed in Table 1 is significant as HPFs, along with concepts of health determinants, have evolved over the past two decades. From an initial role of buying out tobacco advertising and sponsorship in sport and the arts and establishing health promotion programs (as was the case in Australia), the roles have diversified to include the role of expert stakeholder, partner, facilitator, advocate, system and capacity builder, and change agent.

Although HPFs have some flexibility to advocate reform, they also have limitations. In Australia, two established foundations were reabsorbed into government portfolios (in South Australia and the Australian Capital Territory). While the reasons for their dissolution varied, HPFs can arguably be duplicative of other government programs; unresponsive to changing policy imperatives of government; seen as a third party increasing transaction costs; and no longer contemporary if the Act is outdated by other legislative or regulatory changes. These potential limitations create an environment where HPFs need to be able to anticipate and manage risks when challenging prevailing orthodoxies.

What are the 'social determinants of health'?

Definitions of social determinants of health include:

- "the economic and social conditions that influence the health of individuals, communities and jurisdictions as a whole".¹²
- "the conditions in which people live and work" which influence their health.¹³
- "the root causes of disease and health inequalities".¹⁴

The term the 'social determinants of health' is an elusive concept that is frequently and inappropriately used in a normative way. It denotes the outer reaches of a web of causation encompassing many diffuse and incompletely understood influences on population health. The complexity of this web may be viewed as both combinational – there are many influences that can have an impact on health on multiple levels – as well as dynamic – influences may interact or behave in complex ways over time, with multiple feedback patterns and pathways, producing unexpected, counterintuitive or disproportional effects.¹⁵ The utility of the term is in referring to influences on health that are distant to the individual, such as social and economic policy and conditions, and which influence population-level distributions of health and illness.

Inequities in the SDH are manifest in a pattern of health inequities characterised by a gradient of health from the poor and disadvantaged, who experience worse health, to the rich and powerful who experience relatively good health. Health inequities are systematic, unfair and avoidable or remediable

differences in the health of population subgroups related to social, economic, demographic or geographic differences between them.¹⁶ Four related sets of explanations for how SDH become 'embodied' in individual and population patterns of health have been proposed: material (structuralist), psychosocial, behavioural and physiological pathways.²

The complex process by which the inequitable distribution of the SDH result in health inequities is usefully understood as a systematic and progressive process of differentiation between subgroups of a population.¹⁷ Social stratification results in different health exposures (positive and negative) in different population subgroups along with differential vulnerability to these exposures.¹⁷ All of these factors interact with each other and flow through to differences in the consequences of ill-health for these groups, which in turn feed back into social stratification.¹⁷ One of the strengths of this model is the policy intervention points it identifies (see Table 2). These usefully focus a discussion of what health promotion foundations can do to address the SDH and reduce health inequities.

What influences the state's response to SDH?

Insights from conceptual models of health and policy making are useful in understanding how the state, and by extension HPFs, are positioned to respond to health inequities. These include:

- Utilitarian and intrinsic views of the value of health.

Table 1: Inherent features of statutory authorities.

Ability to be independent yet accountable
<ul style="list-style-type: none"> • The independence, objectives and powers of the organisation are established by an Act of Parliament. • The board and chair of the organisation are relatively independent of the Minister and the capacity of the Minister to direct them can be defined or limited. • The organisation operates at arm's length from the core machinery of government. • Within legislative (and political) limits, the organisation is free to advocate and act in its own right.
Capacity to endure despite government and policy change
<ul style="list-style-type: none"> • Parliament must act in order to create or abolish the organisation. • The organisation can withstand changing policies and fortunes of government to some extent and maintain their role and programs regardless of the government of the day. • HPFs are a 'trustee for the public interest' where they have a perceived public purpose apart from party political interests.
Security of resources to allow for sustainable interventions
<ul style="list-style-type: none"> • The organisation administers a permanent statutory fund and/or has their own independently managed finances from the ministry of finance or other sources.
Potential to facilitate innovation and intersectoral action and manage risk
<ul style="list-style-type: none"> • Because of financial, program and policy independence from government and links to community sectors, HPFs can facilitate collaboration both within government across departments and outside of government across sectors. • Innovation and enterprise were the drivers of the emergence of the statutory authority form. • A combination of factors listed above allows HPF to manage and absorb risk (such as holding relatively controversial positions).

Sources: Wettenhall 1981,⁷ Jenkins 2001,⁹ Carrol 2004,¹⁰ Russell 2005.¹¹

- Individualist and structural models of health.
- Models of the role of the state in the policy process.
- Policy processes addressing social determinants of health.

Different models of the value of health permeate the media, popular understanding and policy discourse. Agencies, and the constituencies they are trying to influence, may prioritise the intrinsic value of health (i.e. that health is of fundamental value in and of itself) or the utilitarian value of health (i.e. the value of health is in its public utility and its usefulness in promoting some public good, for example economic wellbeing). Although these two views of health may not necessarily be dichotomous or in tension, it is necessary to understand their relative importance in policy discourse and positions when advocating for action.

Another set of considerations is whether prevailing views of health are based on individualist or socio-structural models of health. An individualist model posits health as under the control of, and therefore as the responsibility of, the individual.¹⁹ Individuals are seen as rational autonomous actors and their health status is viewed as the result of personal behaviours and choices.¹⁹ A socio-structuralist model posits health as determined by factors outside of the individual's control, explaining health inequities as the result of patterns of social inequality and the concentration of power and resources in certain groups in society. Consequently, change in economic and social policy and improvements in living and working conditions (i.e. SDH) are emphasised as key pathways to health.¹²

Hill describes a range of models of the role of the capitalist state in the policy process, including:

- A passive neutral entity – the state responds to the policy demands of interest groups and referees between them.
- A relatively autonomous actor – the state is an active interest group pursuing its own ends or acting on the interests of dominant groups.²⁰

Different parts of the state may work in one or more models at different times according to the policy issue being contested and the constituencies involved. These models help one reflect on how the state has responsibility for, influence over and power to change the SDH (and how it may be constrained) and

consequently how the influence of different state agencies is best exercised.

Finally, insights from models of the process of developing policy on health inequities are also useful in understanding how the state and HPFs respond to SDH. Whitehead's action spectrum on inequalities in health outlines the stages of the diffusion of ideas and development of action on health inequities (see Figure 1).²¹ Although not necessarily linear or progressive, the model suggests that in the process of developing policy on health inequities, states move between and through stages of measurement, recognition, awareness raising, denial/indifference, concern, will to take action, isolated initiatives, more structured developments and comprehensive co-ordinated policy.²¹ Whitehead compares three approaches to developing a national agenda on health inequities: a consensus-building strategy in the Netherlands; a confrontational approach in the United Kingdom; and an approach that emphasised social justice and solidarity in Sweden.

Mackenbach and Bakker completed a comparative study of the evolution of national health inequities policy agendas in Europe.²² Both Mackenbach and Bakker and Whitehead identified a series of factors that promoted policy progress including: deteriorating socio-economic conditions; worsening health trends; the availability of descriptive data; the presence of political will; general economic development and security; and the action of international agencies.^{21,22}

How can HPFs most effectively respond to SDH?

As already argued, organisational capacity associated with their statutory status provides HPFs with unique opportunities to address SDH (albeit there are limitations). Insights from conceptual models of health and the role and process of the state in developing policy on health inequities suggest that the policy environment is complex and uncertain. The apparatus of the state is likely to be constrained in its response by a range of factors such as the complexity of the issue, uncertain outcomes from different courses of action, the importance of the issues at stake, the dynamics of policy debates and disputes, and paradigm stalemates.

Table 2: Policy challenges and sector responses in addressing health inequities

Point of intervention	Point in differentiation process	Sector response
A: Reducing social inequities	Social stratification and exposure	All sectors
B: Addressing factors mediating the effect of social disadvantage on health	Exposure and vulnerability	Housing, education, welfare sectors, etc Health promotion primary care environmental, occupational and public health – Universal and selective health promotion and primary prevention
C: Improving accessibility and effectiveness of health services for low socio-economic groups	Vulnerability and consequences of ill health	Primary, acute and continuing care Universal, accessible, quality health care Secondary and tertiary prevention
D: Reducing negative impacts of poor health on socio-economic position	Consequences of ill health and social stratification	All sectors

Adapted from Diderichsen (1998)¹⁷ and Mackenbach and Stronks (2002).¹⁸

Role of change agent

In this context, we argue that the most effective response by HPFs is to act in the role of change agent. This capitalises on their public purpose, enterprise and innovation capacities for addressing SDH. In this role, HPFs can undertake or support a range of activities including evidence building, internal government policy advocacy, cross-sectoral collaboration, community engagement and constituency building, and program funding for disadvantaged groups. Also, HPFs' capacity to be flexible, opportunistic and strategic enables them to step outside standard health structures and frameworks and more effectively navigate this dynamic and contested space. No single model, approach, sector, organisation or group will be effective in reducing health inequities, although some may be more important players. A change agent seeking to connect, reconcile, bridge or shift positions, approaches and structures, is arguably required.

The independence of HPFs allows them to be relatively eclectic and pragmatic in their approach and act according to opportunities and constraints. Accordingly, HPFs may elect to sit at the junction between the intrinsic and utilitarian and the individualist and structuralist view of health (see Figure 2). This enables tactical shifts to either side of this junction as opportunities arise in the short term, assuming a long-term view to shifting action towards the social determinants end of the continuum. With this stance, they can work at bridging distances and contradictions between these positions without being caught in the doctrine associated with any extremity – all the while contributing to longer-term shifts in the policy agenda.

Linking and consolidating strategy

Similarly, a level of eclecticism is needed when adopting strategy: a mix of approaches is required across the four policy intervention points identified in Table 2. Much of the important work in addressing SDH and reducing health inequities is related to the first policy intervention point: reducing social inequities and disadvantage. This is not, in and of itself, the core business or province of the health sector. Most of the reform required to reduce social disadvantage is in the domain of other sectors, including finance, infrastructure, and education. The benefits of this reform will likewise be shared with other sectors including welfare, justice and environment.

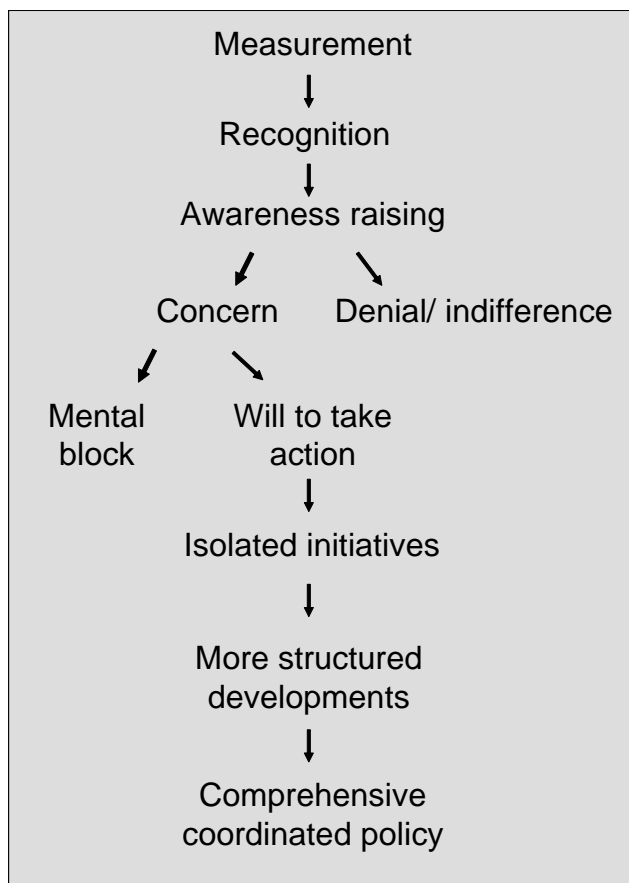
HPFs can play a role in keeping the reform agenda moving by investigating and advocating the relationship between health and material disadvantage and the human and social costs of health inequities. This includes action from the level of macro-social policies that address material disadvantage, such as taxation and equal opportunity policies, to the level of local material disadvantage – focusing on people in places and trying to reduce negative health exposures in local environments. HPFs can be smart as advocates: there are arguments that support the reduction of health inequities that can appeal to different policy positions. These include: that social and economic environmental conditions are estimated to determine

approximately half of population health status; health inequities have spill-over effects for the rest of society; and interventions to reduce them are cost effective and deserve priority on efficiency grounds.^{13,23}

The second policy intervention point, to reduce the effect of social disadvantage on health, emphasises the need to intervene in psychosocial and behavioural pathways and address factors that mediate the relationship between disadvantage and poor health. HPFs have a role in investigating, explaining, and intervening in the relationship between poor health and psychosocial effects of poverty such as social marginalisation, social stress and lack of opportunity and control. An important part of this role is to seek community-generated understandings of and responses to these relationships. Also by adding to the understanding of common determinants of multiple risk behaviours and factors in disadvantaged groups and families, HPFs can intervene to leverage psychosocial protective factors and reduce risk; for example, by working in partnership with other sectors to support and evaluate health effects of their initiatives (e.g. home visiting programs, early childhood support and transition to school programs).

Policies on health inequities in Sweden and Norway include goals to reduce the difference across the socio-economic gradient in the percentage of people who have risk behaviours

Figure 1: Action Spectrum on Inequalities in Health.



Source: Whitehead 1998.²¹

such as smoking, alcohol misuse, and insufficient physical activity.^{24,25} While acknowledging and working on behavioural pathways in disadvantaged groups, HPFs can help shift approaches away from individualism and develop more sophisticated ways of understanding and intervening to change behaviour. For example, HPFs could build further evidence that behavioural pathways are nested in and interact with material and psychosocial pathways.

Although much of the work of HPFs in addressing SDH is in the policy intervention points discussed above, they still need to consider advocacy and support for innovations to improve the accessibility and effectiveness of health services for low socio-economic groups and reduce the negative effects of poor health on socio-economic position (rows C and D of Table 2). While social position predominantly determines health, rather than the reverse, less healthy people are more likely to be downwardly socially mobile. HPFs arguably have a role in advocating universal access to appropriate, effective and quality health services across the health care spectrum, for example supporting initiatives such as Medicare and the Pharmaceutical Benefits Scheme. Likewise, there is a role in advocating for the maintenance of sickness, disability and Workcover benefits at sufficient levels to help avoid a health-related slide into poverty, along with strategies to assist the chronically ill or disabled to re-enter or participate more fully in the workforce.

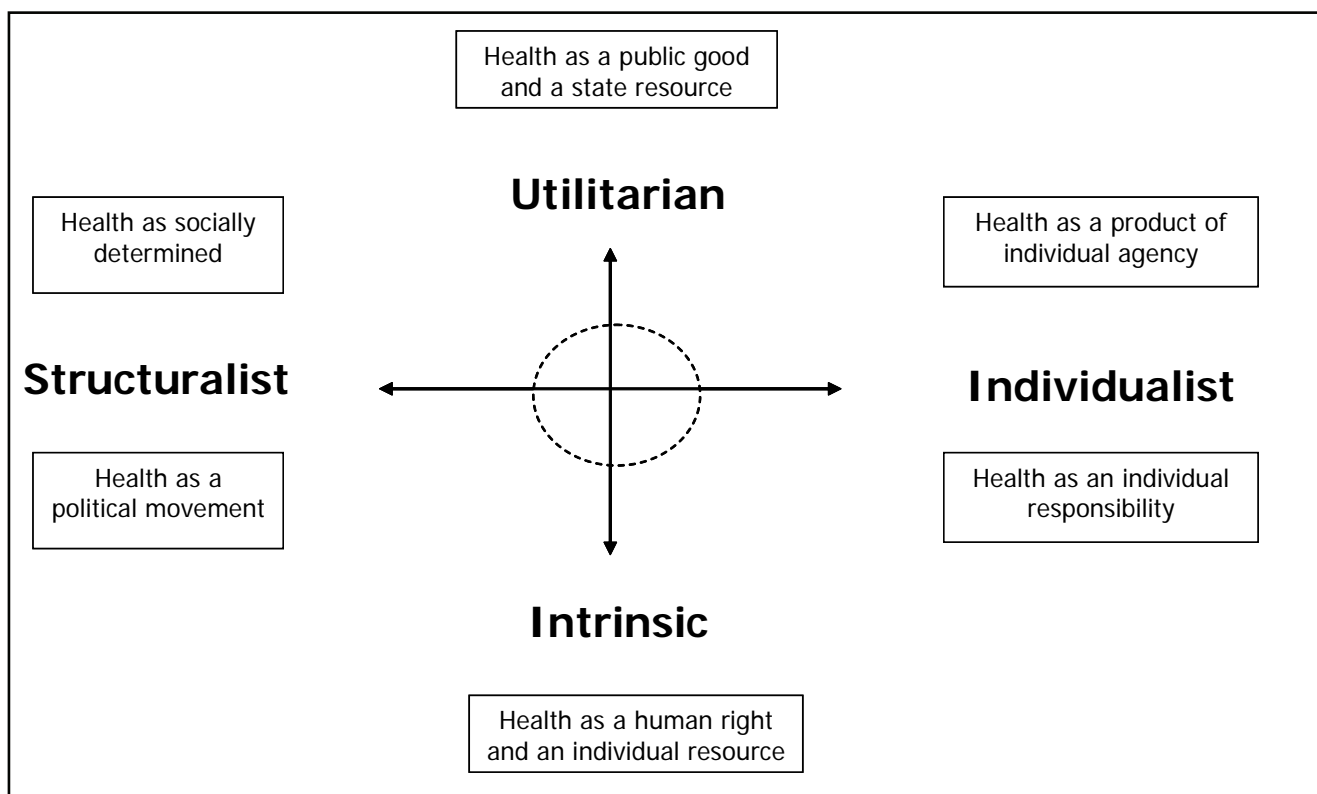
Connecting organisations, sectors and people

As argued earlier, no single organisation, sector or group will be able to accomplish the fundamental changes required to address SDH. Positioning HPFs as change agents is also important in acknowledging the contribution they can feasibly make and in locating their efforts as only one part of a broader movement of social change. It is improbable that health promotion and public health, on their own, can accomplish major social change. Most of public health’s innovation could arguably be seen as responding to and reflecting social change rather than initiating it; hence, positioning HPFs as change agents is a more realistic reflection of their capacity to be a catalyst in, rather than a fundamental driver of, social change.

Accordingly, HPFs have a role in building and contributing to broad-based, intersectoral collaborations to address shared social determinants and find ‘joined up solutions to joined up problems’. The integration of effort and economy of scale offered by broad-based collaborations are key to progress on social inequities and delivering outcomes for any one sector.

If it is strategic to broaden the focus from determinants of health to shared determinants of health and other outcomes, it follows that it is also strategic to shift to executive, rather than health sector, leadership of initiatives. The high-level leadership of a committed executive, as demonstrated in the Treasury-led UK response to tackling health inequities, is arguably crucial to overcoming bureau-based administrative and budgeting silos

Figure 2: Competing health paradigms.



and supporting cross-portfolio approaches.

While HPFs may build collaboration and commitment across sectors and at different levels of government, the decision stakes surrounding SDH are such that fundamental social change won't happen without a people's movement. Public health is arguably increasingly defaulting to a model of state control and not engaging people power to drive social change. HPFs, in their role as change agents, can refocus on this, engaging people as central agents in the formation and implementation of policy and ensuring those with the poorest health have their voices heard and opportunities for redress.²⁶

Social determinism shifts us from "a focus on individuals to a recognition that relational and group-based phenomena shape and influence individual aspiration, capabilities, and agency".²⁶ Ironically, this loops one back to individual agency, within a social movement, as the key ingredient in addressing SDH.

HPFs as change agents: is it defensible?

The eclecticism argued for may be of concern to some who prefer a more rational and instrumental approach. When always tactically responding to complex policy problems it may be perceived that HPFs become compartmentalised in their response rather than systemic. But as Whitehead's schematic and the experience of other countries suggests, the trajectory of policy development in relation to SDH may have a logic of its own, where a flexible and strategic approach may be warranted in the early part of the process (to help constituencies and governments move through phases), consolidating efforts and strengthening momentum until a more co-ordinated, comprehensive and instrumental approach is possible.

Maintaining the flexibility and responsibility of a change agent may also be more challenging than the rigidity of a hard-line position. It requires an organisation to be more reflexive about what it does and represents and may require it to assess, bracket or compromise its position without losing sight of goals or values. It may also require their workforce to critically appraise assumptions and rhetoric that may be problematic in finding solutions, for example examining the contradictions inherent in the notion of empowerment.^{27,28}

Despite the theoretical advantages of HPFs acting as change agents to address SDH, a question remains of how well they can perform in this role. We have not explored this directly but would argue that if HPFs are to shift the agenda from behavioural to SDH then they will need to consider how to reframe their aims, objectives and operations to reflect and foster the paradigm shift. For example, while still retaining their focus on health, HPFs may need to examine how they are addressing the nexus between health and: poverty and social inequality; workforce participation; lifelong education; consumption patterns; and environmental sustainability.

Conclusion

The multiple pathways through which SDH interact and the context-dependency of decisions for policy interventions creates an uncertain policy-making space for social change. HPFs' position in the state apparatus enables them to act as agents for change. To do this, they must combine vision and wisdom so as to balance their independence and advocacy with accountability in the workings of government.⁷ A part of this vision involves shifting their focus from the behavioural determinants of population health gains to patterns and trends in health inequities. Making inroads into SDH to reduce health inequities is going to be beset with gains and failures. What is certain is that HPFs cannot be idle and must act along with others. And now!

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The role of health promotion: between global thinking and local action

Lesley King

Introduction

Readers of this journal are likely to be familiar with the dictum 'think globally, act locally', and have observed how it often plays out at health promotion conferences with 'big picture' ideas from keynote speakers alongside preferred presentations on local projects. In fact, this is the theme for the 2007 conference of the Australian Health Promotion Association.* The gap between global thinking and local action can leave some health promoters feeling motivated, but at other times, or other people, feeling frustrated. This paper suggests that the gap between big ideas and local practice is a significant limiting factor for health promotion in addressing health inequities, and that the maxim 'think globally, act locally' does not provide a sufficient guide for this task.

This paper, a discussion and opinion piece, suggests that we

Footnote:

* Australian Association of Health Promotion. *The 17th National Conference: Grass Roots to Global Action: Health Promotion in Challenging Environments. 2007 May 1-4; Adelaide, South Australia.* Maroochydore (AUST): AHPA; 2006. Available from: <http://www.healthpromotion.org.au/conferences.php#grass>

need to more clearly specify what is needed to fill the space between big ideas and small practice.

The health promotion approach

As illustrated by international and national textbooks, journals and conferences, health promotion has developed a substantial repertoire of conceptual and analytic methods and intervention tools that underpin much research and practice. For example, the health promotion problem-solving and planning approach identifies potential points for intervention on the basis of the determinants of health and analysis of contributing factors.¹ On this basis, structural factors, such as the poorer quality of social, physical and economic environments, can be identified as significant determinants of health differentials and meaningful points for interventions.² Such 'upstream' structural factors can be described as 'causes of the causes', with behavioural factors identified as playing a more mechanistic role as immediate causes. To produce changes in factors that influence health problems, including structural factors, health promotion has sought to influence public policy, facilitate action across sectors

Abstract

Issue addressed: The persistence of health inequities provides an ongoing challenge for health promotion. The dictum 'think globally, act locally' fails to recognise the significance of infrastructure and policy in linking global issues and local practices as a means of addressing health inequities.

Methods: Commentary and opinion.

Results: Through analytic tools and methods, health promotion has much to contribute to facilitating health-improving changes in social, economic and physical environments. Local actions provide excellent illustrations of organisational change and intersectoral action, and present the possibility that such actions could be widely implemented. While this has occurred on some issues, this is not usually the case. Political support, policy and infrastructure are required to link global ideas and local actions and overcome the impasse. Media advocacy is one example of an approach with potential to make these links and mobilise political support.

Conclusions: Reframing media and political discussion, away from the dichotomy of individual responsibility and government intervention and towards acknowledging the social context of human behaviour, could contribute to policy and social environments with greater capacity to address inequities.

Key words: Health promotion practice, media advocacy, organisational capacity, health inequities.

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So what?

Health promotion needs to beg, borrow and build political and media advocacy skills if it is to go beyond local demonstration projects and have the capacity to promote population health and address health inequities.

beyond health services, and mobilise community action, as well as employ more conventional activities, such as community education, health literacy programs and health service delivery.^{3,4} Given that these tools and methods are well known among health promoters, to what extent have they been used to promote health generally and address inequities at local, State and national levels in Australia?

Acting locally

Drawing on a range of publications, including articles published in this journal, it appears that Australian health promotion has applied a broad repertoire of interventions at the local level to address health inequities.⁵ These include:

- Interventions tailored to the cultural and social characteristics of specific target groups, such as Aboriginal health promotion programs.⁶
- Interventions focused on problems specifically associated with disadvantage, such as food insecurity,⁷ as has occurred through VicHealth in a substantial program conducted over the past few years.⁸
- Intersectoral approaches to tackling issues beyond the traditional scope of health, such as community safety, housing and food supply. Examples include Housing for Health¹⁰ (being implemented) and the Penrith Food Project.⁹
- Programs that directly assist disadvantaged groups to access individual and community resources, such as Food Aid⁷ or service navigation and referral.¹⁰
- Actions designed to make changes within particular settings, such as schools, communities and organisations. Setting-based approaches provide a means of working intersectorally, as illustrated through Health Promoting Schools¹¹ and working with police to address alcohol issues.¹² Such setting-based approaches can be particularly effective in addressing environmental, policy and behavioural factors in an integrated and reinforcing way, and contribute to enhancing organisational capacity.¹³

In many of these examples, health promoters have applied recommended best practice principles in designing and implementing programs to address inequities.³

Nevertheless, local programs are frequently of short-term duration and conducted at a low level of intensity in a small number of localities. This very small level of investment in local programs is arguably, in many cases, below the threshold required to produce perceptible or sustainable effects.^{14,15} For example, community development programs are rarely funded at a level where they could be implemented over longer timeframes and on a scale that could logically lead to community changes sufficient to influence health determinants. Studies on the actual intensity of intervention and level of investment required to produce measurable changes for different populations are few, and comprise a major gap in health promotion research and practice.

Local practice provides good illustrations of what is possible in

organisational change and intersectoral action, and opens the possibility that such actions could be widely implemented.

However, the sophistication of methods and approaches available and tested in local health promotion practice is not reflected generally in the scientific evidence base.¹⁶ As a scientific discipline, health promotion recognises the need to build research evidence on the effectiveness of interventions. While evaluations of health promotion programs have indicated that they can be successful in reaching diverse target groups, engaging communities and stimulating environmental changes,^{5,17} there is not a robust evidence base on addressing health inequities. The range of different immediate and intermediate outcomes expected from different types of health promotion actions make it difficult to compare effects and apply conventional systematic review methods across programs.¹⁸ Limitations in the evidence base may be one of the factors restricting the widespread adoption and implementation of health promotion actions, although other social and political constraints discussed below undoubtedly play a role.¹⁹

Thinking globally

At a global level, health promotion has successfully built an international constituency of researchers, policy makers and practitioners that has achieved consensus on the scope and breadth of action required to promote and redress health inequities. The Ottawa Charter, Jakarta Declaration and Bangkok Charter²⁰ are well-known statements of principle and approach. The Commission on Social Determinants of Health, formed by the World Health Organization in 2005, provides an example of a macro-level strategic initiative that is seeking to influence national policy agendas.²¹

These broad-ranging approaches recognise that health can be influenced through global trade as well as national economic, agricultural, transport, urban planning and taxation policies and practices. Such approaches propose a role for politicians, lawmakers and industry in promoting health. Examples of national actions by such groups in Australia include: the production of unsaturated margarines and low-fat food items, which have the potential to contribute to reduced fat intake in the population;²² regulatory changes that have drastically reduced exposure to tobacco smoke in public places; and political commitment that was instrumental in mobilising resources for HIV/AIDs prevention programs.¹⁷ Recent interest in obesity prevention within law faculties in Australia provides a current example of cross-disciplinary opportunities to mobilise action.²³

Between the local and global

Analyses of these success stories, and comparisons with less successful efforts, have indicated that political and policy commitment, organisational management support, infrastructure and workforce capacity are essential preconditions for success.^{17,24} That is, there is a set of middle-range mechanisms and systems that are needed to facilitate global or national policy, support local actions and create links between them.

Where such policies, management and infrastructure supports are in place, health promoters and public health practitioners can be in a position to address social and economic determinants. However, local health promoters frequently perceive that they are not well positioned to address social factors,²⁵ that their context lacks organisational and management support, and that this detracts from the quality and scale of program implementation and overall effectiveness.²⁶

Government, industry and professional groups are not always responsive to public health issues and health differentials, and the infrastructure for health promotion in Australia remains small and relatively fragile.¹⁷ In these circumstances, responsibility for addressing social determinants and inequities may be beyond the reach of many health promoters, including policy makers within State government jurisdictions.

The gap between global thinking and local action has been recognised over many years by many people.²⁷ Recently, responses to the Bangkok Charter have reflected on the connection between the global vision and daily professional activities, and identified its contribution to reflective practice and personal motivation.²⁸ In 1999, St Leger noted that the possibility for local actions to influence global action was something frequently taken on faith within health promotion.²⁹ Ten years previously, McQueen acknowledged that the maxim of 'think globally, act locally' actually reflected prevailing and contradictory views – both recognition of global influences on health and a focus on individual actions.³⁰ In contemplating how health promotion and public health incorporate prevailing culture, he anticipated the current social climate, where health promotion and continues to reflect contested world views.

What can health promotion do to create supportive policy and infrastructure?

In Australia, in a social climate where media and politicians emphasise individual responsibility and caution against the nanny state, it seems difficult to build structural approaches to promoting health and addressing health inequities. For example, a newspaper article, reporting on qualitative research on child care staff's perceptions about the positive role they can play in promoting healthy eating and active play, framed the story as a warning against the nanny state, with the front page headline 'Kids forced into fitness'.³¹ 'Commonsense' theories on promoting health, such as those promulgated by many politicians, media representatives and some community members, frequently assert the primacy of individual responsibility. For example, through appealing to 'common sense', national leaders have recently identified parents as responsible for children's TV viewing and eating patterns and used this as a way of deflecting any serious discussion about regulatory approaches to food advertising on TV and reducing risks for childhood obesity.³² Paradoxically, such views may lead to more disadvantaged people rejecting health messages through feeling overwhelmed, distrustful or finding them irrelevant.³³

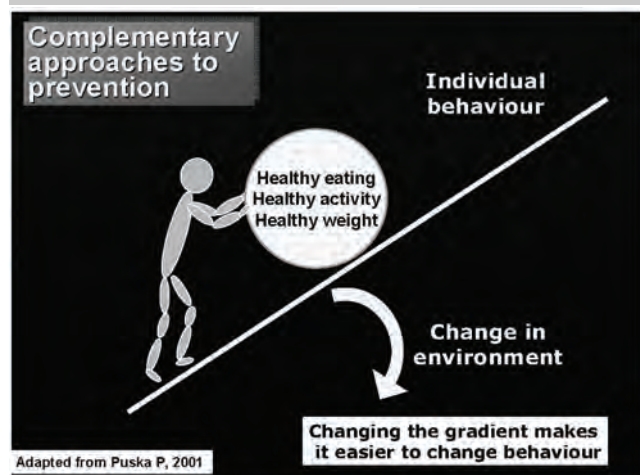
The way an issue is framed can position its significance, direct

understanding about causes and formulate specific types of solutions.³⁵ Public health media advocacy is a tool that can be used to frame issues in new ways, and thus potentially change community views and affect government policy.^{17,34,35}

One potential contribution in the present situation would be to seek to reframe media and political discussion away from individual responsibility and towards acknowledgement of the interaction between choice and environment. For example, it is possible to find new angles and new devices to point to social influences on obesity prevention.³⁶ The classic graphic adapted from Puska (see Figure 1) provides a clear picture of the potential for social and economic environmental factors to alter the gradient posed by everyday environments for people as they seek to make healthy choices.³⁷ Environmental support is particularly critical in supporting more disadvantaged groups and communities, as more privileged and educated groups have greater material and social resources to overcome barriers.

Media advocacy is a familiar strategy in health promotion theory, but less frequently used in local practice. One reason for this is that many health promoters are employed through government services and require complex approval processes to make media statements. Health promotion may need to increasingly build partnerships with groups with better media access. For example, the establishment of the Parents' Jury by Diabetes Australia and The Cancer Council provides a significant avenue for advocating for changes in food marketing to children through greater regulation of TV advertising and reduced point-of-sale promotions in supermarket checkouts.³⁸ While not specifically oriented to inequities, such changes have the potential to reduce pester power for all parents, especially those who have less disposable income and no choice but to take children shopping with them. Media advocacy cannot, by itself, reverse dominant individualistic ideology or blind-spots regarding social influences on health, but is presented here to highlight the possibility of building and applying a repertoire of mid-range strategies to link local actions and big ideas.

Figure 1: Individual and environmental changes as complementary approaches (adapted by Campbell, 2001).



Conclusion

Persistent health inequities continue to challenge how health promotion constructs interventions and the small scale of operations that characterise the field. These challenges relate to the disjuncture between global ideas and local practice and the small scale and local level of much health promotion. Linking global ideas and local actions requires political, policy and infrastructure support. Media advocacy is a familiar and appropriate tool for tackling this disjuncture and potentially creating a more conducive climate for policy and structural changes with the potential to address inequities. To respond to this challenge, health promotion and health promoters may need to increasingly incorporate media and political approaches through forming alliances with groups with scope for advocacy.

Disclaimer

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The health system: what should our priorities be?

Anne-marie Boxall and Stephen R. Leeder

Introduction

Although Australia's health system is one of the best in the world, it is unable to deliver improved health outcomes to all people. The disparities between the health of Indigenous and non-Indigenous people, for example, are vast. Slow, or in some cases no, progress has been made over the past decade¹ despite governments attending more closely to this problem. This in part reflects the important effects of the wider social determinants of health, such as employment, education and income on health outcomes, but also reflects a health system that is focused on treatment of health problems rather than their prevention and early intervention.

The care of people with acute illness and serious injury in Australia is of high standard, well regarded, and comparable with the best international experience.² There are problems of access in specialties, and the tyranny of distance is a particular problem for people living in the country and outer metropolitan areas. But by world standards, these services are well provided. It is in relation to serious and continuing illness – both its prevention and its continuing care and support – that the system is least adequate and where considerable reform is needed to provide both an effective and efficient service.³

Access to high-quality health services based on need and not on your ability to pay or where you live is in itself a social determinant of health. Illness and disability can lead to long-term exclusion from participation in society, and once someone becomes sick or disabled a vicious cycle of exclusion can be established. The ways in which health systems are financed has a substantial impact on the ease with which those in most need can access them, as well as reflecting the wider values of government institutions and the community.

Future priorities for Australia's health system must be defined in response to the areas where health gains have failed to materialise, where disparities continue to endure, and where evidence that effective interventions exist to solve these problems. Before priorities can be determined, however, we need to understand why the present system has been unable to deliver. In this paper we identify two reasons – our insurance model of health financing and the use of blunt funding mechanisms. We argue that implementing a more efficient and flexible health system will make it possible to improve health outcomes for those disadvantaged as a result of rigidities in the system. Alternative models are assessed according to how effectively they overcome these barriers.

Abstract

Issue Addressed: The way the health system is organised is a critically important social determinant of health.

Australia's current health system funding arrangements contain serious barriers to effective health promotion and chronic disease management. The consequences are most evident among disadvantaged people. Major health system reform is needed in Australia to rectify this problem.

Methods: This paper describes current mechanisms for funding health care in Australia and examines a recent reform experiment, the Co-ordinated Care Trials. It discusses why the trials were unsuccessful and identifies key criteria for future success. Three existing proposals for health system reform are assessed against these criteria – managed competition, a Commonwealth takeover of health and medical saving accounts.

Results: Successful reform of Australia's health system will need to ensure that more flexible services are delivered, changes are made on a large scale to affect demand and strong incentives to use cost-effective services are put in place. Of the models considered, managed competition best meets these criteria and is most likely to reduce health disparities and improve health promotion and disease prevention. A Commonwealth takeover of health funding is a less ambitious alternative but because of this, it is also likely to have less impact. It is doubtful whether medical savings accounts meet any of the criteria for success and they would also require a fundamental change in the values that underpin the Australian health system.

Conclusion: Recent reforms of Australia's health system have been too small and have had little impact. Although radical reform of the health system is politically unpalatable and extremely rare, it may be the only way Australia will be able to meet the health challenges of the 21st Century.

Keywords: Health system, reform, health funding and financing, Australia, chronic disease.

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So what?

Health professionals and policy makers wanting to ensure health outcomes improve for all Australians should attend diligently to the way health care is financed. Because of the major impact of health care on health outcomes, this particular social determinant of health deserves priority action.

In searching for alternative proposals for how our health system should be organised, we heed lessons from the recent Co-ordinated Care Trials (CCTs) and identify three essential criteria for successful reform. We then describe and review three proposals for structural reform of Australia's health system and analyse how likely it is that they will be able to facilitate effective disease prevention and health promotion.

The Australian health insurance model and health financing – barriers to health promotion

Fee-for-service medical insurance

Australia does not have a system of health care financing that facilitates disease prevention, nor is it well equipped to provide the systematic support required by people with serious and continuing illnesses. There is nothing within private health insurance that achieves these goals, perhaps in part because it is so heavily publicly funded and regulated and because to date it has covered virtually nothing other than care in a private hospital. This is about to change. Within Medicare, there is nothing that makes the heart (or any other organ that might benefit from a healthy lifestyle) sing about prevention or long-term care either. This is because it privileges curative and hospital-based treatment over preventive and community-based care, including that required by individuals with serious and continuing illnesses.

Medicare funding for out-of-hospital medical services in Australia is provided through the Medical Benefit Scheme (MBS), which subsidises the cost of the services of general practitioners (GPs) on a fee-for-service basis. Most of the services provided by GPs are curative or supportive. Most preventive or health promotion services (for example, weight loss, education-based smoking cessation and exercise programs that require extended support) are not funded through Medicare, but instead are provided by allied health professionals and nurses working in community health centres or the private sector.

In 1999, the Federal Government introduced Enhanced Primary Care (EPC) items into the MBS to improve the inherent disincentives for GPs to spend clinical time on prevention. The new MBS items were designed to encourage greater GP involvement in primary preventive and chronic disease management activities, which can be defined in large part as secondary or tertiary prevention. Prior to this, GPs were unable to bill for preventive services other than those based upon short, single contacts with patients within the fee-for-service system. An independent review of the EPC MBS items was published in 2003.⁴ The review found that while the EPC items were a positive initiative, their impact was limited. Only a small number of GPs used the new item numbers extensively, and the majority used them infrequently. All stakeholders surveyed for the report said that the ongoing demand on all elements of the health system for acute and episodic care was a major barrier to uptake of EPC items.

Effective chronic disease management needs a multi-disciplinary team. Under Medicare, funding is for services provided by doctors on a fee-for-service basis but not for non-medical health professionals. In 2004, new initiatives were implemented that

funded five allied health services per year for patients with a chronic disease. This was a positive move, but falls well short of the needs of many patients.

In 2005, further Medicare reforms were introduced that aimed to improve chronic disease management within the existing system. New MBS items provided GPs with rebates for preparing and reviewing management plans for patients with a chronic disease. These initiatives, like the EPC items, are positive but have a limited capacity alone to overcome the underlying problem, which is that the fee-for-service general practice model constrains the ability of GPs to integrate easily with the rest of the health system. With much of the multi-disciplinary care provided by allied health professionals working in public hospitals, community health centres or the private sector, co-ordinating patient management is a difficult task. Providing GPs with incentives to take responsibility for it is only a partial solution, especially if there is no attempt to improve skills in management and communication that are pertinent to multi-disciplinary care.

Hospital funding through Australian Health Care Agreements

The Medicare financing system covers public hospital care as well as medical services in the community. Medicare funds for hospital care are distributed to State and Territory governments through the Australian Health Care (formerly Medicare) Agreements (AHCA). State and Territory governments, which are responsible for managing and running public hospitals, contribute equal funds. Hospital care, however, is very expensive. In 2002/03, public hospitals consumed 35.1% of total health expenditure in Australia. Together, hospitals, medical services (17.2%) and pharmaceuticals (14.3%) – the mainstay of curative and supportive health services – accounted for more than two-thirds of total health expenditure. In contrast, only 1.7% of total health expenditure went towards public health in 2002/03 and 4.8% was spent on community health centres.⁵ It is in these minimally funded fields of endeavour that most publicly funded health promotion activities take place.

This maldistribution of funding between the hospital and community sectors has led commentators such as Andrew Podger, former Secretary of the Commonwealth Department of Health and Ageing, to draw attention to the high cost of allocative inefficiency in Australia's health system. He explains that health system funding is suboptimal because some areas are getting too much and some are getting too little.⁶ Instead of rectifying this major problem, we expend billions of kilojoules obsessing about achieving greater technical efficiency (how well we run things inside one component of the system) in our hospitals, which can only ever make a marginal difference to the overall efficiency of the complete health service.

The principal decision-making mechanism for funding hospitals – AHCA – needs to be revised. AHCA are made for a five-year period according to a complex formula that considers population and hospital separations (or casemix) data, with additional payments for mental health, palliative care and safety and quality (see footnote 1). AHCA are evaluated according to hospital patient numbers, average cost per episode of treatment and

waiting times (see footnote 2). At each successive funding round, the level of AHCA funding for the next quinquennium is calculated according to a combination of population, health service utilisation and morbidity data (as determined by hospital attendances).

What is striking about this funding mechanism is that it responds to the health of the *system*, not of the people who use it. The AHCA decision-making formula is based on a retrospective assessment of activity within the system – the number of people treated and how costly their treatment has been. The formula does not consider how effective the system is in *improving* the health of the people. The formula does not reward States and Territories that have succeeded in improving the health of their population during the previous five years (unless these improvements are reflected in hospital casemix data), nor do they reward them for using more preventive and cost-effective health services. True, the most recent AHCA stipulate that alternative performance indicators need to be developed (including outcome measures for mental health and Indigenous health), but as they stand they are a blunt instrument for financing health care.

Reform of Australia's health system

Given the heavy burden of chronic disease (as well as its precursors such as overweight and obesity) and the limited success of the health system in dealing with these problems, there is a clear need for more energetic action in prevention and promotion and in organised care for patients in the community with serious and continuing illnesses. Health system reforms are needed that prioritise prevention and community-based care and use financing models that reward the use of efficient and effective health services.

In recent years, several small-scale reforms have been trialled. They include the Council of Australian Governments' Co-ordinated Care Trials (CCTs), the Enhanced Primary Care Program (EPC), Chronic Disease Self-Management Program, and new provisions within the Health Care Agreements that allow substitution of state hospital, Medical Benefits Scheme (MBS) and Pharmaceutical Benefits (PBS) funds for programs that demonstrate efficiency gains.⁷ The CCTs, which were designed to improve management of chronic diseases, have been the most ambitious of these experiments.

Between 1997 and 1999, the Commonwealth Government funded nine general and four Aboriginal CCTs across the nation. Each CCT was required to design an innovative model for health service delivery and funding based on local needs. Each needed to have a single focus of responsibility for the management of pooled funds, a variety of providers from whom services could be purchased, as well as care planning and co-ordination.⁸ The aim of each CCT was to test whether it was possible to achieve better co-ordinated care for patients with high health needs. The challenge was to achieve this using funds pooled from a

number of Commonwealth and State programs, and be cost neutral. Overall, results were mixed.

The Illawarra CCT (Care Net) did not lead to improved health outcomes for patients using multiple services and it ran over budget. According to the Wollongong University academics who evaluated Care Net,⁹ some of the reasons it failed to deliver were that:

- Fund pooling arrangements did not encourage public sector service providers to deliver services in a more flexible way.
- The scale of the trial was not large enough to change the existing pattern of demand.
- The philosophy of the trial did not change deeply held values by service providers about giving priority to patients in greatest need.

Results of the Australian Capital Territory (ACT) CCT were equally disappointing, with no reported impact on health outcomes for patients enrolled. In a qualitative analysis of the reasons for its failure, Gardner and Sibthorpe⁸ from the National Centre for Epidemiology and Population Health said that barriers at the local level prevented success. They found that:

- There was a reluctance by stakeholders to endorse the trial's goals and strategies.
- GPs did not become effective purchasers of outside services.
- The need for increased gate-keeping was never fully realised.
- Cost-saving strategies were never fully taken up.
- Improvements in continuity of care were impeded by limited provider networks and GPs' reluctance to collaborate with other service providers.

Not all trials were unsuccessful. One rural South Australian CCT, for example, that focused specifically on outcomes for patients with type II diabetes produced results showing that many patients had improved health outcomes and that hospital and medical expenses reduced as a result of changes that developed out of the trial.¹⁰ Overall, however, the CCTs had little impact because of their small scale, limited resources and restricted role for private sector providers. These limitations meant that real structural reforms that were hoped for did not materialise.¹¹

What have we learnt so far?

The Australian health system faces a difficult problem. It is failing in key areas, and the only major reform experiment for nearly two decades has produced disappointing results. To reshape the health system and work out new priorities for the future, we need to heed the lessons of the failed CCTs and ensure new proposals meet three criteria. They need to:

1. Offer flexible delivery of services.
2. Implement changes on a scale large enough to change demand for health services.
3. Provide strong incentives for the use of cost-effective services.

Successful health system reform will need to do far more than meet these criteria. It will also need to overcome bureaucratic resistance, interest group opposition and the complexities of our constitutional arrangements for health. It will depend heavily on the attitudes, values and support of health service providers.

Footnotes:

1. See for example the individual AHCA's at <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-ahca-agreement.htm>
2. See for example <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-ahca-performance+report.htm>

Despite the many obstacles, some reform proposals for the Australian health system already exist. They are considered below.

Proposals for a new health system

This section briefly describes three proposals and evaluates them according to the three criteria for success (discussed above). We argue that a new model for our health system that is able to deliver more flexible, cost-effective services and reduce overall demand will create better conditions for effective health promotion and reduce disparities in health outcomes. This argument is justified on the basis of two assumptions:

1. That a new system would remove the current barriers to effective disease prevention and management of chronic illnesses (the insurance model and unresponsive AHCA's).
2. Cost-effectiveness in the long term depends on successful disease prevention and management and reducing disparities in overall health outcomes (see footnote 3).

The three major proposals considered in this paper are:

- Managed competition – the Scotton model.
- A Commonwealth takeover of health – the Podger model.
- Medical Saving Accounts.

Managed competition

The Australian version of managed competition has been developed and advocated by Dr Richard Scotton, formerly of Monash University and co-architect of Australia's original public health insurance scheme, Medibank. Scotton's managed competition model proposes major structural reforms to the financing and delivery of health services in Australia.¹² It involves consolidating all health programs into one (including Medicare, public hospitals, the Pharmaceutical Benefits Scheme, nursing home benefits, mental health, community health and other programs), and depends on the Federal Government assuming responsibility for the overall health system as well as legislating and regulating access to services.

Under the managed competition model, funding would continue to come through the taxation system, a health insurance levy and co-payments, but would more fully integrate the private sector. Funds would be distributed to health regions by the Federal Government rather than to States and Territories. Each region would have a unique risk-adjusted rating, calculated using health outcome data for its own population. Regional budget holders would receive grants and, in return, would fund all health services for their registered enrollees. Competition between providers is a fundamental feature of the model. Citizens within each region would be able to choose between public and private budget holders. It is hypothesised that competition between budget holders and service providers would stimulate efficiency and delivery of services more appropriate for the needs of enrollees.

Footnote:

3. For an example of the cost effectiveness of health promotion and disease management see Pelletier K, A review and analysis of the clinical and cost effectiveness studies of comprehensive health promotion and disease management programs at the worksite: 1998-2000 update. *Am J Health Promot.* 2001;16(2):107-16. For a discussion and justification for the assumption that reducing health disparities is cost effective see Woodward A and Kawachi I, Why reduce health inequalities? *J Epidemiol Community Health.* 2000;54:923-9.

Evaluation

Managed competition has been introduced into health systems in the United States (US), Colombia, Israel, the United Kingdom and New Zealand. Because the health systems in each of these countries differ considerably, it is not possible to provide a concise overview of the effectiveness of managed competition. Instead, a preliminary analysis of the potential effectiveness of managed competition in Australia is made using the criteria for successful reform discussed previously.

The scope of proposed reform is certainly large enough to affect demand but because markets in health care are not always predictable, it is difficult to be certain that demand would decrease. Because regional budget holders would have substantial autonomy and competitive markets would operate within each region, it is likely that managed competition would bring a greater diversity and more flexible service delivery. It would likely enable the delivery of more appropriate services within regions because of the links between funding and health outcome data. If regional markets were properly regulated, managed competition may also ultimately lead to efficiency gains. This notion has been contested, however, by some participants in a Productivity Commission workshop that considered the model.¹² They argued that it would be difficult to ensure that viable markets operated in some places, particularly regional and remote areas.

Commonwealth takeover of health care: the Podger model

Andrew Podger, former head of the Commonwealth Department of Health and Ageing, has proposed a model for the structural reform of the health system whereby the Federal Government assumes total responsibility for the funding and delivery of all publicly funded health services. It shares many features with the Scotton model, with regional purchasing units and regional risk profiles as the centrepieces.⁶ The model differs from Scotton's in that it does not depend on competition between regional budget holders. Instead, budget holders would be allocated a 'soft-capped' budget, determined according to regional risk profile. Over time, regions would be expected to develop increasingly sophisticated approaches to managing the risks of their population. If they over-ran their budgets, health authorities would conduct a performance review rather than impose financial penalties.

Health service provider arrangements under this model would not differ substantially from present arrangements except that hospitals would be funded more directly according to casemix data. Podger states that this change would probably prompt hospitals to contract out particular services and establish centres of excellence so as to improve efficiency, improve co-operation between providers and reduce the need for hospital care.

In addition to changes in the public sector, the Podger model would allow an expanded role for the private sector. It proposes that private health insurance funds be allowed for use in either public or private hospitals, according to contracting arrangements.

Evaluation

Podger's model is similar to Scotton's and therefore its capacity to improve health promotion and reduce disparities is similar. The model would reduce demand for health service if it were implemented across the spectrum of health areas. Podger sees that one advantage of the model is that it could be implemented incrementally by restricting reforms to particular areas (such as aged or primary care). This, however, is likely to limit its capacity to reduce demand. As in the Scotton model, the autonomy given to regional budget holders would probably lead to the delivery of more flexible services. Its impact on efficiency is more uncertain as it is highly dependent on the effectiveness of 'soft-capped' budgets and performance reviews as incentives for cost control. These tools have yet to be tested in Australia.

Medical Saving Accounts

The Medical Saving Accounts (MSAs) idea has been discussed in the past decade, and in Australia has been advocated by Paul Gross from the Institute of Health Economics and Technology Assessment. MSAs are like personal banking accounts, or perhaps self-insurance, with the saved funds being earmarked for health care expenses.¹³ Individuals contribute a portion of their income into MSAs over time. Sometimes employers and the government also make contributions to an individual's (or family's) account.

The essential feature of an MSA, however, is that a private citizen holds his or her own account, rather than the government or insurance organisation, and he or she controls the money. Account holders are able to determine when, and what, medical services are purchased and can use services from the public or private sector. Account holders also bear the risk of ill-health alone, unlike in insurance systems where risk is spread across the community. Cost savings are thought to arise from MSAs because consumers become more sensitive to price and therefore use fewer unnecessary and more cost-effective and preventive services.

Evaluation

Some international evidence on MSAs is available because they already operate in Singapore (the only nationwide, compulsory MSA system) and China, the US and South Africa (countries that have experimented with smaller-scale voluntary systems). Most evidence on MSAs concerns their ability to change consumer behaviour and improve cost-effectiveness because this is the main claim for them. Although international evidence may not be directly transferable to Australia, it is likely to be relevant because consumers of health services behave similarly across nations.

Economists are divided over MSAs' capacity to deliver efficiencies. In a 2002 study addressing this issue, Shortt argued that in China, Singapore and the US, MSAs did not in themselves lead to cost control.¹⁴ In another study, Byrne and Rathwell acknowledged that some MSAs had achieved cost savings, but they had been in systems where they were compulsory, that also provided special assistance to some groups (for example, the poor, unemployed and those who have catastrophic illnesses), and imposed some supply-side controls and had

government stewardship.¹¹ It is likely, then, that to achieve efficiency in Australia, MSAs would also need to be strongly regulated and serve as a channel for government subsidises to disadvantaged groups.

MSAs work by influencing the demand rather than the supply side of the health market. They aim to make health consumers more price sensitive. It is well recognised, however, that many of the central principles in economic theory do not operate in health care¹⁵ and consumers frequently behave in ways that are considered 'non-rational'. As a result, it remains unclear whether MSAs can reduce demand for health services (this would be particularly true for catastrophic illness where non-rational decision-making is most likely).

In a recent article on health funding in the US, journalist Malcolm Gladwell, author of the best-selling book *The Tipping Point*, claims that the idea for MSAs results from an exaggerated concern about the problems of moral hazard in insurance.¹⁵ Moral hazard refers to the incentive to overuse services if they are covered by insurance and where the premium stays the same whether one uses the insurance or not. He cites the argument of Princeton economist Uwe Reinhardt, who claims the moral hazard argument makes no sense because people do not consume health services in the same way as other goods or services that confer pleasure.

Gladwell then points to the main problems with MSAs in the US – that they almost completely ignore the impact of poverty on health and dispense with the notion of cross-subsidisation in health (that is, that the well-off and healthy contribute towards the cost of treating the poor and sick). A certain level of financial competence is required of an MSA holder, and this may exceed the abilities of many. MSAs favour the rich and ask nothing of them for the care of fellow citizens.

The ability of MSAs to change demand in a way that promotes health – particularly for the poor – is questionable. This is especially concerning given the strong evidence for the existence of a social gradient in health. Because MSAs are a demand side reform, it is also uncertain how effective they would be in inducing supply side changes in the health market, such as more flexible delivery of services.

If MSAs were implemented in Australia as a compulsory program nationally, as in Singapore, it would certainly be a large-scale reform. This is unlikely, though, because most countries have introduced a more experimental version because of the administrative, legal, social and political barriers associated with a reform of this type on a large scale. Available evidence on MSAs therefore cast doubts on whether they meet many of the three criteria for successful reform.

Summary

Of the three options for health system reform considered in this paper, none is the magic bullet that some might hope for. The managed competition model, however, is the proposal most likely to improve Australia's capacity to reduce disparities in health outcomes and deliver more effective health promotion services because it best meets the criteria for success – it could

reduce overall demand for health services and lead to the delivery of more cost efficient, flexible and appropriate services. The Podger model is similar, but more tentative in its approach. It is this more cautious and incremental approach that is also likely to prevent it from making a significant difference to service delivery, overall demand and cost efficiency.

MSAs do not appear to meet the criteria established in this paper for successful reform. To implement them in Australia, a fundamental shift in the principles underpinning the health system would also be required – a shift away from the principles of redistribution and cross-subsidisation that exist in both public and private health insurance to an individualistic system based on an actuarial rather than a social insurance model.¹³

Some commentators have dismissed the managed competition model because it is too radical. The assumption is that incremental reform is the only possibility in the real world of politics. When it comes to the health system, however, this conventional wisdom is not so helpful. The most radical reform to the structure of Australia's health system in our era was the introduction of Medibank in 1975. The battle to introduce it was long and bitter. Many assumed that the experiment had in fact failed after it was abolished in 1981, but the introduction of Medicare in 1984 put this argument to rest. Medicare was another chapter in the last major reform of Australia's health system that started with Medibank. While it is now stressed under the pressures of a changing burden of disease and new preventive imperatives, its introduction demonstrates that radical reform is possible and can be successfully achieved in Australia. The analyses in this paper also suggest that reform is only likely to be successful if the radical option is taken. Although a proposal for incremental reform (such as the Podger model) has a much greater chance of being adopted and advocated by a political party, it is likely to falter unless it can stand up to the scrutiny of the multitudes of commentators on Australia's health system – health advocates, the public, academics, economists, interest groups and State and Territory governments to name a few – who are well aware of the faults of the present system. Many of these observers have watched all the tinkering around the edges and seen it lead to only marginal improvements. They are now concerned by the urgency of changing needs for health care and health promotion and are demanding a remedy that will bring demonstrable and substantial improvements in health outcomes.

Conclusion

Australia's health system has served us well but its insurance model and blunt mechanisms for financing care are struggling to meet the challenges of the 21st Century – effective disease prevention and chronic illness management. Previous initiatives

aimed at correcting these problems have been tentative, marginal and had too little impact. We need a new health system if we want to make substantial improvements to the health of Australians. There are various proposals and international examples to inform our choice. The best of these seeks to achieve a higher level of allocative efficiency, which would reduce disparities in health outcomes that result from the under-funding of community-based care, and opens up incentives for regional health authorities to engage in prevention and promotion. To succeed in reforming our health system we need to heed the lessons from our own experiments and our own history, which suggests that only radical structural reform will bring success of the order needed today. Although radical reform is politically unpalatable and extremely rare, tentative and safe incremental reforms have, and are likely to continue to have, only marginal effects on the health of the nation. We deserve better than marginal changes, however valuable marginal victories may be to our political leaders.

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Equity, by what measure?

Shane Houston

I acknowledge the traditional owners of the land on which this meeting is being held. And as I normally do I would also like to acknowledge my father and mother. I do this because both of them were so important in making sure that I had the right set of values, or coat pegs as I call them, on which I can hang my life's decisions. My father served in the Royal Australian Air Force and the Australian Army for some 40 years. For many years, Aboriginal people who served in the Australian armed services were not paid the same as the non-Aboriginal service men and women they fought alongside. I remember raising this with my father at the time the Australian Government decided to address this injustice by compensating Aboriginal service men and women for the difference in pay. His response to me was telling: "Shane, going to war had nothing to do with what you were paid". The strength of his values in that statement has affected my thinking since.

My mother and father met at a time when relationships between Aboriginal and non-Aboriginal men and women were difficult, in fact frowned upon. When my mother told her parents that she was marrying an Aboriginal man they told her "if you walk out that gate don't walk back in again". I can only imagine the power that her hope gave her as she walked out that gate. It was so great that it enabled her to overcome any doubts or fears she may have held. The strength of her values is, I believe, central to my service today.

What is equity? Some have defined equity as a venerable group of rights and procedures to provide fairness, unhampered by narrow strictures or technicalities.

Others, such as the *Harvard Health Policy Review*, have suggested that health equity is achieved when everyone has an equal probability of reaching a desired end. Still others have suggested that equity is generally taken to mean fair or just.

* This is an edited version of an address given by Professor Shane Houston at the fourth international conference of the International Society for Equity in Health in Adelaide on 11 September 2006.

While there are apparently similar concepts running through all of these approaches to equity it all still brings me back to one point: someone has to determine what is meant by fair or just. In the case of the old English law it was the King and now the courts – but who decides for the health system in Australia and what is the yardstick they use? Let me leave that point there for a while and I'll come back to it.

I am a Gangulu man; my country is to the west of what is now Rockhampton and Mount Morgan in central Queensland. As I was growing up my grandmother, aunts and uncles, my father and mother gave me three important sets of related but distinct treasures:

- My culture – that embraces my family of people but also the land, animals and spirit and lore of Gangulu.
- A rich collective knowledge of the experience of my family, of Gangulu and more broadly of Aboriginal peoples' treatment at the hands of the dominant culture.
- Pride, hope and trust – together a powerful belief that I and my sisters and brothers can protect and improve the life and spirit of Gangulu.

Intrinsic to all of these was a wisdom about what is just and fair on the one hand and unjust and unfair and lacking compassion on the other.

I learned that, essentially, it was not possible to improve the life and spirit of Gangulu if I did not protect and respect the culture and spirit of Gangulu. If anyone came to me and asked me to do something or agree to something that had the effect of destroying or damaging any the three treasures given to me, then it was not a fair or just ask.

This is not an easy point to make in Australia today. Some Australians expect that Aboriginal people will jettison our treasures, trade-off our culture, our memories and our hope in exchange for a better house, a better income, a better education or a better socio-economic status. Now even some of my mob are saying "oh well it may be a good trade".

I am not one who is prepared in my personal, professional or

Abstract

Equity has in many instances been framed around the notion of fairness. But the metric used to determine what is fair leaves some people at a disadvantage because the things that they value are not always taken properly into account. If I value mangoes and you value oranges is a measure of fairness based on how many oranges I seek appropriate? If I am expected to give up my love of mangoes in order to get ahead is that fair? The debate about judging equity – about measuring fairness – needs to find the conceptual and methodological space to allow the voices and claims of the *other* to be heard.

Health Promotion Journal of Australia 2006;17:206-10

community life to make that trade. And I am sure that there have been, still are and will be many others who will take this view.

Let me tell you why I am so confident.

Throughout my life I have learned about and worked with people who have taken up the fight to change the status quo, who were fighting for fairness and for justice. And there have been many over the 218 years of Australian history.

Pemulwy was an Aboriginal man who led a resistance movement around Sydney during the early years of the colony. He was spurred to action because of the unjust treatment of Aboriginal people by the colonialists.

Jack Pattern was a worker who travelled the countryside talking to and helping to organise the struggle of Aboriginal peoples. He helped protect and promote Aboriginal growth and resurgence over many decades. They were instrumental in convening the Day of Mourning march and meeting in Sydney in 1938. There were times when he and his colleagues Bill Ferguson and William Cooper were at real risk, but cool minds and strong hearts prevailed. It is important to understand that the last acknowledged massacre occurred in 1928.

Being told of and learning more about these leaders has encouraged generations of Aboriginal people to take up where they left off, fighting to protect the things they then and we now value – these treasures.

Let me tell you of just two or three of these more recent heroes.

Forty years ago this month a group of Aboriginal men and women walked off a pastoral property in the Northern Territory owned by an absent British lord. They moved across the other side of the river off the pastoral property and sat down; they told the property manager that they would not be coming back unless things got better – unless they were treated fairly.

Most Australians knew that many Aboriginal people worked in the cattle industry and that Aboriginal stockmen were highly regarded. Most Australians knew that Aboriginal workers were paid less than non-Aboriginal workers, but few did much about it. Most Australians did not know where Wave Hill was. Most Australians did not know of the Gurindji and all but a handful of Australians were totally unaware of who **Vincent Lingiari** was. All that changed when Vincent Lingiari led the Gurindji mob off that pastoral property 600 kilometres south of Darwin.

These events and this man are a significant part of the history of Aboriginal and Torres Strait Islander peoples' struggle for recognition of land rights and for life in Australia.

Governments did all they could to discourage Vincent Lingiari. They showed that they were not interested in the facts; they were interested only in discouraging land rights for Aboriginal people. For example, ministers of the day intervened to stop the Australian Institute of Aboriginal Studies from conducting research that might encourage the Gurindji's claim for land. They dismissed their own welfare officers because they advocated support of the Gurindji's claim.

But Vincent Lingiari was not deterred. He fought on – he took his case to the Australian people and visited east coast cities over several years talking to unions, churches and anyone that would listen. He was a champion of the Aboriginal land rights movement. Vincent Lingiari took on the British aristocracy, the Australian Government, public opinion and his own fears and doubts. And he won. Vincent did not engage in this nine-year struggle for self gain; he did it for the greater good.

In 1974, the Australian Government acknowledged the Gurindji's land claim and through a simple gesture of pouring a handful of soil into the hand of Vincent Lingiari, Gough Whitlam, the Australian Prime Minister, said:

"Vincent Lingiari, I solemnly hand to you these deeds as proof, in Australian law, that these lands belong to the Gurindji people and I put into your hands this piece of the earth itself as a sign that we restore them to you and your children forever."

Vincent, after having waged a battle, responded to the Australian Prime Minister and people:

"Let us live happily together as mates, let us not make it hard for each other."

The victory of Vincent Lingiari and the Gurindji was the seed from which many decades of the Aboriginal lands rights movement would flow.

Oodgeroo Noonuccal (her English name was Kath Walker) was born in 1920 on North Stradbroke Island off the coast near Brisbane. She attended Dulwich Primary; left school and became a domestic in Brisbane at the age of 13. As an Aboriginal person, she said, "there wasn't the slightest possibility of getting 'a better job' [even] if you stayed on at school".

Oodgeroo served in the Australian Women's Army Service from 1942 to 1944, a period when she was not even counted as a person in Australia. She published her first book of poetry, *We Are Going*, in 1964, going on to become a trailblazer in published Aboriginal writing in Australia. Oodgeroo was Queensland State Secretary of the Federal Council for the Advancement of Aborigines and Torres Strait Islanders (FCAATSI) for 10 years in the 1960s and from 1972 was managing director of the Noonuccal-Nughie Education Cultural Centre on Stradbroke Island. Throughout her life, she was a renowned and admired campaigner for Aboriginal rights, promoter of Aboriginal cultural survival, educator and environmentalist.

Her life was not easy; her pain was often great. Yet she could find the spirit and heart to encourage an outlook on life that was reaffirming of the things that were good. Oodgeroo was a woman who suffered under a government system that robbed our people of wages, that sent us to a prison island and that denied our identity. But her heart was good.

Her son was an angry young man, and a campaigner, too. **Dennis Walker** was an active voice in the Aboriginal struggle for justice, particularly in the health area, during the 1970s and early 1980s. He was in and out of jail and he carried his anger clearly for all to see.

I remember one of the first times I met young Dennis. It was at

a meeting of the National Aboriginal and Islander Health Organisation and I remember Dennis passionately getting up advocating that Aboriginal people should take up arms. I responded thinking he was talking metaphorically, that he was issuing a rallying call. But I was wrong; his intention was that we should take up arms and start a violent resistance to Aboriginal oppression.

There was no doubt that both he and his mother could see the same injustice and pain. But while Dennis called Aboriginal people to arms, his mother took another tack. In a famous poem the mother said to the son:

*Your troubled eyes search mine
Puzzled and hurt by colour line
Your black skin soft as velvet shine
What can I tell you, son of mine*

*I could tell of heartbreak, hatred blind
I could tell of crimes that shame mankind
Of brutal wrong and deeds malign
Of rape and murder, son of mine*

*But I'll tell instead of brace and fine
When lives of black and white entwine
And men of brotherhood combine
This would I tell you son of mine*

Rob Riley was a young turk of the Aboriginal movement of the 1980s and 1990s. He was a friend of mine. He was the youngest chair of the National Aboriginal Conference, an articulate and passionate person. Rob was widely regarded as one of the great Aboriginal leaders of the modern era; he was at the centre of debates that have polarised views on race relations in Australia: national land rights, the treaty, deaths in custody, self-determination, the justice system, native title and the Stolen Generations. There is a great book by Quentin Beresford on the life of Riley and you should read his fantastic story.

Brother Rob's family history demonstrates the intergenerational harm to Aboriginal people that racism in Australia has created. Under the racist WA 1905 Aborigines Act, his maternal grandmother was imprisoned in her adolescence in the Moore River Settlement, north of Perth. A ministerial warrant was used to remove her from her family in the late 1920s and, despite repeated efforts to secure her release, she languished in Moore River for the rest of her life. She once told authorities "this place send anyone mad".

Her children – Rob's mother and four other children – were born at Moore River but removed from her immediate care. Rob's grandmother died at the age of 39 and her children were loaded into the back of a truck and sent deeper into the remote reaches of the Western Australia's mission system. Released at 16 with little education and training and with no 'country' to return to, Riley's mother fell pregnant, giving birth to him.

Riley, removed in infancy in 1954, became the third successive generation of his family to be taken – under the provisions of the same 1905 Act – to spend the next 12 years in Sister Kate's

Children's Home where he was denied knowledge of both his family and his Aboriginal heritage. Rob was assailed by experiences of sexual abuse, loneliness and wanting to belong. Like so many of the Stolen Generations, Rob was denied access to his culture and this for someone like Rob would have been a tremendous weight to carry. But Rob shouldered that burden and many others with an innate pride and spirit.

I can still recall with immense admiration, with heart-swelling pride, the occasion of Rob's disclosure of his abuse in Sister Kate's. I can still recall seeing the pain on his face as he recounted to an audience at a book launch those horrifying times.

I can still recall hearing from friends of his suicide on 1 May 1996. Just 10 years ago. It is said that Rob felt weighed down by the unresolved traumas of his exposure to institutionalisation, segregation and racism, and his sense of betrayal by the Australian political system arising from its failure to deliver justice to Aboriginal people.

Despite all of this, it is not his death that sums up his legacy and contribution to the Aboriginal spirit. Rob was there at Noonkanbah when the conservative government organised police protection for a mining company's destruction of sacred sites. Rob was there in the middle of many of the contemporary watersheds in Australian Aboriginal affairs, the Stolen Generations Inquiry, the Royal Commission into Deaths in Custody, the attempts by the WA Parliament to destroy the Aboriginal Legal Service. Rob was at the centre of all.

Rob had two sayings he used often that summed him up:

You can't be wrong if you are right

And

You don't stop fighting for justice simply because those around you don't like it you just keep on fighting.

I tell you all this because it is important for you to understand what fairness and justice for us mob is. The lives and loss of these people helps frame for us what is just and fair. It speaks to the fact that we hold the treasures given to us in a venerable place. These treasures form the basis on which we will judge equity; they are our yardsticks. This is how my mob will approach the notions of equity. Equity for us will be influenced by whether the proposition protects and multiplies these treasures, these things that we value.

We will judge the efforts to improve our health and spirit today by how well or not these efforts protect or multiply our treasures. The valuing goes not just to peripheral things but also to core issues of life and death.

Let me give you a concrete example. The mother of a friend of mine was diagnosed with end stage renal failure and told that she would have to move to Perth for dialysis or she would soon die. Now she had the calmness of spirit to sit and think about what was right, what was fair not just to her but to her family and community and she made the decision to forgo treatment in Perth even though this would shorten her life considerably. She decided that what was right and just was for her to stay in her community and spend time with her grannies and other

children teaching them the things they needed to live a full life, an Aboriginal life. She decided to protect the treasures of culture and grandchildren.

It is also the case that a fair share of progress, of access to services, is reduced if Aboriginal people decided to continue our special relationship to our country. If we desire access to the range of, say, health services available to other Australians then we are expected to compromise the special cultural relationship with our country by leaving or surrendering our ability to nurture this relationship. We are expected to move. This geographic effect can be seen in the different levels of service funded by Medicare across rural and remote parts of Australia when compared to, say, places like Double Bay in Sydney's affluent eastern suburbs. It seems to me that Aboriginal people are offered on many occasions (not all) greater equity in health and health services if we will give up something or change ourselves.

There are many people in senior decision-making positions, including politicians, who have criticised Aboriginal people for choosing to live 'way out there'. The corollary of this is that we cannot expect the same level of services as people who live in our cities receive, and it's our fault because we choose to live 'way out there'.

Let me put it more concretely. If Aboriginal people value the good that we find in country, kin and culture more than the good that we find in a quarter acre, individualism and middle class aspiration, do we give up the right to fairness and justice at the hands of health services and systems? And in order to achieve greater equity in the health system and in its services, do we need to give up the good we find in country, kin and culture?

Will this make us healthier?

If the cost to Aboriginal people of owning the quarter acre, being a successful individual and a member of the aspirational middle class is the surrender of country, kin and culture, are we being robbed? It all depends on whose perspective you take, or perhaps where you stand.

Let's not think that Aboriginal people want to return to life as it was 220 years ago. We want our kids to enjoy the treasures that generations have gathered up for them but we also want our kids to have the opportunity to have a good education, to live safely, to have a good home, to have a good job and to have the capability to live the sort of life they value.

Let me put it this way. Australia has always juxtaposed its objectives for Aboriginal people in terms wrapped in sameness with non-Aboriginal Australians – same education, same housing, same health, same jobs, same values, etc. But Aboriginal people have always framed our future in terms of difference – Aboriginal culture, Aboriginal values, Aboriginal spirit, Aboriginal community control, and Aboriginal self-determination.

Putting these thoughts together, it seems to me that we have an especially important policy dilemma for health people concerned with equity – how can we construct a way forward if we can't agree on and service a conception of what the good is? Is the good Aboriginal people seek to be valued less or valued

at all in judgements about equity – about fairness and justice because we value some different things?

We can largely agree – let me say quickly – on some of the major items of what needs to improve. We all agree, I would think, about the need to improve health and well-being, physical environment, education, and safety of Aboriginal children. But it is the case that as we delve further behind these broad agreements we find differences in the nature of the good we seek, in the relative priority between issues and in the question 'does the end justify the means'?

If we are to move forward on Aboriginal health and well-being we cannot ignore the voices of difference. We need to understand that success is intrinsically bound up in our ability to respect and address the link between our capability to be free to be who we are – our ability to function as Aboriginal people – as much as it is about the alleviation of physical, emotional and social ills that bedevil many of my mob.

Aboriginal people are being expected to give up things in too many cases. You know I have watched policies in Aboriginal schooling that have sent young, relatively inexperienced teachers out into the most difficult teaching environments and I am amazed that people wonder why we are not getting results. Shouldn't we be sending our most experienced teachers out to these complex and challenging teaching assignments so that we can put our best efforts into solving the problem? And why is it that in respect of education the debate is almost always about Aboriginal kids leaving family and community to get an education in far-off urban centres and never about building the country's best schools in Aboriginal communities?

I watched a TV program the other night and saw a young Aboriginal woman from a Cape York community being hounded to the aircraft door by a man telling her she must leave her community to get a job, there was nothing there for her, that the community will only hold her back. I watched as the program told of how her friends and family were pleading with her not to go and how much of an effort this non-Aboriginal person had to exert to make sure she got on the plane.

She was being pushed to leave her community to find a job; she was going to be an orange packer. I was left wondering whether I was watching a fair and equitable distribution of burden here, on the one hand between that carried by this young woman, having to leave her family and community to take up a job that most non-Aboriginal Australians won't put themselves out to do, and on the other the burden carried by governments in terms of their efforts to build meaningful training and work opportunities in Aboriginal communities.

Why is it we are expected to surrender ourselves and what it is we value in order to get a fair share – how is that fair? How is that just?

Economics is about doing better. Health economics is a crusade about doing better in health. Many people think economics is just about saving money; they often do not see it as about being fairer and more just. Equity in health cannot just be about

numbers; it has to explicitly be about the values of the people concerned.

It has to be about the lessons that Oodgeroo and Rob taught us. Just last month I was part of the Healing Our Spirit Worldwide conference. Three thousand five hundred Indigenous people from around the world attended that gathering in Canada. They brought with them ideas and examples of programs and services that have worked because they have paid attention to Aboriginal values and culture.

When I returned to Australia I was asked to give a lecture at the University of Sydney's Department of Rural Health at Broken Hill. At that lecture I was asked what was startling or most rewarding about attending the international gathering. I replied honestly and earnestly that it was the fact that I did not have to seek permission to be Aboriginal; I did not have to think twice about using my values and my culture as the bedrock of what I said and how I acted. I had permission to care about and talk about things that Aboriginal people value like spirit, culture, lore and collective experience of injustice. This was incredibly liberating; I cannot do that in many settings in Australia, I always have to think twice.

It is strangely spiritual and practically reassuring to come back from that gathering to this one and be able to talk about what it is I, as an Aboriginal man, value, and why it is important and how this relates to equity in health. In Australia today it seems that to be overtly Aboriginal draws criticism – many people feel unable to live out their lives according to the treasures given to us by grandparents and our culture.

Forty years ago Vincent Lingiari gave many Aboriginal communities the hope that something better was possible and that the future can be based on the things Aboriginal people value. As the Australian songwriters Kev Carmody and Paul Kelly put it:

*That was the story of Vincent Lingiari
But this is the story of something much more
How power and privilege can not move a people
Who know where they stand and stand in their law*

Who would have thought a strike by a bunch of Aboriginal people in the remote parts of the Northern Territory would achieve what they did. From little things big things grow...

Who would have thought that the idea of one person could turn into a worldwide movement of Aboriginal people committed to nourishing our spirit as the people of the land? From little things big things grow...

Equity is about what is fair and just but the lenses that we need to look at it through are the values we hold – the things we hold dear to our spirit and hearts. And we need to find the spaces and the voices and the art of being who we are – to tell and listen.

Here we are at a conference on equity and health with 200 people. From little things big things grow...

Remember Vincent, Oodgeroo and Rob's stories. These are examples of how important our treasures are to Aboriginal people – use the lessons and clarity they offer carefully over the next few days as signposts to what is important in a discussion about fairness, about equity. Use them respectfully; they have much power in them.

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Sustainable communities: what should our priorities be?

Valerie A. Brown and Jan Ritchie

Background

Recent developments in the field of health promotion address the wider social determinants of health rather than the narrower risk factors of specific diseases. Most urgently, there is a need for attention to be paid to the ultimate determinants of our health, Earth's life-support systems, and the degree to which these systems can continue to sustain life. Reports of their threatened collapse have focused the minds of those in the scientific, political and general communities on how to escape such a fate. For many, the effective unit of response is the community, the interconnected web of people and place that makes up a human living system. This paper identifies the conditions deemed necessary for the promotion of a sustainable and healthy community and makes recommendations on actions health promotion professionals can take to nurture these conditions.

Sustainability as a wicked problem

The warnings of the human-caused disruption of the planet's life support systems are now two centuries old. Naturalists such as John Muir, walking in the wilderness in the 19th Century, saw some of the early signs.¹ By 1972, the world's ecologists

were concerned enough to issue *Blueprint for Survival*, of how to survive the human technological impact on this living system.² The warnings began that the human species is not only equally at risk with other species, it is the primary contributor to the problem.³⁻⁵ With a damaged ozone layer, global warming having begun its relentless progress, and an increasing fresh water deficit worldwide, the risks to human health have become apparent in all modes of life and all parts of the globe. The lack of progress in averting these changes has also become apparent.

The biologist-ethicist Peter Singer has assessed the global condition for 2002 through a review of the interactions between environment, economy, law and community. Singer concludes that it is industrialised countries' exploitation of the natural resources of the developing world that has resulted in the changes in the global climate. The physical and economic disruption reverberates around the world in drought, storms, and disrupted food production, in a feedback loop that affects the industrialised countries in their turn.⁶

Singer explains how international regulatory systems such as the United Nations and the International Court lack the confidence of the world's nation states. The World Trade

Abstract

Issue addressed: Reports of the degeneration of Earth's natural life-support systems have focused the minds of those in the scientific, political and general communities on how to avert a collapse. For many health promotion practitioners the effective unit of social change is the community, the interconnected web of people and place that makes up a human living system. The challenge lies in determining just what makes up a sustainable community under 21st Century conditions.

Method: This paper reviews major national and international programs working towards sustainable communities, in order to arrive at strategies that establish the necessary interconnectedness and collective action within each individual community.

Results: Moving to a sustainable community under these conditions appears to meet the conditions of a 'wicked problem', that is, one that lies outside the present capacity of the society to resolve it. The move therefore calls for guided social change.

Conclusion: The priorities for guiding the change to a sustainable community involve collective thinking and action as a mutual learning process among the affected individuals, communities, experts, and organisations, towards a holistic sustainability goal.

Key words: Community health promotion, sustainability, determinants of health, knowledge cultures.

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So what?

Recent developments in the field of health promotion focus on the wider social determinants of health. Added to those determinants is the need to ensure that 21st Century environmental systems can continue to sustain life on Earth. Health promotion practice has come to involve the social change necessary to ensure a healthy, just and sustainable future. Acquiring the strategies of the collective thinking and action that establish sustainable communities is the most constructive way for health promotion to move forward along this critical path.

Organization divides along the lines of resource-rich and resource-poor. Civil society and community struggle to find a place within these clashes of Titans. Singer lays the combined scenario before us as a choice between a risk-based negative approach to the future and directing our actions towards the hopeful pursuit of an ideal.

The conclusions of a report issued by the combined science, health and engineering research institutes of the National Research Council of the United States (US) have been powerfully reinforced by the *2005 Millennium Ecosystem Assessment*, prepared by 1,300 experts from 95 countries.^{7,8} These authoritative reports agree that the spiral of environmental disruption is affecting every facet of society. They agree with Singer's proposition that halting the spiral cannot be achieved in piecemeal fashion or by any one set of interests alone. They call for a new type of collaboration between community, science and government.

Health promotion is well placed to take a leadership role following its experiences over the past century. Social change and the hygiene revolution allowed the first crowded cities to combat their crowd-based diseases. Unprecedented for both health promotion practitioners and their potential collaborating partners is the global reach and the timescale of the 21st Century issues.⁹ The remit of 'health for all' now includes the future of all living things on the planet.⁸ The lead time to halt, much less

reverse, processes now in train may be up to 300 years.¹⁰ The all-embracing nature of these challenges to health has coined the equally all-embracing goal of sustainability, that is, "treating environmental integrity, human well-being and equitable development as interdependent and indivisible so that life on Earth can be maintained".¹¹

The persistence of environmental and social degradation in the face of multiple well-informed warnings suggests that the problems facing sustainability fall into the category of 'wicked problems'.¹² According to Rittel and Webber, wicked problems require whole-of-society change, not short-term solutions. Their solutions require the acceptance of paradox and the incorporation of social learning in a concerted response by all parties. The need is for the integration of multiple sources of evidence and not single, specialised perspectives alone; and for constructive collaboration among all the interests involved.

In the case of the wicked problem of sustainability, responses have been at the level of high international policy (such as the Montreal and Kyoto protocols),^{13,14} at individual national government level (such as the regulations around genetically modified organisms)¹⁵ and direct action at the local scale.

At the local scale, the community is the favoured unit for generating social change. In reviews of the field, sustainable communities have some general characteristics. They are utopian, in the best sense, that is, they work towards an ideal, rather than remain fixed on old problems. They are based on whole-of-community learning, seeing the community as a living, growing organism, bringing together community, specialised and organisational constructions of reality. They respect the integrity of living systems at the local and the global scales. They are about directing transformational change, responding to the continued reports that current modes of living are unsustainable.¹⁶

Lessons for health promotion from sustainable communities projects

Health promotion has a rich history of working with the community as a dynamic interdependent system under the various labels of primary health care, health for all, and healthy cities, to name but a few.¹⁷ Each of these initiatives has taken a strong approach to both community and health promotion. Putnam has labelled the cohesiveness of a community network as 'social capital', referring it back to an economic model.¹⁸ A more comprehensive interpretation of the characteristics of a coherent, vibrant community has been developed by Ife¹⁹ and modified for health promotion practice by one of the authors of this article (VAB) (see Box 1).²⁰

Early social movements towards sustainable communities include a Canadian Healthy Communities program in 1985. The Mandala of Health developed in that program can, with very little adaptation, represent the dimensions of a sustainable community today (see Figure 1).²¹

The ideas of Hancock and Duhal²² and of Ashton²³ expanded

Box 1: Characteristics of a coherent, vibrant community.^{19,20}

Ife lists 22 markers by which a community is built and maintained from within, summarised as:

- *Collective development* Community-building among the knowledge cultures of individuals, local community, specialists and organisations involved.
- *Equity* Differential advantage is endemic to a community, and so there are local processes for adjustment and compensation.
- *Sustainability* Environmental and economic resources are finite, so optimising both sets of resources is basic to community sustainability.
- *Power relationships* The tensions between the personal and the political, and individual and public issues are an essential tension in any community.
- *Belonging* A community's sense of identity lies in its collective sense of belonging between people and place.
- *Goals and visions* Vital to a community's existence as defining a shared future.
- *Organic development* A community is essentially organic (plant-like), rather than mechanistic (machine-like).
- *Uniqueness* Particular set of attributes of people, place and time.
- *Inclusiveness* All members are intrinsically part of the community even where they hold dissimilar views – every outcast marks a boundary.
- *Pattern* A sustainable community contains a diversity of interests, ages, constructions of reality, learning styles, and personality styles, weaving a complex pattern.

into the so-called 'new public health' in 1986 with the Ottawa Charter for Health Promotion.²⁴ The principles of the new public health are closely aligned to the later United Nations principles of sustainable development⁴ and now to the more recent community-based Earth Charter principles for sustainability:

- Integrated policies securing intra- and inter-generational equity.
- Protection of ecological integrity.
- Respect and care for the whole community of life.
- Individual access to democracy, non violence and peace.¹¹

While Singer's prediction that governments will not respond to global environmental change has been fulfilled, communities have risen to the challenge. Industrialised countries have been slow to ratify the Kyoto Protocols, and US and Australia have refused to do so. At the same time, communities in both developed and developing countries have joined in enthusiastic endorsement of the Earth Charter and developed a wide range of locally distinctive versions of sustainable communities. Three examples of national and international sustainable communities programs are summarised below.

Healthy Cities

First sponsored by the World Health Organization (WHO) European office in 1987, the Healthy Cities movement to date has spread to more than 5,000 cities worldwide, with more than 1,200 meeting criteria set by WHO. Primarily a collaboration between community, health services and government, many individual cities recruited local businesses and local artists to give the project a whole-of-community presence, for example, Healthy Toronto in Canada²⁵ and Healthy Cities Noarlunga in Australia.²⁶

Factors identified as keys to success include explicit political

commitment, strong leadership, institutional change and intersectoral partnerships.²⁷ Slow at first to incorporate sustainability issues, the concept of Healthy Cities now reaches to projects such as a ranking list of 50 sample cities in the US project 'Green and Healthy Cities'.²⁸ While an excellent example of the potential of the city as a seed-bed for whole-of-community change, Healthy Cities activities have in general remained within the domain of health.

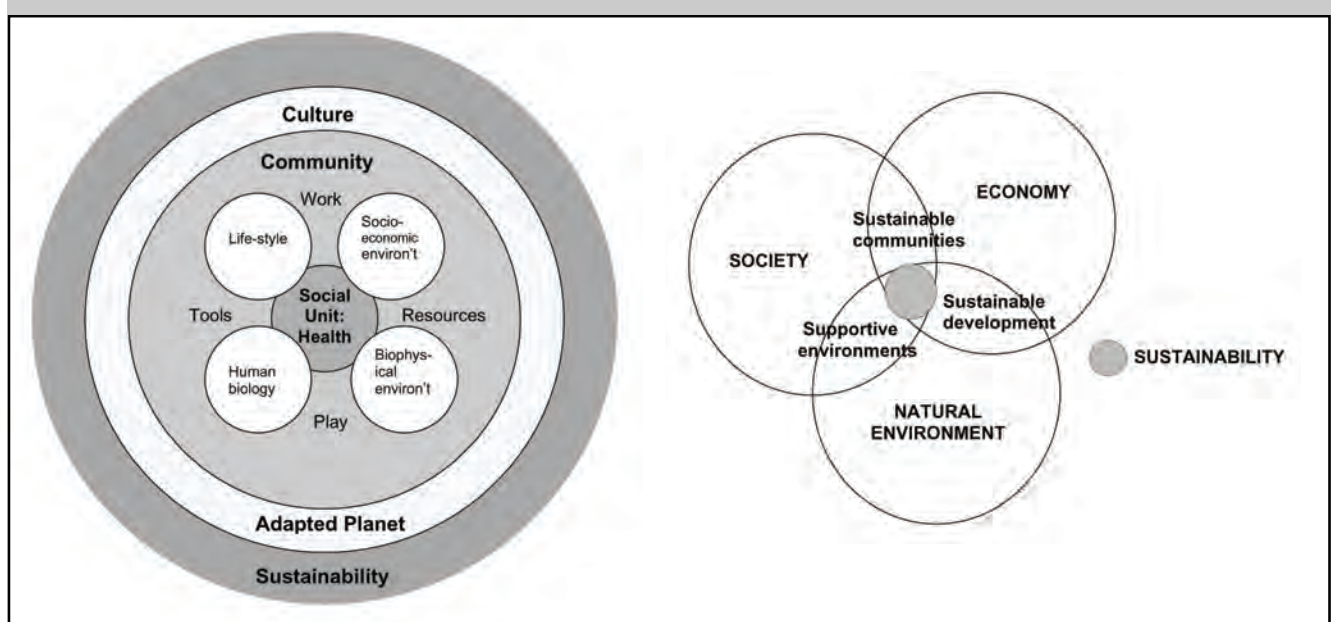
Local Agenda 21

The first world conference on environment and development, sponsored by the United Nations in 1992, drew more than 90 sovereign nations to discuss the interdependence of human and environmental futures and the need for unified action. An extensive agenda for implementing the sustainable development agenda into the 21st Century was titled 'Agenda 21'.⁴ Of the more than 50 chapters of Agenda 21, only Chapter 28 on the role of local government authorities was agreed to by the participating governments. Perhaps unexpectedly, local governments around the world embraced the responsibility, generating Local Agenda 21, an action plan implementing sustainable development principles at the local scale.

Finding a sponsor in the International Council for Local Environmental Initiatives, Local Agenda 21 plans were recommended for all councils worldwide.²⁹ Before 1992, local government in Australia was not considered to hold responsibility for either community well-being or environmental management, but was limited to the old roads, rates and rubbish agenda. By 1994, a nationwide survey of Australian councils found that the councils recognised the need to combine social, economic, and environmental agendas in their strategic planning and in their administrative structures.³⁰

This rapid growth in breadth of responsibility potentially linked

Figure 1: The Mandela of Health and the Elements of Sustainability^{21,22}



Healthy Cities and Local Agenda 21 initiatives. Unfortunately, the two initiatives tended to run in parallel, even in the same city, with Healthy Cities sponsored by health services and Local Agenda 21 by local government authorities. The Australian Healthy Cities Project, launched in 1994, was aimed at combining the full range of community services, the citizens and the professions in a whole-of-community collaboration.

Sustainable Communities

Sustainable Communities as an integrated community, specialist and government project began in Europe in 1993 and spread to North America. The project is characterised by the strong recognition given to the community in the collaboration, and this is reinforced by funding from local community and philanthropic interests. The suite of interconnected aims for a sustainable community were phrased in commonsense and action-oriented terms:

- Living sustainably.
- Creating community.
- Growing a sustainable economy.
- Protecting natural resources.
- Ensuring smart growth.
- Governing community.³¹

Summing up the lessons from a decade of sustainable communities initiatives, one returns to Rittel's emphasis on recognising the role of paradox in resolving wicked problems. The power base of each of the successful initiatives was also their weakness. Healthy Cities was based in a professional field, Local Agenda 21 in government administration and Sustainable Communities in community consortia. External evaluations judged Healthy Cities as being too confined within the specialised hegemony of health services, Local Agenda 21 as fragmented between social, economic and environmental departments of councils, and Sustainable Communities as vulnerable to manipulation from those other two powerful community influences.

Sustainable communities as a collective practice

In fostering sustainable communities, a recurring issue has been the need for reconciliation among the different power bases that constitute a viable community. The aim of combining the interests of community, experts and government was central to Healthy Cities, Local Agenda 21, and Sustainable Communities programs alike. However, where any one of these power bases was the dominant sponsor of a sustainable communities program, this proved to limit its overall success in moving to more sustainable practices. Here we have another of the paradoxes predicted for a wicked problem. A sustainable community is built by strengthening each of the contributing sectors and at the same time combining their powers equitably for a collective response.

The Australian Local Sustainability Project explored this paradox

in a collaborative action research project from 1996-2002.³² The project drew on the combined lessons of Healthy Cities, Local Agenda 21 and Sustainable Communities. A series of inquiries investigated local sustainability initiatives working towards a more healthy, just and sustainable future. Each of the inquiries accepted the criteria for a thriving community developed by Ife¹⁹ (see Box 1) and included the functional elements of community well-being presented in the mandala of Hancock and Perkins (see Figure 1).²¹ Each inquiry examined the progress of a whole-of-community change initiative that originated in the power bases of community, experts and government, respectively.

Two of the studies examined the requirements for involving health promotion in collective decisions towards sustainable communities, one based in environmental health practice³³ and the other in ecological public health.³⁴ Several important lessons emerged for health promotion practitioners. The first arose from the general trend in sustainability projects to combine social, economic and environmental resources (widely known as the triple bottom line). This was a useful direction in theory but problematic in practice. Without access to strong integrating processes, councils and other local organisations set up three parallel accounting strands, which then served to increase existing departmental competition for resources.³⁵

Second, each of the three interest groups, community, expert and government, brought a different power base to the collective capacity to arrive at a sustainable community. This led in turn to different constructions of reality and marked conflicts of interest. Each interest group had its own body of knowledge, internal power structure, set of desired outcomes, and language. Each tended to reject the knowledge and language of the others. Their constructions of reality were so distinct from one another that they could be described as different knowledge cultures (see Figure 2).³⁶

Third, in order to overcome the conflicts of interest, any collaboration among the familiar trio of community, specialists and government required the commitment of individuals and a shared holistic focus on the issue being addressed. These added two further ways of knowing with their own distinctive knowledge cultures and methods for determining 'truth'. Thus, there were five knowledge cultures involved in any lasting whole-of-community action towards a sustainable future (see Figure 2).^{36,37}

Fourth, each of the knowledge cultures was divided within itself, requiring an integrating structure of its own before it could successfully contribute to a wider synthesis. The symbols in Figure 2 represent the different integrating structures. Individuals needed to be able to speak freely from their own lived experience, hence the myriad individual dots. Different communities might be connected in space and time, but each had its symbolic stories and events that gave it integrity and vision, shown as a connected wavy line. Specialists such as public and environmental health practitioners had their own differing frameworks and rules of inquiry that determined their separate

approach to a problem, and so formed separate compartments. While governments shared with organisations the practice of generating a planned strategic direction (represented as arrows on a closed circle), different government departments and individual organisations were enmeshed in a competing, not a collaborative, system.

At the outset of the Local Sustainability Project studies, specialised and organisational knowledge cultures were competing for control. Local knowledge generated from within each of the communities was regarded with suspicion and labelled irrelevant to the ‘real’ business of power relations. Individuals’ direct experience was rejected as biased and self-interested, quite often by the individuals themselves. The ruling idea was that legitimate decisions were based on either numbers or on realpolitik, and these were in opposition to one another. An overriding integrated framework that did justice to all the knowledge cultures was badly needed.

Fifth, the solution to the conflicting interests of competing cultures proved to be to escape the ruling hierarchy by working collectively within a mutual learning process. The Local Sustainability Project drew on Kolb’s experiential learning framework³⁸ as the basis for managing collective social change. One outcome was a *Sustainability and Health* text book on the capacity for public health to support global ecological integrity.³⁴ The text contained tools for each knowledge culture to draw on its own set of principles, problem parameters, potential and practice in learning to work with the others. Health promotion’s guiding principles, practical parameters, potential for creative change, and practical solutions were shared in mutual social learning with the other knowledge cultures, following the stages of the experiential learning process (see Figure 3).

Collective action towards a sustainable community therefore proved to be a social learning matter, not a competition between

interest groups. In putting Kolb’s experiential learning cycle into practice, the knowledge cultures required strong methods of synthesis that would allow them to work collectively at each of the four learning stages. Another study from the Local Sustainability Project identified five strands to be woven together by participants in any social learning process. These strands can be matched with the five elements of the new public health’s Ottawa Charter, now two decades old but still the driving force for health promotion practice:

- Reflectivity: reflections on own ideas and actions (enhancing individual capacities).
- Systemic thinking, with recognition of the interdependence of elements of an issue (ensuring supportive social and natural environments).
- Negotiation: respect for the differences between the knowledge cultures (intersectoral collaboration).
- Participation based on equal involvement of all knowledge cultures (strengthening communities).
- Integration of understanding in a collective learning process (reorienting services).^{17,39}

There are three key conclusions for health promotion practitioners to draw from the experiences of working towards sustainable communities. First, the necessary whole-of-community change to maintain global ecological integrity depends on collective thinking and collective action. That, in turn, requires a process of social learning that brings together the different constructions of reality among the participating interests. Health promotion has long experience in both fields of action and so can provide the much-needed leadership in resolving the wicked problem of a humane sustainable future for life on Earth.

Nevertheless, to fulfill its promise, the field of health promotion will need to broaden its field of practice from the specialised health profession to include the other knowledge cultures, individual, community, organisational and holistic. The third conclusion for health promotion practitioners is that they will

Figure 2: Sources of evidence in the nested set of Western knowledge cultures.²⁰

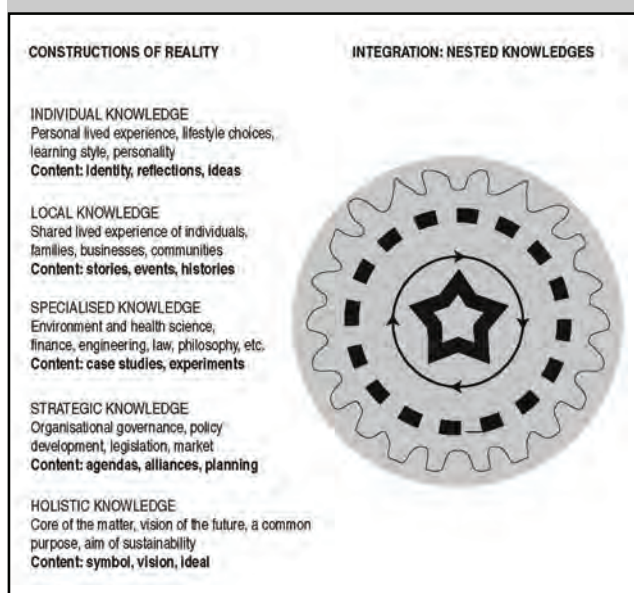
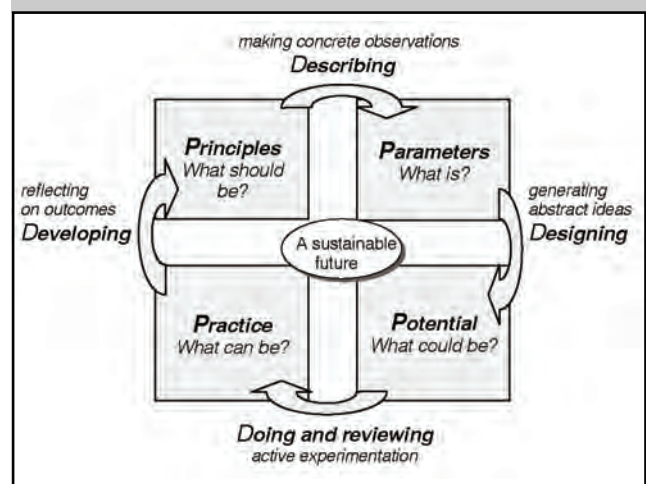


Figure 3: Adaptation of Kolb Experiential Learning Cycle.^{37,38}



need skills in the management of integrated social learning. Health promotion has led public health into concerted social change before, in the cities of the Industrial Revolution and in addressing high-consumption lifestyles. It is needed now to give guidance to learning to live with the impact of people on the planet.

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Federal, State and Territory government responses to health inequities and the social determinants of health in Australia

Lareen Newman, Fran Baum and Elizabeth Harris

Introduction

*Inequalities in health are of concern to all countries and represent one of the biggest possible challenges to the conduct of government policy.*¹

An important part of the social determinants in health agenda is the quest to reduce health inequities through planned action by governments. This concern has a considerable history with strong roots in the 19th Century, evident through the work of such public health reformers as Rudolf Virchow in Upper Silesia² and the British social reformers such as Rowntree. More recently

the British Black Report published in 1982,³ although soundly rejected as a basis for policy by the Conservative Thatcher Government, did provide a clear agenda for governments that wanted policies that might reduce inequities. In Australia, concern about health inequities has been shown federally through reports and initiatives in the past two decades that were concerned about the impact of social determinants in maintaining health inequities.⁴⁻⁸ These reports have made several policy recommendations.

Through the 1990s, as evidence accumulated to indicate that

Abstract

Issue addressed: Planned actions by governments can play an important part in addressing the social determinants of health and health inequities. We assess the extent to which Australian health departments are committed to health equity as a core value, and the extent to which strategic directions and policies show evidence of action and achievement in reducing health inequities and attention to the social determinants of health.

Methods: Key documents guiding each health department since 2000 were sought from a key informant in each jurisdiction (State/Territory/federal). An analysis was made of the content in terms of stated values, strategies, objectives, intended and current initiatives, collaborations, funding, and reporting of achievements in relation to the reduction of health inequities and the attention accorded to the social determinants of health.

Results: All jurisdictions are explicitly or implicitly committed to reducing health inequities and to addressing the social determinants of health to at least a limited extent. The extent of commitment varies from those who make a clear statement of the importance of achieving health equity at both whole-of-government and health department level, to others who have extremely limited commitment. There is also variation in the extent to which directions are transformed into planned initiatives to improve health outcomes or access to health services for disadvantaged groups or areas, and variations in the degree of monitoring and evaluation.

Conclusion: Although substantial health inequities exist in Australia there is explicit or implicit recognition of the underlying value of equity within all jurisdictions and some policies designed to increase health equity in all. However, in most jurisdictions health equity could be more explicitly incorporated into core government and health department strategies and initiatives, and there is room for the development of the capacity to monitor change over time in access to services, quality of care, and improved health outcomes.

Key words: Health inequities, social determinants of health, governments, Australia.

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So what?

Reinforcement of fairness and equity as core values of Australian society is the responsibility of governments supported by civil society. The health sector should provide leadership and evidence of the impact of social determinants on health and equity. A National Health Equity Framework should be developed to encourage comprehensive and co-ordinated national action.

health inequities were increasing both within countries and between countries,⁹⁻¹¹ more and more governments have expressed concern with this issue and a determination to do something to reduce them. Much literature has described the inequities and the underlying reasons, but there has been less focus on what action should be taken. When announcing the formation of the Commission on the Social Determinants of Health at the 2004 World Health Assembly, the late director-general of the World Health Organization said: "The goal is not an academic exercise, but to marshal scientific evidence as a lever for policy change – aiming toward practical uptake among policy makers and stakeholders in countries." This clearly is the key challenge in regard to health inequities.

An important aspect of the quest for practical uptake is the assessment of existing policies. This issue of the journal shows that reducing health inequities will require concerted action across many sectors. Although the health sector is likely to make only a relatively small contribution to the reduction,^{12,13} it nonetheless has an important role to play especially in providing leadership and evidence of the relationships between health and the social environment.

There have been no recent systematic assessments of the policies of Australian health jurisdictions relating to health inequities and this paper sets out to address this gap. The paper describes the methods used to do this and then summarises plans and action from State, Territory and Federal governments to assess the extent to which they are recognising and addressing health inequities.

Methods

The chief health officer, chief medical officer or executive director of each Australian health department was identified as a key informant and was asked to provide the key strategic documents that they felt had been guiding their health department's strategic directions since the year 2000. This person was also asked to identify any documents or policies specifically aimed at reducing health inequities. Although initial inquiries were to this person, they or their department often nominated a delegate to provide the documents. All recommended documents were analysed.

However, in some instances additional documents were also analysed (such as a health department's annual report, State-level health indicator documents, or recent reviews of the health system). This was done in order to make a more detailed assessment of attention to health equity issues if this was not evident from the documents nominated by the department, or if these documents were mentioned within the documents provided and appeared relevant to the review questions. The main emphasis was on analysing documents that the health department staff felt were influencing their directions, and not on analysing the same types of document for each department.

A review framework was developed to analyse documents in two main ways. First, it sought to determine whether health equity was a driving value in the documents, whether documents

used language consistent with an understanding of equity and the social determinants of health, and whether there was an explicit or implicit commitment to reduce health inequities. Second, it considered whether commitment was reflected in general or specific actions or plans, whether there were initiatives and a funding allocation directed at reducing health inequities, and whether there was infrastructure to support equity action (such as staffing or tools). Initiatives targeted at the areas of early childhood or refugee health were used as indicators of the responsiveness to health equity issues because these were felt by the researchers to be issues of particular contemporary relevance.

The resulting summaries were checked with the key informant and with an 'equity-friendly policy commentator' (mostly university academics) in each jurisdiction. The review framework, full-length summaries and documentary references for each jurisdiction are available at http://som.flinders.edu.au/FUSA/PublicHealth/AHIP/projects_list.htm. The analysis is based on documents that were publicly available up to and including August 2006; where the word 'Aboriginal' is used this does not necessarily exclude people of Torres Strait Islander background.

Results

This section provides results in two parts. The first section discusses the extent to which jurisdictions have made progress on addressing health inequities, as judged on the basis of the documentary evidence outlined above. A continuum of progress was identified from those jurisdictions exhibiting a strong philosophical commitment to equity and health equity and demonstrating this with concrete initiatives, to those where the strength of value commitment was less clear and where funding allocation or planned actions could be made more evident. All jurisdictions acknowledged the need for collaborative work with other sectors to improve health, and to consult with 'the community'. The second section of the results provides short summaries for each jurisdiction, emphasising strengths and areas for improvement.

Those jurisdictions whose documentation suggests that they have made the most progress in concrete action to reduce health inequities are New South Wales, Victoria, South Australia and Tasmania. Their progress is evidenced in two main ways. First, there is a commitment to health equity as a value at both State Government and health department level, with documentation explicitly using language that is consistent with an understanding of the social determinants of health and health inequities. A commitment to reduce health inequities is written prominently into the values, mission, strategies and objectives in their State strategic plan and/or their health department strategic documents. In the best circumstances, the health department draws directly on the State-level plan to formulate health department priorities and targets, and then reports these back in a State progress report. Drawing on these directions to prioritise actions, there are planned and evaluated initiatives to reduce differences in health outcomes between named groups

or areas and/or to address the broader social determinants of health.

Second, these jurisdictions show a commitment to re-orient the government and the health system to address equity issues more widely, and health inequities in particular, recognising that health is both a foundation of, and an indicator of, an economically prosperous and socially harmonious society. In these ways, both commitment to health equity and the development of concrete actions are clearly evident.

These jurisdictions are also committed to developing a wider support base and structure to address health equity. They have mechanisms to collect and report on state-wide health indicators, including indicators of the distribution of health and disadvantage that can be used in health equity targets and evaluations. They also have strategies or objectives to build capacity to better understand the causes of health inequities and to identify the most effective interventions and initiatives. They are allocating significant funding specifically to reduce disadvantage, or are redistributing funding under population-based models. Those most serious about reducing health inequities are aiming for health equity to become integrated into 'core business', and for all government initiatives and policies to be reviewed using an 'equity filter'.

Those jurisdictions that have not made as much progress are the Australian Capital Territory, Western Australia, Northern Territory, Queensland, and the Federal Department of Health and Ageing. Their documents either show little or no evidence of a clear commitment to equity as a value, or to health equity in particular, either at whole-of-government or health department level, and they do not overtly use health inequities language or talk about the social determinants of health.

In some jurisdictions, their chronic disease or healthy lifestyle strategies take an equity focus that may reflect greater levels of understanding within these policy areas of the substantial burden of disease related to health inequity and the need to directly address the social determinants of health in program implementation. Furthermore, while some jurisdictions do clearly state a commitment to address health inequities, this commitment does not necessarily pervade their strategic directions or targets in such an obvious way, nor to the same extent, as the jurisdictions that have made better progress. It is also more difficult in the documents of these jurisdictions to track how ideas of equity are informing policy, initiatives, funding or measurable targets to improve health outcomes or access.

The following summaries outline specific aspects of each jurisdiction.

New South Wales

The Office of the Chief Health Officer of New South Wales (NSW) recommended a range of documents that state "equity in health" to be "a major goal for the NSW Government" and "a core value of NSW Health". These values, and a commitment to improve health for "health-disadvantaged groups", are reflected in the *Planning for the Future*¹⁴ consultation documents.

The department's new health plan for the next 20 years, which is to be developed from these, will hopefully continue to reflect a clear commitment to reducing health inequities. The values are also reflected to some extent in the state government's draft *State Plan*,¹⁵ which, although it does not set improved health outcomes as a clear priority (in the same way that the Victorian and South Australian State documents do), does acknowledge the need to improve health for specified groups and for areas of "entrenched disadvantage", and aims to address some social determinants of health.

Goals in the Health Department's current *Strategic Directions*¹⁶ include "fairer" access and "fair" allocation of health funding and resources across health areas. The department also states a commitment to strengthen policies and programs to address inequalities in health status and to undertake initiatives to reduce health inequities in specific communities (particularly Aboriginal communities). Some examples are the Housing for Health Program for Remote Aboriginal Communities, and funding for Community Health for Adolescents in Need, an early intervention and primary health care initiative for young homeless people. Documents identify a variety of other health-disadvantaged groups, including children and refugees.

The *Chief Health Officer's (CHO) Report* included a chapter on refugee health indicators in 2004, and the department funds the NSW Refugee Health Service and initiatives such as promotion of HIV prevention to African refugee communities. Trends in key health indicators are provided in the CHO Report and department *Annual Report*, with some disaggregated for example by area, rurality, Aboriginality, socio-economic status, and country of birth.

New South Wales has the most comprehensive range of structural supports to encourage health equity, including a health and equity statement (*In All Fairness*)¹⁷ to provide direction for planning, a resource distribution and funding formula to allocate resources between the eight health areas on the basis of population numbers and degree of disadvantage, and funding for research to further the understanding of health inequalities and to strengthen links between research and policy/practice. The department also supported a NSW Health Promotion Directors' Equity Project that resulted in the *Four Steps Towards Equity* toolkit¹⁸ to embed health equity into health promotion practice. It encourages local health services to develop 'health and equity profiles' in their health plans to identify where action is needed, and encourages review of existing initiatives using an 'equity filter' and review of 'best-buy' policies and practices to address health inequities. The department sees itself having an important role in advocating for a reduction in health inequities in the broader public policy arena.

While some evaluation is conducted, for example the three-year review of the NSW Aboriginal Maternal/Infant Health Strategy, which showed some increases in the proportions of Aboriginal mothers using antenatal care and reductions in Aboriginal perinatal mortality and prematurity, the health and equity statement's recommendations need to be advanced to

allow NSW to further develop its capacity to assess whether actions and investments are reducing health inequities.

Victoria

The Victorian Department of Health's health inequalities project officer recommended a range of documents and these clearly demonstrate a strong overarching philosophical commitment by the Victorian Government to reduce disadvantage in general and health inequities in particular. This commitment is reflected in the strategic directions and key objectives of the Victorian Department of Premier and Cabinet's State Strategic Plan (*Growing Victoria Together*¹⁹), and those of the Department of Human Services (DHS) and the Department of Health (DH), which include, for example, "disadvantage in health, education and housing will be reduced".

The Victorian Government also has a specific action plan to reduce disadvantage.²⁰ Documents in general define and describe disadvantage, health inequalities and groups with greater health problems, including children and refugees. Responsibility for leading action on reducing health inequities is allocated to the DHS and VicHealth (Victorian Health Promotion Foundation) through developing programs, building capacity in health equity knowledge, and advocating for health equity in the wider arena. A significant amount of funding is clearly directed by the Department of Premier and Cabinet to reducing disadvantage and it is easy to identify a range of actions and projects under way to address the social determinants of health and health inequities. The Neighbourhood Renewal Program is one obvious major initiative in this regard.

Nevertheless, monitoring and evaluation of progress is mixed, with some measurable indicators used (e.g. increases in life expectancy), and improvements reported for some groups or areas (e.g. rural/urban), but not always for more obvious groups such as those with low income. While objectives and achievements are reported in annual progress reports, the impact of actions is often described retrospectively or measures are based on change in numbers of services/patients or numbers of projects established, rather than on change in health-related indicators. Victoria could strengthen and refine evaluation and monitoring systems that report its progress in addressing health inequities.

South Australia

The South Australia (SA) Department of Health's executive director of Health System Improvement and Reform recommended a range of State Government and departmental documents guiding the department's directions, including *South Australia's Strategic Plan*.²¹ Collectively, these show a clear commitment at both government and department level to improve overall standards of living to support and reflect State prosperity, as well as a specific commitment to the Government's health reform agenda and to action on issues of inclusion, equity and health inequality. This includes addressing the social determinants of health and targeting scarce resources to "the most vulnerable" to improve health and well-being and "close

the gap in outcomes". Although strategies and plans address early childhood health, refugee health is not mentioned.

What clearly stands out for South Australia is that the Health Department's priorities for action link in with the overall philosophy and specific health targets in the State strategic plan, and the department therefore has actions that direct resources to improve access and equity in health. Nevertheless, disadvantage and health inequalities are most obviously defined and described in the resource documents *Inequality in South Australia*²² and the *Social Health Atlas of South Australia*,²³ although these inequities are not necessarily clearly addressed in the Government's (and hence department's) generally worded targets.

The State Government sees responsibility for health equity vested in both itself and the general community, and there are strategies for collaborative partnerships, cross-agency work and community participation to improve health outcomes. There is retrospective description of relevant initiatives and funding, although fewer initiatives addressing health equity and the social determinants of health are evident when compared with NSW and Victoria. The Department of Health commits to influence other government departments to have a positive impact on the social determinants of health, and to develop health strategies to address inequities in the State strategic plan's target areas for which the department has lead responsibility.

Other planned actions include developing population-based funding models and integrating health targets into the State budget process. Monitoring and evaluation of health-related targets in the department documents and South Australian strategic plan is to occur biennially based on quantitative indicators, although, as with other jurisdictions, inclusion of more specific variables to identify health improvements in particular disadvantaged groups or areas would improve transparency of progress.

Tasmania

The Department of Health and Human Services' (DHHS) manager of the Policy Unit in Community Population and Rural Health recommended five documents, including the vision for the State – *Tasmania Together* – which was developed at the request of the Premier by an independent board through community consultation.^{24,25} These show some attempt to align strategic directions and outcome indicators with those of other Tasmanian and national policies, but not to the same extent as in South Australia and Victoria. The documents do demonstrate a commitment by the Tasmanian Government to improve overall health and well-being, as well as improving living standards and health for the disadvantaged, but health equity is not as explicit in the values, objectives and outcome measures in DHHS or broader government documents as it is in other jurisdictions.

Furthermore, the health inequities language that is used in DHHS documents is not reflected to the same extent in whole-of-government documents. There is nevertheless still a strong emphasis on the social determinants of health and the

importance of social capital in creating a healthy, harmonious and economically prosperous state. The DHHS has responsibility to improve overall health and to reduce disparities in the impact of chronic conditions between groups. Health inequities are defined and discussed in the DHHS documents, and groups at risk of greater health problems are identified.

Events in early childhood are seen as crucial to lifelong health, and the achievement of a major reduction in the prevalence of cigarette sales to children is highlighted. Immigrant groups are also identified as at increased risk of disadvantage and poorer health. Departmental and government-level objectives aim to improve health outcomes through action on the social determinants of health and through access to health services. Some objectives are clearly linked to measurable targets and *Tasmania Together* has specific benchmarks (e.g. annual percentage reductions in proportion of population living below poverty line).

Other documents give examples of initiatives such as the Health-Promoting Schools model, or quantify increase in services, but not all clarify whether disadvantaged groups are targeted and quantitative indicators to measure improvement are not always included. Improving data collection and the monitoring and evaluation of priorities and change in health indicators is a future objective, although some documents (e.g. *Food & Nutrition Policy*²⁶) already have an associated action and monitoring plan. Documents acknowledge the importance of working collaboratively across sectors to address complex problems, and one of the most striking aspects for Tasmania was the very broad community consultation underpinning *Tasmania Together* and its review. Discussion of funding is patchy, although the DHHS is to develop annual work plans for the Aboriginal Health Plan, which includes annual resource allocation.

Australian Capital Territory

Three documents were provided from the Department of Health by the Office of the Chief Health Officer. They show the Australian Capital Territory (ACT) Government having achievement of health equity as a value and being committed to addressing health inequities through action on the social determinants of health. This reflects the Government's vision for health, which includes a community that is "inclusive" and "fair". The aims are to maintain good health for the whole population while working to "narrow the gap in health outcomes" experienced by disadvantaged and vulnerable groups. Some documents provide health indicators but these are not disaggregated by socio-economic status. Ensuring equitable access to appropriate health services is also intended. However, the aim to increase coverage of private health insurance may well widen the health gap in the ACT and reduce the acceptability and possible quality of public hospitals if they come to be seen as a residual service. The ACT Government states an intention to be open and accountable about resource allocation, but the need to shift the mix and allocation of resources is only mentioned in relation to the increasingly ageing

population. The ACT documents acknowledge the need for cross-sectoral approaches to address health inequities, and the Health Department is seen as having a lead role in this.

However, intentions to "narrow the health gap" are not overtly translated into plans or actions that clearly target the disadvantaged groups mentioned. Refugee health is not mentioned, although there is an intention to prevent the worsening of detainee health. The most explicit action in the ACT is in regard to Aboriginal health, where the ACT Government commits to intersectoral work. The ACT Government and Health Department's commitment to reduce health inequities could be better evidenced in concrete actions, along with more intensive reports of monitoring and evaluation of equity in health outcomes.

Northern Territory

For the Northern Territory (NT), the senior policy officer, Health Services Policy Branch, recommended one main document guiding the Department of Health & Community Services' (DHCS) vision from 2004 to 2009 (*Building Healthier Communities*).²⁷ The department's latest annual report was also reviewed.²⁸ What is most noticeable when compared with the other jurisdictions discussed so far is that strategic directions and core priorities in the NT documents do not explicitly mention health inequalities or health inequities, or link with any higher-level philosophical commitment by the Government to equity as a value.

However, health inequities are implicitly addressed in the obvious emphasis given to improving the "unacceptable situation" in health that exists for the Aboriginal population (29% of all NT residents in 2001). The social determinants of health are also discussed implicitly when mentioning the need to provide "health hardware" and to address the many pathways to health such as through schools, jobs, housing and justice. There is, however, no clear allocation of responsibility for health equity in the NT Government or DHCS and no specific health equity documentation. The department does aim to improve overall health and services, and to improve health outcomes for those with poorer health, and there is a stated aim to not only increase social and physical access to services, but to improve technological access to health promotion and prevention information, particularly for rural and remote communities.

Building Healthier Communities has 10 core strategic areas targeting specific groups, particular behaviours, or particular service issues. Children's early-years health is one of the 10 key areas, but refugees are not mentioned at all (although this is not surprising considering the minimal number of refugees moving to the NT). Both within *Building Healthier Communities* and the DHCS annual report, the impact of actions is described retrospectively or measures are based on change in numbers of services or new projects, rather than measuring change in health-related targets.

Documents also do not mention specific funding mechanisms

to address inequities or provide transparency of funding allocation for each priority. Despite a focused commitment to achieve improved health outcomes for the Aboriginal population, NT documents could go further and explicitly introduce social determinants and health inequities language, identify funding allocations for specific initiatives, and have clear monitoring and evaluation processes.

Western Australia

For Western Australia (WA), the Department of Health's senior policy officer, Population Health Policy Branch, and manager of State-Commonwealth Relations recommended 11 government documents plus the *Healthways Strategic Plan* (Health Promotion Foundation). Documents exhibit a commitment to improve health for all and to work for equitable and fair treatment and access to health services. However, while some documents talk of the need to address the social determinants of health, WA has only patchy acknowledgement of the need to address health inequities and improve equity of health outcomes. This is despite the Reid Review of the WA health system including "reduce inequities in health status" as the second point in its first of 86 recommendations.²⁹

Health Department priorities that focus on disadvantaged settings and groups are clearly mentioned in some documents (e.g. the *Aboriginal Health Strategy* and *Eat Well Strategy*), and most clearly in the *Healthways Strategic Plan*.³⁰⁻³² The WA Department of Health would exhibit a clearer commitment to reducing health inequities if it were to enact the Health Review recommendation to emphasise in its vision and mission the values of "equity and justice" and an aim for health improvement for "Indigenous, rural and remote, and disadvantaged populations", and to explicitly highlight these in strategic documents and funded initiatives. Children are targeted in several strategies, and planned initiatives include assistance to newly arrived families. Support for refugees is most obvious in the *Substantive Equality Framework* (although this focuses mainly on reducing racism) and in *Languages in Health Care*, which focuses on improving access to health care.^{33,34} Some WA initiatives directly target non-Aboriginal groups (e.g. a free tuberculosis screening program for migrants), although initiatives addressing disadvantage most obviously aim to target the Aboriginal population. Targeted initiatives, such as one which encourages breast screening for Aboriginal rural women, could be duplicated for other disadvantaged groups such as refugee women.

WA shows little evidence of plans that are resulting in concrete health improvements for disadvantaged groups, and few measurable health targets with allocated funding. The overall absence of targets may reflect the lack of data disaggregated by indicators of disadvantage, or the annual report focus on service provision rather than health outcomes. Future department plans include improved data collection and performance evaluation, and the Health Review recommended an annual epidemiological report on health in WA. These could help develop more targets that could enable performance progress

to be regularly evaluated in relation to the reduction of health inequities.

The Department of Health also states an intention to move from resource allocation based on submissions to population based resource allocation, although this is not yet developed.

Queensland

The director of the Policy and Development Unit, Population Health Branch, recommended six documents for Queensland, but pointed out that Queensland Health is redrafting its directions following a health systems review. The Queensland Government and Health Department have documents outlining broad objectives that include "a fair, socially cohesive and culturally vibrant society", and which note the need to address social determinants of health and reduce "disparities in health" between groups. The latest *Strategic Directions 2006-2011*³⁵ does not include equity as a fundamental value but does include "equitable health outcomes" as a strategic direction, and "equity" as a key performance indicator (albeit with no details of measurement).

The Health Department ascribes itself a leadership role in supporting "wider socio-economic health improvements opportunities". While some department documents talk of health inequalities, "equity issues for people in low socio-economic circumstances" and the need for targeted programs to improve health for disadvantaged groups (particularly for the Aboriginal population and for rural and remote areas), there are no obvious benchmark targets that clearly aim to reduce health inequities in other disadvantaged groups. There is also some discrepancy between indicators reported in *The State of Health of the Queensland Population*,³⁶ which highlight certain health inequities, and policy directions that do not clearly address these. As an example, *State of Health* notes that suicide rates are higher in socio-economically disadvantaged areas and are affected by social factors such as poverty, yet Health Department strategies to prevent suicide do not target socio-economically disadvantaged groups or areas.

The *Smart State: Health 2020* document and *Chronic Disease Strategy*^{37,38} have plans to start developing responses to equity issues, but other documents focus more on areas of illness and increasing the funding of services and numbers of staff. Examples of initiatives that do target the social determinants of health and disadvantaged groups include the Community Renewal Program and the Child Health Partnership Project with Rio Tinto, which will introduce preventive measures to reduce antenatal exposure to smoking and alcohol in Aboriginal communities. Children's health is also targeted, including in a specific *Aboriginal Children's Health Strategy*,³⁹ and refugee health in the *Multicultural Action Plan*.⁴⁰ The latter reports on "local activity directed at specific disadvantaged groups" and gives details of a refugee health clinic in Logan and the Nourishing New Communities project to help settlement agencies familiarise refugees with healthy eating and kitchen safety.

Queensland Health has plans to develop funding models based

on population and health data, and health targets for strategic health improvement. Monitoring and evaluation programs are just being established, and these could include clearer articulation of achievements in addressing or improving health equity for both Aboriginal and non-Aboriginal disadvantaged groups and areas.

Federal

The senior adviser, Population Health Division, Federal Department of Health and Ageing, recommended a range of key documents, including the *Corporate Plan*, *Annual Report* and *Portfolio Budget Statement*.⁴¹⁻⁴³ Compared with the health inequities language and commitment that is evidenced extensively in the documents of some State-level jurisdictions, the federal documents exhibit scarce mention of health inequities and the social determinants of health. The *Portfolio Budget Statement* does make passing comment about improving health for “low income Australians” to be comparable with that of the general population, yet this is not obviously reflected in any vision or mission statements, strategic directions, initiatives, funding or outcome measures, except for Aboriginal people.

The *Corporate Plan* notes the need to improve health outcomes, health access and quality of life for the Aboriginal population, the aged, and rural communities, but does not mention socio-economically disadvantaged groups in general. Some quantitative targets are set to generally address social determinants of health (e.g. “greater than 86% of secondary schools participating in ‘MindMatters’ mental health literacy program”), but this is not linked to improvement in disadvantaged groups or areas (again, except for Aboriginal people). Indeed, most progress indications are reports on a selection of positive achievements, rather than measures against benchmarks.

As with other jurisdictions, data highlighting health inequities by socio-economic status (for the national level produced by the Australian Institute of Health and Welfare) is therefore not reflected in performance outcomes to make progress transparent. The main departmental contribution to improving outcomes and access for low-income groups is implicit in the desire to maintain accessibility to affordable health care through funding of the Medicare universal health system and the Pharmaceutical Benefits Scheme.

However, the annual report notes that the Medicare Benefits Schedule still requires more equitable distribution between localities. As with some other jurisdictions, while there is no obvious health equity documentation, the *National Chronic Disease Strategy*⁴⁴ does include some discussion about the social determinants of health and the importance of inclusion, strong communities and healthy environments. It also notes the disproportionate prevalence of chronic disease for certain groups, including the socio-economically disadvantaged, and has a key principle which includes “reducing health inequalities” and a key direction of “focusing on health inequalities” in prevention and intervention initiatives.

The Department of Health was a key developer of this document, to which the Australian Health Ministers’ Advisory Council (AHMAC) contributed under the aegis of the National Health Priority Action Council and the National Public Health Partnership. The document’s perspective on equity is not linked to any stated fundamental commitment to equity at the whole-of-government level. It would be encouraging to see a national health equity strategy or framework alongside the plethora of other national strategies and frameworks that are guiding health directions in Australia.

Discussion and Conclusion

This review of health equity policies being developed and used by Australian governments suggests that all jurisdictions have an implicit or explicit recognition of the underlying value of equity and at least some policies designed to increase health equity. All jurisdictions, in at least some of their policies, pay attention to the importance of social determinants in influencing health outcomes and health access. The vital importance of improving Indigenous health status is recognised in each jurisdiction. Our study suggests that some jurisdictions (New South Wales, Victoria, South Australia and Tasmania) demonstrate a higher level of commitment to social justice principles and have more equity-friendly policies than others. The study also highlights the important role that State governments can play in advocating for a whole-of-government commitment to health equity, and the important role that the Commonwealth Government plays in ensuring continued access to health services through such universal programs as Medicare and the Pharmaceutical Benefits Scheme. As a nation we have made progress in attempting to prevent and redress health inequity, but initiatives need to be preserved and strengthened.

Our review leads to the following conclusions concerning ways in which commitments and policies to reduce inequities could be strengthened:

1. Governments have a responsibility to recognise and reinforce fairness and equity as core values of Australian society. Civil society groups (such as the Australian Health Promotion Association and the People’s Health Movement – Australia) have an important role in advocating for them to do this. Promotion of these values will encourage citizens and corporations to take action in the interests of equity. Regulations will be required in some instances. The creation of an equity climate is important to encourage health systems to be proactive within their services and programs to increase equity and also to invest in whole-of-government initiatives. Public and private debates about values are essential to creating this kind of climate. Such debate is being actively encouraged by the editors of this journal.
2. Key programs of cross-sectoral activity should be identified within each State and nationally where there is potential to make long-term investments that will result in improved equitable health and social outcomes for the community. This approach is preferred to investing in a series of short-

term pilot projects. Potential long-term initiatives include investing in early childhood, measures to include more people in employment, and locally based and locally driven healthy community projects (see also article by Baum and Simpson in this issue). These long-term initiatives should be well monitored and evaluated, and government departments should be required to collect and report on health equity indicator data.

3. Jurisdictional networks of staff (which also include key academic groups) should be established with responsibility for equity-related programs, to pool expertise, to develop capacity across the health system and, in the longer term, to develop links with other sectors. Our documentary review indicates that the involvement of academic groups outside the bureaucracy appears to encourage the inclusion of health equity language, the commitment to social justice and detailed understanding of the social and economic determinants of health.
4. Each jurisdiction should commit explicitly to health equity in their values, mission, goals and strategic directions, and should reflect this in well-funded, long-term programs of work to improve health and reduce health inequity.
5. Each jurisdiction should continue to develop specific, high-profile and well-funded strategies to address health inequities between Indigenous and non-Indigenous Australians that are based on principles of solidarity and principally designed by Indigenous peoples.
6. The implementation of health equity impact assessments should be funded and encouraged as a means of accountability and monitoring of cross-sector policies that have an impact on health and equity.

If each measure were implemented in each jurisdiction in Australia, then the outcome in 5-10 years should be measurable reductions in health inequities. The adoption of these measures would be significantly helped if the Federal Government were to develop a national health equity framework that was endorsed by AHMAC and included incentives. Funding should be provided through the agreements between the Federal and the State and Territory governments to implement the list of measures above.

After five years, a Senate Select Committee Review could report on the Federal Government's progress and similar review processes should be held in each jurisdiction. In addition, the chief medical officer in each jurisdiction should report on progress to reduce inequities in their annual report. As a final comment, the authors draw attention to the conclusion of a similar study for Europe⁴⁵ that, at the macro level, policy makers need to work to ensure that "strategies to tackle the macroenvironmental factors feature in policy on inequalities in health, and to ensure that health becomes a prominent issue in social justice policy". The European Community is in the process of implementing a 'Health in All Policies' statement and Australia would be well serviced by designing and enacting a similar initiative.⁴⁶

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Smoking, not smoking: how important is where you live?

Christine Migliorini and Mohammad Siahpush

Introduction

The nefarious consequences of smoking tobacco are well established and the litany of diseases caused or exacerbated by smoking continues to increase. Although the prevalence of smoking is decreasing in Australia, it remains imperative we do everything we can to stop people from starting to smoke and help current smokers to quit.

When reviewing the literature, there is constant reference to individual risk factors that relate to smoking, especially the various measures of socio-economic status such as education, income or work classification. These risk factors demonstrate strong connections; the lower the level of socio-economic status, the greater the likelihood of being a smoker. Indeed, the smoking prevalence among Victorian adults, 2000-02, is 26.8% for regular smokers with Year 11 or lower education, 19.1% for those with Year 12 or trade qualifications, and 13.4% for those with tertiary-level education.¹

It is not surprising that the literature is so concentrated on individual risk factors. While it is true that smoking is a behaviour

of personal choice, these choices do not happen within a vacuum. The varying impact of our social and cultural domains upon our health and behaviour has been well established within many fields of study; for example, social psychology talks of normative social influence, conformity and group polarisation;² sociology talks of social roles and reflexivity;³ public health talks of social context, social capital and social contagion.⁴ Overseas studies have been able to link living in deprived neighbourhoods with increased risk of cardiovascular disease, mortality and ill-health behaviours including smoking.^{5,6} Most smokers find it difficult to quit when their social environment encapsulates a smoking culture, that is, when significant/important others smoke as well.^{7,8}

Further, those smokers who are poor and living in areas of high disadvantage may find quitting particularly hard. Indeed, personal disadvantage in conjunction with neighbourhood disadvantage has been linked with higher nicotine dependence.⁶ Not only are their neighbourhoods more poorly resourced, stressful and isolated from wider social norms, but personal

Abstract

Issue addressed: To explore and describe the social-environmental influence upon the likelihood of smoking tobacco for the Australian experience, in particular, Victoria.

Methods: A multilevel (hierarchically structured regression) method was used. The micro-level units (characteristics of individuals) came from the annual surveys conducted by the Cancer Council of Victoria from 1990-97. The dependent variable was smoking status. The socio-demographic variables of age, marital status, education, employment status and ethnicity of individuals were used. The macro-level units (partitioned by postcode) came from the Australian Bureau of Statistics' Socioeconomic Index for Areas, split into quartiles.

Results: Residential neighbourhood had a unique but modest influence in the likelihood of smoking for both men and women. Also as the level of disadvantage increased within the residential area so did the odds of smoking for both men and women; however, the effect was not consistent. The odds of smoking were highest in the most disadvantaged areas for men, contrasting with women for whom the highest odds were in areas of more but not most disadvantage.

Conclusions: The level of disadvantage of the residential neighbourhood has a unique, statistically significant influence, but not to the same degree as previously published Australian research. The effect is consistent across individual characteristics such as age and level of education for men. The effect is small and less consistent for women. Indeed, area of residence seems less important for women as a whole, suggesting differential influences according to gender.

Key words: Smoking, multilevel analysis, area disadvantage, context.

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So what?

When developing community-based interventions, there is a strong need to understand the importance of individual characteristics of the people living in the community, such as age or ethnicity, as well as the potential impact of the context. The impact of context is significant but small as in most published papers.

resources such as social support and networks appear to encourage smoking and be barriers to quitting.⁹

Siahpush and Borland¹⁰ examined the effect of the social environment upon smoking status of Australians by including a geographic measure of socio-economic status in their analysis. This measure was found to have a stronger association with the likelihood of smoking than either of the individual-level indicators of education or income. This has important implications in the development of health promotion activities. Problematically, though, there are methodological and theoretical weaknesses of their study that need to be addressed.

Studies generally analyse patterns of risk either within individuals or populations. There are problematic methodological and theoretical issues associated with both approaches. The studies based on individuals cannot be generalised across populations, otherwise known as the atomistic fallacy.^{5,11,12} Although our social and cultural domains can have a strong influence on our behaviours, we can and do make choices despite, or in spite of, the possible consequences from our social environment; for example, the 1989 protests by the Chinese students leading to the Tianamen Square massacre. Population-based studies cannot be generalised down to individuals, otherwise known as the ecological fallacy;^{5,11,12} for example, the strong connection between poverty and the higher risk of smoking cannot distinguish those who do become smokers and those who do not.

Alternatively, some studies have tried to incorporate aggregated measures of environment, such as measures of area disadvantage, with individual measures within the same analyses, such as Siahpush and Borland's study¹⁰ mentioned above. Statistical analyses in these studies do not take into account that variables belong to different levels of analysis. This often leads to an over-estimation of the importance of aggregated variables.¹³ A recent development in statistical modelling, variously called multilevel modelling, hierarchical modelling or contextual analysis, has the advantage of disentangling the influences of composition from contextual factors. Multilevel analyses avoid the constraints of individual and population-based analyses by explicitly modelling the contributions made from the different levels within these analyses.^{11,14-17} To date, overseas research considering area effects and smoking prevalence using this technique has yielded mixed results.

The aim of this study was to examine to what degree, if any, are there area effects on smoking status in Australia. This study is the first true multilevel analysis, to the authors' knowledge, examining smoking prevalence in Australia, thus providing insight into the context of the Australian experience. In doing so, five questions will be considered:

1. Does smoking prevalence vary depending upon area of residence (i.e. residential neighbourhood)?
2. Does smoking prevalence vary by residential neighbourhood independently of individual characteristics; that is, controlling for composition, are there any contextual effects?

3. Does the level of disadvantage of the residential neighbourhood have an impact upon smoking prevalence independently of individual characteristics; that is, does the neighbourhood socio-economic status account for any contextual effects?
4. Does smoking prevalence vary by residential neighbourhood independently of individual and neighbourhood characteristics; that is, do some neighbourhoods matter more than others having controlled for compositional effects?
5. Are there differences according to individual characteristics in any observed variation in smoking prevalence, either by neighbourhood or disadvantage; that is, does residential neighbourhood or level of disadvantage of the residential neighbourhood matter differently according to some personal characteristic?

Method

The data concerning individuals came from the annual telephone surveys conducted on behalf of the Cancer Council Victoria. These surveys are conducted at the same time each year to enable accurate estimations of smoking prevalence, quitting behaviour and associated demographics. A more thorough report of the method of data collection has been published elsewhere.¹⁸

In order to provide reliable estimates of both within-neighbourhood and between-neighbourhood differences in multilevel studies, sufficient numbers are needed at each level.¹⁹ For this reason, data for the years 1990 to 1997 were aggregated by postcode. The macro neighbourhood level was partitioned by postcode based upon the same reasoning. Since smoking prevalence of adults and the uptake of smoking by adolescents remained stable for those years,²⁰ it was reasoned that the risk of confounding resulting from the amalgamation was minimal. Following the logic presented by Kreft and De Leuw²¹ to ensure high power in the analysis, a minimum of 20 persons within each macro-level two unit of postcode was chosen.

The decision of which individual variables (micro-level units) to include was influenced by both previous studies and available data. Demographics of the individuals included gender, age, marital status, highest educational level achieved and origin of birth. In most cases, these variables originally consisted of numerous subcategories that were then reduced, in the interest of parsimony. The 'least-likely to smoke' subcategory of each variable became the reference group as per normal preparation for regression analyses. Both SPSS v12.01 and MLwiN v2.0 were used. The dependent variable was the binary variable of smoker or not.

The independent variable of disadvantage associated with the macro-level units was the Socio-Economic Index of Areas (SEIFA), compiled by the Australian Bureau of Statistics (ABS). The SEIFA, based on Census data, includes attributes such as the proportion of low household income, low educational attainment, high unemployment and jobs in relatively unskilled

occupations. The ABS standardise the measure so that the Australia-wide average is 1,000; areas with a score below 1,000 can be considered lower than the Australian average, areas with a score above 1,000 can be considered higher than the Australian average. The SEIFA scale was recoded into four ranks with 0 for most disadvantaged neighbourhoods to 4 for the least disadvantaged neighbourhoods.

Analysis

A multilevel framework, in MLWiN v2.0, was used to examine the influences of individual and neighbourhood characteristics on the likelihood of smoking. The sequential modelling plan, building increasing complexity within each step, was used as recommended by the MLWiN manual.²² Each step related to a research question as noted below. Given the increasing complexity, separate but identical multilevel frameworks for men and women were conducted to aid interpretation.

The analysis began with a simple two-level model where the overall prevalence of smoking was estimated (called the fixed effect) and the prevalence in each neighbourhood was allowed to vary from this overall value. Since there were no predictors present, this model is called the null or empty model. The level of variation present gave an indication whether it was useful to construct a multilevel model. This model addressed the first question.

This model also provided a baseline for future comparisons. A

test of the residual deviance –using the log likelihood (-2LL) statistic – would normally provide a direct measure of the likelihood that the observed data represent the true values and so provide a measure of model fit. Since the dependent variable of smoking is binary, it cannot do this. However, the differences between -2LL in two nested models have a chi-square distribution so one model can be compared with another, with the degrees of freedom based on the change in the number of different parameters, to see if it is a significant improvement over another.^{21,23}

In the second step, the socio-demographic variables of the individuals as covariates were included. This model is known alternatively as the variance components model (or random intercept model using individual factors only). This model was used to estimate the overall contribution of the residential neighbourhood on the likelihood of smoking controlling for the characteristics of individuals. This addressed the second question.

The third step built upon model two by now including the level of disadvantage of the residential neighbourhood covariate – the SEIFA rank. This model is used to estimate the unique contribution of neighbourhood disadvantage so was able to address the third question. The degree of change in the estimates for the individual characteristics addressed the fourth question.

Finally, in the fifth step the covariates are allowed to vary – random slopes or random coefficient model. This model was used to show whether residential neighbourhoods had a differential effect on the covariates of the individuals. This final model addressed the fifth question.

Table 1: Socio-demographic characteristics of participants.

Variable	Male n= 8,225		Female n=9,327	
Postcodes n	180		190	
Smoking status	Non-smoker 5,936	Smoker 2289	Non-smoker 7,100	Smoker 2,227
Age (years)				
60+	1,684	322	1,992	287
45-59	1,229	442	1,609	406
30-44	1,792	838	2,157	831
18-29	1,231	687	1,342	703
Education				
Tertiary	2,241	588	1,992	406
Years 11, 12	1,621	700	2,157	831
≤Year 10	2,074	1,001	1,342	703
Marital status				
Married/de facto	4,009	1,252	4,340	1,148
Widowed/divorced/separated	513	283	1,556	498
Single	1,414	754	1,204	581
Employment status				
Home duties/retired	1,680	425	3,533	908
Employed	3,743	1,535	3120	1,066
Student	219	57	205	73
Unemployed	294	272	242	180
Ethnicity				
Australian	4,360	1,670	5,544	1,834
Non-English-speaking other	975	372	887	187
English speaking other	601	247	669	206

Results

Table 1 summarises the demographic characteristics, segregated by gender, of the sample. Overall, 28% of men and 24% of women were current smokers.

Model 1 (see Table 2) shows the results of the null model where, indeed, residential neighbourhood did have an impact on the likelihood of smoking to a statistically significant degree ($p < 0.01$) for both genders. The neighbourhood-level variation is $< 5\%$ for both genders. The prevalence of smoking did vary depending upon residential neighbourhood.

Table 2: Null or empty model.

Null model	Model 1 – Men Co-efficient (standard deviation)	Model 1 – Women Co-efficient (standard deviation)
Constant (cons)	-0.986 (0.034)	-1.184 (0.033)
Neighbourhood	0.086 (0.021) ^b	0.075 (0.020) ^b
Variance		
-2LL	10,101.1	10,382.7
VPC ^a	$< 5\%$	$< 5\%$

(a) VPC – variance partition co-efficient indicating the amount of variance associated with the macro-level residential neighbourhood. Two methods are provided by Rasbach et al., (ref 22, p. 113-4). The larger estimate reported but results using both methods were similar in this study.

(b) $p < 0.01$

Tables 3 and 4 – model 2 (in each table) shows the results of the random intercept model for women and men respectively. Here the individual-level variables were entered. As expected, age, education, and ethnicity were all statistically significant in the expected direction for both men and women. This supports the connections between individual characteristics and smoking status of previous research, both in Australia¹⁰ and overseas.²⁴⁻²⁶

The neighbourhood macro-level variation decreased but remained statistically significant for men and women. Based on chi square distribution, comparisons of the -2LL of model 2 for each gender showed a statistically significant improvement in representativeness of the model ($p < 0.01$). Question 2 answer in this study: smoking prevalence did vary independently of individual characteristics.

Tables 3 and 4 – model 3 (in each table) shows the results after the level of disadvantage of the residential neighbourhood

measure (the SEIFA rank) was included. The overall direction and magnitude of association between individual characteristics and likelihood of smoking were very similar.

The independent variable associated with the macro level 2 unit level of disadvantage of the residential neighbourhood was statistically significant. Variance of the level 2 macro units becomes insignificant for both men and women. Comparison of the -2LL of model 3 with model 2 (degrees of freedom based on the change of parameters) suggests that model 3 is a statistically significant improvement over model 2 ($p < 0.05$) for men but not for women. Indeed, for women, the -2LL increases to a statistically significant degree ($p < 0.05$), suggesting the resulting model is a poorer fit so less representative of the true values. The variation of the macro level 2 units of residential neighbourhood was no longer significant for both men and women.

Table 3: Model 2 and Model 3 for women n=9,327; postcode n=190.

Independent variables	Categories	Model 2		Model 3	
		Co-efficient (standard deviation)	Odds ratio (95% CI)	Co-efficient (standard deviation)	Odds ratio (95% CI)
Constant		-3.527 (0.191)		-3.660 (0.195)	
Age (years)					
	60+	Ref	1.00	Ref	1.00
	45-59	0.937 (0.095)	2.55 (2.12-3.07)	0.929 (0.094)	2.53 (2.11-3.04)
	30-44	1.509 (0.093)	4.52 (3.77-5.43)	1.493 (0.093)	4.45 (3.71-5.34)
	18-29	1.759 (0.106)	5.80 (4.72-7.15)	1.729 (0.106)	5.64 (4.58-6.94)
Education					
	Tertiary	Ref	1.00	Ref	1.00
	Years 11-12	0.452 (0.07)	1.57 (1.37-1.80)	0.425 (0.071)	1.53 (1.33-1.76)
	≤ Year 10	0.812 (0.07)	2.25 (1.96-2.58)	0.765 (0.071)	2.15 (1.87-2.47)
Marital status					
	Married/de facto	Ref	1.00	Ref	1.00
	Single	0.390 (0.076)	1.48 (1.27-1.71)	0.396 (0.076)	1.49 (1.28-1.72)
	Widowed/divorced/separated	0.632 (0.071)	1.88 (1.64-2.16)	0.625 (0.071)	1.87 (1.63-2.15)
Employment status					
	Student	Ref	1.00		1.00
	Employed	0.083 (0.150)	1.08 (0.81-1.46)	0.098 (0.150)	1.10 (0.82-1.48)
	Home duties/retired	0.133 (0.158)	1.14 (0.84-1.56)	0.140 (0.158)	1.15 (0.84-1.57)
	Unemployed	0.569 (0.176)	1.77 (1.25-2.49)	0.558 (0.176)	1.75 (1.24-2.47)
Ethnicity					
	Non-English speaking other	Ref	1.00	Ref	1.00
	Australian	0.391 (0.089)	1.48 (1.24-1.76)	0.386 (0.089)	1.47 (1.24-1.75)
	English-speaking other	0.517 (0.119)	1.68 (1.33-2.12)	0.536 (0.119)	1.71 (1.35-2.16)
SEIFA					
	Least disadvantage			Ref	1.00
	Less disadvantage			0.083 (0.081)	1.09 (0.93-1.27)
	More disadvantage			0.310 (0.082)	1.36 (1.16-1.60)
	Most disadvantage			0.287 (0.082)	1.33 (1.13-1.56)
Macro-level residential neighbourhood variance					
	Between postcodes	0.034 (0.015)	1.04 (1.00-1.06)	0.019 (0.014)	1.02 (0.99-1.05)
Model comparison					
	-2 log likelihood	9475.55		9484.09	
	Significance of model difference	$p < 0.01$		$p < 0.05$	
VPC		<1%		<0.5%	

Question 3 answer: In this study, the level of disadvantage of the residential neighbourhood did have an impact upon smoking prevalence independently of individual characteristics.

Question 4 answer: In this study, smoking prevalence did not vary by residential neighbourhood independently of individual and neighbourhood characteristics.

Model 4 – Random slopes, not displayed. Here each of the variables with their subcategories was allowed to vary. Given there was no macro level 2 variance remaining, this was unlikely to be significant. Exploration of the data confirmed this.

Question 5: In this study, residential neighbourhood or level of disadvantage of the residential neighbourhood did not matter more according to some personal characteristic.

Individual covariates outcomes

The odds of smoking were largely consistent for both genders

for the categories of age, education, marital status and employment status, although the magnitude varied somewhat. This is particularly evident in the effect of age and employment status, with age having a stronger influence on women and employment status having a stronger influence on men.

Ethnicity and the level of disadvantage of the residential neighbourhood make interesting contrasts. Both men and women born in other English-speaking countries were the most likely to smoke; however, it was women born in non-English speaking countries who were the least likely to smoke while for men it was those born in Australia. The level of deprivation of the residential neighbourhood also had a differential effect on smoking by gender. The odds of smoking were highest in the most disadvantaged neighbourhoods for men, contrasting with women for whom the highest odds were in neighbourhoods of more but not most disadvantage.

Table 4: Model 2 and Model 3 for men n=8,225; postcode n=180.

Independent variable	Categories	Model 2		Model 3	
		Co-efficient (standard deviation)	Odds ratio (95% CI)	Co-efficient (standard deviation)	Odds ratio (95% CI)
Constant		-3.265 (0.194)		-3.400 (0.198)	
Age (years)					
	60+	Ref	1.00	Ref	1.00
	45-59	0.864 (0.106)	2.37 (1.93-2.92)	0.857 (0.106)	2.36 (1.91-2.90)
	30-44	1.301 (0.111)	3.67 (2.95-4.57)	1.284 (0.111)	3.61 (2.93-4.49)
	18-29	1.461 (0.125)	4.31 (3.37-5.51)	1.435 (0.126)	4.20 (3.28-5.38)
Education					
	Tertiary	Ref	1.00		1.00
	Years 11-12	0.475 (0.067)	1.61 (1.41-1.83)	0.445 (0.068)	1.56 (1.37-1.78)
	≤ Year 10	0.866 (0.067)	2.38 (2.08-2.71)	0.819 (0.068)	2.27 (1.99-2.59)
Marital status					
	Married/de facto	Ref	1.00	Ref	1.00
	Single	0.249 (0.071)	1.28 (1.12-2.73)	0.255 (0.071)	1.29 (1.12-1.48)
	Widowed/divorced/separated	0.690 (0.086)	1.99 (1.68-2.36)	0.680 (0.086)	1.97 (1.68-2.11)
Employment status					
	Student	Ref	1.00	Ref	1.00
	Home duties/retired	0.739 (0.185)	2.09 (1.45-3.01)	0.714 (0.185)	2.04 (1.42-2.93)
	Employed	0.582 (0.161)	1.79 (1.24-2.45)	0.568 (0.161)	1.76 (1.29-2.42)
	Unemployed	1.130 (0.178)	3.10 (2.18-4.39)	1.098 (0.178)	3.00 (2.12-4.25)
Ethnicity					
	Australian	Ref	1.00	Ref	1.00
	Non-English speaking other	0.153 (0.072)	1.17 (1.01-1.34)	0.138 (0.073)	1.15 (0.99-1.32)
	English-speaking other	0.273 (0.086)	1.31 (1.11-1.56)	0.281 (0.086)	1.32 (1.12-1.57)
SEIFA					
	Least disadvantage			Ref	1.00
	Less disadvantage			0.212 (0.082)	1.24 (1.05-1.45)
	More disadvantage			0.241 (0.083)	1.27 (1.08-1.50)
	Most disadvantage			0.323 (0.083)	1.38 (1.17-1.63)
Macro-level residential neighbourhood variance					
	Postcode	0.029 (0.015)	1.03 (1.00-1.06)	0.019 (0.014)	1.02 (0.99-1.05)
Model comparison					
	-2 log likelihood	9173.72		9155.85	
	Significance of model difference	$p < 0.01$		$p < 0.01$	
VPC		<2%		<0.5%	

Discussion

On the whole, the results of this study concur with previous research concerning the association between smoking prevalence and individual socio-demographic measures. For both men and women, smoking prevalence was strongly associated with individual characteristics, the most predictive being age. Smoking is evidently more strongly associated with the young. This could be because the older we become, the more time has passed, providing more opportunities to quit.

The analysis also shows that being widowed, divorced or separated was associated with a higher likelihood of being a smoker. It cannot simply be because smokers are more likely to get divorced. The prevalence of smoking is lowest in those who are married or in a de facto relationship, so some smokers seem to quit after forming stable relationships. However, smoking prevalence increases substantially after the breakdown of their relationships, with those who are widowed/divorced/separated surpassing the prevalence of those who are single with an approximately 40% increase for women and approximately 70% increase for men.

Reflecting on possible explanations, these could be because being widowed, divorced or separated can be a very stressful and grief-stricken time. If ex-smokers have not learnt to cope with higher levels of stress without cigarettes, then the likelihood of returning to smoking is increased. It also is a time of being single/unpartnered again, possibly the first time since adolescence. When we are presented with a return to an earlier state, it is also a time we are likely to revert to behaviours associated with that state, that is, when a person is young and single the odds of smoking are higher so when a person is older and becomes single again then the odds of smoking are also likely to increase.

As Myer² states:

The best means of predicting people's future behavior is not a personality test or an interviewer's intuition. Rather, it is their past behavior patterns in similar situations. As long as the situation and the person remain much the same, the best predictor of future job performance is past job performance: the best predictor of future grades is past grades; the best predictor of future aggressiveness is past aggressiveness; the best predictor of drug use in young adults is high school drug use (p. 493).

In this study, there was an initial small difference in smoking prevalence of less than 5% across postcodes. After the inclusion of individual characteristics, the residential neighbourhood difference reduced to less than 1%, although still statistically significant, suggesting much postcode variation is due to composition. The measures of neighbourhood disadvantage were also significant, suggesting some contextual effects. These results are similar to other multilevel analyses investigating the possible link between smoking prevalence and residing in disadvantaged neighbourhoods, that is, there is a small but statistically significant positive association between

neighbourhood disadvantage and smoking prevalence over and above individual characteristics.^{24,26,27}

There have been two multilevel studies where this effect was not found.^{25,28} It is possible to speculate why this may have occurred. In the study conducted in Glasgow, Scotland, individuals were randomly selected from specifically chosen general practices.²⁸ Specifically choosing the macro-level locality units of general practices removed the ability of the multilevel analysis to model the real world. This lack of randomness of the units of general practice means issues of bias and confound cannot be ruled out.

The other study, conducted in Malmo, Sweden, used individuals residing in administrative areas that were very residentially homogenous neighbourhoods of 3,000-6,000 inhabitants. (The average population count per Victorian postcode is approximately 4,000.) For example, some neighbourhoods consisted of only blocks of flats owned by tenant owners, some neighbourhoods contained only privately owned one-family houses.²⁵ The homogeneity of residential type within each neighbourhood meant that the between-neighbourhood variation was always likely accounted for by characteristics of the individuals, that is, the types of households occupying those types of residences.

The significance of residential neighbourhood in this study was statistically significant but the variance was of modest size. It could therefore be argued that residential neighbourhood was not 'clinically significant' but was just a product of the large sample size used. The counter argument is that while the difference is small, even 1% difference can mean anything from a dozen to some hundreds of smokers – depending upon the population size within each postcode. Moreover, this method of analysis is designed to model the real world, so it is explorative and descriptive in nature rather than evaluating or comparing therapies or techniques so there is no 'clinical'.

This study supports the idea of clustering of smoking prevalence by residential neighbourhood. The level of disadvantage of the residential neighbourhood had a unique but modest influence in the likelihood of smoking for both men and women. As the level of disadvantage increased within the residential neighbourhood, so did the odds of smoking for both men and women; however, the effect was not consistent. The odds of smoking were highest in the most disadvantaged areas for men, contrasting with women for whom the highest odds were in areas of more disadvantage but not most disadvantage. Indeed, residential neighbourhood seems less important for women as a whole, suggesting differential influences according to gender. This may be because the level of disadvantage of residential neighbourhood has less effect than first thought or the measure (SEIFA) used in this study did not really capture that aspect of the social environment that influences smoking prevalence.

The results of this study may help to explain the limited success of community-based campaigns designed to reduce smoking prevalence as found by Seck-Waller and associates' meta-search

of some 32 studies whose community-based interventions defined community as geography-based, with community populations ranging from a couple of thousand to some hundreds of thousands.²⁹ These studies, for the most part, did not target specific subgroups, preferring a homogenous approach, so a uniform impact of context was assumed. However, roughly half of the studies did indicate participants were of a single ethnicity or race such as Vietnamese Americans, Mexican Americans, African Americans or simply white. These studies seemed no more successful in outcomes than any of the others. Interestingly, those studies that targeted those of minority status, such as Vietnamese Americans or Mexican Americans, seemed like they could be more successful, but the small number of these studies precludes generalisations.

The partitioning of the macro level 2 residential neighbourhoods at the level of postcode in this study could have compromised the ability of the model to capture the effects of the social environment. As can be seen in the study by Subramanian and colleagues,³⁰ what level stratification used – household, village, district or State in their case – can have a differential effect on smoking prevalence depending upon which layer of the onion is considered. Future studies, using different representations of neighbourhoods or communities (excluding geography), would be useful in offering insight into which part of the social environment influences smoking prevalence. Finally, the cross-sectional nature of the data employed in this study does not allow drawing causal inferences about the relationship between neighbourhood disadvantage and smoking behaviour. A longitudinal study would be more appropriate for indicating a causal effect of living in a disadvantaged neighbourhood on the likelihood of taking up smoking or quitting.

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Evaluation of the Outreach School Garden Project: Building the capacity of two Indigenous remote school communities to integrate nutrition into the core school curriculum

Antonietta Viola

Introduction

The original idea for the Outreach School Garden Project (OSGP) was a very simple and innovative approach to teach nutrition based on how the researcher learnt about nutrition as a child, through the family garden and home cooking. This research built on this concept and incorporated formal nutrition and gardening education lessons into the core school curriculum through key learning areas (KLAs), such as mathematics, English, health and physical activity, science and the arts. This practical and innovative school initiative was based on the Health Promoting Schools (HPS) Framework using processes of action research, social capital and experiential learning to build the capacity of Indigenous Australian school students in nutrition.

The project was conducted over a six-month period in two rural and remote Indigenous Australian school communities,

Doomadgee (community 1) and Dajarra (community 2) in north-west Queensland. Doomadgee is a Deed of Grant Trust with a predominantly transient Indigenous population of 1,200, situated in the remote far north west of Queensland in the Gulf of Carpentaria.¹ Dajarra has a population of 200 in a smaller, isolated and predominantly Indigenous township near Queensland's border with the Northern Territory.²

This evaluation examines how effective school gardens are as a nutritional education tool in Indigenous Australian school settings; monitors the extent that nutrition was integrated into the curriculum through the KLAs; investigates the knowledge, skills and attitudes of the students; monitors changes in the physical and organisational environment; and examines the development of partnerships and the sustainability of the project.

Abstract

Issue addressed: This paper describes the Outreach School Garden Project, which was conducted in two remote Indigenous school communities in north-west Queensland. This project integrated nutrition into the key learning areas of the core school curriculum by using a school-based garden as a nutritional education tool.

Methods: Evaluation was by a descriptive qualitative approach supplemented by some quantitative data consistent with Indigenous research methods. The objectives were linked to the Health Promoting Schools Framework, using concepts of community capacity building, action research, social capital and experiential learning.

Results: Nutrition was extensively integrated into the core school curriculum by the teaching staff, who required no specific nutrition knowledge or gardening skills prior to the implementation. Students' knowledge and skills in nutrition and gardening were increased over the six-month period and positive improvements in the physical and social environment at the school were observed.

Conclusion: A school-based nutrition garden enables the teaching and learning of basic nutrition through the core school curriculum. This concept was an innovative, practical nutritional education tool to engage and build the capacity of Indigenous students, school staff and the broader community in nutrition.

Key words: Indigenous, nutrition, schools, gardens, school curriculum, capacity building, innovative.

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So what?

This method provided a stimulating and creative way to focus on nutrition in the school environment, positively influencing the students' knowledge of nutrition and future health practices. This concept is not limited to Indigenous students and can be used in all school environments.

Background

Indigenous Australians experience considerable disadvantages in terms of their health and socio-economic status, and have higher levels of morbidity and mortality than non-Indigenous Australians.³ There are complex reasons for this inequality: European colonisation, lifestyle changes, physical activity and nutrition are significant factors.⁴⁻⁸ However, much of the ill-health of Indigenous Australians can be attributed to nutrition-related chronic diseases such as obesity, diabetes, cardiovascular disease and cancer, many of which are thought to begin in early childhood.⁹

Nutrition and Indigenous children

On average, most children in Australia eat less than the recommended amounts of vegetables and fruit.¹⁰ Indigenous children reportedly consume less fruit, vegetables and dairy items than non-Indigenous children and thus have a poorer health status.¹¹ In rural and remote Australia this is more pronounced, because access to and availability of fruit and vegetables are highly influenced by the frequency, cost and methods of transport, seasonal factors, and community store management practices.^{12,13} Therefore, there is a need to focus nutrition interventions in schools on improving children's awareness and behaviour concerning nutrition and health.^{10,12}

Schools, health promotion and capacity building

The World Health Organization's HPS Framework is the basis of recommended health promotion practice in schools.^{14,15} Although not developed specifically for Indigenous communities, this framework provided an integrated and holistic structure for working within this area. The approach linked the curriculum with the school environment and community. It has been documented to improve a school's physical and social environment; curriculum, teaching and learning methods; and the personal and social development of students.¹⁴ This framework enabled the creation of a capacity-building environment to improve both the education and health outcomes of students in participating schools.^{16,17}

Capacity building is a dynamic process linked to the principles of social capital.¹⁸ Social capital involves developing high levels of co-operation, trust, mutual understanding, and shared values and behaviours to bind and connect community members, making co-operative action possible.¹⁶ This complements the HPS Framework, which is also similar to action research — a guided, reflective process constituting a cycle of planning, acting, observing and reflecting. This is an appropriate approach for use in Indigenous communities.¹⁹ Using capacity building, coupled with an action research approach, has been demonstrated to enhance knowledge, skills, resources and management support for school health promotion.²⁰

Schools and nutrition interventions

The benefit of working with schools to promote health has been well documented as improving the knowledge and attitudes of

students, staff and parents towards fruit and vegetables.²¹⁻²⁴ Even so, there are also practical challenges and limitations such as time constraints, overcrowded curriculum, teacher skills, and availability of funding or organisational issues.²³ These lead to many school health promotion programs being unpublished.¹⁴ Therefore, health promotion programs and strategies need to be tailored to meet the specific school population; developed in partnership; adequately resourced; and planned and supported within a restricted but adequate timeframe to have an impact.²³⁻²⁸ St Leger¹⁷ also recommends that non-classroom-based initiatives are developed between the health and education sectors to assist this process.

Nutrition and school gardens

School gardens are a non-classroom-based initiative and a key source of experiential learning.¹⁶ They have been used to teach core academic subjects such as science, language, arts, maths and even nutrition by incorporating a hands-on learning environment.²⁵⁻²⁸ School gardens have been documented to have a positive impact on children's food choices by improving preferences for fruit and vegetables, increasing nutrition knowledge and fruit and vegetable consumption.^{23,25} School gardens are a flexible teaching tool that can be shaped by the style and goals of individual teachers.^{25,28} Teachers are not required to have knowledge of, or experience in, gardening as this can be acquired.²⁶ Realistically, integrating school gardens into the school curriculum also requires time, energy, funding and effort.³³ It also requires student and staff support, especially from the school principal. However, information on the use of school gardens in Indigenous school environments has not been published.

Methodology

At the time of the study, the researcher had been working in both communities for more than three years as the outreach community dietitian.

Consent for this project was provided as an extension of the researcher's work.

Ethics approval

The sensitivity of working with Indigenous communities and directly with children necessitates appropriate evaluation methodology.^{29,30} Both communities were consulted at each stage of the research and actively participated in all decision-making processes. Written school and community approval was obtained from the principals and community advisory groups, respectively. Ethical approval was granted by two ethics committees: the Behavioural and Social Sciences Ethical Review Committee at the University of Queensland and the Mount Isa Health Service District Research and Ethics Advisory Committee.

Facilitation process

The researcher lived in Mount Isa, some distance from each community, and conducted outreach visits for 3-5 days every

6-8 weeks. Each school principal appointed a co-ordinator for the project to assist facilitation at the local level. Regular teleconference and phone debriefings supplemented outreach visits to keep the researcher informed of the progress and significant project events.

Participants

School students in the secondary levels from Years 7, 8 and 9 in community 1 and students in the primary levels 4, 5 and 6 in community 2 participated in the project, the participating grades being determined by the principal in each school. Key informants were selected from each community advisory group to participate in the semi-structured interviews. Formal written consent was obtained prior to the interview. Nine people from community 1 and six people from community 2 participated.

Data collection and analysis

A descriptive qualitative approach supplemented by some quantitative data was used for evaluation of the project over a six-month period. This timeframe was designed to capture the larger context of the program development and implementation.³¹ This approach was well suited to the evaluation of what was an innovative program that was likely to change over time.³² The objectives were based on the HPS Framework and were evaluated via data collection instruments, particularly activity sheets ('My Healthy Dinner Plate Activity' and 'The Pyramid Activity'), a curriculum matrix, semi-structured interviews, reflective journal and an event log.

Data collection instruments were piloted prior to the implementation and developed to assess knowledge and attitude changes. Activity sheets used to collect data on nutritional knowledge were chosen to meet the needs of students with potentially poor literacy and numeracy skills. The 'My Healthy Dinner Plate Activity' asked students to draw what they believed a healthy meal would consist of on an imaginary plate, while 'The Pyramid Activity' asked students to indicate the category a particular food item belonged to on the Healthy Food Pyramid. The data were analysed by tallying food items and collating the percentages of correct answers, respectively. The activity sheets had a visual focus, with participants presenting their

understanding of nutritional issues through drawings.³⁴

The curriculum matrix was used to enter KLA data that addressed nutrition. The researcher used a reflective journal and event logs to register all school garden nutrition-related activities. Rigour and reliability of the data and results were enhanced by using a triangulation of research methods and data sources. By using multiple forms of evidence and perspectives, a truer evaluation and portrait of the project was developed.³⁴

Results and Discussion

Communities are both complex and dynamic. Indigenous communities and schools located within them provide a challenging context for any health-related interventions.³⁴ The evaluation of an intervention within the context of two rural and remote Indigenous Australian communities required both creativity and innovation. As many researchers have found, conventional approaches to working with communities and undertaking health-related projects do not commonly work well in Indigenous communities.³⁴⁻³⁶ Therefore, a capacity-building approach that used action research principles provided an alternative to the rigidity of a more conventional evaluation approach. This approach also proved sufficiently flexible for the project to change and adapt as learning by staff, students and the researcher progressed.^{37,38} The HPS Framework provided a vision and direction for action and was familiar and acceptable to both the school principals and the Indigenous school community.

Working from an established position within the school and broader community to change existing practices in both schools broke with the more conventional role of researcher and evaluator. Creating social capital, by forming relationships with students and teachers and maintaining a personal connection with the communities, the researcher moved away from the more conventional role to a more effective role of collaborator and facilitator. This personable approach built credibility and assisted in negotiating and mobilising change, especially when introducing and facilitating a new intervention. This was particularly important because this approach had never been used before in either school community.

Table 1: Number and percentage of participating students from community 1 and 2 who agreed to participate in the Outreach School Garden Project.

Community	School level and total number of students in all grades	Total number of students in the participating classes	Actual number of participating students	Overall participant rate	Distribution (female/male)
Community 1	Primary and secondary school n=281	Secondary students (Years 7, 8, 9) n=66	n=15	23%	F=37 M=29
Community 2	Primary school n=43	Primary students (Years 4, 5, 6) n=20	n=20	100%	F=8 M=12

Source: Education Queensland, 2001.

The approaches used here took account of learning techniques that tend to work well with Indigenous students and communities.³⁹ That is, the gardens provided a concrete and tactile experiential learning experience that was shared with students, staff and the broader school community.

Participation

The principal's approval and support for the project was the key to the success of staff, students and community participation.²⁸ Student numbers participating in the OSGP are given in Table 1. The primary students (n=20) in community 2 were more willing to participate than secondary students (n=66) in community 1, with 100% (n=20) and 23% (n=15) of students participating, respectively. This is reflected in the literature, as school-based gardens are commonly undertaken with primary rather than secondary students. The core curriculum standards at primary level are perceived to be easier to meet using a school garden compared with the secondary level, plus all children at the primary level stay in the same classroom throughout the day.²⁵⁻²⁸ The low participation rate with the secondary students may also reflect the high drop-out rate of Indigenous secondary students, with only 66 secondary students in total in community 1.⁴⁰

Local community dynamics

Both communities are small, remote areas where local community issues always have an impact on the school

environment. For example, deaths in the community, conflict, and community time all had an impact in several ways on the project, causing problems with meeting research and project deadlines and expectations.²⁹

Curriculum, teaching and learning

At the end of the six-month period, the OSGP became a major focus for teaching, to the extent that almost "every lesson was tied into the theme of the school garden and nutrition, [and] we found the process was part of our usual school day". All that was required by the teachers was some imagination and a willingness to be creative. One teacher felt that "Teachers are only limited by their imagination", but the success of such a project is "only as good as the teacher behind it".

Table 2 outlines how nutrition was incorporated into the KLAs. There was considerable overlap between the primary and secondary school curriculum. The overall integration of nutrition into the curriculum was quite similar, the garden being used to assist students in mathematical calculations, measurements, space and numbers and problem solving. Maintaining a weekly diary on the project assisted with writing skills and students from both schools developed garden booklets and a garden-bingo game in English classes. For one teacher, the most important outcome for this project was that "the students are learning life skills through this project ... they have learnt so

Table 2: Examples of how nutrition was integrated into the core curriculum through some of the key learning areas.

Key learning areas	Strand	Examples of activities
Language (English)	Reading and viewing	<ul style="list-style-type: none"> • Reading nutrition-themed books, e.g. <i>James and the Giant Peach</i> • Watching videos related to past gardens in the communities • Reading recipes
	Writing	<ul style="list-style-type: none"> • 'Gardening Bingo' – student quiz on garden concepts • Weekly diary of the progress of the school garden • Writing a book on <i>How to make a Healthy Sandwich</i> • Writing to the local council about the environmental issues at the local park and weir. • Foyer display of school garden and environmental issues
Mathematics	Money	<ul style="list-style-type: none"> • Purchasing healthy food from the store and using realistic money transactions
	Mass	<ul style="list-style-type: none"> • Conversions between g/kg using the produce of the garden
	Measurements	<ul style="list-style-type: none"> • Using the garden to address mathematical calculations of area, volume and lengths and graphing these measurements
	Statistics	<ul style="list-style-type: none"> • The school garden was used to collect, survey, organise and record data of the growth of the plants using tally marks; tables and bar graphs were then generated by each student
Health and physical education (HPE)	Promoting health of individuals	<ul style="list-style-type: none"> • Through school lesson activities the students described the impact of their own and others' behaviour on health, and proposed personal and group actions to promote health, using a self-assessment sheet formulated by the teacher • Students explained how eating behaviours affected health, working with the researcher in a HPE class lesson
	Nutrition	<ul style="list-style-type: none"> • Introduction to the Healthy Food Pyramid and discussing availability at their local community store
Science and technology	Life and living	<ul style="list-style-type: none"> • Environmental issues – students addressed ways to clean up the community by sending a collectively written letter to the local Indigenous Council • School lesson activities examined food throughout the food cycle, through activity sheets
Art and design	Drama	<ul style="list-style-type: none"> • Participation in rehearsed group presentations about the school garden project for the staff and community members
	Music	<ul style="list-style-type: none"> • Participation in action songs related to nutrition and the school garden (e.g. 'Going down the food tube'; 'Message from the Chief Food Detective')
	Visual arts	<ul style="list-style-type: none"> • Drawing an interpretation of a 'healthy plate' • Drawing a graphic outline of their own interpretation of the school garden

much about nutrition ... how it affects the body, the cycle of food, about waste management ... all this has been incorporated in the curriculum”.

Nutrition knowledge and environment

Table 3 outlines the results for the ‘My Healthy Dinner Plate Activity’ and shows that high fat and refined carbohydrate convenience food items were commonly selected as healthy food choices in the pre-implementation phase, whereas at the assessment after six months no convenience food items were drawn at all. Fruit and vegetables and some bush food items were more frequently illustrated.

There was very little difference in the food choices between communities at either pre or post implementation. One teacher was “... amazed about what they drew the second time, it was just so different ... they put down more healthy food choices and bush foods as well”. The cultural connection also was evident, with many of the students identifying bush foods as “healthy”.

The primary students in community 2 increased their knowledge in nearly all items in Table 4, from pre to post implementation. However, the secondary students in community 1 scored very poorly on nearly all items for this activity, even producing a lower score in the post test. This was caused by the participating students in the secondary school in community 1 being unruly and unresponsive compared with the enthusiastic primary school participants when completing the post-implementation activity sheets.

School organisation, ethos and environment

The OSGP acted as a catalyst for action and change, especially

as “working outside the classroom in a less structured and more practical environment was great for the kids, they loved it [school garden] because they were outside”.

In community 1, waste management was identified as an environmental issue, particularly school rubbish bins and community litter. Students explored ways of cleaning their school and environment. They began with a discussion about the rubbish problem and what action they could take. The students wrote to the local council requesting assistance with this environmental issue, recorded data on a chart with photos and displayed them in the school foyer.

In community 1 and 2, the tuckshops incorporated healthy food choices on their menus; for example, spaghetti bolognese, hamburgers, stew and rice, plus a drink of milk, fruit juice or water. This was especially significant, as non-nutritious items such as softdrink, chips, pies and other convenience food items previously predominated. Cooked meals were provided to the students at \$1 a day with financial support from the Aboriginal Student Support and Parental Awareness (ASSPA) and the school budget. As a result, the school timetable also changed so that school students started school earlier, remained at school after lunch and were provided with a nutritious meal.

In support of this change, students had the opportunity to participate in food preparation for the tuckshop. This involved a rotation of students in community 2 assisting the tuckshop ladies (teacher-aides) to prepare “big lunch” for other students in the school (approx 40-50 students). One student said that “Doin’ the cook-up with Miss ... was fun. We put a recipe book together for the tuckshop as well. We did this every week so that the tuckshop would have healthy food”.

In community 1, the tuckshop also provided a teaching setting,

Table 3: ‘My Healthy Dinner Plate Activity’ – students’ beliefs about foods that represent healthy choices at two points in time.

Core food groups	Community 1		Community 2	
	Pre	Post	Pre	Post
Bread, cereals, rice, pasta, noodles	Rice	Bread, rice	Bread, muffin	Bread, pasta, porridge Weetbix, Nutri-Grain
Fruit	Mandarin, pear orange, banana apple, berries	Cherry, watermelon, peach, apple, coconut, banana, pineapple, apricot, mango, orange	Apple, orange, fruit juice, lemon	Apple, orange, fruit juice, banana, cherry, mango
Vegetables	Carrot, capsicum, tomato, cabbage	Tomato, carrot, potato, peas, corn, celery, broccoli, marrow, capsicum, pumpkin, onion	Potato, peas	Potato, peas, lettuce, capsicum, carrot, pumpkin, onion, tomato, beans
Meat and alternatives (e.g. poultry, fish, eggs, nuts, legumes)	Oxtail, fish, chicken	Fresh meat from shop, beef, goanna, turtle, eggs, chicken, fish, stew, organ meat, snake	Chicken, meat, sausages	Baked beans, chicken, meat, steak, ham, emu, bacon, kangaroo, fish, goanna, egg
Milk, cheese, yoghurt or milk equivalent	Milk	Milk, yoghurt, cheese	Milk, yoghurt	Milk, yoghurt, cheese
Miscellaneous: fast food and convenience food items etc	Pie, softdrink, fish & chips, chicken & chips, pizza		Hamburger, hot chips, Coke, lollies, meat pie, hot dog, softdrink, cake	

where students compiled a recipe book of healthy-choice meals to be used by the tuckshop called *How to make a Healthy Sandwich*, which was used in a peer teaching lesson with the Year 2/3 class.

Partnerships and services

An inventive 'Action-Kids' group was formed in community 2, which also created an Action Kids song for the primary group. "We are action kids, We are healthy kids, We love gardening the best, We are the best in the west". This demonstrated ownership of the project in the initial stages.

The students in community 1 created an 'Adopt-a-Garden' concept. This involved establishing links with elders or community members who had an existing garden or who wanted to start a garden. The idea behind this was to access and use existing resources in the community and provide links to their historical roots. The elders would tell stories of the mission gardens: "When I was a little girl at a school I had jobs to do after school. Weedin' in the garden, pickin' vegetables and packin' them on to the trailer. That was our little school chore in the afternoon. Helping the gardener to do a bit of gardening".

Capacity building and sustainability

Capacity building provided an important theoretical framework underpinning the OSGP, enabling school communities to identify concerns and problem solve solutions appropriate to their own health and nutrition needs.³⁶

The project in both schools did not continue after the six-month timeframe because the researcher left her post as outreach community dietitian. Despite this, the sustainable skills of the students and teaching staff extended to the knowledge and skills

gained from the student activity sheets; the intense level of integration of nutrition into the school curriculum; and the acquisition of practical skills required for the preparation of healthy and nutritious meals. Although the project was effective in the short term, further work needed to be done with respect to sustainability.

Barriers to sustainability

Several barriers to sustainability have been identified (see Table 5). A further limitation was the fact that the researcher was both the facilitator and the evaluator of the project, which is not the most beneficial or unbiased assessment. However, the fact that the projects were implemented and sustained for more than six months in each community, with the researcher some considerable distance from each site, suggests that this approach to improving the health and nutrition skills, knowledge and attitudes of Indigenous children has merit.

Conclusion

The sustainability of such an innovative project working with Indigenous students in rural and remote Australia required a variety of skills and awareness of unforeseen community issues, which ultimately affected the project's sustainability. However, the capacity-building effect of the project was evidenced by the impact and effect of a simple school garden concept that snowballed and developed into a clear nutritional education tool. All KLAS in the curriculum focused on nutrition and enhanced the emphasis on nutrition beyond the garden. This resulted in the whole school community being enthusiastic about the project and adopting a nutrition focus. Implementation of this concept was also more effective in the primary than secondary school setting, with enthusiasm and motivation being more easily stimulated in younger children and the primary school curriculum and classroom dynamics more adaptable to capacity-building activities.

Capacity building in Indigenous communities is a dynamic process and involves awareness of multiple factors, social levels, cultural and ethical issues and needs to be tailored to the context of each individual Indigenous school community. It must be acknowledged that Indigenous people already participate in their own cultural systems, institutions and structures. As a

Table 4: Percentages of correct answers to The Pyramid Activity obtained in both communities.

Food item	Community 1		Community 2	
	Pre (%) n=15	Post (%) n=15	Pre (%) n=20	Post (%) n=20
Cheese	75	62	38	50
Carrot	92	57	52	75
Fish	67	52	24	35
Cake	92	76	62	85
Pear	84	52	72	85
Softdrink	84	65	67	72
Milk	50	28	10	30
Lollies	100	70	76	90
Egg	92	57	24	60
Bananas	84	85	72	90
Butter	92	76	52	60
Bread	67	66	82	90
Nuts	42	38	33	25
Pineapple	84	66	72	80

Table 5: A list of barriers to sustainability.

List of items

- Researcher did not reside in each community and had to liaise via distance or on her outreach visits to each community within the project.
- Researcher not being able to continue facilitating the project beyond the six-month period.
- Progress was not always as productive as anticipated due to factors such as the high degree of absenteeism in school children.
- Changes and unforeseen teaching staff turnover.
- Community transience.
- Both school communities being in remote rural areas.
- The limited and short six-month time frame for the evaluation process.

facilitator and researcher of a community capacity-building project, the author recommends that this needs to be harnessed, captured and directed towards nutritional capacity-building initiatives.

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Scoping supermarket availability and accessibility by socio-economic status in Adelaide

Lisel A. O'Dwyer and John Coveney

Introduction

The relationship between socio-economic status (SES) and diet has been examined extensively. People who are socio-economically disadvantaged are more likely to run out of food; are less likely to purchase recommended healthy alternatives that are lower in fat, salt and sugar, and high in fibre; and generally consume fewer types of fruit and vegetables, and less regularly, than higher SES groups.¹ Most research has focused on behavioural approaches to explaining these patterns, so that other possible factors to explain SES differences in diet and food purchasing patterns are less well understood. The role of geographical distribution of affordable, healthy food retail outlets is a recent avenue of investigation. Research suggests that foods that are beneficial to health may be more expensive and more difficult to obtain in disadvantaged areas compared with more affluent areas and that this may help to explain the lower adherence to healthy eating guidelines consistently reported in less affluent areas.^{1,2}

This paper reports the results of a pilot study examining the availability and accessibility of supermarkets in areas of different

socio-economic status in the Adelaide metropolitan area. The inclusion of contextual or structural factors in public health nutrition is a distinct departure from the individual and behavioural factors (such as personal mobility and knowledge of nutrition) that have been the main focus of research in this field. Accordingly, this paper documents the scale of food availability and accessibility to inform possible policy responses.

The research questions asked include: does accessibility and availability of supermarkets vary by socio-economic status? Are there food deserts within larger areas?

Background

Research interest in the role of the location of supermarkets first arose in Britain with the increasing exodus of the big supermarkets to out-of-town locations, leaving 'food deserts' behind and growing spatial inequalities in food access between deprived and more affluent communities. Food deserts are defined as "areas of relative exclusion where people experience physical and economic barriers to accessing healthy food".³ Although Australia has not experienced the same type of

Abstract

Issue addressed: Lower socio-economic status (SES) populations are known to have poorer diets than high SES populations. We explore the extent to which factors in the built environment may contribute to this social health inequality and determine whether 'food deserts' exist in Australian cities.

Methods: We use a geographic information system to measure availability and accessibility of supermarkets in four case study local government areas (LGAs). The location of supermarkets is analysed in relation to residential dwellings, car ownership and in terms of travel distance along the road network.

Results: This methodology identifies differences in both availability and accessibility between and within LGAs. It shows that a local-level approach to the issue of food deserts is warranted and suggests that generalisations based on large geographic areas are unlikely to be meaningful.

Conclusions: A significant number of households live in 'food deserts' in Adelaide and these can only be identified using a local-level approach.

Key words: Food deserts, Geographic Information Systems (GIS), accessibility, availability, socio-economic inequality.

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So what?

Local governments should consider residential access to food when planning new developments and when zoning existing land uses. Incentives can be used at local and State level to encourage supermarket developers to locate in or nearby food deserts. Measures to improve mobility can be targeted to specific neighbourhoods.

movement of supermarkets, other factors, of which some may be specific to Australia's urban structure, may cause similar outcomes. Several researchers argue that people in deprived communities, particularly those without cars, the elderly and people on low incomes, have no option but to rely on smaller stores where prices are higher and the quality and variety of fresh food is more limited.^{2,4,5} However, Cummins and Macintyre⁶ suggested that the issue of 'food deserts' has become a 'factoid', with little supporting evidence. This has spurred the development of ways to identify and measure food deserts. Most of these studies have taken a geographic approach.^{1,4,7-11} Dowler and Blair¹² were among the first to use descriptive mapping combined with qualitative methods, finding large networks of streets and estates without any shops selling fresh fruit and vegetables and where any available fruit and vegetables were expensive. Inexpensive, good-quality food, including fresh fruit and vegetables, was available, but only in small concentrated shopping areas to which the majority of the population would have to travel by car or public transport. The study concluded that eating patterns in this district may be determined by socio-economic and geographical factors rather than real choice or knowledge.

Moreland et al.⁸ found that the locations of food shops in Mississippi, North Carolina, Maryland and Minnesota, in the United States (US), are associated with the wealth and racial makeup of neighbourhoods, with almost three times as many supermarkets in wealthier neighbourhoods compared with lowest-wealth areas. They also found different types of food stores in poor and wealthy neighbourhoods. Wealthier areas had many more large supermarkets and fewer small grocery stores and fast food restaurants.

Even where many supermarkets may be available, their proximity

or distance to residences is a consideration, particularly for households without cars. Distance from home to food store has been found to be inversely associated with household fruit consumption.⁹ Dependence on local stores means that food shopping becomes a question of not what one would like to buy, but what is available given mobility restrictions. Unless a household is small, lives in a walkable neighbourhood, is able to shop more than once per week or has a supermarket within 500 metres,³ the difficulty of carrying home the weekly shopping for a household of two or more makes walking as transport very difficult, especially if one is accompanied by small children.¹³ People who have no option but to walk to do their shopping have been found to have relatively poorer diets, which can be partly attributed to the difficulty they experience carrying their shopping home.^{8,14,15} Public transport is often ill suited for most household food shopping because of the limited range of destinations and schedules available.⁷ In sum, socio-economic disadvantage may constrain many low-income families to their local food environment because they are the most likely to lack access to a car.¹³

Winkler, Turrell and Patterson¹¹ reported minimal or no SES differences in the availability of shopping infrastructure. Unfortunately, significant methodological shortcomings in this study limit its usefulness; these include the use of the 'as the crow flies' measure of distance and the modifiable areal unit problem in the use of Collection Districts (CDs) as the basic spatial unit. Studies involving geographical concepts such as distance, proximity, areal units and location, as in the issue of accessibility and availability of food, should ideally involve more sophisticated use of geographic information systems and methodologies.

In sum, the literature identifies a range of structural factors

Table 1: Selected characteristic of case study local government areas (LGAs).

LGA	Selected indicators			
	% Unemployed	% managers and professionals	Median weekly income category	Distance (km) from city centre to LGA centroid
Burnside	2.7	27.3	\$400-499	5.9
Onkaparinga	4.9	10.7 ^a	\$300-399	29.7
Playford	7.4	8.1	\$200-299	25.4
Port Adelaide – Enfield	5.9	9.7	\$200-299	10.9

(a) Ranges from approximately 7% in SLAs comprising former Noarlunga LGA to 18.6% in Hills SLA (previously Happy Valley LGA).

Table 2: Availability of supermarkets in relation to population.

LGA	Persons ^a	Households ^a	Number of supermarkets ^b	Number of persons per supermarket	Number of households per supermarket
Burnside (C)	40,752	16,429	9	4,528.0	1,825.4
Onkaparinga (C)	144,878	53,690	28	5,174.2	1,917.5
Playford (C)	66,928	24,348	12	5,577.3	2,029.0
Port Adelaide – Enfield (C)	98,569	40,877	32	3,080.3	1,277.4

Source: (a) 2001 Census (b) 2005 Yellow Pages Online.

influencing access to food. Foremost among these are the presence or absence of a nearby supermarket, its proximity to residential areas, and car ownership. The presence or absence of public transportation is another key factor. Clearly, the importance of any one of these factors varies according to distance and location in relation to people's homes. The food desert debate must move from a yes/no approach towards a more sensitive approach investigating variations in different levels of access between different places and SES groups, particularly those disadvantaged by multiple barriers, and it must do so at the local spatial level.

Method

As Donkin and Dowler¹⁶ point out, availability, or provision, is a key factor that needs to be systematically defined and examined before accessibility, whether economic or physical, can be measured. There can be no accessibility without availability. Availability is defined simply as the number of food outlets present in an area in relation to its population, expressed as a ratio. We are primarily interested here in the availability of the large chain supermarkets, which typically provide the whole range of food groups at the most economic prices. While we acknowledge that factors other than the availability of local supermarkets can and do influence where households do their shopping (such as the location of employment or relatives), food shopping is generally an activity that takes place in households' local areas or neighbourhoods for practical reasons.

The local government area (LGA) is used as the areal unit for comparing case study areas because:

- This unit is large enough to exhibit substantial internal spatial variation and patterning in food-type outlets and demographic groups.
- It is small enough that its population profile is distinct from those of other LGAs.
- There is a sufficient number of units that can be matched and compared in terms of location and socio-economic status.
- It is a standard unit for official demographic data.
- Local government has a significant role in meeting local needs and planning services for its residents and in local development in terms of planning approval and land use zoning.

Table 3: Mean distance to closest supermarket.

Mean distance (km) to closest supermarket	
Burnside (C)	2.1
Onkaparinga (C)	4.2
Playford (C)	3.8
Port Adelaide Enfield (C)	2.4

Table 4: Accessibility classification.

Level of accessibility	Closest supermarket	Second closest supermarket
1. Excellent	Within 1 km	Within 1 km
2. Good	Within 1 km	Within 2.5 km
3. Average	Within 1 km	Further than 2.5 km
4. Fair	Within 2.5 km	Within 2.5 km
5. Poor	Within 2.5 km	Further than 2.5 km
6. Bad	Further than 2.5 km	Further than 2.5 km

Several other geographic levels of analysis are used in this study including metropolitan, small (local) area, and addresses (points) to reveal the degree of variation within the larger unit of the LGA. This spatial level of analysis will establish the validity of a local-level approach to accessibility.

Our study was part of a larger project examining location, health and social disadvantage. For that study, four LGAs with contrasting SES were identified based on Socio-Economic Index for Areas (SEIFA) data and the 2001 Census, produced by the Australian Bureau of Statistics. Two were located close to the city centre (one of each level of SES) and two had outer suburban locations (also with contrasting SES). An inner area of mixed SES (Prospect) was part of the larger study, but as we were particularly interested in socio-economic disadvantage, we substituted Port Adelaide-Enfield to represent an inner area of low SES. The location of the LGAs within metropolitan Adelaide is shown in Figure 1. Selected demographic indicators are presented in Table 1.

A list of the addresses of all the food outlets where healthy foods were available (defined as supermarkets, greengrocers and butchers) was compiled using the online search function of the Telstra Yellow Pages for each LGA and the areas in the buffer zones around them. They were then geocoded (assigned a

Table 5: Comparison of supermarket accessibility indices by case study LGA.

Percentage of all individual dwellings in LGA Index category	Burnside n=14,325	Onkaparinga n=48,558	Playford n=25,527	Port Adelaide – Enfield n=45,256
1. Excellent	4.4	6.5	1.4	3.9
2. Very good	24.5	8.9	10.5	21.4
3. Good	4.2	4.6	6.3	5.9
4. Fair	47.2	35.8	20.6	45.1
5. Poor	11.9	18.6	16.0	17.2
6. Bad	7.7	25.6	45.2	6.4

geographic co-ordinate) and plotted on a map of the road network.

We created a buffer zone of 2.5 kilometres around each of the case study LGAs (consistent with the buffer measurement used by Winkler et al.¹¹). Buffer zones provide a more realistic representation of the food outlets available to persons living within an arbitrarily defined boundary, because people travel outside these boundaries to nearby food outlets. People living near boundary edges may represent a substantial proportion of an area’s population.

Census data on car ownership was used to identify the geographic distribution of households without cars within each of the case study LGAs at the CD level, the smallest spatial unit for which Census data are available. CDs in each LGA were identified as having a high concentration if the percentage of households with no car was in the top quartile range of the distribution for the Adelaide Statistical Division (i.e. over 15.8%).

We emphasise that where CD-level data is used to characterise an area as having low car ownership, this does not mean that all persons in the area have that characteristic. It means that there are more people or households with that characteristic in that area relative to other areas (see the classic Robinson¹⁷ paper on the ecological fallacy).

Geocoded address data showing the precise locations of all residential dwellings in the case study LGAs were obtained from the SA Department of Environment and Natural Resources. All individual land parcels with a land use code indicating residential use were selected. The centroid of each parcel is used as the point from which distances are measured.

We used the MapInfo product Drivetime 9.5, which uses the road network to find the distance between two points, in this case the three supermarkets closest to each residential dwelling. Supermarkets only were used for the initial analysis to keep it as straightforward as possible and on the grounds that all types of healthy foods are available there.

Results

Availability of supermarkets by socio-economic status of LGA

Port Adelaide-Enfield has the most supermarkets available to its population, with one supermarket for every 3,080 people (see Table 2). Supermarkets in Playford serve nearly twice (1.8 times) as many people as supermarkets in Port Adelaide-Enfield.

Table 6: Number of households located in food deserts by LGA.

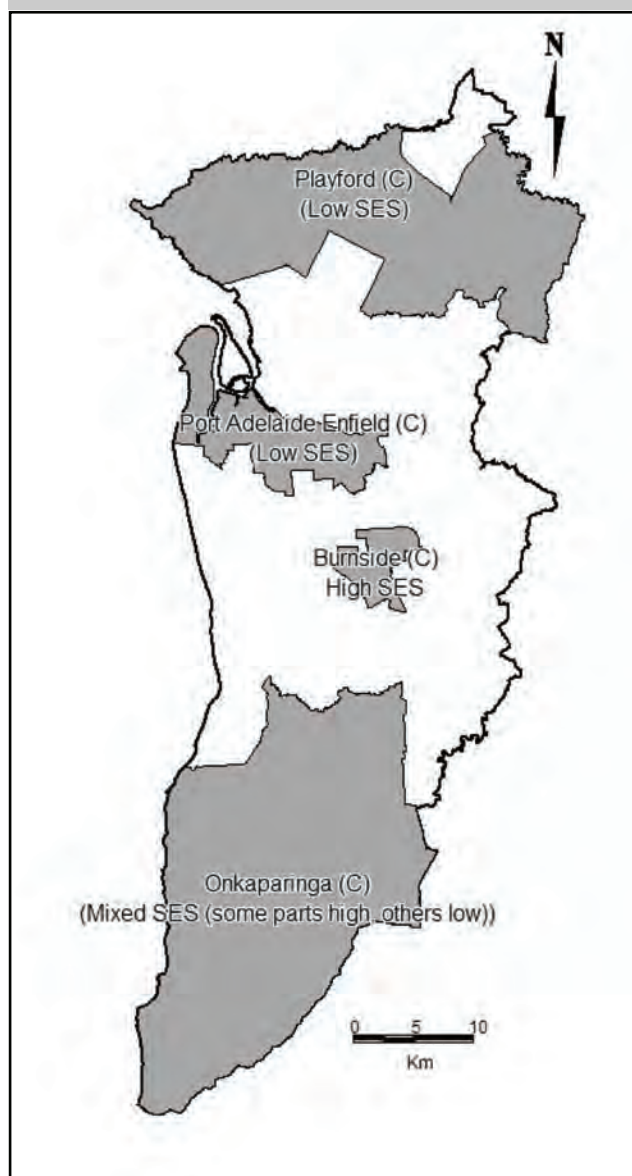
LGA	Number of dwellings/ households	Number of deserts
Burnside	0	0
Onkaparinga	1,296	3
Playford	4,605	5, including one very large cluster
Port Adelaide – Enfield	3,407	4 large, 8 smaller desert islands

However, shopping for food is generally (not always) done on a household basis, where one or more members of the household choose and purchase food for the entire household. If we look at the ratio of supermarkets to households, the differences in the number of available supermarkets between the LGAs is considerably reduced. Port Adelaide-Enfield still has the lowest ratio of households per supermarket, and thus apparently the best availability, and Playford the highest ratio in terms of rank order, but there is relatively little difference between Burnside, Onkaparinga and Playford, which are all around the mark of one supermarket per 2,000 households.

Average distances to nearest supermarkets by socio-economic status of LGA

Table 3 shows that households in the two outer LGAs of Playford and Onkaparinga have further to travel to supermarkets, with Onkaparinga households travelling slightly further than Playford households. Burnside and Port Adelaide-Enfield appear to have

Figure 1: Location of case study LGAs in metropolitan Adelaide.



comparable distances to travel. On average, most households in all LGAs will need to drive to their nearest supermarket as they are located more than 500 metres away from their homes, the maximum walking distance for carrying shopping reported in the literature.

Accessibility within LGA by socio-economic status of LGA

It appears from the analysis of average travel distances and the number of available supermarkets that Port Adelaide-Enfield's population has good access to food. However, average distances and ratios of supermarkets to populations do not account for variations in access at the local level, which is the level at which shopping patterns take place. It is still possible for supermarkets to be available within or near an LGA, but for their proximity to residential areas to be poor. This depends on the road network and local environment, both of which also influence whether walking is an option for getting to supermarkets. Incorporating car ownership and the road network into a local or neighbourhood-level analysis shows a very different picture to an aggregated summary of supply and distance.

To account for the role of the road network in determining accessibility, we created a six-level index based on average travel distances in the literature (see Table 4). These classifications are essentially arbitrary and can be modified to model different assumptions or conditions. We calculated distances to the nearest two supermarkets; more than one indicates some degree of choice and also simplifies methodological development.

Table 5 shows that the two inner/middle LGAs of Burnside and Port Adelaide-Enfield appear to have the best access to supermarkets, with around one-third of their households enjoying good to excellent access. Only 17% of households in the low socio-economic status LGA of Playford, located in the outer north of metropolitan Adelaide, were categorised as having very good to excellent access. A striking 45% of Playford

households have bad access, and about two-thirds have poor or bad access in total. Onkaparinga also has a considerable share (one-quarter) of its households with poor to bad access in terms of distance and number of local supermarkets available.

Identifying possible food deserts within LGAs

Living a considerable distance from supermarkets is not necessarily a concern if households own a car. Therefore, we have factored in the Census variable 'no car' to the accessibility index to identify dwellings with both poor or bad accessibility (rated 5 or 6 in the index) and a high probability of not owning a car, defined as a dwelling located in a collection district with the percentage of households without a car exceeding 15.8%, the bottom range of the top quartile for the distribution of no car ownership in metropolitan Adelaide. In effect, these are food deserts. They are shown in Figures 2 to 4.

No food deserts were identified in Burnside at all. Table 6 summarises the estimated number of households located in the food deserts of each case study LGA and how many deserts (represented by discrete groups) there are. This pattern clearly follows socio-economic lines. The absolute number is greatest in Playford, where potential food deserts are also more spatially concentrated. Port Adelaide-Enfield has a larger number of potential food deserts.

The geographical distribution of food deserts exhibits different patterns in each of these three LGAs. They are more spatially concentrated in both of the outer LGAs of Playford and Onkaparinga, but dispersed throughout Port Adelaide-Enfield. The spatial distribution is clearly influenced by such factors as housing costs and location of public housing. High concentrations of households without a car also tend to be associated with aged households as well as income. Note that although Burnside has a relatively old age structure, car ownership is still relatively high throughout the whole LGA.

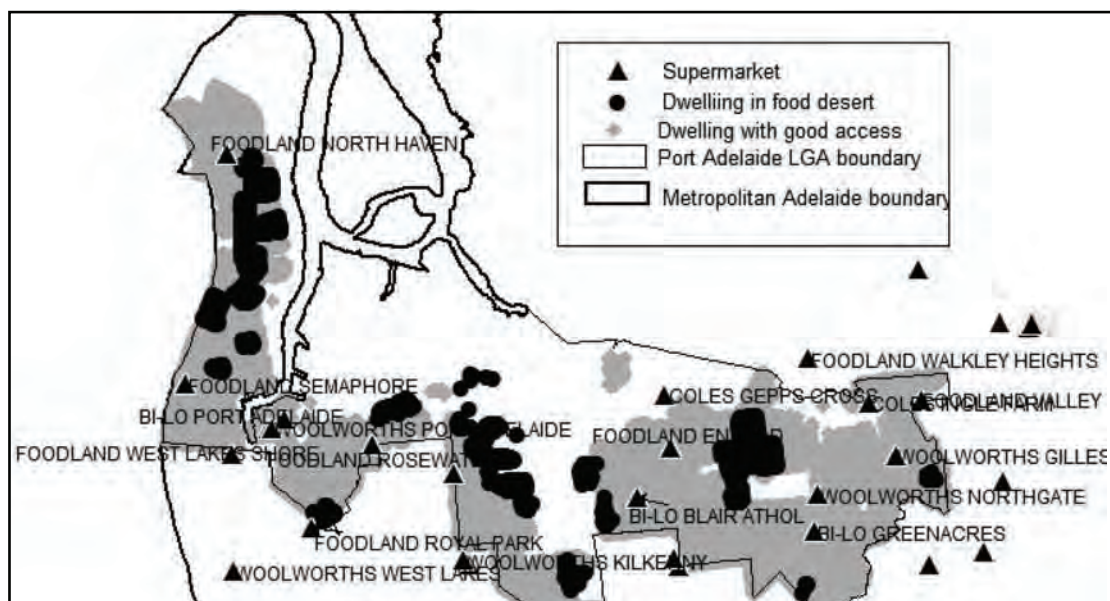


Figure 2: Food deserts in Port Adelaide-Enfield LGA.

Conclusions

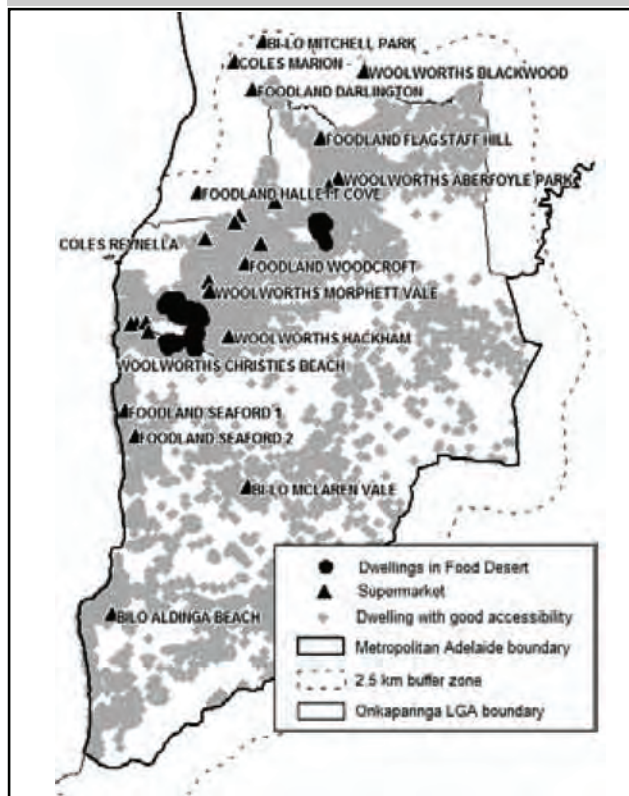
This paper illustrates the application of a methodology that can reveal some important patterns. The use of point-level data and the road network are a significant advance in the measurement of accessibility to food outlets. At this stage we can conclude that there are indeed socio-economic differences in access to food and the availability of food outlets; and that food deserts appear to exist. Food deserts are best identified by accounting for patterns and features of local environments rather than larger areas based on administrative spatial units as generally used in the literature to date.

The analysis of food outlets per head of population shows the value of including buffer zones around selected areas. The inclusion of food outlets in buffer zones radically changes the picture of food outlet availability, as shown by the number of supermarkets located within 2.5 km of the case study LGA boundaries.

The role of demographic status at the individual level and the measures people adopt to survive in a food desert will be validated and explored with qualitative fieldwork in the next phase of this study. Further research incorporating other food outlets, such as greengrocers, butchers and convenience stores, is also necessary to refine the picture of food availability and accessibility. It is also possible to use this methodology to address the supply of take-away foods.

The scale of the food desert problem in terms of the number and types of households affected appears sufficient to warrant ameliorative measures. Availability is a structural constraint, although it may be amenable to land use planning measures and location incentives for businesses.¹⁸⁻²¹ Because the supply of supermarkets, road and path construction and residential development is influenced partly by local government zoning and development planning, local government has some ability to influence its residents' access to food. Local governments are

Figure 4: Food deserts in Onkaparinga LGA.



also well placed to account for local travel and shopping patterns in their planning and development. Access to food may need to be placed higher on the local government planning agenda. However, there are also clear implications for State-level policy directives, both in the health and urban development and planning portfolios. This may involve co-ordinating actions between spatially adjacent local governments and considering the role of food supply in future urban regeneration in areas such as Playford and Port Adelaide.

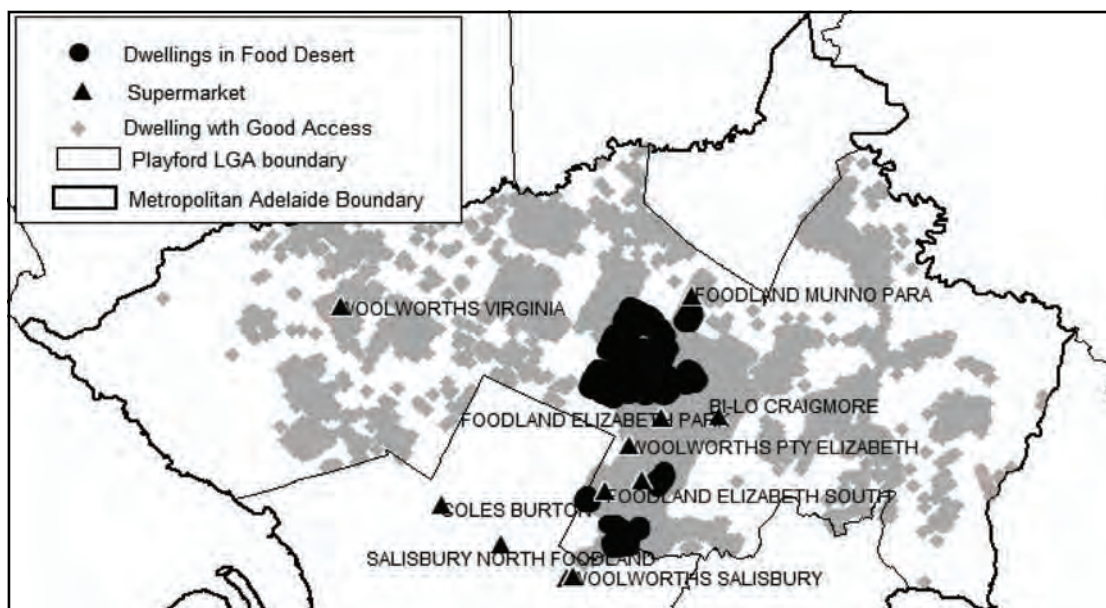


Figure 3: Food deserts in Playford LGA.

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Food insecurity in three socially disadvantaged localities in Sydney, Australia

Michelle Nolan, Glenys Rikard-Bell, Mohammed Mohsin and Mandy Williams

Introduction

Despite Australia's relative affluence and abundant food supply, sections of its population are likely to be food insecure.¹ Food insecurity is defined as "the limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways".² Food insecurity is associated with poor health and insidiously exacerbates other health inequalities.^{1,3} It is recognised as an important social determinant of health^{4,5} and has been identified as a significant Australian public health issue at national⁶ and state⁷ levels.

Food, nutrition and household economics are likely linked³ and have been explored in previous Australian^{8,9} and New Zealand¹⁰ surveys. Research has shown that groups at high risk of food insecurity include those on low incomes,^{1,3} and that food purchasing behaviours of socio-economically disadvantaged

groups are least in accord with dietary guideline recommendations.^{5,11,12} In addition to income, studies suggest that food access and food supply also contribute to food insecurity.^{1,13} Food access generally refers to capacity to acquire and consume a healthy diet, including ability to buy and transport food; home storage, preparation and cooking facilities; knowledge and skills to make appropriate choices; and time and mobility to shop for and prepare food.¹ Food supply refers to aspects of the supply of food within a community affecting food security of individuals, households or an entire population, specifically location of food outlets, availability of food within stores, price, quality and variety of available food.¹

Previous efforts to estimate population prevalence of food insecurity in Australia include the 1995 Australian National Nutrition Survey¹⁴ and the New South Wales Child Health Survey 2001.¹⁵ Both used a single-item measure that is more

Abstract

Issue addressed: Food insecurity, now listed among the social determinants of health, compromises the health and well-being of affected Australians. The objective of this study was to determine the prevalence of food insecurity within an urban population of social disadvantage in readiness for a local health promotion response.

Methods: This was a cross-sectional survey conducted in three disadvantaged locations of south-western Sydney. Prevalence of food insecurity was assessed using both the 16-item US Household Food Security Survey Module and the single-item question previously used in national Australian health surveys. Bivariate and multiple logistic regression analyses were performed to determine associations between food insecurity and socio-demographic characteristics of the households.

Results: The 16-item US tool yielded a significantly higher food insecurity prevalence (21.9%, 95% CI 20.0-23.8) than the single-item Australian tool (15.8%, 95% CI 14.1-17.5). Compared with the former, the single-item Australian tool has high specificity (96%) yet low sensitivity (56.9%). In our three sites, food insecurity was strongly and independently associated with household capacity to save money (AOR=5.05). Local fruit and vegetable production (83.8%), nutrition education (83.9%), transport to food outlets (81.5%) and better public transport overall (76.3%) were most highly rated by 'food insecure' households as useful future strategies.

Conclusion: The higher sensitivity of the US 16-item food security survey module relative to the single-item Australian tool indicates its potential for use in future Australian surveys of food insecurity.

Keywords: Food security, food insecurity, prevalence, measurement, poverty, nutrition, social disadvantage, health promotion.

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So what?

In the absence of strategies already proven to make a difference to food insecurity, the findings of this study will inform the initiation of local health promotion interventions addressing inequities identified by food-insecure households of Sydney South West Area Health Service and add to the evidence base.

an indicator of risk rather than a measure of food insecurity.³ By contrast, a more comprehensive measure of food insecurity prevalence has been used in the United States (US) that particularly assesses the degree of hunger experienced by food-insecure households.¹⁶ This more comprehensive tool, which assesses the nature and severity of food insecurity, will provide unique Australian data that will inform a health promotion response. At the local level, any actions to alleviate food insecurity require descriptive and analytic data beyond that generated by the single-item tool.^{1,3}

Given criticisms of the validity of the single-item Australian tool as a measure of food insecurity prevalence,³ this study aimed to report the prevalence of food insecurity in Sydney South West Area Health Service (SSWAHS) using both the single-item Australian tool and the more comprehensive measure that has been used in the US, and to determine local residents' understanding of food insecurity and priorities for intervention among those most in need. It was considered that this survey would provide quantitative baseline data in anticipation of a future rigorous evaluation of the impact of subsequent health promotion action to alleviate food insecurity.

Method

Study setting

Of the 177 local government areas (LGAs) in New South Wales (NSW), seven are located in south-western Sydney and aggregate socio-economic status for each of the LGAs can be measured by the Socio-Economic Index for Areas (SEIFA).¹⁷ Using SEIFA for 2001 Census data, 84% of the population of south-western Sydney resides in LGAs ranked in the lowest 40% of SEIFA rankings.¹⁸ Of even greater concern, 63% of the south-western Sydney population resides in LGAs ranked in the bottom quintile (20%) in NSW.¹⁸ Hence, three lowest-ranked postcodes from the three most disadvantaged LGAs (one from each) were purposely selected as sampling frames for the present study to access the degree of severity of food insecurity in south-western Sydney. Table 1 summarises socio-economic information about the three sites from which the postcodes were selected, referred to herein as WF, VL and RA. For comparison, similar information for NSW is also included in Table 1.

Survey administration

A random sample of households from each of WF, VL and RA was generated from an electronic version of the White Pages telephone directory. To maximise response rates, address listings in this database were used to mail an advance informative letter about our study seven days prior to the intended telephone contact to all randomly selected households. At least 10 call attempts were then made by one of 25 trained interviewers from a market research company to establish contact with each household. One eligible person was identified per household, namely the person aged 18 years of age or older who was responsible for doing "most of the cooking and food shopping". Verbal consent to participate in our interview was then obtained. All interviewers were Interviewer Quality Control Australia (IQCA) trained and certified.

After verbal consent was obtained, the interviewer proceeded to administer the 25-minute, computer-assisted telephone interview (CATI). Interviews were mostly conducted in the evenings or at other times arranged for the respondent's convenience. Multi-lingual interviewing was offered in the five languages most commonly spoken in these three sites, namely English, Arabic, Cantonese or Mandarin, Spanish and Vietnamese.¹⁷ The interview was originally developed in English, then back-translated by a commercial translation service then checked by bilingual SSWAHS health workers for accuracy of meaning. When an interviewer encountered a respondent with language difficulties, they ascertained which language the respondent spoke and, if it was one of the languages offered, a call-back was arranged. In these instances, multi-lingual interviewers had translated hard-copy versions of the household survey from which they read questions. Responses were entered directly into English CATI. Validations of responses were conducted via live monitoring of 10% of interviews using standard IQCA forms. Interviews were conducted between June and August 2004.

Survey instrument

The instrument used for the household survey (available from the authors on request) included background demographics and two measures of food insecurity. The first measure of food insecurity, developed by the US Department of Agriculture and

Table 1: Social demography of three disadvantaged postcodes from which samples were selected.

Survey sites (postcodes)	Aged <15 yrs (%)	Overseas born (%)	Unemployed (≥18yrs) (%)	Completed schooling up to year 10 only (%)	Low income (<\$400/week) (%)	Lived in public housing (%)	Dwelling fully owned or being purchased (%)
WF ^a	22.8	42.8	9.0	42.7	19.2	7.7	60.2
VL	22.1	52.8	16.7	39.3	36.2	36.5	38.4
RA ^a	25.2	24.3	8.1	50.8	16.8	12.0	65.3
NSW	20.8	23.1	7.2	26.8	40.2	4.9	63.7

(a) Postcode data includes streets not included in our survey.

Source of SWSAHS data: Girgis S, Jalaludin B, Harris E, Smith M. Health Inequities – South Western Sydney. Division of Population Health, SWSAHS: Sydney, 2004.

Original data source: ABS Census of Population and Housing for NSW 2001.

known as the US Household Food Security Survey Module,¹⁶ is referred to herein as the '16-item US tool'. The 16-item US tool, described in detail by the authors elsewhere,¹⁶ addressed the following: a screening question about whether the household had enough of the kinds of food they/we want to eat (n=1), concerns about food running out and having enough money to get more (n=2), ability to afford balanced meals (n=1), having enough money to adequately feed children (n=3); adults skipping meals (n=2) or eating less (n=1) because of inadequate money to buy food, weight loss due to insufficient money to purchase food (n=1), and adults not eating for a whole day (n=1). Lastly, four questions addressed capacity to feed children (under 18 years of age), specifically: cutting size of meals, skipping meals, being hungry, and not eating for a whole day. The second measure of food insecurity used in the interview, the Australian single-item measure (herein referred to as the 'single-item Australian tool')^{1,8,9} posed one question as follows: In the past 12 months, were there any times that you ran out of food and couldn't afford to buy more? ('yes', 'no', 'unsure' 'refused'). Households responding 'yes' to this question were next asked whether they had used each of nine coping strategies, adapted from published research.¹⁵

Further questions in the survey instrument addressed aspects of transport related to food insecurity dimensions (developed *de novo*) and the respondent's involvement in the community.¹⁹⁻²¹ In order to inform local population health interventions, respondents' endorsement was sought of 13 listed strategies for future implementation in their community. These strategies have the potential to address food supply and access factors, and were adapted from existing policy frameworks.^{1,22-25}

Statistical procedures

SPSS (Version 12.1)²⁶ and Epi Info (Version 6)²⁷ were used for all analyses. Because of variation of the number of households per site, the total prevalence estimate for all three sites (combined total) was calculated based on weights constructed from the number of households in each site (identified by listed telephone number). The number of households experiencing food insecurity was calculated based on the US 16-item score and Australian single-item response respectively. Based on the US 16-item score, in accordance with the author's recommended guidelines,¹⁶ households were categorised into one of four categories: food secure (scores of 0-2.2), food insecure without hunger (scores of >2.2, ≤4.4), food insecure with moderate hunger (>4.4, ≤6.4) and food insecure with severe hunger (scores of >6.4, <10). Household categories determined from the 16-item US tool were then dichotomised into two groups for analyses: 'food secure' and 'food insecure' (total of 'food insecure without hunger', 'food insecure with moderate hunger' and 'food insecure with severe hunger'). Based upon the Australian tool, households indicating 'yes' to the single item question were classified as food insecure, those indicating 'no' were classified as food secure.

Sensitivity and specificity of the single-item Australian tool were

compared with the 16-item US tool, using a standard 2x2 table. To quantify community involvement, responses to each of five questions were first dichotomised then summed to generate a score from zero (lowest possible community connection) to five (highest possible community connection). For some analyses, the score was further classified as follows: 'low' (score=0 or 1), 'medium' (score=2 or 3) and 'high' (score=4 or 5).

Bivariate (cross-tabulations) and forced entry multiple logistic regression analyses²⁸ were performed to determine associations between food insecurity and socio-economic and demographic characteristics of the households (explanatory variables). Results of bivariate analyses were expressed as percentages and chi-square tests were used to examine group differences ($p < 0.05$). Logistic regression analysis determined the independent contribution of each potential explanatory variable on household food insecurity adjusting for other variables. Adjusted odds ratios (AOR) from logistic regression analysis with their 95% confidence intervals (95% CI) express the likelihood of food insecurity for each explanatory variable adjusted for the effects of other variables. Only those variables found significant in bivariate analyses were included in the logistic regression model. To avoid multi-collinearity among the highly correlated variables, the variable that had less influence over others (in terms of food insecurity) were excluded from the logistic regression model.

Sample size calculations

It was hypothesised that the prevalence of food insecurity might be as high as 10% within each of the three designated sites. In anticipation of further evaluation of the impact of local strategies designed to decrease food insecurity, a sample size in each site sufficient to detect a 3% change in prevalence (80% power, 95% CI) was sought. Samples of 651 households per site were sufficient to enable a prevalence estimate of food insecurity as low as 7% with a precision of 2% ($\pm 2\%$) with 95% CI.

Ethical approval

The study was approved by the South Western Sydney Area Health Service Human Ethics Research Committee. (SSWAHS was formerly known as SWSAHS prior to its official amalgamation with Central Sydney Area Health Service on 1 January 2005.)

Results

Response rate and sample characteristics

In total, 4,239 south-western Sydney household telephone numbers were generated from the Electronic White Pages: WF (n=913), VL (n=1,828) and RA (n=1,498) respectively. Of these, 1,922 were deemed ineligible after 10 attempts for the following reasons: disconnected (n=771), engaged (n=1), no answer (n=683), business number (n=91), fax/modem (n=29), moved out of area (n=60), too frail to interview (n=113) or spoke a language other than those available (n=174). From 2,317 eligible phone listings, 1,719 interviews were completed

in total (overall response rate 74%). Due to an unexpectedly high number of disconnected numbers in WF (nearly 200, out of 913), the required sample size was not obtained at that site despite calling all numbers. Response rates for WF (n=413, 84%), VL (n=651, 72%) and RA (n=655, 71%) were not

significantly different ($p=0.10$). Most interviews were conducted in English (n=1,535, 89.3%) with fewer in Arabic (n=79, 4.6%), Cantonese/ Mandarin (n=44, 2.6%), Spanish (n=32, 1.9%) or Vietnamese (n=29, 1.7%).

Table 2: Socio-demographic characteristics of respondents by study site.

Socio-demographic characteristics	WF n (%) ^a	VL n (%) ^a	RA n (%) ^a	Total ^b % ^a (weighted)
Gender				
Male	106 (25.7)	153 (23.5)	146 (22.3)	23.4
Female	307 (74.3)	498 (76.5)	508 (77.6)	76.6
Highest education attained				
HSC and above	185 (44.8)	256 (39.2)	347 (53.0)	46.3
Below HSC level	222 (53.8)	378 (58.1)	300 (45.8)	53.7
Age (years)				
18-49	205 (50.2)	337 (52.2)	435 (67.0)	57.6
50-89	203 (49.8)	308 (47.8)	214 (33.0)	42.4
Aboriginal or Torres Strait Islander				
Non-Aboriginal	402 (97.3)	634 (97.4)	640 (98.2)	97.9
Aboriginal/Torres Strait Islander/both	8 (1.9)	16 (2.5)	12 (1.8)	2.1
Employment				
Currently employed	147 (35.6)	216 (33.2)	389 (59.4)	44.0
Retired	168 (40.7)	275 (42.2)	121 (18.5)	33.2
Currently unemployed	96 (23.2)	152 (23.3)	140 (21.4)	22.8
Country of birth				
Australia	196 (47.5)	306 (47.0)	434 (66.3)	54.7
Other	215 (52.1)	343 (52.7)	219 (33.4)	45.3
Ability to speak English				
Well	335 (81.1)	529 (81.3)	640 (98.3)	87.7
Poor	78 (18.9)	120 (18.4)	14 (2.1)	12.3
Household type				
Other	235 (56.9)	397 (61.0)	494 (75.4)	66.0
Single parent	51 (12.3)	94 (14.4)	81 (12.4)	13.4
Lone household	124 (30.0)	160 (24.6)	78 (11.9)	20.6
Capacity to save				
Can save	168 (40.7)	255 (39.2)	336 (51.3)	46.2
Cannot save	232 (56.2)	350 (53.8)	306 (46.7)	53.8
Children				
No child <18 years	259 (62.7)	395 (60.7)	312 (47.6)	44.0
With child <18 years	154 (37.3)	256 (39.3)	343 (52.4)	56.0
Household income (per annum)				
More than \$40,000	84 (20.3)	121 (18.6)	340 (51.9)	47.0
≤\$40,000	245 (59.3)	369 (56.7)	245 (37.4)	53.0
Health of respondent				
Good	272 (65.9)	460 (70.1)	561 (85.6)	76.3
Poor	140 (33.9)	184 (28.3)	91 (13.9)	23.7
Language usually spoken at home				
English	234 (56.7)	332 (51.0)	537 (82.0)	64.0
Other	179 (43.3)	316 (48.5)	116 (17.7)	36.0
Housing tenure				
Owner	92 (22.3)	152 (23.3)	168 (25.6)	24.7
Buy	66 (16.0)	116 (17.8)	299 (45.6)	29.0
Rent	247 (59.8)	357 (54.8)	179 (27.3)	46.3
Community involvement				
Low	92 (22.3)	134 (20.6)	202 (30.8)	24.8
Medium	216 (52.3)	328 (50.4)	328 (50.1)	50.5
High	105 (25.4)	189 (29.0)	125 (19.1)	24.7
Mean (SD)	2.5 (1.2)	2.6 (1.2)	2.2 (1.3)	2.9 (1.3)

(a) Where percentages do not add to 100%, data were missing or unsure.

(b) Weighted data.

Table 2 summarises socio-demographic characteristics of the samples by site and in total (weighted). Total scores for community involvement ranged from 0-5 (mean=2.9, SD=1.3).

Prevalence of food insecurity

Table 3 summarises the prevalence of food insecurity in each of the three socially disadvantaged sites and overall. The single-item Australian tool yielded a total food insecurity prevalence of 15.8% (95% CI 14.1-17.5), significantly lower than food insecurity as measured by the 16-item US tool of 21.9% (95% CI 20.0-23.8).^{14,15} Compared with the 16-item US tool, the single-item Australian tool was specific (96% specificity) but insensitive (56.9% sensitivity).

Coping strategies used by food-insecure households (single-item Australian tool)

Households indicating 'yes' to the single-item Australian tool, when next asked about nine strategies that families often use to cope when they run out of food and can't afford to buy more, indicated that only three cited strategies were used by the majority, specifically: cutting down on the variety of household food (59.1%, 95% CI 53.4-64.8), putting off paying bills (57.4%, 95% CI 51.6-63.1) and the parent or guardian skipping meals or eating less (58.8%, 95% CI 53.0-64.4).

Independent predictors of food insecurity (16-item US tool)

Bivariate analysis first confirmed there was no significant association between gender and education of respondent with food insecurity as measured by the 16-item US tool.

There was no significant association between 'community involvement score' ('low', 'medium', 'high') and food insecurity (16-item US score) ($p=0.89$). All other household and individual demographic variables were significantly associated with food insecurity (bivariate analyses available from the authors). Food insecurity also was significantly associated with difficulty accessing shops (transport) and each of six aspects of food supply and each of seven aspects of food access (bivariate analyses available from the authors).

Table 3: Prevalence of food insecurity by study site (n=1,719).

	WF % (n=413)	VL % (n=651)	RA % (n=655)	Total % (weighted)
Australian one-item tool				
Food secure	83.8	82.6	86.1	84.2
Food insecure	16.2	17.4	13.9	15.8
US 16-item tool				
Food secure	73.1	76.8	81.5	78.1
Food insecure ^a	26.9	23.2	18.5	21.9
Without hunger	19.1	14.4	11.5	14.0
With moderate hunger	6.1	6.6	5.5	6.1
With severe hunger	1.7	2.2	1.5	1.8

(a) Total food insecure = (food insecure without hunger + food insecure with moderate hunger + food insecure with severe hunger).

Factors significantly ($p<0.05$) associated with food insecurity as determined by the 16-item US tool in these bivariate analyses then were included in the logistic regression model to determine the independent contribution of each after adjusting for all other factors. Table 4 displays results from the logistic regression model. All except two of the variables entered in the model remained statistically significant (see Table 4). Four predictors were found to have relatively strong associations ($AOR\geq 2$), namely capacity to save, presence of children in the household, housing tenure and respondents' reported health status (see Table 4). Indeed, households that could not save were five times more likely to be food insecure than households that could save ($AOR=5.05$, 95% CI 3.0-7.10). Those who were renting were nearly three times more likely to be food insecure compared with those

Table 4: Adjusted odds ratios (AORs) from multiple logistic regression analysis of food insecurity^a (secure v. insecure).

Socio-demographic characteristics	Adjusted odds ratio ^b (95% CI)	p value
Age (respondents age in years)		
50+ ^c	1.00	
18-49	1.71 (1.19-2.45)	0.003
Aboriginal status		
Non-Aboriginal ^c	1.00	
Aboriginal	1.59 (0.72-3.50) ^d	0.252
Capacity to save (household)		
Can save ^c	1.00	
Cannot save	5.05 (3.60-7.10)	<0.001
Children in family v no children		
Others ^c	1.00	
With child	2.13 (1.53-2.96)	<0.001
Household income		
More than \$40,000 ^c	1.00	
≤ \$40,000	1.52 (1.14-2.04)	0.005
Health of respondent		
Good ^c	1.00	
Poor	2.03 (1.48-2.78)	<0.001
Language usually spoken at home (respondent)		
English ^c	1.00	
Other	1.45 (1.10-1.92)	0.010
Housing tenure		
Owner ^c	1.00	
Buy	1.19 (0.73-1.93) ^d	0.482
Rent	2.77 (1.81-4.24)	<0.001
Ability to access shops		
Not difficult ^c	1.00	
Difficult	1.73 (1.26-2.38)	0.001
Price of food		
Not a problem ^c	1.00	
Problem	1.97 (1.50-2.61)	<0.001
Adequate time to shop, prepare and cook food		
Not a problem ^c	1.00	
Problem	1.84 (1.35-2.50)	0.001

(a) As classified by 16-Item US tool.
 (b) -2 Log likelihood=1331.10, Model Chi square=448.52, $p<0.001$; 92.1% of the total households included in the model.
 (c) Used as reference category in multiple logistic regression analysis.
 (d) Not significant at $p<0.05$.

who owned or had mortgages (AOR=2.77, 95% CI 1.81-4.24). Households with children less than 18 years of age were more than twice as likely to be food insecure as households with no children (AOR=2.13, 95% CI 1.53-2.96).

Accessing shops to buy food

When asked about their usual mode of transport to access shops to buy food, most south-western Sydney households used a car (79.8%, 95% CI 78-81.7). Nearly one in five respondents indicated it was 'difficult' accessing shops using their usual mode of transport (18.3%); of these, more than one-third (37.9%) were households classified as 'food insecure' (16-item US tool). Further, of the food-insecure households indicating difficulty accessing shops, more than one-quarter cited that this was due to reduced mobility caused by disability, illness or injury (25.7%, 95% CI 17.9-33.3). Difficulties shopping with children (15.0%, 95% CI 8.9-21.5) and absolute distance to shops (12.8%, 95% CI 6.9-18.7) also were highly ranked.

Preferred strategies to facilitate change

Table 5 lists food insecure households' ratings of 13 listed for future community action. The proportion of food-insecure households typically exceeded that of food secure households in their ratings of local food production, improved transport to food outlets and health education on food and nutrition.

Conclusions

To our knowledge, this is the first Australian survey of food insecurity among low socio-economic households addressing the recognised need to provide evidence applicable specifically to this target group.^{1,29} Our results, which show higher specificity of the 16-item US tool over the single-item Australian tool, suggest that the prevalence of food insecurity within the Australian community, both advantaged and disadvantaged, may have been masked in previous surveys.

Although quantitative, our study has provided additional insights about potential predictors of food insecurity identified by those most in need, previously under-published in Australia. Specifically, this is also the first Australian study to quantify 'supply' and 'access' as predictors of household food insecurity. 'Ability to access shops', 'price of food' and having 'adequate time to shop, prepare and cook food' independently predicted household food insecurity. As most respondents indicated using a car to access shops, it was not surprising that absolute 'distance to food shops' and 'reliable and adequate public transport' were not independently predictive of food insecurity. The high rating of transport strategies by all households suggests that it is a simplistic hypothesis that anyone with a car won't ever need public transport.

The findings that 'price of food' also predicted food insecurity contextualises previous (albeit dated) reports that healthier foods cost more in south-western Sydney.³⁰ As cost is an important determinant in choice of food,³⁰ low-income families of south-western Sydney may be forced to choose cheaper rather than

healthier foods. A New Zealand report on food insecurity demonstrated the high cost of a healthy diet relative to welfare payments or minimum wages, and that while overall low-income families are good at budgeting they have insufficient money for all their basic needs.¹³ Food-insecure families are caught in a vicious cycle and have difficulty in obtaining food at the lowest prices because of lack of transport, storage or money to buy food in bulk,¹³ while it is often the shops most accessible that are most expensive.³¹ This relationship between income and food security status is further supported by our findings that households with no capacity to save money were five times more likely to be food insecure than households that could save.

Clearly, in south-western Sydney and at a state and national level, a broad whole-of-government approach to address the social and economic determinants of food insecurity (such as income, housing, cost of food), including a rise in real incomes whether from minimum wage or social assistance, protecting the affordability of food staples (such as milk), ensuring affordable housing and establishing a national food insecurity monitoring system to determine progress, deterioration or shifts among those affected, is indicated.⁴

Twelve of 13 strategies to improve access to food were supported by all households surveyed, demonstrating that the required community support indicated as necessary for local food security initiatives³ is present in south-western Sydney. The most highly rated strategies included: local food production; midstream interventions likely to have a long-term impact on food insecurity¹; improved transport to food outlets; upstream interventions that reduce structural barriers to food insecurity;¹ and nutrition education. While nutrition education can be an important and effective strategy for improving diet, the effectiveness of such initiatives on food insecurity is dependent upon the availability of appropriate resources and skills¹ and on healthy food being readily available and accessible.⁵ It is suggested that a community-level focus on midstream and, where possible, longer-term upstream initiatives is likely to have the greatest impact on food insecurity.¹

Our data will assist our health service to identify relevant alliances for comprehensive, intersectoral and social intervention in response to the communities' needs.³ Efforts to address structural issues underpinning food insecurity, such as poverty and geographical isolation, appear warranted to reduce the high prevalence of food insecurity. We theorise that this approach coupled with local initiatives (including community development) that emphasise food skills and alternative means of food acquisition would likely be well received if offered as part of our intervention and could be a useful adjunct to social and economic forces underlying food insecurity.³²

We acknowledge the limitations of generalising these results nationally, but believe the methodology will be of considerable interest to those working in the area of food insecurity. Our telephone survey excluded households without a landline connection and the homeless. The study was limited to the five

major languages spoken within south-western Sydney, potentially excluding minority or newly emerging groups who are likely to be at an increased risk of food insecurity.³ Nonetheless, we argue that the inadequacy of the single-item Australian tool is demonstrated, reaffirming recommendations to use the 16-item US tool nationally not only in stand-alone descriptive research but also in any study that, like ours, is intended to provide insight about interventions and a baseline for evaluation over time. We also acknowledge the limitations in the inclusiveness of our food supply and food access choices, these being based upon previous surveys and policy frameworks.^{1,15}

Hence, we believe that our survey tool, which incorporates a comprehensive measure of food insecurity, is well suited to inform local health promotion initiatives that potentially will meet the needs of the population most at risk of food insecurity.^{1,3} The evidence generated from this survey instrument can also be used at a broader level for local and national-level advocacy, to influence policy making, and to increase population understanding of the complex nature of food insecurity in order to engage the necessary workforce and government to address food insecurity at all levels of society.

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Table 5: Strategies preferred by food insecure^a households to improve access to food.

Strategies	WF Food insecure ^a households (n=111) %	VL Food insecure ^a households (n=151) %	RA Food insecure ^a households (n=121) %	All three sites ^b Food insecure ^a households %
Food supply				
Food production				
Growing local fruit and vegetables	78.4	82.1	89.3	83.8
Community or collective kitchen	52.3	53.6	62.0	56.1
Food co-operative	61.3	49.7	57.0	54.2
Food aid and subsidised meals				
School meals	73.9	76.8	78.5	76.8
Emergency food parcels	64.9	67.5	79.3	70.9
Food retail outlets				
Improved variety and quality of food	66.7	72.2	62.8	68.1
Home delivery service	55.0	53.6	61.2	56.3
Ordering food from home/Internet shopping	27.0	21.9	29.8	25.4
Food access				
Transport to food suppliers				
Cheap/free transport to food outlets ('shopping shuttle')	85.6	81.5	79.3	81.5
Cheaper public transport to shops	79.3	77.5	72.7	76.3
Increasing public transport routes	69.4	72.8	73.0	68.2
Strategies				
Health education				
Education on food nutrition	83.8	80.8	88.4	83.8
Education on food nutrition	75.7	77.7	85.2	80.2
Appropriate storage and kitchen facilities				
Improved household storage and cooking facilities	60.4	53.6	52.1	54.3
Improved household storage and cooking facilities	38.0	43.2	43.8	42.6

(a) As classified by 16-item US tool.

(b) All three sites' weighted data.

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Utility stress as a social determinant of health: exploring the links in a remote Aboriginal community

Eileen Willis, Meryl Pearce, Carmel McCarthy, Tom Jenkin and Fiona Ryan

Introduction

In the past two decades, there has been significant change in the regulation, provision and management of essential services such as water, electricity, gas and telephone services to the Australian population. Two significant factors in this shift have been the privatisation or full retail contestability of once publicly owned utilities, such as electricity, water and telecommunications, and, in the case of water, a move by the Federal Government to full cost recovery in the interest of sustainability as professed under the National Water Initiative (NWI).^{1,2} The impact of these moves has been to increase costs for consumers, many of whom are now experiencing hardship in meeting monthly or quarterly payments. Significant research has been done on the impact of the increased cost of public utilities on low-income population groups.²⁻⁴ Most of these studies include some commentary on the impact of increased costs to Aboriginal people in urban and rural towns,^{3,4} with an earlier study by Tregenza and Tregenza⁵ focusing specifically on remote Aboriginal communities in South Australia.

The results of these studies indicate that the impact of utility

stress on low socio-economic groups is considerable. In 1998/99, 16.1% of Australians households reported utility stress, i.e. in the past year they were unable to pay either electricity, water, telephone, or gas bills by the due date because of a lack of money.² Groups most at risk included the aged, single people, single-headed households, young people, the disabled and chronically ill, those living in transitory accommodation, non-English speaking migrants and Indigenous people.⁴ The Committee for Melbourne report makes a distinction between those suffering intermittent financial hardship and those who have lived in poverty over long periods of time. It is not just the long-term poor who suffer utility stress; many families who endure occasional financial hardship are also victims. Aboriginal families fit into both categories of financial hardship.

Aboriginal families living in remote and rural locations are particularly disadvantaged. The Committee for Melbourne report² noted that the 2001 Census identified that 72% of Aboriginal people were in the bottom 40% of household income distribution, with an increase to 92% in remote regions, and were therefore likely to experience utility stress. Further, research

Abstract

Issue addressed: The implications of the high cost of water on the poverty and subsequent health of Aboriginal residents in a remote community in Australia.

Methods: During 2003, a focus group session was held with adults at Umoona Aboriginal community in South Australia. Participants were asked to comment on key issues of concern in the provision of the domestic water supply.

Results: The Umoona community members in Coober Pedy identified the high cost of water and electricity as key hardship factors.

Conclusions: Plans under the National Water Initiative to move to full cost recovery for water and the privatisation of public utilities may result in increased hardship for low-income groups such as Aboriginal people. Utility stress (difficulties paying water, electricity, gas or telephone accounts by the due date) increases poverty and relative deprivation, both key factors in the social determinants of health. Increased community service obligations (CSO) and rebates need to be made available to all low-income groups in order to reduce the negative impact of poverty.

Keywords: Utility stress, water, remote Aboriginal communities, relative deprivation.

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So what?

Health promotion strategies aimed at improving the health status of Aboriginal people, particularly those living in remote communities, need to take into account the complex nature of poverty in many of these communities and the subsequent negative impact this has on the ability of community members to engage in healthy living practices.

by Willis et al.⁶ noted that in some instances Aboriginal communities were not able to access the community service obligation (CSO) subsidy, a State Government subsidy for rural and remote customers that aims to bring the price of water and other services into line with city prices. This situation is part of an array of stressors that have an impact on individual and family health. In the case of Aboriginal people, utility stress is offered as one of the explanations for why people move back and forth between urban or rural towns to remote communities, thus contributing to chronic unemployment, poor school attendance and ongoing poverty.⁶

The relationship between utility stress and health comes through the impact it has on health behaviours and poverty. For example, Lawrence⁴ found that people with disabilities or chronic illnesses, especially respiratory disease, who needed increased access to essential services such as electricity, water or telephone often rationed these utilities in order to meet quarterly or monthly bills, thus further jeopardising their health. Further, groups experiencing utility stress tend to spend a larger percentage of their annual income on essential services, thus limiting money available for food and other essential items. These populations tend to have poor-quality housing and less efficient use of energy technology within the household. Families renting, especially those living in public housing where government cost cutting has resulted in poor insulation, lack of verandas or rain water tanks, are particularly vulnerable as they are forced to spend more on electricity or water than those living in more energy and water-efficient housing. Tregenza and Tregenza⁵ noted in their study of the Pitjantjatjarra that Aboriginal people could not achieve five of the nine essential health hardware prerequisites if water and electricity providers moved to a full cost recovery. These five health hardware prerequisites are: washing children and adults; washing clothes and bedding; buying and storing and preparing healthy food; controlling dust; and controlling temperature.

Various State governments have introduced regulatory frameworks for utility debt including concession cards, weekly payment schemes, loans, and in the case of those with chronic conditions, rebates for people on haemodialysis and oxygen support. Centrelink also provides a direct billing service for many of its recipients that many Aboriginal people access.² The difficulty for Indigenous people is that these concessions are inadequate or may not be widely known. In the case of many communities on the fringes of rural towns, essential services are delivered to the gate, not to households, and it is left to the community to organise the payment of bills. In a few cases, residents are not able to access the CSO subsidy.⁶ The study outlined in this paper explores the impact of utility stress in Umoona, Coober Pedy, a remote Aboriginal community in South Australia where the CSO subsidy is not available.

Methods

The research employed a qualitative case study approach based on a semi-structured focus group interview with members of

the community. This method is seen to provide a more complex account of the richness of community attitudes than structured one-to-one interviews⁷ and creates a more comfortable research environment for participants. Furthermore, focus groups are an efficient means of gaining insight into the perceptions, experiences, feelings and desires of individuals and groups.⁷

The study, conducted in 2003, was part of a larger study that examined community perceptions on water supply in 12 Aboriginal communities across South Australia. Focus group sessions were all semi-structured in that the participants raised and discussed the water issues of concern to them. The researchers had a predetermined list of key topics (cultural relationships to water; water regulation; user pays; quality; future availability; conservation and recycling) that, if towards the end of the focus group session had not been discussed by the participants, were raised by the facilitator. The participants were eager for an accurate account of their opinions to be voiced to organisations involved in their water supply. Because the community largely determined the content of the discussions, different water supply issues arose out of the 12 communities. The key theme that arose out of discussions with Umoona community was that of financial hardship resulting from the costs associated with their water supply, and thus this paper focuses on Umoona alone.

The focus group session was held with five men and three women of the Umoona community on 22 September 2003. Male and female participants were interviewed together in English. The group included, among others, Council members, long-term residents and a non-Indigenous community housing employee. The interview was taped, transcribed and returned to participants for verification and acceptance. Following this, the transcripts were analysed by the research team for emerging themes. A report focusing on the key themes was then generated and verified by the community. Participants were given the option to be named in any publications; for consistency names, are not cited in this paper. In addition to the focus group session, field observations of the water supply system were conducted and water quality data were obtained from the Coober Pedy District Council.

Research community

Umoona lies 850 kilometres to the north-west of Adelaide. The community is a 'suburb' of the opal mining township of Coober Pedy.⁸ Coober Pedy has a population of approximately 3,000,⁹ with Umoona's population ranging from 90 to 150 people.^{9,10} The region's climate is hot and arid. Rainfall is low (158 millimetres a year on average) and temperatures are high and variable. Tables 1 and 2 summarise the socio-economic characteristics of the Umoona community as of the Australian Bureau of Statistics 2001 Census.

Income and employment

The median weekly household income for Aboriginal people at Umoona is \$400-\$499, the same as for all non-Aboriginal

people in Coober Pedy (see Table 2). However, the mean Aboriginal household size in the Umoona community is far higher than all non-Aboriginal households in Coober Pedy (3.4 compared with 2.2 persons per household). Therefore, in regard to individual weekly incomes, the disadvantages faced by Umoona residents are more apparent with individual weekly incomes of \$160-\$199.

The unemployment rates for the Umoona community are high, with an overall rate of 61.9%. The statistics are more alarming for the female population, with unemployment rates nearing 75%. Of the 16 Umoona residents that were employed at the time, all worked for the Community Development Employment Program, a work-for-the-dole scheme. Umoona's unemployment rates are five times those experienced by the non-Aboriginal population of Coober Pedy (12.4%). The socio-economic profile of the Umoona community is thus characterised by low income and extreme unemployment. The significance of such disadvantage is highlighted when comparisons are made with non-Aboriginal people in Coober Pedy, who have incomes equivalent to the state-wide average and slightly above-average unemployment rates.

Health of the Umoona population

De Crespigny, Kowanko, Emden and Murray¹¹ noted that the health status of Aboriginal people in the Coober Pedy community is characterised by the prevalence of numerous chronic illnesses (for example, cardiovascular disease, renal disease, diabetes, emphysema), psychological issues, Stolen Generation issues, and issues related to alcohol abuse and substance misuse. As such, the state of health of the people at Umoona shares many common features with that of the wider population of Aboriginal people in Australian society.

Umoona Tjutagku Health Service provides a range of services for the Aboriginal people at Umoona including community mental health care, alcohol and other drug counselling, a child health nurse, diabetes program, and domestic violence support. Working in collaboration with external agencies, the health service has been involved in establishing programs to address health issues of particular concern to the community. Examples include the Umoona Kidney Project,¹² which focused on high levels of renal disease, particularly among older people in the community, and a community nutrition project¹³ developed to assist the Umoona community to identify and redress nutrition-

related issues considered important in improving their overall health status.

Umoona water supply

Umoona's water supply is provided by the Coober Pedy District Council and it operates independently of State Government funding or CSO subsidies. Groundwater is pumped from bores 23 kilometres north-east of Coober Pedy to storage tanks in the town. Water is then treated by reverse osmosis, stored and reticulated throughout Coober Pedy, including to the Umoona community. The district council's responsibilities regarding water supply to Umoona stop at the community gate, and the community receives one bill each month for its water usage calculated at approximately \$5/kL. Prices in Adelaide and other rural and remote towns where the CSO is in place is approximately 99¢/kL, although prices do vary for other remote towns. For example, water charges at Marla are around \$1.25/kL up to a limited amount and \$3.88 for excess water use.¹⁴ The quality of water supplied to Coober Pedy and Umoona residents is very high (93 mg/L of total dissolved solids, compared with 369 mg/L and 534 mg/L in Adelaide and rural South Australia respectively). While rainwater tanks are fitted to most Umoona households, there is little reliance on rainwater because of low and unpredictable rainfall and high temperatures.⁸

Results

The focus group discussion reiterated that the Coober Pedy and Umoona water supply was of exceptional quality. Umoona residents described the water as 'beautiful' and like 'rainwater'. However, the quality of the water supply comes at considerable cost: "It's good quality water, it's beautiful water. But we think the price is too high" (participant 4). As noted earlier, Umoona community is treated as one household with the district council providing water to the gate and billing the community as one household.

Interviewer 2: So per house it's charged at a flat rate?

Participant 5: Well it's charged at what the district council ...

Interviewer 2: Does it depend on how much each household uses?

Table 1: Aboriginal population characteristics of Umoona community.

Characteristic	Males	Females	Total
Total persons	51	41	92
Employed CDEP	11	5	16
Employed other	0	0	0
Total labour force	23	19	42
Unemployment rate (%)	52.2	73.7	61.9

Source: ABS 2002.

Table 2: Selected socio-economic characteristics of Umoona community and non-Aboriginal people of the Coober Pedy township.

Characteristic	Umoona community Aboriginal	Coober Pedy township non-Aboriginal
Median age	33	44
Median weekly rent	\$50-\$99	\$50-\$99
Median weekly individual income	\$160-\$199	\$300-\$399
Median weekly family income	\$600-\$699	\$500-\$599
Median weekly household income	\$400-\$499	\$400-\$499
Mean household size	3.4	2.2

Source: ABS 2002.

Participant 5: District council bill ... we get one bill that we have to pay back, and then the boys go around to each house and they read the water reading, and they bring that back to me. And I've got my computer set up for water reading, and then I do individual invoices for all the houses.

Interviewer 1: The amount that they've used.

Participant 5: Yeah. (TU 159–180).

Although the community does receive a subsidy from the Department for Aboriginal Affairs and Reconciliation (DAARE) for water, it still pays around four times that charged in Adelaide. Most Umoona residents, according to focus group participants, derive their income from Centrelink payments and struggle to pay for water and electricity:

Participant 3: Some people ... are actually on Youthstart or Centrelink payments, and that's not going to be enough for them to be able to pay their bills, as well as put food in the house. And I think, that's where a lot of people find it difficult. I mean, when I was actually, even though I'm working, I find it hard, because I have to pay my electricity bill, and I have to have the air-conditioning on, because of the heat. I was paying water and electricity. (TU 220–233)

Water service provision at the Umoona community has shifted from a cheap, internal system with State Government support, when it was funded by DAARE, to an expensive, external, local government-controlled system. Focus group participants discussed both periods. The period when Umoona was supplied through an internally operated desalination plant had both advantages and disadvantages. On the positive side, the plant offered employment and training to two residents. Furthermore, the supply was independent, offering greater control of the system and the water came at no charge to the community residents. On the negative side, the desalination plant experienced several operational problems and the water was of an inferior quality to the current supply.

Focus group discussions also revealed discrepancies between water charges for households in Umoona and Housing Trust homes in Coober Pedy. The Aboriginal Housing Authority recently introduced a subsidy that provides a set amount of water free of charge to households within the Coober Pedy Council, excluding the Umoona community, and participants saw this as an unfair situation:

Participant 1: Literally in about May this year, Aboriginal Housing set the precedent up here, that they would pay for the water to X amount of kilolitres, once you've got over that amount of kilolitres, the people had to pay excess water. But us, the Umoona community, we haven't got those resources to tap in. So all of our 52 houses, everybody has to pay full [price] for their water. So, you know, the people of the community and the community housing get further and further behind the eight-ball. (TU 30–36)

Receiving such a subsidy is seen as an important way forward and a means of alleviating financial pressures:

Participant 4: It would be marvellous to have, like the Aboriginal

housing has got. The community could literally be granted X amount of kilolitres per family, and then literally only pay the excess water, and then that way perhaps a family might have a chance, to get a little bit in their pockets. It really is sad to see, by the time they get their pensions on a Thursday, by the time their rent and the money comes out for the electricity, and the few basic needs ... Nine times out of ten on a Monday, you've got people coming in here for a food order, because they've got no money. (TU 255–261)

Discussion

As one informant noted, individuals and families at Umoona experiencing utility stress pay their bills through weekly deductions from their Centrelink payments or seek assistance through the various provisions offered by providers. However, these arrangements compound poverty and poor health as they often leave the individual or family with very little money to buy food for the week. Families are forced to ration the use of resources, such as air-conditioners, heating, or the watering of household gardens. They may also go without other essential household items including clothes and meals or pawn or sell essential household items to meet the payments.

Collecting the quarterly payments is also a considerable stressor for the Umoona Community Council. An Indigenous essential service officer (ESO) does the weekly water meter readings and reports these to the bookkeeper, who determines the amount each family must pay. This arrangement is open to conflict. Aboriginal Community Councils lack the legislative authority to enforce payment. If families refuse to pay, do not have sufficient means to meet the quarterly accounts, dispute their bill, or vacate the premises there is little the council can do but meet the costs out of its own meagre revenue. Given that water is only delivered to the community gate, it is not possible to restrict the water supply to any individual house, nor is it advisable for public health reasons. Community councils must deal with this issue with no help from outside agencies. This is despite several requests for providers such as the Coober Pedy Council and SA Water to provide individual water accounts.

The Umoona community demonstrated a willingness to pay for water. However, the cost of water is considerable and a significant burden, particularly given the low incomes of residents. Participants expressed a strong desire for the inequities relating to water costing within Coober Pedy and the rest of the State to be addressed. This is not an issue that can be readily dealt with by the Coober Pedy District Council. It already offers subsidies to pensioners, with no financial assistance from the State Government in the form of a CSO available to residents in other country towns.

What is needed in this case is a review of the CSO arrangements for all Coober Pedy residents so that the cost of water can be reduced. The high cost of water is a significant inequity in comparison to other Indigenous and non-Indigenous communities in South Australia.

Conclusion

While this case study has focused on Umoona, several other communities in our study reported utility stress.^{6,15} These were most often Aboriginal communities positioned on the fringes of remote towns where water is delivered to the gate. While water is piped to each house, the provider bills the community as though they were one household. While this collective response is of assistance to the community as a whole, it means that permanent householders are also responsible for the costs incurred by visitors. For community members already burdened by the high cost of water, this is an additional stressor.

The capacity also exists through the NWI to alleviate some of the problems experienced at Umoona. First, the NWI seeks a reduction in water use through the use of sustainable water technologies. At Umoona, this could include increased use of rainwater tanks, a strategy that has been taken up by several other Aboriginal groups to reduce water costs.¹⁵ Second, the NWI makes provision under clause 66 for the CSO to remain in communities where full cost recovery is unlikely, provided this is publicly reported.¹⁶ There is no reason why this could not extend to Coober Pedy.

At the core of the social determinants is the concept of health as more than the absence of disease, to one which encompasses a broader view where the notion of an individual's capacity to be a fully functioning member of the society in which they live is emphasised as well. In light of this, the social determinants of health point to action that includes the relief of poverty along with "the broader aim of improving the circumstances in which people live and work".¹⁷ For the people at Umoona, the impact of utility stress, along with their high rates of under- and unemployment, is such that it is difficult for them to improve their overall well-being. Until there are improvements in employment and poverty can be alleviated, there is little possibility of improved health status. Addressing utility-induced poverty is thus essential in improving the well-being and life experiences of Umoona's Aboriginal residents.

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The war on obesity: a social determinant of health

Lily O'Hara and Jane Gregg

Introduction

In Australia we have developed an obsession with body size. The issue of increasing weight in Australia and many other parts of the world has been the subject of intense scientific, political and media attention.¹⁻⁶ Weight is now presented to the public as an independent cause of disease and death, and terms such as 'epidemic' and 'obesity' are commonplace. In the 10 years from 1996 to 2005, the number of times the term 'obesity' was mentioned in a newspaper article in Australia or New Zealand increased from 40 to 2,734 (see Figure 1). In 1996, there was one mention every nine days; in 2005 there were 7.5 mentions per day.⁷

Obsession with body fat was once a cultural issue. In recent years, the health sector has increasingly contributed to the cultural definition of the 'ideal' lean body.^{6,8} 'Excess' fat is not just undesirable to look at these days; it is routinely described as being bad for your health.⁵ The 'war on obesity' is a broad, health-based set of policies and programs designed to problematise 'excess' body fat and create solutions to the 'problem'. The framing of fatness as central to health status is described as the weight-centred health paradigm, the tenets of which are described in Table 1.⁹⁻¹¹

There is a substantial body of literature that claims to demonstrate the harmful effects of 'excess' body fat. More recent critiques of 'obesity prevention' programs have highlighted the importance of focusing on environmental changes rather than individuals due in part to the risk of harmful consequences associated with individualistic, victim-blaming approaches.^{4,12} Beyond this, numerous authors have challenged the evidence on which the current emphasis on 'overweight' and 'obesity' is founded.^{10,11,13-16} Furthermore, there are suggestions that the very act of framing body weight as the source of health problems – known as the weight-centred health paradigm – is in itself a harmful approach.^{10,17,18} A recent article in the *Californian Journal of Health Promotion* called 'The O Word: Why the Focus on Obesity is Harmful to Community Health', proposed that focusing on fat people is not helping to address the broader social and economic issues that have an impact on health and well-being.¹⁸ The authors discussed strategies to remove the focus on weight and in doing so reduce the harm to individuals and communities.

The editors of the *New England Journal of Medicine* were so concerned about the weight-centred health paradigm that they warned: "Until we have better data about the risks of being

Abstract

Issue addressed: The weight-centred health paradigm is an important contributor to the broader cultural paradigm in which corpulence is eschewed in favour of leanness. The desirability to reduce body fat or weight or to prevent gaining 'excess' fat is driven by both aesthetic and health ideals. The 'war on obesity' is a broad health-based set of policies and programs designed to problematise 'excess' body fat and create solutions to the 'problem'. There is a substantial body of literature that claims to demonstrate the harmful effects of 'excess' body fat. Recent critiques of 'obesity prevention' programs have highlighted the importance of focusing on environmental changes rather than individuals due in part to the risk of harmful consequences associated with individualistic, victim-blaming approaches. Beyond this, there are suggestions that framing body weight as the source of health problems – known as the weight-centred health paradigm – is in itself a harmful approach. The range of harms includes body dissatisfaction, dieting, disordered eating, discrimination and death. Health promotion policies and programs that operate within the weight-centred paradigm have the potential to have a negative impact on the health and well-being of individuals and communities.

Key words: Weight-centred health paradigm, health at every size paradigm, iatrogenic effects, harm.

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So what?

Health promotion practitioners have a responsibility to do no harm to people they work with. The 'war on obesity' is actually a war on fat people, and the casualties from such a war are felt both personally and by the community. Health promotion practitioners working within the weight-centred health paradigm need to be aware of the evidence that demonstrates the harms associated with working in this paradigm. There is a need for a more health-promoting and compassionate approach to people's health that is based on evidence of effectiveness. The 'health at every size' paradigm offers such an alternative.

overweight and the benefits and risks of trying to lose weight, we should remember that the cure for obesity may be worse than the condition."¹⁹

The first ethical principle that all health professionals must follow is to do no harm.²⁰ As questions are raised about the consequences of operating within the weight-centred health paradigm it becomes critical to review the literature to ascertain the range of potential harms that may inadvertently result from health promotion efforts designed to improve health through weight management.

Weight-centred health paradigm

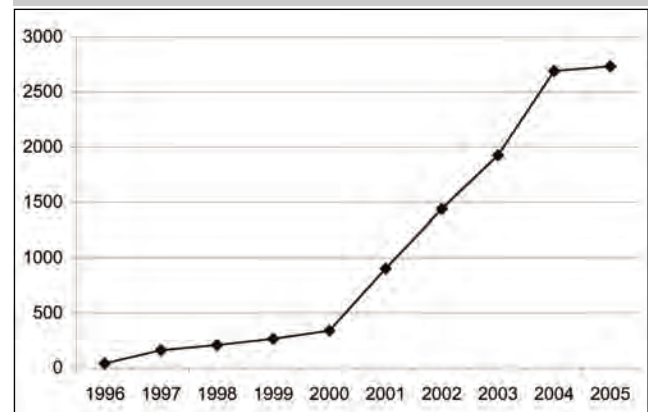
The weight-centred health paradigm, with its focus on acceptable levels of body fat, mirrors precisely the broader social and cultural 'ideals' about body size and shape. The weight-centred health paradigm therefore makes a significant contribution to the broader range of effects that result from focusing on an 'ideal' or 'healthy' body weight. However, there is concern emerging in the literature about the unintended harmful effects of health promotion programs that focus on body weight. The iatrogenic effects include body dissatisfaction, dieting, disordered eating, discrimination and death.^{9,21-61}

Numerous studies have demonstrated that obsessing about weight is psychologically harmful.^{21,22} Dissatisfaction with one's body is extremely prevalent in Western cultures.²³⁻²⁶ It is more common for young women to be dissatisfied with their bodies than not, and young men are also expressing higher levels of body dissatisfaction.²⁷ Children as young as six years of age are expressing unhappiness with the way their body looks.⁹ Media messages portraying the lean ideal for men and women are associated with increased body dissatisfaction.²⁸⁻³³ Body dissatisfaction in adolescents is predictive of a range of unhealthy weight control measures over a five-year period.³⁴

As a result of dissatisfaction, the majority of Western women are dieting to lose weight.³⁵ Most fat women started seriously dieting by 14 years of age.³⁶ Dieting is a significant cause of mental distraction, and people who are dieting are less able to concentrate or learn effectively.³⁷

While dieting may lead to short-term weight loss, over the medium and long term 95% of people regain all the lost weight.³⁸ Dieting by adolescents and preadolescents is predictive of future weight gain, irrespective of initial body weight.^{39,40} Failed diets usually result in higher weights than before the diet, and the consequence of such failure includes significant physical and emotional harm.³⁸ Weight fluctuation brought about by constant

Figure 1: Number of times 'obesity' was mentioned in Australian and New Zealand newspaper articles, 1996-2005.



dieting, termed the 'yo-yo syndrome', is associated with higher rates of death from cardiovascular disease than heavier but stable weight.⁴¹

The most severe forms of disordered eating such as anorexia nervosa and bulimia nervosa affect between 1% and 3% of the general population respectively, with disproportionate rates among young women.⁴² Disordered eating behaviours, including fasting, fad dieting, use of diet pills, diuretics or laxatives, vomiting and smoking for appetite control, are practised by almost 60% of American Year 9 girls and 30% of Year 9 boys.⁴³ Disordered eating also results in greater weight gain in the long term,³⁹ as well as an increase in physiological risk factors for disease such as hypertension.^{40,41}

Discrimination based on body size is a widespread phenomenon.⁴⁴ Evidence of systematic bias against people of higher-than-average body weights has been found in health workers, health promotion practitioners, doctors, nutritionists, coaches, employers, landlords and teachers, and in all settings including hospitals and general practices, workplaces, schools and universities.⁴⁴⁻⁵⁶

Deaths resulting from losing and regaining large amounts of weight have been consistently linked with increased mortality rates from cardiovascular disease.^{38,57} Deaths from anorexia nervosa are 12 times higher than for any other cause of death for females aged 15-24 years, and 200 times greater than the suicide rate for the general population.⁹

The short-term death rate from gastric bypass surgery is one death in 50-100 surgeries, and from adjustable lap band surgery is one death in 3,000 surgeries. Although there are no long-

Table 1: Tenets of the weight-centred health paradigm.

1. Weight is mostly volitional and within the control of the individual.
2. Weight is caused by a simple imbalance between an individual's energy intake and energy usage.
3. Current health status of the individual can be assessed and future health status can be predicted based on BMI categories.
4. Excess weight causes disease and premature death.
5. Methods for successful and sustained weight loss are well known to science and include focusing specifically on changing eating and physical activity patterns.
6. Losing weight to achieve 'healthy weight' status will result in better health.

term controlled studies of weight loss surgery, there has been an increase in the reporting of nutritional deficiencies that were thought to belong in the past, such as berri berri and its associated permanent neurological damage.⁵⁸

A small but increasing number of young people have been reported as dying from suicide as a direct result of bullying about body size.⁵⁹ Adolescents who experience weight-based teasing and harassment are more likely to think about and attempt suicide.⁶⁰

Studies that have examined changes in the prevalence of harms have demonstrated that they have worsened significantly. For example, stigmatisation of 'obesity' by children increased by 41% over the 40-year period between 1961 and 2001.⁶¹

Health at every size paradigm

'Health at every size' (HAES) is a new paradigm that moves the focus away from weight and towards health for all people, irrespective of their body size or weight. Table 2 describes the tenets of the HAES paradigm.⁶²

There is a small body of evidence demonstrating the health benefits of health promotion programs that use the HAES approach. Outcomes from these studies include improvements in the following health indicators: mortality,⁶³⁻⁶⁵ morbidity,⁶³ physiological factors such as blood pressure and cholesterol levels,^{21,63} psychological factors such as self-esteem,²⁶ depression,³⁵ body image,⁴³ and behaviours such as restrained eating⁶⁶ and sustained physical activity.²¹

Conclusion

The framing of body weight is one of the most dominant health discourses of our times. This paradigm is part of a broader social and cultural paradigm in which 'excess' body fat is regarded as quite literally a fate worse than death. The literature revealed that the range of harms associated with the problematising of

body weight include dissatisfaction, dieting, disordered eating, discrimination, and death. The war on obesity is actually a war on fat people, and the casualties from such a war are felt both personally and by the community. Health promotion policies and programs that operate within the weight-centred paradigm have the potential to have a negative impact on the health and well-being of individuals and communities. There is a need for a more health-promoting and compassionate approach to people's health that is based on evidence of effectiveness. The HAES paradigm offers a viable alternative health promotion approach.

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Table 2: Tenets of the 'Health at every size' paradigm.

Health at every size supports:
1. Health enhancement – attention to emotional, physical, psychological, social and spiritual well-being, without focus on weight loss or achieving a specific 'ideal weight'.
2. Size and self-acceptance – respect and appreciation for the rich diversity of body shapes and sizes (including one's own), rather than the pursuit of an idealised weight or shape.
3. The pleasure of eating well – encouraging eating based on internal cues of hunger, satiety, pleasure, appetite and individual nutritional needs, rather than on external food plans or diets for weight loss.
4. The joy of movement – encouraging appropriate, enjoyable, life-enhancing physical activity, rather than following a specific routine of regimented exercise for the primary purpose of weight loss.
Health at every size does not support:
1. Ideal weight – the indiscriminate use of the standardised 'ideal' weight category as a measure of a person's health status.
2. Weight loss – dieting, drugs, programs, products or surgery for the primary purpose of weight loss.
3. Body assumptions and bias – that a person's body size, weight or body mass index is evidence of a particular way of eating, physical activity level, personality, psychological state, moral character or health status.
4. Body size oppression – any form of oppression including exploitation, marginalisation, discrimination, powerlessness, cultural imperialism, harassment or violence against people based on their body image, body size or weight, and any approach to health, eating or exercise, the provision of products, services or amenities that perpetuates body size oppression.

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Social determinants of health and health inequalities: what role for general practice?

John Furler

The relationship between health care and social inequalities in health has been contested for many years. Even within general practice, opposing views exist. Some hold that this issue is not within the remit of the profession. GPs should concern themselves with the provision of high-quality care to their patients. Others hold that as health professionals we have a responsibility to engage with this important health issue.

Most models that depict the pathways through which social factors influence health do not directly include health care, which is seen as peripheral to the main game, confined mainly to picking up the pieces on a socially determined battlefield of life.¹ These models focus on a range of material and, increasingly, psychosocial pathways.^{2,3} There are reasons to suggest that medicine ought to be brought into this frame. In both a material and social sense, general practice may well play a role in determining health and health inequalities. As a technical or material resource medical access may be important in determining health status of individuals and communities,⁴ particularly in the context of the increasing prevalence of chronic illness. More importantly, health care is unavoidably played out within the broader set of social relations of people's lives. Medical practice is not exempt from this and is itself subject to these social processes. In these ways, medical practice itself can become an important social determinant of health in its own right.

The notion of inverse care, where people most in need of health care are frequently the least likely to receive it,⁵ is key to invoking a role for general practice in addressing health inequalities. If medical care has a role, in this paradigm it is viewed as a material, technical resource. Access to care can be thought of as both getting any care and the quality of the care that is received.^{6,7} At an individual level there is good evidence that the characteristics of care received in general practice varies for

patients depending on their socio-economic backgrounds. For example, patients from disadvantaged circumstances, while attending GPs more frequently⁸ (although it is not clear that this higher rate is sufficient to account for their higher disease burden), receive fewer long consultations from GPs,⁹ are less likely to be referred to specialist care,^{10,11} may be less likely to receive appropriate testing¹⁰ and may be subject to quite different patterns of prescribing, either underprescribing^{12,13} or overprescribing.¹⁴ The difficulties facing GPs in ensuring that their patients have access to appropriate high-quality care in relation to need stem in part from the structures that they work within, including payment systems (fee for service payments encourage high patient throughput) and organisational characteristics (the lack of an identifiable practice population, maldistribution of the workforce, relative underdevelopment of primary care teams in Australian general practice).

At a regional level, Divisions of General Practice are potentially an important thread in building the capacity of general practice to play a role in tackling health inequalities. Studies have identified strong commitment in divisions to tackling inequities in access to services and in developing collaborative programs at a regional level to target the needs of disadvantaged groups.^{15,16} This was most frequently aimed at Aboriginal and Torres Strait Islander communities and least frequently at socio-economically disadvantaged patients and groups. Problems facing divisions in this role have included accessing quality local demographic and health data (although this has recently been addressed to an extent with the production of detailed demographic profiles of divisions¹⁷), lack of specified funding for this work, and no formal accountability for reporting on efforts to reduce inequalities in their region (as is found in New Zealand, for example¹⁸).

Abstract

This paper argues that general practice is potentially an important social determinant of health and health inequalities. The way it is influential is consistent with models of causal pathways in the way social and societal factors influence health. General practice clinical care can be thought of as a material resource. Evidence exists at many levels that this resource is inequitably distributed. But encounters in general practice are profoundly social processes, embedded in wider society. Debating and reflecting on the values underpinning relations between GP and patient may help challenge and illuminate wider inequitable processes in society that sustain inequalities in health.

Key words: Health inequalities, social determinants, general practice.

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In terms of general practice's role in addressing social inequalities in health, all of the above examples could be considered under the rubric of 'medical care as technical or material resource'. Strategies could be developed and advocated for by the profession to address each of the difficulties highlighted above. However, a range of studies are producing an increasingly sophisticated understanding of the causal pathways involved in the generation of social inequalities in health. One important new development in the understanding of causality, referred to in this issue of the journal (Starfield) and elsewhere,¹⁹ is the notion that the societal characteristics and social (individual level) factors that determine health are not necessarily the same as the social processes that underlie the unequal distribution of these factors. In a number of important ways, general practice may have a role to play in such social processes.

At an individual and an institutional level, medical care may be important in these social processes. Numerous studies have documented the way provider attitudes and beliefs can play a role in generating inequalities in health care.²⁰ This may be particularly important in the context of a burgeoning epidemic of chronic illness, where general practice can increasingly form a thread in the social fabric of people's lives.²¹ Medical care is not simply about technical care. It must be understood "more broadly, not just as a domain of professional practice, nor as a bundle of commodities to be delivered, but rather as an institution in which the whole of society participates".²² By focusing exclusively on medical care as technical and material, we risk losing sight of the fact that "medical care is provided by institutions and decisions [made in that institutional setting] as to who receives medical care and the quality of that care are shaped by social processes".²³

Viewed in this way, one role for the profession as a whole could be in leading a debate about the values that underpin our health care system. A recent study involving the profession's peak body, the Royal Australian College of General Practitioners,²⁴ revealed that while the college was actively addressing health inequalities in several ways in areas such as GP training, setting of quality standards and advocacy work, this was implicitly informed by notions of care and compassion for vulnerable groups, rather than an explicit commitment to equity, justice and human rights.²⁵ Starfield's assertion, that societies characterised by strong primary health care systems have both better health and more equitable health, may be as much to do with what that reflects about the underlying values of such societies as it has to do with medical care as a material resource. In promoting a critical debate on values, general practice may act as an important social determinant of health in its own right.

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The NSW Social Determinants of Health Action Group: influencing the social determinants of health

Suzanne Gleeson and Garth Alperstein

There is robust evidence demonstrating that social determinants have far greater influence upon health and the incidence of illness than conventional biomedical and behavioural risk factors,^{1,2} but the public discourse on health and disease remains focused on lifestyle approaches to disease prevention.

The New South Wales (NSW) branches of the Australian Health Promotion Association (AHPA) and the Public Health Association of Australia (PHAA), together with the Council of Social Services of New South Wales (NCOSS), formed a Social Determinants of Health (SDoH) Action Group. In brief, the main purpose over the next few years is to develop strategies to inform the community, the media and all levels of government of the importance of the social determinants of health in maintaining the health and well-being of the whole community, in reducing health inequalities, and in minimising the long-term costs of health care.

The catalyst for this initiative was the development of *The Toronto Charter for a Healthy Canada: Strengthening the Social Determinants of Health*,³ and the evidence from a recent Canadian population health survey report.⁴ Seventy per cent of respondents stated that they had good or excellent knowledge of health issues. While lifestyle behaviours were well recognised by Canadians as factors that contributed to poor health, factors such as income, education, employment and social support were not highly recognised as important factors influencing health. In addition, almost one in four respondents did not consider any group as having worse health than other Canadians. These results mirrored what was published in the media on health. In this respect, we would anticipate similar results in Australia.

The SDoH Action Group plans to influence policy makers and government to incorporate the SDoH in the development of healthy public policy, as has occurred successfully in other parts of the world such as Sweden.^{5,6}

Strategies to achieve this include raising the general awareness of the importance of social determinants as the major influence on population health, including translating the research in a way that the community, the media and decision makers can comprehend.

In March 2005, a working committee, the SDoH Action Group, was formed with representation from the NSW branches of the PHAA, AHPA and NCOSS.

The SDoH Action Group intends to be broad based and has started with the following strategies:

1. The development of a pamphlet entitled *What makes us healthy? Social determinants of health*. This has been well received and 20,000 copies requested and distributed nationally.
2. The compilation and posting of a comprehensive list of resources and key research articles on the social determinants of health on to the Australian Health Promotion Association website at www.healthpromotion.org.au.
3. Launch of the Action Group initiative during Anti-Poverty Week in October 2005 with a seminar at the Sydney Mechanics School of Arts, which was opened by the Governor of NSW, Professor Marie Bashir, and included guest speakers Dr Pat O'Shane, Associate Professor Peter Sainsbury and Ms Marilyn Wise, from the Australian Centre for Health Promotion.
4. Submission of a research proposal to NSW Health to replicate the Canadian study⁴ on the knowledge of the population on determinants of health for inclusion in its annual population health survey.
5. Started a broad consultation process on developing an Australian Charter (based on the Toronto Charter) on the Social Determinants of Health, with a workshop at the 16th National AHPA Conference in Alice Springs in April 2006. The next step will be to repeat the workshop at the 37th PHAA Conference, 'Tackling the Determinants of Health', in Sydney in September 2006. The planning for nationwide participation and consultation is in progress.
6. Organising a seminar and workshop during Anti-Poverty Week (<http://www.antipovertyweek.org.au>), October 2006, to inform the community and the media of the social determinants of health and to workshop strategies that would enable the community to influence politicians' decisions.
7. Developing fact sheets on common myths with evidence-based 'myth busters' on the determinants of health. These fact sheets will be available for the community, the media and professionals to use for educational and advocacy opportunities relating to relevant policy and legislation changes with respect to population health. An example of a common myth would be 'if I am poor and have poor health, it is my fault'.

This is clearly a long-term process and will require long-term commitment from a broad representation of the community. As quoted by the World Health Organization "it's time to address the causes behind the causes of ill health".⁷

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Community Research in Environmental Health: Studies in Science, Advocacy and Ethics

By Doug Brugge and H. Patricia Hynes. Published by Ashgate Publishing, England, 2005. Hardback, 277 pages. RRP \$122. ISBN 0754641767.

Reviewed by Cordia Chu

In the broad field of public health, health determinants and community participation are two issues that have attracted growing interest. In public health journals usually dominated by epidemiological studies and biostatistics, there has been an upsurge of papers on social determinants, social capital and community development for health. However, there has not been the same attention paid to the many environmental health determinants and their relationships with inequalities in health. Thus, this book, a compilation of case studies of collaborative and participatory research to address environmental issues that unequally affect residents' health in the United States, is a welcome addition.

This book shares a similar purpose with existing literature that aims to draw attention to the impact of environmental hazards and social injustice on community health, such as Robert Bullard's *Dumping in Dixie: Race, Class and Environmental Quality* (1990).¹ Previous community-based studies driven by the environmental justice movement in the US, however, tend to focus on local struggles sparked by particular events; the 1978 Love Canal hazardous waste incident, or the 1982 protest of "environmental racism" by an African-American community in Warren County, North Carolina, against the building of a PCBs landfill in their community. This book is concerned more with a range of environmental and ethical issues that have an impact on the daily existence of the urban poor, ethnic minorities, and residents of urban slums.

The book is the result of the collective efforts of a multidisciplinary group of researchers who want to share their experience and valuable lessons learned in the process of conducting community-based collaborative projects. Aiming at researchers, students, community members and government agencies interested in the environment, public health, social justice, or community participatory research, half of the chapters focus on the findings of studies and the other half are concerned with research process and methodology. It offers insights into the what and how of many models of community-based

collaborative research, in which scientists and academic researchers are working with the communities rather than for the communities.

The book is divided into four sections: housing, open space, urban development and transportation and environmental exposure, and it covers subject matter representing common challenges to urban development, environmental planning and management. Written as case studies in layperson's language, readers will find useful information about environmental qualities of public housing, indoor environmental quality and asthma, lead-safe yard interventions, urban community gardens, traffic injuries and transportation, environmental surveys, air pollution, nuclear risk management, urban rivers, commercial hog production and the ethics of community-based collaborative research. For public health practitioners, this book offers a broader understanding of the relationship between the environment and health and the importance of community partnerships in improving environmental conditions.

The weakness of the book, as is the case with many edited volumes, is the uneven quality of the chapters, particularly in the methodology used and the reporting of data. The paper entitled 'We don't only grow vegetables, we grow values' is particularly inspiring and has appropriate qualitative analysis. However, a number of the studies conducted quantitative surveys with too small a sample to be statistically meaningful. On the other hand, there are excellent papers that bring new insights to public health practitioners on social inequality and environmental health. The paper on environmental justice and regional inequality in southern California is one such example, providing readers with a comprehensive analysis on the subject matter and its policy implications. The two papers on research ethics are both useful and interesting to read as they shed light on the difficulties and dilemmas confronting researchers who have to deal with pressures from different stakeholders and the need to protect the community at the same time.

To conclude, the book demonstrates the usefulness and necessity of community-based collaborative research for environmental justice and public health. For practitioners and researchers involved in community health, environmental health and urban health, this will be a useful reference.

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- Alperstein, Garth see Gleeson, Suzanne;
Kang, Melissa
- Arabena, Kerry, Preachers, policies and
power: the reproductive health of
adolescent Aboriginal and Torres Strait
Islander peoples in Australia 85–90
- Bain, Chris see Spallek, Melanie
- Barr, Ali see Mouy, Barb
- Baum, Fran see also Newman, Lareen
- Baum, Fran and Harris, Elizabeth, Equity and
the social determinants of health [editorial]
163–5
- Baum, Fran and Simpson, Sarah, Building
healthy and equitable societies: what
Australia can contribute to and learn from
the Commission on Social Determinants
of Health 174–9
- Bauman, Adrian see Rissel, Chris; Smith,
Ben J
- Bennett, David L see Kang, Melissa
- Bernard, Diana see Kang, Melissa
- Boxall, Anne-marie and Leeder, Stephen R,
The health system: what should our
priorities be? 200–5
- Brown, Valerie A and Ritchie, Jan, Sustainable
communities: what should our priorities
be? 211–16
- Carter, Owen BJ, The weighty issue of
Australian television food advertising and
childhood obesity 5–11
- Chau, Josephine see Smith, Ben J
- Chu, Cordia [Book review of] *Community
Research in Environmental Health: Studies
in Science, Advocacy and Ethics* by Doug
Brugge and H. Patricia Hynes 268
- Coveney, John see O'Dwyer, Lisel A
- Day, Carolyn and Dolan, Kate, Correlates of
hepatitis C testing among heroin injectors
in Sydney 70–2
- Dixon, Helen; Scully, Maree and Parkinson,
Kristiina, Pester power: snackfoods
displayed at supermarket checkouts in
Melbourne, Australia 124–7
- Dolan, Kate see Day, Carolyn
- Drew, Lynette see Turner, Catherine
- Duignan, Fiona see Rhodes, Linden
- Edwards, David; Freeman, Toby and Roche,
Ann M, Dentists' and dental hygienists' role
in smoking cessation: an examination and
comparison of current practice and barriers
to service provision 145–51
- Edwards, Ken see Parker, Elizabeth
- Elliott, Abigail see Kang, Melissa
- Field, Karen see Pryor, Anita
- Finch, Caroline, [Book review of] *Injury
Prevention and Public Health: Practical
Knowledge, Skills, and Strategies*, 2nd ed,
by Tom Christoffel and Susan Scavo
Gallagher (Jones and Bartlett Publishers)
76–7
- Fleming, MaryLou, [Book review of] *Health
Promotion Strategies and Methods*, 2nd ed,
by Garry Eggar, Ross Spark and Rob
Donovan (McGraw Hill Australia) 73
- Francis, J Lynn see Hazell, Juliana
- Freeman, Becky see Glover, Marewa
- Freeman, Toby see Edwards, David
- Frost, Steven see Smith, Ben J
- Furler, John, Social determinants of health
and health inequalities: what role for
general practice 264–5
- Giles-Corti, Billie see McCormack, Gavin
- Gleeson, Suzanne and Alperstein, Garth, The
NSW Social Determinants of Health Action
Group: influencing the social determinants
of health 266–7
- Glover, Marewa; Paynter, Janine; Wong,
Grace; Scragg, Robert; Nosa, Vili and
Freeman, Becky, Parental attitudes towards
the uptake of smoking by children 128–33
- Gould, Trish see O'Connor-Fleming, Mary
Louise; Parker, Elizabeth
- Gregg, Jane see O'Hara, Lily
- Harris, Elizabeth see Newman, Lareen
- Harris, Elizabeth see Baum, Fran
- Harris, Wendy see Rhodes, Linden
- Hart, Kelly see Turner, Catherine
- Hawkshaw, Barbara see Smith, Ben J
- Hazell, Juliana; Henry, Richard L and Francis,
J Lynn, Improvement in asthma
management practices in child care
services: an evaluation of a staff education
program 21–6
- Henry, Richard L see Hazell, Juliana
- Higgins, Helen see O'Connor-Fleming, Mary
Louise
- Houston, Shane, Equity, by what measure?
206–10
- Irwin, Alec see Solar, Orielle
- James, Ross, [Book review of] *Health
Promotion Theory*, edited by Maggie Davies
and Wendy Macdowall (Open University
Press, McGraw Hill Education) 156
- Jenkin, Tom see Willis, Eileen
- Jones, Sandra, [Book review of] *Global Public
Health Communication: Challenges,
Perspectives and Strategies*, by Muhiuddin
Haider (Jones and Bartlett Publishers)
73–4
- Kang, Melissa; Bernard, Diana; Usherwood,
Tim; Quine, Susan; Alperstein, Garth; Kerr-
Roubicek, Helen; Elliott, Abigail and
Bennett, David L, Towards better practice
in primary health care settings for young
people 139–44
- Kerr-Roubicek, Helen see Kang, Melissa
- Khavarpour, Freidoon A, [Book review of] *The
Grog Book*, revised ed, by Maggie Brady
(Department of Health and Ageing,
Australian Government) 74–5
- King, Lesley, The role of health promotion:
between global thinking and local action
196–9
- Lawrence, Mark, [Book review of] *Health
Policy and Politics: Networks, Ideas and
Power*, by Jenny M Lewis (IP
Communications) 153–4
- Leeder, Stephen R see Boxall, Anne-marie
- McCarthy, Carmel see Willis, Eileen
- McClure, Rod see Spallek, Melanie; Turner,
Catherine
- McCormack, Gavin; Giles-Corti, Billie and
Milligan, Rex, Demographic and individual
correlations of achieving 10,000 steps/day:
use of pedometers in a population-based
study 43–7
- Mackerras, Dorothy, [Book review of] *Nutrition
in Public Health: Handbook for Developing
Programs and Services*, 2nd ed, by Sari
Edelstein (Jones and Bartlett Publishers) 152
- McManus, Alexandra, Management of brain
injury in non-elite field hockey and
Australian football: a qualitative study 67–9
- Mallor, Cecily see Pryor, Anita
- Meiklejohn, Beryl see Parker, Elizabeth
- Migliorini, Christine and Siahpush,
Mohammad, Smoking, not smoking: how
important is where you live? 226–32
- Milligan, Rex see McCormack, Gavin
- Minichiello, Victor, [Book review of] *Sexual
Health: an Australian Perspective*, by
Meredith Temple-Smith and Sandra Gifford
(IP Communications) 155
- Mitchell, Rebecca see van Weerdenburg,
Katherine
- Mohsin, Mohammed see Nolan, Michelle
- Mouy, Barb and Barr, Ali, The social
determinants of health: is there a role for
health promotion foundations? 189–95
- Narayan, Ravi, The role of the People's Health
Movement in putting social determinants of
health on the global agenda 186–8
- Newman, Lareen; Baum, Fran and Harris,
Elizabeth, Federal, State and Territory
government responses to health inequalities
and the social determinants of health in
Australia 217–25
- Nolan, Michelle; Rikard-Bell, Glenys; Mohsin,
Mohammed and Williams, Mandy, Food
insecurity in three socially disadvantaged
localities in Sydney, Australia 247–54
- Nosa, Vili see Glover, Marewa
- O'Connor-Fleming, Mary Louise; Parker,
Elizabeth; Higgins, Helen and Gould, Trish,
A framework for evaluating health
promotion programs 61–6
- O'Dwyer, Lisel A and Coveney, John, Scoping
supermarket availability and accessibility by
socio-economic status in Adelaide 240–6
- O'Hara, Lily and Gregg, Jane, The war on
obesity: a social determinant of health
260–3

- Parker, Elizabeth
 [Book review of] *Public Health and Health Promotion: Developing Practice*, by Jennie Naidoo and Jane Wills (Bailliere Tindall) 153
 see also O'Connor-Fleming, Mary Louise
 Parker, Elizabeth; Meiklejohn, Beryl; Patterson, Carla; Edwards, Ken; Preece, Cilla; Shuter, Patricia and Gould, Trish, Our games our health: a cultural asset for promoting health in Indigenous communities 103–8
 Parkinson, Kristiina see Dixon, Helen
 Patterson, Carla see Parker, Elizabeth
 Paul, Christine L see Walsh, Raoul A
 Paynter, Janine see Glover, Marewa
 Pearce, Meryl see Willis, Eileen
 Phelan, Claire, The Blue Book Oral Health Program: a collaborative partnership with statewide implications 109–13
 Preece, Cilla see Parker, Elizabeth
 Pryor, Anita; Townsend, Mardie; Mallor, Cecily and Field, Karen, Health and well-being naturally: 'contact with nature' in health promotion for targeted individuals, communities and populations 114–23
 Quine, Susan see Kang, Melissa
 Raphael, Dennis, The social determinants of health: what are the three key roles for health promotion? [editorial] 167–70
 Rhodes, Linden; Duignan, Fiona and Harris, Wendy, Playing the game on the world wide web 27–31
 Rikard-Bell, Glenys see Nolan, Michelle
 Rissel, Chris
 Journal issues [editorial] 4
 What price petrol? [editorial] 3–4
 Rissel, Chris; Bauman, Adrian and Ritchie, Jan, Conflict of interest and the processes of publication 83–4
 Ritchie, Jan
 Values in health promotion [editorial] 83
 see also Brown, Valerie; Rissel, Chris
 Roche, Ann M see Edwards, David
 Ryan, Fiona see Willis, Eileen
 Saunders, David, A global perspective on health promotion and the social determinants of health [editorial] 165–7
 Scragg, Robert see Glover, Marewa
 Scully, Maree see Dixon, Helen
 Shuter, Patricia see Parker, Elizabeth
 Siahpush, Mohammad see Migliorini, Christine
 Simpson, Sarah see Baum, Fran
 Smith, Ben J; Zehle, Katharina; Bauman, Adrian E; Chau, Josephine; Hawkshaw, Barbara; Frost, Steven and Thomas, Margaret, Quantitative methods used in Australian health promotion research: a review of publications from 1992–2002 32–6
 Solar, Orielle and Irwin, Alec, Social determinants, political contexts and civil society action: a historical perspective to the Commission of the Social Determinants of Health 180–5
 Spallek, Melanie; Turner, Catherine; Spinks, Aneliese; Bain, Chris and McClure, Rod, Walking to school: distribution by age, sex and socio-economic status 134–8
 Spark, Ross, [Book review of] *Health Program Planning: an Educational and Ecological Approach*, 4th ed, by Lawrence W Green and Marshall W Kreuter (McGraw-Hill Australia) 75–6
 Spinks, Aneliese see Spallek, Melanie
 Stackpool, Gai, 'Make a Move' falls prevention project: and Area Health Service collaboration 12–20
 Starfield, Barbara, Are social determinants of health the same as societal determinants of health? [editorial] 170–3
 Stojanovski, Elizabeth see Walsh, Raoul A
 Thomas, Lyndall and Williams, Mark, Promoting physical activity in the workplace: using pedometers to increase daily activity levels 97–102
 Thomas, Margaret see Smith, Ben J
 Townsend, Mardie see Pryor, Anita
 Turner, Catherine see also Spallek, Melanie
 Turner, Catherine; Yorkston, Emily; Hart, Kelly; Drew, Lynette and McClure, Rod, Simplifying data collection for process evaluation of community coalition activities: an electronic web-based application 48–53
 Tzelepis, Flora see Walsh, Raoul A
 Usherwood, Tim see Kang, Melissa
 van Beurden, Eric, [Book review of] *Health Promotion and Education Research Methods: Using the Five-Chapter Thesis/Dissertation Model*, by Randall R Cottrell and James F McKenzie (Jones and Bartlett Publishers) 157
 van Weerdenburg, Katherine; Mitchell, Rebecca and Wallner, Frank, Backyard swimming pool safety inspections: a comparison of management approaches and compliance levels in three local government areas in NSW 37–42
 Viola, Antonietta, Evaluation of the Outreach School Garden Project: building the capacity of two Indigenous remote school communities to integrate nutrition into the core school curriculum 233–9
 Wallner, Frank see van Weerdenburg, Katherine
 Walsh, Raoul A; Paul, Christine L; Tzelepis, Flora and Stojanovski, Elizabeth, Quit smoking behaviours and intentions and hard-core smoking in New South Wales 54–60
 Williams, Mandy see Nolan, Michelle
 Williams, Mark see Thomas, Lyndall
 Willis, Eileen; Pearce, Meryl; McCarthy, Carmel; Jenkin, Tom and Ryan, Fiona, Utility stress as a social determinant of health: exploring the links in a remote Aboriginal community 255–9
 Wise, Marilyn, Response [to Orielle Solar and Alec Irwin's Social determinants, political contexts and civil society action: a historical perspective to the Commission of the Social Determinants of Health] 185
 Wong, Grace see Glover, Marewa
 Wortman, Jay, Health promotion when the 'vaccine' does not work 91–6
 Yorkston, Emily see Turner, Catherine

- adolescents
 promoting primary health care access 139–44
 reproductive health of Indigenous 85–90
 see also youth
- advertising
 food on television, childhood obesity 5–11
 point-of-sale displays of snack foods in supermarkets, Melbourne 124–7
- alcohol harm reduction, safe partying project 27–31
- asthma management, in child care services 21–6
- Australian Rules football, non-elite, management of brain injury 67–9
- Blue Book Oral Health Program, NSW 109–13
- body size and health paradigm 260–3
- book reviews
Community Research in Environmental Health: Studies in Science, Advocacy and Ethics, by Doug Brugge and H. Patricia Hynes. (Ashgate Publishing) 268
Global Public Health Communication: Challenges, Perspectives and Strategies (Haider) 73–4
The Grog Book, revised ed (Brady) 74–5
Health Policy and Politics: Networks, Ideas and Power (Lewis) 153–4
Health Program Planning: an Educational and Ecological Approach, 4th ed (Green and Kreuter) 75–6
Health Promotion and Education Research Methods: Using the Five-Chapter Thesis/Dissertation Model (Cottrell and McKenzie) 157
Health Promotion Strategies and Methods, 2nd ed (Eggar, Spark and Donovan) 73
Health Promotion Theory (Davies and Macdowall) 156
Injury Prevention and Public Health: Practical Knowledge, Skills, and Strategies, 2nd ed (Christoffel and Gallagher) 76–7
Nutrition in Public Health: Handbook for Developing Programs and Services, 2nd ed (Edelstein) 152
Public Health and Health Promotion: Developing Practice (Naidoo and Wills) 153
Sexual Health: an Australian Perspective (Temple-Smith and Gifford) 155
- brain injury, management in non-elite hockey and Australian Rules football 67–9
- car use, and health implications 3–4
- Celebrate – do it Safely (safe partying project) 27–31
- child care services, asthma management training in 21–6
- child health professionals, oral health promotion, NSW 109–13
- children
 food advertising on television and obesity 5–11
 smoking initiation, parental attitudes towards 128–33
 walking to primary schools, Brisbane 134–8
 see also infants
- Commission on Social Determinants of Health 174–9, 180–5
- communities, priorities for sustainable 211–16
- community coalition activities, simplifying data collection for process evaluation 48–53
- confectionery, at supermarket checkouts, Melbourne 124–7
- conflict of interest, and process of publication in *Health Promotion Journal of Australia* 83–4
- data collection, simplifying for process evaluation 48–53
- dental professionals, role in smoking cessation 145–51
- diets, benefits of low-carbohydrate diets 91–6
- drug use, and hepatitis C testing, Sydney 70–2
- equity
 and Indigenous people 206–10
 social determinants of health 163–5
- evaluation framework, health promotion programs 61–6
- falls prevention, Make a Move project 12–20
- food advertising
 point-of-sale displays of snack foods in supermarkets, Melbourne 124–7
 on television and childhood obesity 5–11
- food insecurity, socially disadvantaged localities, Sydney 247–54
- football, Australian Rules, non-elite, management of brain injury 67–9
- general practice, health inequalities and social determinants of health, role for 264–5
- government, responses to health inequalities and social determinants of health 217–25
- head injury, management in non-elite hockey and Australian Rules football 67–9
- health and body size paradigm 260–3
- health education, in asthma management 21–6
- health inequalities and social determinants of health
 government responses to 217–25
 role for general practice 264–5
- health professionals
 dental, role in smoking cessation 145–51
 oral health promotion, NSW 109–13
- health promoters, roles for, social determinants of health 167–70
- health promotion
 Blue Book Oral Health Program, NSW 109–13
 ‘contact with nature’ 114–23
 evaluation framework for program 61–6
 global perspective, social determinants of health 165–7
 between global thinking and local action 196–9
 primary health care access and young people 139–44
 quantitative methods used in research 32–6
 traditional Indigenous games 103–8
 values in 83
- health promotion foundations, social determinants of health 189–95
- Health Promotion Journal of Australia*
 conflict of interest in process of publication 83–4
 indexing of and citations 4
 health system reform, options for 200–5
- hepatitis C testing, among heroin injectors, Sydney 70–2
- heroin injectors, and hepatitis C testing, Sydney 70–2
- hockey, non-elite field, management of brain injury 67–9
- Indigenous communities
 effects of utility stress 255–9
 integrating nutrition into school curriculum 233–9
 traditional Indigenous games and health promotion 103–8
- Indigenous people
 and equity 206–10
 reproductive health of adolescents 85–90
- infants, oral health promotion, NSW 109–13
- injecting drug use, and hepatitis C testing, Sydney 70–2
- injury prevention
 childhood, simplifying data collection for process evaluation 48–53
 Make a Move (falls prevention project) 12–20
- local government, enforcement of swimming pool fences, NSW 37–42
- Make a Move (falls prevention project) 12–20
- mental health promotion, ‘contact with nature’ 114–23
- nature, contact with and health promotion 114–23
- nutrition
 benefits of low-carbohydrate diets 91–6
 integrating into Indigenous school curriculum 233–9
 see also food advertising

- obesity
 childhood, food advertising on television 5–11
 and weight-centred health paradigm 260–3
- oil price, and health implications 3–4
- older people, falls prevention project 12–20
- oral health promotion, Blue Book Oral Health Program, NSW 109–13
- Outreach School Garden Project 233–9
- parents, smoking and children smoking initiation 128–33
- party safely project 27–31
- pedometers
 demographics of achieving 10,000 steps/day 43–7
 promoting physical activity in the workplace 97–102
- People's Health Movement, social determinants of health 186–8
- petrol price, and health implications 3–4
- physical activity
 demographics of achieving 10,000 steps/day 43–7
 Make a Move (falls prevention project) 12–20
 promoting in the workplace using pedometers 97–102
 see also sport
- pre-schools, asthma management training in 21–6
- primary health care, promoting access to young people 139–44
- primary school students, walking to school, Brisbane 134–8
- quantitative methods, used in health promotion research 32–6
- reproductive health, Indigenous adolescents 85–90
- research
 evaluation framework for health promotion programs 61–6
 web-based data collection, simplifying for process evaluation 48–53
- research design, quantitative methods used in 32–6
- residential neighbourhoods, and likelihood of smoking 226–32
- safety
 Make a Move (falls prevention project) 12–20
 swimming pool fencing inspections, NSW 37–42
- schools
 integrating nutrition into Indigenous school curriculum 233–9
 pre-schools, asthma management training in 21–6
 walking to primary, Brisbane 134–8
- smoking
 cessation, dental professionals' role in 145–51
 initiation by children, parental attitudes towards 128–33
 quit smoking behaviours and hard-core smokers, NSW 54–60
 and social-environmental influences 226–32
- snack foods, at supermarket checkouts, Melbourne 124–7
- social determinants of health
 Commission on Social Determinants of Health 174–9, 180–5
 equity 163–5
 health inequalities
 government responses to 217–25
 role for general practice 264–5
 health promoters, roles for 167–70
 health promotion, global perspective 165–7
 health promotion foundations 189–95
 obesity 260–3
 People's Health Movement 186–8
 Social Determinants of Health Action Group, NSW 266–7
 versus societal determinants of health 170–3
 Social Determinants of Health Action Group, NSW 266–7
 social-environmental influences, and tobacco smoking 226–32
 socially disadvantaged localities, food insecurity, Sydney 247–54
 societal determinants of health, versus social determinants of health 170–3
 socio-economic status, availability and accessibility of supermarkets, Adelaide 240–6
- sport
 non-elite hockey and Australian Rules football, brain injury management in 67–9
 traditional Indigenous games and health promotion 103–8
- statistics
 quantitative methods used in health promotion research 32–6
 web-based data collection, simplifying for process evaluation 48–53
- supermarkets
 availability and accessibility by socio-economic status, Adelaide 240–6
 displays of snack foods at checkouts, Melbourne 124–7
- sustainable communities, priorities for 211–16
- swimming pool fencing, inspections, NSW 37–42
- television, food advertising, childhood obesity 5–11
- tobacco smoking see smoking
- utility stress, effect of in remote Aboriginal community 255–9
- values, in health promotion 83
- walking
 demographics of achieving 10,000 steps/day 43–7
 promoting in the workplace using pedometers 97–102
 to school by primary students, Brisbane 134–8
- water cost, effect of in remote Aboriginal community 255–9
- web-based data collection, simplifying for process evaluation 48–53
- website, safe partying project 27–31
- weight-centred health paradigm 260–3
- weight loss, benefits of low-carbohydrate diets 91–6
- World Health Organization, Commission on Social Determinants of Health 174–9, 180–5
- youth
 promoting primary health care access 139–44
 safe partying project 27–31

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Membership provides access to benefits for a 12-month period from receipt of fees.

Membership categories

Choose one of the following categories of membership. See Membership Benefits and Membership Fees for details relating to each category.

A. Corporate membership

Please tick one of the boxes below then complete part A of Membership Details section.

- Not-for-profit community-based organisations (C1)
- Not-for-profit government agencies (C2)
- For-profit organisations (C3)
- Mini corporate (C4)

B. Individual membership

Please tick one of the boxes below then complete part B of Membership Details section.

- Full Membership Category 1** (employed) (F1)
- Full Membership Category 2** (student or unemployed) proof of student status must be attached (F2)
- Restricted Benefits Membership** (available to full-time students only, proof of student status must be attached) (RB)



Membership details (please print clearly)

B. Individual membership only

Title: _____ First name: _____

Last name: _____

Preferred mailing address: _____

State: _____ Postcode: _____

This address is: Business Home

Phone: Business: () _____ Home: () _____

Mobile: _____

Fax: () _____

E-mail: _____

Occupation: _____

Current place of employment: _____

Qualifications: _____

Current studies and institution: _____



Membership Details (please print clearly)

A. Corporate membership

Name of organisation: _____

Name of organisation's representative nominated as voting member of the association until further notice: _____

Title: _____ First name: _____

Last name: _____

Organisation address: _____

State: _____ Postcode: _____

Phone: () _____

Fax: () _____

E-mail: _____



Payment Details (please print clearly)

Select the appropriate membership fee from the table provided.

Overseas members add \$30 or \$60 (corporate) for postage.

Amount paid: AUD\$ _____

Payment by: Cheque Money Order

Please make payable to Australian Health Promotion Association

Bankcard Visa Mastercard

Card No.: ____/____/____/____ Expiry date: __/ __

Name on card: _____

Cardholder's signature: _____



For automatic credit card renewal please sign below

I authorise the Australian Health Promotion Association Inc., until further notice in writing, to debit my card account number shown above with the annual membership fee. My account will be debited on receipt of this form by the AHPA, then annually on the anniversary of this payment thereafter.

Signature: _____

Date: _____



All members to sign below

I agree to abide by the constitutional rules and bylaws of the Australian Health Promotion Association.

Signature: _____

Date: _____

Office use only	Amount received: \$ _____	Chq. details: _____
	Date deposited: _____	
	Database entry date: _____	Entered by: _____
	Receipt No: _____	