

## 10 Improving socioenvironmental conditions and psychosocial factors

### 10.1 Background

Socioenvironmental and psychosocial factors are important risk factors for CVD and diabetes. There is good evidence that:

- People at the lower levels of the socioeconomic hierarchy have significantly worse health status.
- The effects of economic disadvantage are cumulative, so sustained hardship over time produces greatest risk of poor mental and physical health (Puska & Vartiainen 1999; Marmot 2000).
- Heart disease is a common condition associated with low income and poverty.
- People in the lowest income groups and poorest neighbourhoods have higher death rates for CVD and diabetes (as well as cancer and respiratory diseases) (Puska & Vartiainen 1999; Marmot 2000).
- Adverse (or less than optimal) early childhood experiences are reliable predictors of heart disease in adult life, regardless of one's adult income status.
- Rising rates of obesity, diabetes, depression and CVD are associated with increasing social inequality (Wilkinson 1996; Turrell et al. 1999; Everson et al. 2002).

There is strong evidence that CVD is the major contributor to inequality in health (Puska & Vartiainen 1999; Marmot 2000). There is also emerging evidence that inequalities in social and material environments and levels of economic participation are determinants of CVD and diabetes (Raphael et al. 2003; Raphael and Farrell 2002). Government policy must find solutions for inequalities<sup>6</sup> if rates of CVD and diabetes are to be substantially reduced. Nonetheless, many effective health promotion interventions can be implemented at local levels. To address inequalities, interventions must identify and target social, economic and environmental factors leading to CVD and diabetes. Local services need to distribute their resources in relation to the health needs of different groups, so as to reduce avoidable health inequalities and promote equitable access to the determinants of good health.

#### Psychosocial factors

Psychosocial factors that have an independent and causal association with CVD include depression, lack of quality social support and social isolation. Association between social isolation and CVD exists for men and women across cultures and age groups, with numerous studies showing associations between social networks and support and mortality (Bunker et al 2003). People who are socially isolated or disconnected have two to five times the risk of dying from all causes, compared with those who maintain strong ties to friends, family and community (Zimmet and Alberti 1997). Intervention approaches are focused from downstream to midstream.

#### Socioenvironmental factors

There is a recognised need to promote healthy social environments that are supportive of heart health. Social environments provide 'the substrate' on which psychosocial factors operate, such as in smoking rates (Marmot 2000). Although there is as much literature

<sup>6</sup> 'Health inequality is a generic term used to designate the [measurable] differences, variations, and disparities in the health achievements of individuals and groups [whereas] health inequity refers to those inequalities in health that are deemed to be unfair or stemming from some form of injustice' (Kawachi et al. 2002, p 1-2).

about inequality and poverty as about the determinants of health in general, less is known about the specific effect on CVD and diabetes. Social environments with deficient resources—in the areas of food, safety, housing, access to health services, educational infrastructure, early childhood services, social networks, wages and jobs—place citizens at the highest risk of poor health and premature mortality (Wilkinson 1996; Puska and Vartiainen 1999; Marmot 2000).

While this guide focuses on adult health, development through childhood is a powerful determinant of health in later life (Marmot and Wilkinson 1999; Raphael 2002). Programs such as the Department of Human Services Best Start program are platforms for integrated health promotion interventions that seek to enhance early child development and wellbeing. There is strong evidence that early childhood centres, for example, improve mental health through education, social support and social connectedness for mothers and children. The characteristics of these childhood programs include:

- access to high quality, centre based preschool/early childhood centres
- assistance for low income families who have insecure housing and/or who rely on public transport
- a focus on building parenting skills
- the availability and quality of parenting support and programs
- the quality of housing and safety within families and neighbourhoods
- household income and levels of employment
- social capital (Marmot and Wilkinson 1999; Raphael 2002).

To better understand the influence of social environments on health, there has been renewed interest in localities and neighbourhoods. Led by ‘area’ or ‘place’ theorists, this research uses socioecological approaches to link psychosocial risk factors (for example, social support, social isolation and depression) to socioenvironmental factors (for example, housing, transport and safety). It is argued that the contexts influence health more so than do the characteristics of the people in those communities (NHS 1997; Macintyre and Ellaway 2002; Kawachi and Berkman 2003). The context in which people live and work produces factors that interact in a range of different ways and these local differences should influence the selection of health promotion strategies.

Criteria are still being developed for quality outcome measures of community-wide interventions to influence the social environments and psychosocial factors associated with CVD and diabetes. Nonetheless, evidence indicates that the interventions with the greatest potential are intersectoral, community-wide approaches that use integrated, multilevel strategies. Broader environmental, regulatory and institutional policies have an impact on and shape patterns of heart health and diabetes, so there is much potential for advocacy to influence policy makers at all levels.

Table 2 provides a useful summary of core social and ecological principles for health promotion, as well as guidelines for designing and implementing interventions. These guidelines underpin the interventions that are reviewed following the table.

**Table 2: Socioecological approach for community interventions**

Core social and ecological principles	Operating guidelines for intervention and design implementation
Physical, mental and social wellbeing are influenced by a variety of environmental factors.	Encompass multiple settings and life domains. Reinforce health promoting social norms through existing social networks.
Personal characteristics and environmental conditions often have interactive as well as direct effects on wellbeing.	Target changes in the community or organisational environment, as well as in individual behaviours.
The degree of fit between people's biological, behavioural and sociocultural needs and the environmental resources available to them is a key determinant of wellbeing.	Tailor programs to fit the setting via the participation of the community and target audience. Empower individuals to make changes.
Within the context of structured community settings, certain behaviours and roles exert pivotal influences on wellbeing.	Identify influential points in the community for promoting health. Use multiple delivery points and methods over an extended period.
It is important to examine (1) the links between physical and social conditions within particular settings and (2) the joint influences of multiple settings and life domains on health over extended periods.	Address social conditions and recognise the social context of health behaviours in interventions. Implement coordinated interventions across multiple life domains.
Interdisciplinary research—linking the perspectives of public health, medicine, behavioural and social sciences, and policy—is essential for developing comprehensive and effective health promotion programs.	Establish a collaborative, interdisciplinary research team. Link the results of epidemiological research, intervention research and policy analysis.

Source: Sorenson et al. (1998).

### Overview of evidence reviewed

Interventions to address psychosocial and socioenvironmental factors have been conducted largely in relation to CVD rather than diabetes. This section summarises the evidence for the effectiveness of:

- health education
- work conditions
- social support and networks
- community based and neighbourhood programs
- culturally competent health services.

## 10.2 Health education

### Intervention description

Health education programs are intended to enable people to play active roles in achieving, protecting and sustaining health through the provision of information.

### Specific Population group/setting

The reviewed interventions targeted individuals, families, groups, organisations and communities. Health education at an individual level has commonly been combined with screening and used for both CVD and diabetes awareness raising.

### Effectiveness

Health education interventions have frequently concentrated on the ‘soft target’ behavioural risk factors of weight control, nutrition, chronic disease management, physical activity and smoking, by targeting the modification of behaviours related to diet, smoking, alcohol, physical activity, self-harm/addictive behaviours and chronic disease management. Health education interventions targeted at these risk factors have produced generally unimpressive effects, including general practitioner behavioural health education. Individual health counselling has by itself, had little, if any, effect for more than the short term (Taub 2001).

Evidence of the effectiveness of health education combined with screening is inconclusive. There is promising evidence, however, that community level health education can achieve effectiveness through multifaceted intervention strategies. Health education should thus be (1) based on a thorough understanding of the social and economic determinants of the population’s health and (2) just one strategy in an integrated health promotion plan.

### Implementation issues

The effectiveness of health education is modified by people’s understandable preoccupation with day-to-day survival issues, particularly people in low income groups. In general, people facing challenging life circumstances tend not be concerned with the possibility of developing a longer term chronic disease. The focus of health education, therefore, should be on changing capacity, social support and control over decision making, and the provision of resources at the individual, network, organisation, community and political levels. Goals and objectives should define how to involve and reach low income groups, rather than just using broad approaches to screening and health education.

### References

Davey-Smith (2003); Huibers et al. (2002); Taub (2001).

## 10.3 Work conditions

### Intervention description 1

These interventions relate to establishing work settings for organisation based heart health programs and to improving poor work conditions, including occupational health and safety.

### Specific Population group/setting

The reviewed interventions targeted workplaces, low income settings and local communities, focusing on working aged adult males with a low socioeconomic status.

### Effectiveness

- Healthy workplaces have been shown to have an impact on a range of health conditions.
- Regulating work hazards has been shown to reduce injury and stress by promoting better physical work conditions, with impacts on health.
- Low income over time is a predictor of stress and poor access to health services, and an adequate wage through life prevents CVD in the longer term.
- Employment programs that put people into low income jobs with poor work conditions have shown little effect on positive improvements in health.
- Workplace settings are effective for health programs that increase an understanding of health issues by taking a more integrated approach to health promotion than just focusing on behavioural risk factors.
- Social marketing and the monitoring of workplace compliance with occupational health and safety have been effective.
- Programs should seek to increase local democracy and be evaluated for a wide range of outcomes, including changing capacity, social support and control over decision making and resources at the individual, network, organisation and community levels.

### Implementation issues

- Top-down management support for workplace programs should be negotiated with bottom-up inclusion of staff in decision making.
- Goals and objectives should target low income workers.
- Staff should gain an understanding of the particular social, environmental and economic determinants of their health, particularly in workplaces where low income jobs are clustered.
- Health promotion programs should target low income workers and be based on a sound understanding of the determinants of health for those people in their own context.

**Intervention description 2**

Interventions can take the form of advocacy for getting people into jobs, employment programs and for income equity through employment programs. Income equity issues can be addressed at the local level via efforts to ensure local employment programs are creating healthy jobs, not health damaging jobs.

**Population group/setting**

The reviewed interventions targeted local employment programs.

**Effectiveness**

There is good evidence that a low income over time is a predictor of stress and poor access to health services, and that an adequate wage through life prevents CVD in the longer term. Employment programs that place people into low income jobs with poor work conditions show little evidence of a positive improvement in health.

**Implementation issues**

Health promotion agencies should work with local employment programs to ensure they are health promoting and not health damaging. They should design evaluations of the impact of employment programs.

**References**

Bosma and Marmot (1997); Cave et al. (2001).

**10.4 Social support and networks****Intervention description 1**

Social support can be provided through one-to-one counselling and through work-based group interventions that connect people to each other and to larger networks. Social support and social connectedness programs often have a health education component.

**Population group/setting**

The reviewed interventions targeted groups at risk of CVD or diabetes in work places and in social settings such as neighbourhood houses.

**Effectiveness**

One-to-one interventions lack good evidence of their health outcomes. The evidence is more promising for the provision of social support for low income groups when that support is combined with efforts to build problem solving skills.

**Implementation issues**

Social support and networks should use a settings approach and combine with multilevel, integrated health promotion interventions. They should avoid top-down ownership of group processes and foster local governance and empowerment.

### **Intervention description 2**

Social support and social connectedness programs have been run specifically for carers.

### **Population group/setting**

The reviewed interventions targeted carer support groups, sometimes combining with respite care facilities and programs.

### **Effectiveness**

There is good evidence that social support and relief from caring responsibilities promotes mental health and general wellbeing through social support and social connectedness, which reduce isolation.

### **Implementation issues**

Social support should be combined with a health education component. Programs should ensure they reach less mobile and low income carers.

### **References**

Cattan and White (1998); National Health Service Centre for Reviews and Dissemination (1997); Jackson et al. (2001).

## **10.5 Community based and neighbourhood programs**

### **Intervention description 1**

Community-wide, multilevel, intersectoral, integrated health promotion programs focussing on one or more issues.

### **Population group/setting**

The reviewed interventions targeted communities, particularly low income communities and those disadvantaged by geography, lack of public transport, cultural diversity and low levels of employment.

### **Effectiveness**

There is good evidence that community programs, with a high degree of information diffusion, have potential to encourage community mobilisation to influence health. Local programs that combine health promotion approaches can influence environmental, regulatory and institutional policies. Effectiveness is much improved if communities are involved in defining priority issues.

### **Implementation issues**

Community programs should focus on the determinants of CVD and diabetes, and ensure those determinants are a focus of strategies and evaluation. These programs should also ensure their goals and objectives define populations of interest and evaluate for reach.

**Intervention description 2**

Area regeneration and neighbourhood renewal programs.

**Population group/setting**

The reviewed interventions targeted the renewal of rundown, disadvantaged neighbourhoods in the United Kingdom and the United States.

**Effectiveness**

There is strong evidence that area regeneration and neighbourhood renewal programs increase social network development which has an impact on health by reducing of social isolation and increasing social connectedness.

**Implementation issues**

Neighbourhood renewal programs in Australia provide a platform for integrating a wide range of health promotion opportunities. As long as practitioners work cooperatively and across sectors with multilevel strategies, these programs have the potential to reduce inequality by lifting employment and training, improving personal safety, enhancing housing and environments, developing partnerships between agencies and communities, and with local business and service agencies, and increasing local leadership. The programs should ensure their goals and objectives define populations of interest and evaluate for reach.

**Intervention description 3**

Physical improvements to public housing and local environments are the focus of area regeneration and similar neighbourhood programs. In these interventions, housing repairs and the creation of safer areas for public housing tenants are conducted in consultation with local residents, who are involved in planning, decision making and strategy development.

**Population group/setting**

The reviewed interventions targeted public housing and low income groups.

**Effectiveness**

There is good evidence that housing renewal programs improve mental health and general wellbeing.

**Implementation issues**

Housing interventions need to be localised so they are context specific.

**References**

Hamer et al. (2003); National Health Service Centre for Reviews and Dissemination (1997); O'Loughlin et al. (1999); Sorenson et al. (1998); Task Force on Community Preventive Services (2003); Thomson et al. (2002).

## 10.6 Culturally competent health services

### Intervention description

Access to quality health services for all people is essential, while culturally competent health services are a determinant of health. Strategies include:

- cultural diversity training
- culturally accommodating settings for the delivery of health services
- interpreter services and linguistically proficient staff
- the development of culturally appropriate health education materials
- recruitment and retention programs for multicultural staff.

### Population group/setting

The reviewed interventions targeted groups experiencing disadvantaged health and social status or vulnerability. Some interventions dealt with health providers and health services.

### Effectiveness

There is good evidence that strategies to address access to services—particularly culturally competent services for defined populations—are worthwhile. There is strong evidence that access to effective services is a major determinant of health.

### Implementation issues

It is important to examine how local health and social institutions (including health services) treat people from diverse cultures differently to focus interventions for local contexts.

### Reference

Task Force on Community Preventive Services (2003).

## 10.7 Future directions

The effectiveness of health promotion program planning and implementation is significantly increased if based on a sound understanding of the determinants of health. Both CVD and diabetes are strongly associated with inequalities, low incomes and lack of access to appropriate health services. These upstream determinants influence psychosocial factors and people's behaviour. The literature emphasises the need for heart health and diabetes prevention to focus on upstream social determinants and inequalities, particularly through community based, integrated, multilevel, intersectoral intervention programs. For individual health promotion practitioners, this means that single agency, single level interventions will be more effective if part of a wider planned program of interventions involving partners from other agencies (and preferably involving sectors outside of health). There is much potential for local practitioners to engage in intersectoral projects—based on platforms such as the Neighbourhood Renewal and Best Start programs—to value add with collaborative interventions.

## 10.8 Resources (links, evaluation, case studies)

- Department of Human Services Neighbourhood Renewal Program (<http://www.dhs.vic.gov.au/dhsplan/dhsplan2004/part3/statements/strengthening3/htm>)—an overview of the strategy, details of specific sites for the program rollout, key targets and milestones, and the department’s approach to community building.
- Department of Human Services Best Start Program (<http://www.dhs.vic.gov.au/>)
- *The equity gauge: concepts, principles, and guidelines* ([http://www.gega.org.za/download/gega\\_gauge.pdf](http://www.gega.org.za/download/gega_gauge.pdf))—an overview of the Equity Gauge Strategy, which supports policy and action for health equity using a three-pronged approach of assessment and monitoring, advocacy and community empowerment.
- Social Justice (<http://www.socialjustice.org>)—a wealth of information about social determinants of health and the Toronto Charter for a Healthy Canada (a charter that is based on evidence that the root sources of health and the causes of illness are social and economic and that urges funding for social housing and childcare among measures to progress on population health).
- *Guide to community preventative services* (<http://www.thecommunityguide.org>)