

**Older Persons and Health Promotion -
An Overview of the Literature**

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For the

City of Greater Geelong

Live Well: A Strategy for Healthy Mature Communities

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Older Persons and Health Promotion - An Overview of the Literature

Executive Summary

Introduction

- This overview of the literature on health promotion for older persons does not claim to be a comprehensive review of the literature, but rather an overview with selected examples to illustrate various approaches to health promotion for older people.
- The term ‘older’ is used in this report to mean persons aged 55 years and over.
- The focus of this overview is on community dwelling older people.
- The aim of this report is to provide a critical overview of the literature on health promotion for older persons, and to provide information about health promotion strategies that are effective and appropriate within the context of the Barwon region.
- A broad definition of health promotion is used:
“Health promotion is the combination of educational and environmental supports for actions and conditions of living conducive to health” (Green & Kreuter, 1991, p. 4), and health promotion is the “process of enabling people to increase control over, and to improve, their health”. (World Health Organisation, 1986).

Background

- The social model of health underpins this overview of health promotion.
- Social disadvantage, social capital, the built environment, and perceptions of control in particular all play an important role in determining the health of older persons and are briefly discussed.
- A number of theoretical approaches are available that attempt to explain behaviours related to health, and how these behaviours can be changed, or can be used as planning frameworks for health promotion. A brief description of the following is included:
 - Individual level: Behaviour modification; the Health Belief Model; the Transtheoretical Model; Lay Beliefs.
 - Interpersonal level: the Theory of Reasoned Action; Social Learning Theory.
 - Theoretical frameworks with multiple levels: an ecological model; the PRECEDE-PROCEED model.

Physical Activity

- There is abundant evidence of the importance of physical activity to the health and well-being of older persons.
- It is clear that levels of physical activity in older people are far from optimal.

- Reviews of the literature on promoting physical activity to older persons have concluded that there is a lack of good quality evaluations of programs and that no single approach stands out as being the most successful.
- Descriptions of a range of physical activity interventions and programs were described.

The following conclusions summarise the key findings from the literature:

- There is a need for education for example on the type and level of physical activity that is appropriate for older persons.
- Negative stereotypes need to be addressed.
- Different types of physical activity or exercise training confer different benefits.
- It is sometimes appropriate to tailor physical activity programs to individual needs, especially for those with poor health.
- There is a role for GPs in promoting appropriate physical activity, but there are many demands on their time.
- It is beneficial to encourage the social aspect of exercise.
- Women are more likely to respond positively to group walking activities.
- There is a need to pay particular attention to recruiting sedentary people. Using a personal approach where an active person recruits an inactive person has been successful.
- The role of the built environment is very important:
 - establish safe walking paths, pedestrian crossings etc.
 - utilise venues that are easily accessible, or promote mall walking
 - comprehensive resources are available that address the many relevant policy areas.
- There are many advantages in promoting walking: it is the preferred activity for many people; it requires no special equipment; it can be done in a range of places; and it can be done in groups.
- A multi-level approach to promoting physical activity such as the PRECEDE-PROCEED model or the ecological approach is most appropriate.
- Many successful programs involve collaboration from a range of different organisations.

Falls Prevention

- There is evidence that falls prevention programs can reduce the incidence of falls or of injuries from falls.
- Multifaceted programs have been shown to be most effective.
- Exercise, particularly with an emphasis on balance, is effective.
- Home hazard assessment and modification is effective among people who have a history of falling.

Social and Cultural Involvement

- There are strong links between participation in social and other activities and enhanced physical and mental health.
- Appropriate leisure activities for older people enhance their overall satisfaction with life.
- Examples are presented of programs that enhance social and cultural involvement.
- Formal clubs and organisations play an important role in facilitating participation.

- Specific interventions to facilitate the involvement of older people have been received positively by participants.
- Intergenerational programs offer benefits to older people and to the younger people they become involved with, and the important contribution older people can make is acknowledged.
- Volunteering should be promoted as it is beneficial to the volunteer as well as to the community as a whole.

Transport

- Transport is an important factor in maintaining the independence and connectedness of older people.
- There are many health damaging aspects of the dominance of cars in communities.
- Active transport has been proposed as a health enhancing approach to transport.
- Pilot projects such as the TravelSmart Alamein project have demonstrated that it is possible to change transport behaviour.
- The role of the built environment is of considerable importance in the area of transport.
- Promoting healthy transport requires an intersectoral approach.

Nutrition

- Nutrition is important for the maintenance of health and in the management of chronic disease.
- There are clear dietary guidelines for older persons.
- Screening for nutrition risk includes food insecurity, social factors and needing assistance in self care in addition to assessing dietary behaviour.
- Many nutrition interventions focus on children.
- Tailored interventions have had some success in changing dietary behaviour.
- Access to fresh fruit and vegetables is important.
- Successful nutrition health education strategies for older persons include a personalised approach, active participation, use a behavioural approach, and attend to motivators and reinforcers.

Obesity and Overweight

- Overweight and obesity are key risk factors for preventable morbidity and mortality.
- Much of the health promotion activity in relation to obesity and overweight focuses on physical activity, and some on nutrition.
- An ecological approach which takes account of environmental, biological and behavioural influences on weight has been recommended.
- There is some indication that older persons do not have an accurate perception of their weight.

Housing

- There are substantial differences in the situations of older persons who own their home compared with those rent.
- Most Australians are satisfied with their housing, and many do not want to move out of a family home that they are attached to.

- Urban planning has a critical role in ensuring that environments are conducive to social inclusion and participation.
- Access to services such as shops and health care are very important to older people.
- It is preferable to locate accommodation for older people in central locations to facilitate involvement in the community.
- Home modifications can assist older persons to maintain their independence.

Oral Health

- Oral health is an important aspect of general health and well-being.
- Access to dental services is an issue, especially for low SES groups.
- A number of ways of promoting the oral health of older persons have been suggested, including re-orienting dental services to improve access, dispelling 'oral health myths', a focus on preventive oral hygiene, and a more comprehensive assessment of dental needs and oral health.
- Improving older peoples' beliefs that they can control their oral health has been recommended.

Smoking

- There are substantial benefits to be gained by older people who quit smoking.
- Individual or group counselling strategies have shown some success.
- Community interventions have generally had a limited impact.
- Regulatory measures such as bans on smoking in public have produced positive outcomes.
- Older persons who continue to smoke may need a personalised approach to smoking cessation.

Medications

- Inappropriate medication use is a serious health problem amongst older persons.
- Most interventions to help people use medications according to instructions have not been very effective, and the most effective ones have been quite complex.
- Health literacy, or the capacity of individuals to obtain, process, and understand basic health information and services in order to make decisions about their health, is an important concept in relation to medication use.
- Approaches such as using pictographs for medication instructions help to overcome poor literacy problems.
- Increasing health literacy has been suggested as a public health goal.

General Approaches to Health Promotion

- Some approaches to health promotion for older persons utilise a general approach that includes promoting a range of activities known to promote health.
- An examination of some of these, including wellness centres, health promotion programs, health nights for men and wellness guides is presented.
- General health programs or wellness centres have the advantage of combining a number of health promotion activities, usually in a social setting which is beneficial to participants.
- Participants in general health promotion programs are more likely to be women, already involved in other activities, and have a higher SES. This suggests a need

for more effort to be put into recruiting less involved people, and those with a lower SES.

- Men's health nights or sessions seem to be a more effective way of accessing older men than general programs.
- Wellness Guides that are developed in partnership with the people for whom the guide is designed have been well received. This reflects the value of a 'bottom-up' approach to health promotion.

Special Groups / Populations

While it is beyond the scope of this overview of the literature to describe in detail the available research on special groups or populations, a summary of some key points is presented.

Ethnicity

- Ethnicity influences health, health beliefs and behaviours and relationships with health care providers.
- It is important that health promotion activities are culturally appropriate.
- Culturally appropriate physical activities and leisure activities will facilitate involvement from different ethnic groups.

Indigenous Persons

- A greater burden of ill health is suffered by Indigenous persons than other Australians, and includes higher rates of disability, reduced quality of life, and a shorter life expectancy.
- Specific health promotion strategies have been developed in various domains for Indigenous persons.
- Cultural sensitivity is particularly important in health promotion activities for Indigenous communities.

People with Disabilities

- A large proportion of older persons have some type of disability.
- There are health promotion activities developed specifically for people with a disability.
- Improving the accessibility of the environment for people with disabilities will also enhance the accessibility of the environment for all older persons.
- Health promotion activities should be inclusive of older people with disabilities.
- Many informal carers have some level of disability themselves.

People with Chronic Disease

- Chronic diseases are highly prevalent in Australia, contribute significantly to ill health, and often lead to disability.
- Many health promotion activities previously described are relevant to the prevention or management of chronic disease.
- Self management training is an important approach to the management of chronic disease.
- Better Health Self Management programs have demonstrated positive outcomes.
- Home visits by nurses or pharmacists and coaching by telephone have also demonstrated positive outcomes for people with chronic disease.

Informal Carers

- A substantial number of older people are caregivers to others.
- Caregiving has a negative impact on the physical and mental health of many carers.
- Respite care services are a common type of service provided to carers.
- The evidence on the value of respite care is equivocal.
- Home modifications, home help and transport are other useful services provided to carers.

Gay and Lesbian Older Persons

- Gay, lesbian, bisexual and transgender (GLBT) people face particular issues as they age including obstacles in maintaining friendships and networks, ageism and exclusion, issues associated with caregiving and discrimination.
- Many actions to address these issues have been suggested, including the inclusion of culturally appropriate care standards and training, the development of a GLBT seniors friendly visitor / volunteer program, GLBT seniors social activities, intergenerational activities and caregiver support activities.

Conclusions

- Given the frequent lack of good quality, comprehensive evaluations of individual health promotion projects targeted at older persons it is not possible to conclude this overview with any definitive guidelines on best practice or optimal interventions.
- Some generalisations on the types of approaches that are likely to work are possible.
- The ‘one size does not fit all’ rule should be applied to the development of any health promotion activities for older people.

Inter-Relationships Between Domains

- In many ways physical activity, transport, and social and cultural activities are not discrete domains.
- Health promotion activities that combine aspects from multiple domains, for example physical activity with social involvement, have been shown to be successful.

Physical Activity

- It is clear that promoting physical activity should be considered as a high priority, as there are multiple health and well-being benefits to be gained from being regularly physically active.
- Walking was found to be an appropriate type of physical activity to encourage in older persons.
- Many aspects of the built environment have been highlighted as important in encouraging walking.

Social Engagement

- There is clear evidence of a strong link between physical and mental health and social engagement, therefore it is particularly important to incorporate the

promotion of social engagement for older persons into a health promotion strategy for older persons.

- The use of volunteers in health promotion interventions has been described as a successful strategy, with benefits to volunteers and to the people they support.

The Importance of the Built Environment

- A recurring theme throughout this overview of the literature is the importance of the built environment to the overall health of older persons.
- It has been suggested that sometimes what are perceived as individual limitations may in fact be unnecessary demands in the environment.
- Aspects of the built environment can be conducive to or can inhibit both social engagement and physical activity.
- Change at the policy level to promote active transport has been suggested as a more sustainable way of encouraging regular physical activity than individual programs where ongoing adherence is a major issue.
- Ensuring that the built environment is accessible to older persons, and supports and promotes physical activity and social connectedness for older persons, will also benefit other members of the community.

The Role of Health Professionals

- General practice is an ideal place to promote a range of health promoting behaviours to older persons, given that the majority will visit a doctor regularly.
- Difficulties are experienced in obtaining the necessary time and commitment from GPs due to some systemic barriers that are difficult to overcome.
- Alternative approaches such as nurse practitioners or practice nurses having a health promotion role in general practices may be more feasible.

Recruitment Issues

- The need to attract individuals who will most benefit from specific health promotion programs or activities is particularly important.
- Recruiting men is often particularly problematic.
- One suggestion, proposed for physical activity, was that an active person could recruit an inactive person known to them.
- Environmental changes that promote healthier lifestyles also counter the recruitment difficulty.

The Importance of Community Involvement

- There is a general consensus in the literature on the importance of community input into the planning and implementation of health promotion projects in general.
- It has been stated that this is particularly important where changes at the policy level need to occur, to ensure a consensus building approach rather than a coercive approach to changing behaviour.
- The importance of tailoring health promotion strategies to meet the needs and interests of individuals is another theme that has emerged, and can be assisted by the use of appropriate theoretical approaches such as the Transtheoretical Model.

Theoretical Approaches

- Some evidence has emerged on the value of having a theoretical framework for health promotion activities.
- Various approaches are useful for different forms of activities.
- Behaviour modification and social learning theory such as reinforcement, increasing self-efficacy by setting small achievable goals, and self-monitoring have demonstrated value in shaping some behaviours such as physical activity.
- In tailoring interventions to individuals, many theoretical approaches are useful.
- The value of an ecological approach to health promotion for older persons was highlighted in this overview.
- The impact of many levels from the individual to the policy level can be identified in many health promoting activities.

Delivering Programs

- A mass media approach is useful for education and for informing communities about programs, but more individual approaches are often needed to induce behaviour change.
- Tailoring interventions to the needs and interests of individuals has been recommended.
- Involving the relevant community in planning programs should ensure that appropriate delivery formats are utilised.

Intersectoral Collaboration

- The findings from this examination of the literature on health promotion for older persons concur with the recommendations from the Victorian Department of Human Services in so far as they support an integrated approach to health promotion.
- To be successful, collaborating organisations need to bridge their differences to achieve mutual benefits, they need to develop a shared understanding of the problems they aim to solve and of the goals they aim to achieve and they need the support or involvement of management and staff at various levels.
- The need for integrated policies rather than a piecemeal approach to planning for the needs of older persons generally has also been noted.
- There are many examples of successful collaborations involving a range of organisations included in the interventions described.

Further Research

- The need for further research in the area of health promotion for older persons, and for rigorous evaluation of programs, is raised frequently in the literature.
- Given that our population is ageing, this need is becoming increasingly imperative.

Older Persons and Health Promotion - An Overview of the Literature

Introduction

The following overview of the literature on health promotion for older persons does not claim to be a comprehensive review of the literature, but rather an overview with selected examples to illustrate various approaches to health promotion for older people. It utilises good quality reviews of the literature where they are available, and describes Australian, or local programs where possible. The term 'older' is used in this report to mean persons aged 55 years and over. The focus of this overview is on community dwelling older people.

The aim of this report is to provide a critical overview of the literature on health promotion for older persons, and to provide information about health promotion strategies that are effective and appropriate within the context of the Barwon region.

Defining Health Promotion

The approach to health promotion utilised in this overview of the literature is characterised by the following definitions:

“Health promotion is the combination of educational and environmental supports for actions and conditions of living conducive to health.” (Green & Kreuter, 1991, p. 4).

Health promotion is the “process of enabling people to increase control over, and to improve, their health”. (World Health Organisation, 1986).

The issues that are discussed at length in this review were determined by their prevalence, severity, and amenability to intervention (Hawe, Degeling, Hall & Brierley, 1998). That is, priority was given to health promotion activities related to a problem that is experienced by a large number of older people, has serious health implications, and has been successfully addressed by interventions.

Search Strategy

Electronic databases, including AgeLine, Medline, PsychINFO, CINAHL, and the Cochrane Collaboration were searched using a combination of various search terms (health promotion, older persons, elderly, review, physical activity, falls, nutrition etc.). The reference lists of journal articles and books were examined. The websites of relevant government departments and non-government organisations were also examined. An attempt was made to obtain unpublished material, particularly material relating to local health promotion programs.

Background

The Social Model of Health

The social model of health underpins this overview of health promotion. The social model of health focuses on a number of important contextual factors (the social determinants of health) that must be considered in any discussion of health promotion (Wilkinson & Marmot, 1998). The ten key aspects of the social model of health are:

1. The social gradient – people’s social and economic circumstances strongly affect their health throughout life.
2. Stress – social and psychological circumstances can cause long-term stress.
3. Early life – the effects of early development last a lifetime.
4. Social exclusion – processes of social exclusion and the extent of relative deprivation in a society have a major impact on health and premature death.
5. Work – stress in the workplace increases the risk of disease.
6. Unemployment – job security increases health, well-being and job satisfaction.
7. Social support– friendship, good social relations and strong supportive networks improve health at home, at work and in the community.
8. Addiction – drug use is both a response to social breakdown and an important factor in worsening the inequalities in health.
9. Food – healthy food is a political issue – social and economic conditions result in a social gradient in diet quality that contributes to health inequalities.
10. Transport – healthy transport means reducing driving and encouraging more walking and cycling, backed up by better public transport (Wilkinson & Marmot, 1998).

Social disadvantage, social capital, the built environment, and perceptions of control in particular all play an important role in determining the health of older persons. A brief description of these will therefore be presented as part of the background to this overview. Most of the factors briefly outlined below are supported by the Victorian Department of Human Services’ document “Environments for Health” in which the need to consider the impact on health and well-being of factors across four environmental dimensions – built, social, economic and natural is espoused (Victorian Department of Human Services, 2001).

Social disadvantage

It is well reported that a relationship exists between socio-economic status and health (Turrell & Mathers, 2000). A detailed review of Australian research on the relationship between low socio-economic status and poor health concluded that persons of lower socio-economic status have higher mortality rates for most major causes of death, experience more ill-health, and are less likely to act to prevent or

detect disease at an asymptomatic stage than persons of a higher socio-economic status (Turrell, Oldenburg, McGuffog & Dent, 1999). For every major disease group (cardiovascular, cancers, respiratory diseases, and so on, with the exception of skin and breast cancer), the incidence rates are higher at the lower end of the social scale. It is without doubt that differences in the social and economic organisation of society are related to rates of the prevalence of disease (Wilkinson, 1999).

Social Capital

Another important factor that affects health is social capital, which has been variously described in the literature. Robert Putnam (1995) suggests that social capital refers to “features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit” (pp. 66-67). The Australian Bureau of Statistics (ABS) has focused recently on the importance of social capital and utilised the following description: “Social capital relates to the resources available within communities in networks of mutual support, reciprocity, and trust. It is a contributor to community strength. Social capital can be accumulated when people interact with each other in families, workplaces, neighbourhoods, local associations, interest groups, government, and a range of informal and formal meetings places.” (Australian Bureau of Statistics, 2004).

It appears that higher levels of trust and participation in a community are related to the degree of equity in income distribution, and contribute to improved population health outcomes. Social capital or social connectedness is seen to empower and enhance the health of communities and the health of people who form a community (Rosenfeld, 1997). Social capital refers to the processes between people, which establish networks, norms and trust enabling coordination and cooperation for mutual benefit. It is a cause and effect of community development, providing the possibility for community development to prosper, whilst simultaneously being a key product of community development (Onyx & Bullen, 1997).

Membership of voluntary organisations or volunteerism have been frequently used as measures of global or aggregate social capital (Kawachi, Kennedy & Glass, 1999; Putnam, 2001). Per capita group membership was reported as significantly and inversely correlated with all-cause mortality and a number of diseases after adjusting for poverty (Kawachi, Kennedy, Lochner & Prothrow-Smith (1997). Overall rates of volunteering alone have been used as a measure of aggregate social capital. In the US, students who attended colleges with greater aggregate levels of volunteering reported significantly lower levels of binge drinking compared with students attending colleges with lower levels of volunteering (Weitzman & Kawachi, 2000). This significant relationship was found after several other variables, including individual volunteering, were controlled for. These findings relate to the amount of social capital within communities. The benefits of social capital at an individual level, such as social engagement, will be discussed below in a section on social interventions.

Control

Research suggests that increased feelings of control over factors that affect an individual enhance psychological and physical health, and that restrictions in control are detrimental to health (Rodin, 1986). The extent to which feelings of personal control are possible will affect the health experiences of individuals in any community. The concept of control has been found to be important in the relationship

between job stress and health, with the amount of control individuals have in relation to their work role more closely related to health outcomes than job demands (Syme, 1997). Enabling people to take control of things that determine their health is included in the Ottawa Charter for health promotion (World Health Organisation, 1986). The issue of control also relates to feelings of personal efficacy that are important in understanding many behaviours that can enhance health.

The Built Environment

Frameworks that attempt to conceptualise the association between socioeconomic status and health include some reference to the impact on health of an individual's area of residence or the built environment (Labonte, 1993; Turrell & Mathers, 2000). Built environments have a range of characteristics including the quality of the infrastructure (roads, footpaths, access to public transport), public space (streetscapes, access to parks and gardens), a sense of safety and community, the availability of healthy foods and access to health and related services. There are many ways in which these characteristics influence individual and collective behaviour and affect both physical and mental health. It is possible that the impact of the built environment is particularly strong in lower socio-economic areas where residents have limited access to resources that would enable them to improve or move from their immediate environment.

There are less tangible aspects of the built environment that also impact on health. Overseas research has demonstrated a relationship between perceptions of the local environment and health (Sooman & Macintyre, 1995). These subjective perceptions included poor reputation of the area, fear of crime, and lack of neighbourliness (Sooman & Macintyre, 1995). Such perceptions may affect the preparedness of individuals to participate in their local community. One study has shown that objectively rated aspects of the built environment are associated with depression suggesting that efforts to reduce the prevalence of depression should extend to the contexts in which people live (Weich et al., 2002). Conversely, the built environment may positively impact on health and wellbeing. For example, a sense of community may be fostered by the built environment (Butterworth, 2000).

Theoretical Approaches

There are a number of theoretical approaches that attempt to explain behaviours related to health, and how these behaviours can be changed, or that can be used as planning frameworks for health promotion. A brief description follows of key theories. These apply at various levels:

- Individual level: Behaviour modification; the Health Belief Model; the Transtheoretical Model; Lay Beliefs.
- Interpersonal level: the Theory of Reasoned Action; Social Learning Theory.
- Theoretical frameworks with multiple levels: an ecological model; the PRECEDE-PROCEED model.

The key elements of these approaches are listed in Table 1.

Individual Level Theories

Behaviour Modification

The principles of behaviour modification, as described by Skinner (1953) have been incorporated into many health promotion activities, either implicitly or explicitly, and have influenced later theoretical approaches to understanding health behaviours. An important part of behaviour modification is the concept of shaping behaviour by setting small goals and rewards for the achievement of each goal (Skinner, 1953). Rewards may include physical consequences, extrinsic rewards or intrinsic rewards. Reinforcement, or the consequences that motivate an individual to continue or discontinue a behaviour is also an important aspect of behaviour modification.

The Health Belief Model

The Health Belief Model (HBM) pertains specifically to health behaviours. The four main components of the HBM are: perceived severity (the individual's perception of the seriousness of the consequences of contracting the condition); perceived susceptibility (an individual's subjective perception of their risk of contracting a condition); perceived benefits (the individual's perception of the effectiveness and feasibility of performing the recommended health action); and perceived barriers (any aspects involved in a particular health action which the individual perceives as negative) (Janz & Becker, 1984; Rosenstock, 1974). It is argued that the combination of the severity and susceptibility components energise the individual to act and that the weighting of the relative benefits and barriers provides the individual with a path of preferred action (Janz & Becker, 1984). In addition, cues to action play a role in triggering this decision-making process. A modified version of the HBM also incorporates the concept of self-efficacy, or how competent the individual feels to carry out the necessary health action (Rosenstock, Strecher, & Becker, 1988). This concept was derived from social learning theory (Bandura, 1977).

Table 1. Elements of Theoretical Approaches

| Theory | Elements |
|--|--|
| <i>Individual level theories</i> | |
| Behaviour modification | Shaping behaviour Reinforcement |
| Health Belief Model | Perceived severity Perceived susceptibility Perceived benefits Perceived barriers Cues to action Self-efficacy |
| Transtheoretical Model (Stages of Change) | Precontemplation Contemplation Determination or preparation Action Maintenance |
| Lay beliefs | Lay epidemiology Own views of causes and course of disease |
| <i>Interpersonal level theories</i> | |
| Theory of Reasoned Action | Intentions to perform an action Attitude toward the behaviour Subjective norm Volitional control |
| Social Learning Theory (Social cognition) | Self-efficacy Outcome expectations Modelling Social support Reinforcement Self monitoring |
| <i>Theoretical frameworks / Planning models – multiple levels</i> | |
| PRECEDE-PROCEED | Social diagnosis Epidemiological diagnosis Behavioural and environmental diagnosis Educational and organisational diagnosis Administrative and policy diagnosis Implementation Process evaluation Impact evaluation Outcome evaluation |
| Ecological model | Intrapersonal factors Interpersonal factors Institutional factors Community factors Public policy |

The Transtheoretical Model

The Transtheoretical Model (TTM), or Stages of Change Model, was originally proposed by Prochaska and DiClemente (1982) to explain the processes of change which occur during psychotherapy. It has been applied to the problem of how people change problem behaviours, such as cigarette smoking (Prochaska & DiClemente, 1983). They suggest that behaviour change involves a progression through a sequence of stages along a continuum of behaviour change. These stages comprise precontemplation (not intending to adopt the target behaviour), contemplation (considering adopting the behaviour), determination (preparing to change behaviour, later called preparation), action (initiating the behaviour), and maintenance (sustaining the change over time) (Prochaska & DiClemente, 1982; 1983). Different processes of change operate within each stage. A decisional balance can be calculated for each individual, based on their scores on a number of pro and con measures. The validity of the TTM's concept of decisional balance, and changes in this balance, as individuals move through the stages of change has been demonstrated across a range of behaviours (Prochaska et al., 1994). According to the TTM, it is necessary to understand at what stage an individual is and to address issues relevant to that stage in health promotion activities.

Lay Beliefs

Another theoretical approach to health behaviours in particular focuses on people's own beliefs about health and the health implications of certain behaviours. Proponents of lay epidemiology, for example, outline the process by which people perceive health risks and explain health misfortunes, and describe the notion of 'candidacy' for particular health problems (Davison, Davey Smith & Frankel, 1991). It is argued that the way people understand illness is closer to the uncertainty of epidemiologists than to the certainty presented by those involved in health education and health promotion (Frankel, Davison & Davey Smith, 1991). The authors of lay epidemiology suggest that people acquire and process information about illness from a number of sources, including observations of cases of illness and death known personally to them, and in the public arena (Davison et al., 1991). In their everyday experiences people are aware of anomalous deaths and survivals - individuals who did all the right things who nevertheless died suddenly from a heart attack, and people who do all the wrong things who remain healthy with no heart problems. The lay epidemiology concept relates particularly to the notion of people's understanding of who is likely to be a candidate for a particular illness. The concept of people actively processing health information from a variety of sources to produce their own view of the causes and course of a disease is a useful one when developing health promotion activities.

Interpersonal Level Theories

The Theory of Reasoned Action

Proponents of the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980; Fishbein, 1979) argue that a person's intention to perform an action is the most reliable predictor of that behaviour when that behaviour is under volitional control. Intentions to perform an action are determined by two factors: a personal factor and a social factor. The personal factor is the individual's attitude toward the behaviour, or their evaluation of performing the behaviour. It is made up of their beliefs that the behaviour leads to particular outcomes and their evaluations of these outcomes. The social factor, termed the subjective norm, is the individual's perceptions of the social pressures on them to

perform the behaviour. It relates to the individual's beliefs that specific people or groups think he or she should or should not perform the behaviour. This factor is mediated by the extent of the individual's motivation to comply with those people or groups (Ajzen & Fishbein, 1980). Proponents of the TRA argue that the relative importance of the subjective norm and the attitudinal components of the model may depend on the intentions being investigated, and also that people are influenced differentially by the two components. Ajzen (1985) extended the TRA to develop the Theory of Planned Behaviour which takes into account whether the desired behaviour is under the individual's volitional control.

Social Learning Theory

Social Learning Theory, or Social Cognitive Theory focuses on an individual's beliefs about outcomes and their own abilities or self-efficacy (Bandura, 1977). Outcome expectations are beliefs about whether a certain behaviour will lead to a specific outcome, while efficacy expectations are beliefs about one's competence to perform a certain behaviour (Bandura, 1977). Modelling is an important aspect of social learning theory. Role models are most effective when they share many characteristics of the person or people that are being targeted. Social support from others, being able to rehearse behaviours and receiving feedback are consistent with this approach. Reinforcement, incentives, feedback and self monitoring are all strategies that are consistent with this approach.

Theoretical Frameworks / Planning Models

PRECEDE-PROCEED Model

PRECEDE-PROCEED is described as a planning model for health education and health promotion programs (Green & Kreuter, 1991). It comprises nine phases in total. The first five phases are diagnostic: (1) social diagnosis of the self-determined needs, wants, resources and barriers in the target community; (2) epidemiological diagnosis of the health problems; (3) behavioural and environmental diagnosis of the factors linked to the health problems chosen; (4) educational and organisational diagnosis of the predisposing, enabling, and reinforcing conditions that immediately affect behaviour; and (5) administrative and policy diagnosis of the resources needed and available in the organisation (Green & Kreuter, 1991). The remaining four phases relate to implementation, process evaluation, impact evaluation, and outcome evaluation (Green & Kreuter, 1991). This model has been described as a useful organising framework for the application of other theories to the problem being considered (National Cancer Institute, 2004).

Ecological Model

Leroy, Bibeau, Steckler & Glanz (1988) describe an ecological approach to health promotion. In this model five factors are seen as determining behaviour: (1) intrapersonal factors or characteristics of the individual such as knowledge, attitudes, behaviour and self-concept; (2) interpersonal processes and primary groups – formal and informal social network and social support systems; (3) institutional factors – social institutions with organisational characteristics; (4) community factors – relationships among organisations, institutions, and informal networks; and (5) public policy which includes local, state and national laws and policies (Leroy et al., 1988). An important aspect of the ecological approach is the focus on environmental causes of behaviour, and on social influences, thus moving away from the tendency to view

many health behaviours as purely the individual's choice. An important theme in this approach is that successful interventions will involve action on many levels.

Summary

The theoretical approaches described above range from those that are individual models, that focus on the individual's perspective of health behaviours, to those that focus on many different levels, such as the ecological model. The latter approaches recognise the complexities of health behaviour, and that health is influenced by many social determinants. These are more consistent with a broad definition of health promotion that recognises the impact of many factors on health and health behaviours. The individual level theories are more limited in that the broader environment is not directly accounted for. They do nevertheless contribute to our understanding of behaviours. Different approaches are relevant to the consideration of different types of situations and behaviours.

Physical Activity

Rationale for Inclusion

There is evidence that physical activity is of benefit in relation to a large number of health problems. These include five of the six Australian National health priorities: cardiovascular disease prevention; diabetes prevention and control; the primary prevention of some cancers; injury prevention and control; and the promotion of mental health (Bauman, Bellew, Vita, Brown & Owen, 2002). These health priorities are all relevant to older persons, and some particularly so, such as cardiovascular disease and injury prevention. The U.S. Surgeon General's report presents a thorough review of the research and concludes "Many of the diseases and disabling conditions associated with aging can be prevented, postponed or ameliorated with regular physical activity" (U.S. Department of Health and Human Services, 1996). The health benefits of physical activity described in a fact sheet aimed at older Australians include: "improved blood pressure, blood cholesterol, bone health and body weight and the prevention and management of chronic diseases such as heart disease, diabetes, arthritis and osteoporosis" (Australian Government Department of Health and Ageing, 2003, p. 1). The role of physical activity in falls prevention will be discussed in a separate section.

The costs of physical inactivity are extremely high. The direct health costs in Australia of illness attributable to physical inactivity in adults have been estimated at \$377 million a year (Stephenson, Bauman, Armstrong, Smith & Bellew, 2000). Estimates suggest that physical inactivity contributes to the risk of 6,400 deaths a year from coronary heart disease, non-insulin dependant diabetes mellitus and colon cancer alone, and that 122 of these deaths could be avoided each year for every 1 per cent increase in the proportion of the population who exercise regularly (Stephenson et al., 2000). While these figures relate to the adult population not just to older persons, the diseases included are all more prevalent in older adults.

The national guidelines for physical activity recommendation is that all Australians, including older Australians, accumulate at least 30 minutes of moderate-intensity physical activity on most days (Australian Government Department of Health and Ageing, 2003). The guidelines state that the physical activity need not be strenuous, and does not need to be continuous – the 30 minutes can be accumulated over the day (Australian Government Department of Health and Ageing, 2003).

Despite the acknowledged benefits of physical activity, and the fact that it is widely recommended by health professionals, many older Australians are not sufficiently physically active. Australian estimates indicate that in 2000, only 54% of people aged 60 to 75 years, and 50% of those aged 45 to 59 years were sufficiently physically active (Bauman et al., 2002). In 2000, 18% of people aged 45 to 75 reported no physical activity (Bauman et al., 2002). Older people and those on lower incomes are less likely to perform regular physical activity than younger people and those on higher incomes (Bauman, Owen, & Rushworth, 1990). People who have attained tertiary education are more likely to be physically active than those with less education (Bauman et al., 2002). This pattern is mirrored in the Geelong data on walking: the smallest proportion of people walking were those with Year 10 or below education (City of Greater Geelong, 2004). There is a trend for a slightly higher

proportion of Australian males overall to report doing sufficient physical activity compared with females overall (Bauman et al., 2002). In Geelong more men aged 65 years and over compared with women reported walking for sport, fitness or recreation in the previous two weeks, however in the 55 to 65 years aged group, more women than men reported walking (City of Greater Geelong, 2004).

Given the importance of physical activity to the health and well-being of older people, it will be considered in greater detail than other factors covered in this review.

Evidence of Improvements

There is evidence that interventions are able to increase levels of physical activity amongst older persons. For example, increases in physical activity have been shown as a result of a mass-media campaign (Owen, Bauman, Booth, Oldenburg & Magnus, 1995), from home-based resistance training (Jette et al., 1999), and from group approaches (Williams & Lord, 1997). A recent review of randomised controlled trials with people aged 65 years and over reported that 4 of 6 interventions focusing on walking reported more walking in the intervention group compared with the controls, and 6 of 10 studies of physical activity or exercise other than walking reported increased physical activity in the intervention group compared with controls (Conn et al., 2003). However, the long-term adherence rates to physical activity after the intervention ceases is less clear as few studies report long-term follow-up data (Conn et al., 2003).

The beneficial outcomes from increased physical activity demonstrated by a range of programs include improvements in physiological variables such as strength and reaction time (Williams & Lord, 1997), muscle strength, flexibility, agility, and dynamic balance (Cavani, Musto & Tummers, 2002), and in cognitive variables (Williams & Lord, 1997). Improvements in subjective measures of well-being have also been reported in aerobic (Williams & Lord, 1997) and in non-aerobic group programs (McAuley et al., 2000).

The types of exercise promoted to older persons can be categorised as endurance or aerobic, flexibility, strength and balance training (Wyman, 2001). Table 2 below, based on a review of exercise interventions for the elderly (Wyman, 2001), summarises the types of benefits that have been shown to result from each type of exercise.

Examples of Interventions

There is an enormous literature available on interventions to promote physical activity to older persons. These take place in a range of settings (e.g., community, general practice, home), promote different types of physical activity (e.g., aerobic, strength or resistance training), promote different levels of physical activity (in terms of duration, intensity, and frequency), and utilise different ways of promoting activity (e.g., self-monitoring, telephone supervision, formal instructors). There are few studies that replicate earlier designs or compare different approaches (King, Rejeski & Buchner, 1998). It is therefore difficult to identify any single approach as optimal. This section will describe a small number of programs in some detail, and highlight relevant issues. Examples have been chosen to represent different types of approaches, are Victorian or Australian wherever possible, and also frequently cited in the literature where possible, and are appropriate types of activities for the Geelong region.

Table 2. Types of Exercise Training and Benefits

| Type of Exercise Training | Demonstrated Benefits |
|---|---|
| Endurance or aerobic activity (e.g., walking, running, cycling, swimming) | Improved cardiovascular fitness Improved blood pressure Improved reaction time Improved body weight / composition in healthy elderly Improved walking time and distance in impaired elderly participants Decreased self-reported physical disability in arthritic patients |
| Flexibility or stretching exercises (e.g., active or passive motion exercise, yoga) | Typically performed as warm-up for other exercises, and in combination with other types of exercise, so outcomes not examined |
| Strength or resistance training (Resistance may be provided by body weight, free weights, elastic bands, pneumatic or hydraulic devices) | Improved muscle strength Increased muscle size in healthy elderly Improved gait velocity / time/ distance Improved mobility in healthy elderly Improved chair rise or stair climb time |
| Balance training (e.g., Tai Chi, use of computerised force platforms) | Increased functional reach Decreased loss of balance on sensory test Decreased falls Decreased fear of falls |
| Combination training – a combination of the above | |

Adapted from Wyman (2001).

Mass-media campaigns

This type of health promotion program is not typically aiming at any particular age group, although it is possible to frame messages to be age-specific.

- National Heart Foundation campaigns, 1990 and 1991

A mass-media campaign to promote physical activity was conducted by the National Heart Foundation of Australia in 1990 and 1991. Both campaigns included a range of media, including: paid national television advertisements, public service announcements on the radio, distribution of a professional paper, posters, leaflets and stickers, T-shirts, sweat shirts, publicity tours by two heart-health experts, magazine articles, and the scripting of two nationally broadcast television drama series (Owen et al., 1995). Interviews were conducted using random samples of approximately 2,500 individuals before and after each of the campaigns to evaluate the impact of the two campaigns. While these campaigns were not directed at any age group in particular, the first campaign, with the slogan “Exercise: make it part of your day”, was particularly successful at increasing walking for exercise or leisure amongst the older age groups (aged 40 years or more). However, the second campaign, conducted the

following year, “Exercise: take another step” resulted in no further increase in walking in any age group, suggesting that the second campaign was redundant (Owen et al., 1995).

Community approaches

There are numerous programs that promote physical activity, in particular walking, at the community level. Like the mass media approach, they are not typically aimed at any particular age group. They are however particularly relevant to older people, given the demonstrated advantages of regular physical activity.

- ‘Walk-it Bunbury’

‘Walk-it Bunbury’ is a three year program in Bunbury, Western Australia, aimed at increasing the number of adults who walk for at least 30 minutes on most days (Norris, Shilton & Stewart, 2001). This program involves a number of different strategies, including:

- Educational resources – a map of walking routes and paths in the City of Bunbury, a path report form to report any path safety issues, information card with program details, poster and a bi-monthly newsletter.
- Environment change – a path stencil system to direct walkers and indicate distances along 12 measured walks.
- A local mass media campaign.
- GP and health professional based promotion.
- Heart Foundation walking-related education programs.

The ‘Walk-it Bunbury’ program materials communicated three behavioural skills that have been found to encourage people to commence and to maintain walking: make it part of your day; go with a friend; and set yourself goals (Norris et al., 2001). The program involved the collaboration of many different agencies such as the Bunbury community, the National Heart Foundation of Western Australia, the Bunbury City Council, Bunbury Primary Health Services, Greater Bunbury Division of General Practice, and Edith Cowan University (Norris et al., 2001). Fostering ownership of the program by the Bunbury community was seen as an important feature of the program. An evaluation of the ‘Walk-it Bunbury’ program indicated a 98% awareness of the project, and a 15 minute increase in the amount of walking each week by those surveyed (Layng et al., 2003).

- 10,000 Steps

While there have been various 10,000 Steps projects overseas (Burke, 2004), the original Australian 10,000 Steps project was implemented in Rockhampton, Queensland. It is a multi-strategy, community based intervention aimed at increasing physical activity within that community. The use of pedometers for self-monitoring to promote individual motivation is a key element of the 10,000 steps projects (10000 Steps Rockhampton, 2004). Pedometers provide immediate feedback and can enhance the individual’s behaviour modification efforts (Lindburg, 2000). The Rockhampton project has a particular focus on sedentary people from socially and economically disadvantaged groups (10000 Steps Rockhampton, 2004). It is supported by a range of partners including the Rockhampton City Council, the local Division of General Practitioners and the National Heart Foundation. 10,000 Steps includes a local media campaign, promotion through general practice, a website and merchandise (10000 Steps Rockhampton, 2004).

Rigorous evaluation of 10,000 Steps programs has been hampered by poor response rates, particularly for the return of log books (Lindburg, 2000). Participants have however reported that the use of the pedometer increased their physical activity (Lindburg, 2000). In Rockhampton results from a survey conducted 8 months after the program commenced found an increase in physical activity in women but not in men since baseline data was collected 12 months earlier (Brown et al., 2003). Later evaluation data was not yet available at the time this report was prepared.

10,000 Steps Barwon has been recently implemented by the Barwon Primary Care Forum, with Leisure Networks as the auspicing agency, and support from the Department of Human Services, Barwon-South Western Region (10,000 Steps Barwon, 2004). The website includes ideas for competitions between groups, offers from sponsors, and rewards. Being involved in the 10,000 Steps program as a group or as part of a workplace are promoted as part of the campaign.

One advantage of the 10,000 Steps approach to physical activity is that incidental activity accumulated throughout the day is measured, not just formal, continuous periods of exercise. Overseas evidence suggests that this lifestyle approach to physical activity is more likely to appeal to sedentary people, and that activity is maintained over long periods of time (Dunn, Andersen & Jakicic, 1998).

Group-based programs – Walking

Many group-based walking programs are described in the literature. These programs share the benefits to participants of providing social contact, a simple activity, and accessible locations. This type of program seems to appeal to people aged 50 years and over.

- ‘Walk and Talk’

Promoted as a community-based program, ‘Walk and Talk’ mostly uses a small group walking model. The aim of the program is to increase and maintain participation in regular, moderate physical activity (van Dort, 2003). ‘Walk and Talk’ is supported by VICFIT and in 2002/2003 there were 96 programs active throughout the State, largely in rural and regional Victoria, with a range of agencies involved with its implementation. The most common approach within this program in 2002/2003 was the initial identification of a coordinator and participants then meeting at a pre-arranged location to walk together (van Dort, 2003). The earlier model was largely very small groups (an average of three members) walking in their own neighbourhood (Jones & Owen, 1998).

An evaluation of the program involving 2078 participants reported that the majority were women (68%), and 30% of all participants were inactive before joining the program. The majority of participants are aged over 50 years (van Dort, 2003). This suggests the program is successful at recruiting the difficult to reach inactive older individuals. While most of the groups meet an average of only once a week, many participants walk outside of the group walks. Advantages of the ‘Walk and Talk’ program include its social component, low cost and flexibility. Groups meet to walk in a range of places including their neighbourhood, church hall, and shopping centres (van Dort, 2003). It also requires no special equipment and no qualified persons as

teachers. 'Walking guides' who lead the groups are either volunteers or employed by various agencies (van Dort, 2003).

The 'Walk and Talk' concept has been adopted by other groups also. For example, the Surf Coast Life Activities Club (described in the section on Social and Cultural Involvement) has a weekly walk and talk activity for all levels on the beach. This activity precedes weekly meetings (with a cuppa) and the fortnightly guest speaker (Surf Coast Life Activities Club, 2004).

- 'Just Walk It'

The 'Just Walk It' program in Queensland uses a similar approach to the 'Walk and Talk' program. Volunteer 'walk organisers' establish small groups to walk in their area. This program is supported by the Heart Foundation (Heart Foundation, 2004). Similar to the 'Walk and Talk' program, 'Just Walk It' reports that participants are largely female, mostly aged over 50 years, and many have been previously inactive (Foreman, Walsh, Brown, Marshall & Abernethy, 2004). The success of the program is demonstrated by its impressive retention rate over 6 months of 80%, and the fact that 38% of participants were from a lower socio-economic status (Foreman et al., 2004). Participants who reported insufficient activity before joining the program trebled their median walking time (from 60 to 180 minutes) (Foreman et al., 2004).

The "Walk and Talk" and 'Just Walk It' programs both feature newsletters, a website and other materials to promote the activity.

- Casey Mall Walk

An informal approach to physical activity is mall walking. This is one way of promoting walking that overcomes many environmental problems such as inappropriate weather and unsafe paths and roads. One such program involves over 100 older people on the Casey Mall Walk (VicHealth, 2004). This group walks in and around the Cranbourne Park Shopping Mall. The project is supported by VicHealth, the City of Casey, the local division of General Practitioners, and the Casey Community Health Service (VicHealth, 2004). An important component of the Casey Mall Walk is the social interaction. In overseas research, mall walkers have described this activity as meaningful 'work' that they do in retirement (U.S. Department of Health and Human Services, 1996).

Group based programs – Aerobic

- Randwick Exercise Program

An examination of the effects of a group exercise program was conducted as part of a Randwick Falls and Fractures Study (Williams & Lord, 1997). Community dwelling people aged 60 years and over completed 42 weeks of exercise, one hour twice weekly over a twelve month period. The program was conducted by a trained instructor and comprised warming-up, conditioning (mostly aerobic), stretching, and relaxation (Williams & Lord, 1997). Results of a randomised controlled trial indicated significant improvements in the intervention group in reaction time, strength, memory span and feelings of wellbeing when tested 12 months after the program commenced (Williams & Lord, 1997).

Group based programs – Resistance training

A review of randomised trials of progressive resistance training for older people concluded that it appears to be an effective way to increase strength and has a positive effect on some functional limitations (Latham, Anderson, Bennett, & Stretton, 2004). Some limitations in the published research were noted however, including poor reporting of adverse events (Latham et al., 2004). It appears that benefits from resistance training can be obtained by both healthy older people and those with chronic disease or functional limitations (Latham et al., 2004; Wyman, 2001). While the majority of interventions reviewed were supervised, gym-based programs, some were individual home-based programs or a combination of group gym-based and individual home-based (Latham et al., 2004). Higher intensity training had a greater effect on strength than low to moderate intensity training (Latham et al., 2004).

- ‘Living Longer Living Stronger’

‘Living Longer Living Stronger’ is an initiative of the Council on the Ageing Victoria which aims to increase the quality and quantity of strength training programs available to people aged over 50 years (Byrush, 2004). It was recently reported that there were 5,000 people over 50 years of age participating in ‘Living Longer Living Stronger’ programs in 95 sites across Victoria (Byrush, 2004). Importantly, a retention rate of 85% for the program has been reported (Byrush, 2004). This program is available in Geelong.

The ‘Living Longer Living Stronger’ program works in partnership with fitness centres and aims to address ageist myths, negative stereotypes associated with strength training for older adults and the lack of supportive and inclusive environments for older people to undertake strength training (Byrush, 2004).

- U.S. 6-week program

Recent data is available from a U.S. 6-week program which combined stretching with moderate-volume (one set) and moderate intensity (12-15 repetitions) resistance training (Cavani, Mier, Musto & Tummers, 2002). Results from a comparison of an intervention and control group study with a total of 37 participants aged 60 to 79 years demonstrated that the group receiving the training showed significant improvements. Their performance on functional-fitness tests designed to assess muscle strength, flexibility, agility, and dynamic balance all improved significantly (Cavani et al., 2002). The authors claimed that they demonstrated that resistance training need not be high intensity and can be performed using single-set exercises to obtain significant benefits (Cavani et al., 2002).

Home-based programs / Individual approaches

In their review of physical activity interventions for older people, Conn et al. (2003) found that four of six studies using individualised interventions, and three of five delivered in the home reported greater exercise in the intervention group compared with the control group. Telephone supervision has been found to be effective for individualised programs (King et al., 1998), with four of five using a telephone intervention delivery reporting positive findings (Conn et al., 2003). Such programs have the advantage that exercise regimes can be tailored to meet the specific needs and abilities of the individual.

- The ‘Strong-for-Life program

A U.S. a home-based resistance training program for older adults with some disability reported significant improvements in lower extremity strength, tandem gait and a 15 to 18% reduction in physical and overall disability (Jette et al., 1999). High adherence rates were reported at the three and six months follow-ups in this program, most likely due to the considerable efforts made to achieve these adherence rates (Jette et al., 1999). These included:

- Two home visits from a physical therapist who used cognitive and behavioural strategies to enhance subjects’ attitudes related to exercise and to maximise adherence to the program.
- Individual goal setting – tailored for different ability levels.
- Use of a motivational videotape to address misconceptions about exercise in later life.
- Telephone follow-up by the physical therapist to monitor progress.
- Self-reported exercise performance data recorded on calendars and mailed in.
- One-dollar bill sent on receipt of each log, a fridge magnet received for each change of rubber band (indicating an increase in resistance), and a sticker to be placed on the Strong-for-Life ladder after each 2 weeks goal met.

General Practice interventions

General practice presents an ideal opportunity to promote physical activity to older people, given that older people have high rates of consultations with health professionals (Teshuva et al., 1994). Doctors or health professionals were nominated by older people as their preferred source of support in relation to physical activity (Booth, Bauman, Owen & Gore, 1997). Older participants in focus groups also mentioned GPs as appropriate motivators (Brown et al., 1999). It should also be noted however, that some participants in the latter study commented that their GPs were not good role models for physical activity.

Reviews of general practice interventions indicate short term improvements in physical activity, but rarely significant improvement over the longer term when follow-up data is available (Bauman et al., 2002). The barriers to promoting physical activity in general practice include a lack of time, lack of training and expertise, and financial disincentives (Bauman et al., 2002). The Rockhampton 10,000 Steps program incorporated a ‘GP Strategy’ into the program (Eakin, Larsen, Mummery & Brown, 2003). Results of an evaluation indicated that while GPs were using the 10,000 steps materials, there was no change in the percentage of patients counselled about physical activity, and few pedometers had been loaned to patients (Eakin et al., 2003). The authors suggest that further work would be needed to encourage GPs to promote physical activity in the busy general practice setting (Eakin et al., 2003).

- The Active Script Program

In Victoria, the Active Script Program commenced in early 1999. This program is supported by VICFIT, which works in partnership with interested Divisions of General Practice. Training and materials are provided including script pads, assessment pads, posters and GP guides (VICFIT, 2004). There is also an electronic active script available to GPs. It was reported that in the first three years about 43% of all GP members of the 11 participating Divisions of General Practice had been trained to provide advice on physical activity (VICFIT, 2004). An evaluation of the program

found that 70% of participating GPs reported thinking about physical inactivity as a risk factor more frequently, and 75% reported advising their patients to be active more frequently as a result of the program (VICFIT, 2004).

- **Exercise Scientist in General Practice**

In Queensland, the use of an Exercise Scientist working in conjunction with a GP to promote physical activity was trialled (Armit, Brown, Ritchie, Marshall & Trost 2003). It was found that groups who received individualised counselling from the Exercise Scientist, in addition to brief advice and a written prescription from the GP, significantly increased their total physical activity while those receiving only advice and a prescription from their GP did not (Armit et al., 2003). However, there were no group differences in other measures, including increased time spent walking and the proportion who met National physical activity guidelines (Armit et al., 2003). Thus there was some indication that the addition of an Exercise Scientist to general practice was successful at increasing physical activity amongst older people, but the evidence was not conclusive.

Issues to be Considered

One size does not fit all

It is apparent from the literature that no single intervention to increase physical activity will be appropriate for all members of a community. Similarly, no single theoretical approach explains all physical activity behaviour. The capabilities of individuals and therefore the type and amount of exercise that is appropriate differ according to age and health, the types of activity that appeal to individuals differ by age, gender, and previous involvement in activities (Booth, Bauman, Owen & Gore, 1997), and the perceived benefits of and barriers to physical activity differ by age, gender, and health (Booth et al., 1997; O'Neill & Reid, 1991). Different forms of physical activity confer different benefits, and should be tailored to the needs of the older person (Wyman, 2001). Thus the ideal approach to promoting physical activity should offer a range of activities that vary by type of activity, method of delivery, intensity, duration and frequency. There is a need to tailor messages for the specific group being targeted in promotional activities (Brown et al., 1999), which is consistent with the application of the PRECEDE-PROCEED or an ecological model. The need for special efforts to target older men are indicated by some of the research described above.

Barriers to physical activity

The barriers to physical activity identified in the literature include both intrinsic and extrinsic factors, thus an individual level theoretical approach alone does not fully explain this behaviour. Focus groups conducted in Australia with people aged over 60 years identified the following barriers to physical activity: poor health, no one to exercise with, inappropriate or unsafe environments and facilities, and lack of interest (Brown et al., 1999). The Health Status of Older People Project, which surveyed 1000 people aged 65 and over in Melbourne, reported barriers to being more physically active as health problems, lack of motivation, facilities or environment problems, lack of time, and lack of company (Kendig et al., 1996). Similarly, other Australian research has found that the barriers most often reported by 60 to 79 year olds were an injury or disability, poor health, believing they are too old, or lacking motivation (Booth et al., 1997). Interestingly, the latter study reported a smaller number of people

aged over 60 years identifying ‘no one to exercise with’ as a barrier compared with younger age groups (Booth et al., 1997). Canadian research with adults aged 55 years and over found that the most frequently cited barrier was ‘I get enough physical activity already in my daily routine’ (O’Neill & Reid, 1991). When the barriers identified by participants were categorised, it was found that those relating to knowledge were most frequently cited, followed by those classed as physical, relating to injury or ill health. However, one of the major reasons why people would increase their physical activity was found to be ‘my friends joining me’ (O’Neill & Reid, 1991). Research conducted in the United States found an association between neighbourhood safety and physical inactivity in adults aged 65 years and over (Morbidity and Mortality Weekly Report, 1999).

It has been suggested that there is a need for educational intervention that addresses issues related to knowledge of appropriate physical activity and that deals with psychological misgivings (O’Neill & Reid, 1991). The need for further education is supported by Brown et al.’s (1999) finding that many older Australians participating in their qualitative study were unsure about what constituted ‘adequate’ exercise. The need to tailor activities according to the older person’s abilities has been noted, and the possible role of GPs in doing this, particularly for people with health problems (Booth et al., 1997). Addressing stereotypes that work against older people being physically active is also raised as an important issue (Ory, Hoffman, Hawkins, Sanner & Mockenhaupt, 2003).

A detailed list of suggestions on how to overcome typical barriers to physical activity is presented in a resource produced by the U.S. Department of Health and Human Services (1999). For example, suggestions for a lack of willpower include “Plan ahead. Make physical activity a regular part of your daily or weekly schedule and write it on your calendar. Invite a friend to exercise with you on a regular basis and write in on *both* your calendars. Join an exercise group or class.” (U.S. Department of Health and Human Services, 1999, p. 71).

Recruitment

A frequent comment in the literature is the difficulty of recruiting and retaining inactive people in physical activity programs. A meta-analysis of 21 randomised-controlled trials of physical activity involving adults aged 55 years and over was conducted to examine the factors related to adherence to these exercise programs (Martin & Sinden, 2001). It was reported that the people most likely to remain in the programs were individuals who were in better physical condition at baseline, had a history of a physically active lifestyle, were nonsmokers, and had higher exercise self-efficacy (Martin & Sinden, 2001).

Some different approaches to recruiting sedentary people are described in the literature. A program conducted in the Netherlands, the Groningen Active Living Model (GALM) used a two-stage approach. Initially 1000 older adults received a written invitation to the program, and were then visited at home to include a face-to-face approach (Stevens, Bult, de Greef, Lemmink & Rispen, 1999). During the home visits, people were screened to identify those who are sedentary. Those eligible were invited to participate in the program and to bring a friend along. The authors stated that this process would result in between 100 to 125 people willing to participate. Later in the program, participants were invited to recruit other sedentary adults

(Stevens et al., 1999). A smaller, community-based program in Australia used volunteers ('Activators') to recruit people they knew to join a 'Walk and Talk' program in their neighbourhood (Jones & Owen, 1998). Over four months 58 activators recruited 155 people to walk (Jones & Owen, 1998). This type of approach was also suggested by a focus group participant: "I think the way to get people exercising is to have those who already exercise take someone who doesn't exercise with them" (Brown et al., 1999, p. 62).

Social influences on physical activity

The role of social influences and interpersonal relationships as determinants of physical activity in older adults has been acknowledged in the literature (Chogohara, O'Brien Cousins & Wankel, 1998). Negative as well as positive aspects of social influences should be taken into account (Chogohara et al., 1998). Providing an environment for exercise where social interactions are enhanced is advised (McAuley et al., 2000).

The 'Walk and Talk' program described previously has an important social component in its design (van Dort, 2003). A survey of 182 participants found that 42% joined the program for company and social benefits. An interesting finding was that three quarters of 'Walk and Talk' participants surveyed also met outside of the group walking times, which suggests that the program is successful at improving social networks overall (van Dort, 2003).

Physical activity and mental health benefits

It is well recognised that there are mental health benefits in addition to the physical health benefits of physical activity (Bauman et al., 2002). For example, there is evidence that physical activity has a positive impact on feelings of well-being in older persons (Williams & Lord, 1997), and produces short term increases in happiness and satisfaction with life (McAuley et al., 2000). Aerobic exercise therapy has been demonstrated to have significant therapeutic benefit for individuals with depression (Babyak et al., 2000). It has been demonstrated that aerobic exercise is not necessary to obtain mental health benefits of activity (McAuley et al., 2000). However, the extent to which social aspects of physical activity is responsible for improvements in well-being is not clear (Williams & Lord, 1997).

People's preferences

Australian research has reported that walking was the preferred physical activity of 68% of people aged 60 years and over (Booth et al., 1997). Walking has also been reported as the sport or leisure activity most frequently undertaken by all people in Geelong, including those in the older age groups (City of Greater Geelong, 2004) and in the Barwon-South Western region (Savage, Bailey, Connell & Austin, 2002). It was also the most frequently reported exercise undertaken by tenants of government housing in the area (Clarke, Savage, Hanna, Neilson & Cox, 2001). It has been suggested that walking is a natural activity, particularly for older age groups, and should thus be considered for this group (Conn et al., 2003).

Message framing

Ory et al. (2003) provide some suggestions on messages that do and do not motivate older people to be physically active.

Messages that do motivate tend to:

- Feature ordinary people doing ordinary things.
- Provide concrete information.
- Be specific.
- Recognise the obstacles that people face.
- Recognise that family is a key motivator.

Conversely, it is suggested that messages should not:

- Make exercise look like work.
- Refer to 'exercise' or 'fitness'.
- Play the age card.
- Be confrontational.

The built environment

As indicated in the section on barriers to physical activity (Brown et al., 1999), the built environment has an important role in promoting physical activity. This point will also be discussed in the section on Transport below. The role of the built environment was also acknowledged in the National Health & Medical Research Council's (NHMRC) (1997) strategic plan for the prevention of overweight and obesity. One strategy is "Create opportunities for increasing both planned and incidental activity through the planning of the physical environment" (p. 22). Attention to improving safety (by providing lighting in gardens and paths for example) was particularly noted. The fact that walking is the most common activity undertaken by many older persons highlights the importance of the built environment. The majority (55%) of people in Geelong indicated that they walk in their local streets, with 18% using paths, bike tracks or the river, 9% using community parks or sportsgrounds, and 7% the beach (City of Greater Geelong, 2004). People who walk in the Geelong area have indicated the need for greater provision of shelter, more seating, better walking surfaces and improved safety for pedestrians, with older people in particular stating that seating at regular intervals for resting was vital (City of Greater Geelong, 2004). Importantly, people living in lower SES suburbs of Geelong were less likely to rate the environment and scenery as good or very good, and were also more concerned about the presence of litter than people from other suburbs (City of Greater Geelong, 2004).

A list of environmental factors that prevent people from being active includes the following aspects of the built environment:

- Hills, stairs.
- Lack of benches to rest on.
- Lack of footpaths / uneven pavements.
- Inadequate lighting.
- Social environment that doesn't support physical activity.
- Inadequate public transport to neighbourhood services, recreation centres.
- Hazardous traffic crossings and pedestrian signals.
- Lack of safe bicycling facilities and multi-use paths.
- Inaccessible staircases in buildings where older residents reside.

(Adapted from Partnership for Prevention, 2001, p. 7).

Many of these factors can be improved. Ensuring that footpaths are safe, street lighting is adequate, and appropriate places to exercise are available will encourage

older persons to be physically active. Developing walking paths and widely promoting their use, as seen in the 'Walk-it Bunbury' program, or initiating mall walking which overcomes many of the environmental barriers to walking are promising approaches.

Research has indicated that people are more likely to be active if they live near to, or can access, conducive or facilitatory environments (Bauman et al., 2002). It has been suggested that to encourage physical activity, environments should be designed from the point of view of the slowest walker or pedestrian and the learner cyclist (Bauman et al., 2002). The Australian review on physical activity concluded that there is still a need for more objective measures of environments, for example using geographical information systems (GIS) mapping to quantify the physical 'friendliness' of environments (Bauman et al., 2002).

Creating environments that are supportive of walking and other forms of physical activity involves multiple policy sectors. These have been summarised in the Walking Policy Matrix (City of Greater Geelong, 2004) which depicts the range of roles and of various organisations under the headings of sport and recreation, environment, infrastructure and public health. The need for a whole-of-government approach is exemplified by the Walking Policy Matrix.

There are valuable resources available on Supportive Environments for Physical Activity (SEPA) that have been prepared by the Heart Foundation (2004). In the Geelong region, recommendations for policy, promotion and education in relation to walking in terms of policy, infrastructure development and open space have been made (City of Greater Geelong, 2004).

Theoretical Approaches

Many of the specific interventions described above do not specify a theoretical framework. However, it is clear that such factors as perceived benefits, perceived barriers, cues to action, social influence, reinforcement or rewards, self-monitoring and modelling have been incorporated into the design of promotional activities. Resources are available that incorporate theoretical approaches into promoting physical activity, including surveys to assess the stage an individual is at terms of the Stages of Change theory and barriers they experience to physical activity (e.g., Jitramontree, 2001).

One review of physical activity research found that interventions that used a theoretical framework were more likely to report positive findings (seven of ten studies) than those that did not use a theoretical framework (three of seven studies) (Conn et al., 2003). An earlier review also found that interventions that employed behavioural or cognitive-behavioural strategies were more likely to be effective than those that used health education or instruction alone (King et al., 1998). The most common theoretical framework utilised in the research reviewed by Conn et al. (2003) was social cognitive, or social learning theory. Self-efficacy in particular has been consistently associated with exercise in older persons (Conn et al., 2003). Behavioural strategies based on social learning theory were also the most common strategies mentioned in the physical activity interventions reviewed by King et al. (1998). The other most frequently used theoretical approach was the Transtheoretical Model. Two

of three studies reviewed by Conn et al. (2003) using this approach reported significant treatment effects.

Models of health behaviours at an individual or interpersonal level assist to explain some behaviours in relation to physical activity. However, the value of ecological models that incorporate a consideration of issues at an environmental and policy level is apparent. Such an approach is also consistent with a broad definition of health promotion as espoused by the Ottawa Charter (World Health Organisation, 1986). The section on physical activity has highlighted the importance of many such issues. The case for a broader approach to promoting physical activity is presented in the section below on Transport. It is argued that physical activity that becomes part of one's lifestyle, such as active transport, is more likely to be maintained over a longer period than programmed exercise (Mason, 2000). This approach typically involves a broad policy approach.

Encouraging More Active Lifestyles for Older Persons

Ory et al. (2003) conclude their article with suggestions on how to challenge ageist stereotypes and encourage more active lifestyles for older persons:

- Use existing knowledge– educate about the myths and realities of ageing starting in primary schools.
- Mobilise public awareness campaigns – stress positive images of ageing and the capacities of older people.
- Sensitise those providing care to older people – professionals need realistic expectations about what older people can and cannot do, and to confront their own stereotypes about ageing.
- Create opportunities for intergenerational networks and linkages.
- Design productive roles for older people – assist them to be active and engaged in meaningful activities whether paid or not. Volunteerism helps those less fortunate and also benefits the volunteers themselves.
- Retrofit the built environment – changes in later years may make it more difficult to navigate the environment. It is imperative that environments are designed in an activity-friendly manner that considers the needs of an ageing population.
- Intensify governmental action – set and carry out priorities.
- Build partnerships with interested public and private parties – coordination of research, practice, and policy efforts both within and outside of government is important.
- Extend the current knowledge base – build on the existing research foundation by testing the effectiveness of evidence-based models in community settings.

(Adapted from Ory et al., 2003, pp. 169-170).

Key Points – Physical Activity

There is abundant evidence of the importance of physical activity to the health and well-being of older persons. It is also clear that levels of physical activity in older people are far from optimal. Reviews of the literature on promoting physical activity to older persons have concluded that there is a lack of good quality evaluations of programs (Bauman et al., 2002; U.S. Department of Health and Human Services, 1996) and that no single approach stands out as being the most successful (Conn et al., 2003). It is however possible to make some comments on approaches to promoting physical activity:

- There is a need for some education for example on the type and level of physical activity that is appropriate for older persons.
- Negative stereotypes need to be addressed.
- Different types of physical activity or exercise training confer different benefits.
- It is sometimes appropriate to tailor physical activity programs to individual needs, especially for those with poor health.
- There is a role for GPs in promoting appropriate physical activity, but there are many demands on their time.
- It is beneficial to encourage the social aspect of exercise.
- Women are more likely to respond positively to group walking activities.
- There is a need to pay particular attention to recruiting sedentary people. Using a personal approach where an active person recruits an inactive person has been successful.
- The role of the built environment is very important:
 - establish safe walking paths, pedestrian crossings etc.
 - utilise venues that are easily accessible, or promote mall walking
 - comprehensive resources are available that address the relevant policy areas.
- There are many advantages in promoting walking: it is the preferred activity for many people; it requires no special equipment; it can be done in a range of places; and it can be done in groups.
- A multi-level approach to promoting physical activity such as the PRECEDE-PROCEED model or the ecological approach is most appropriate.
- Many successful programs involve collaboration from a range of different organisations.

Falls Prevention

Rationale for Inclusion

According to both Australian and overseas studies, approximately one in three community dwelling people aged 65 years and over fall each year, with 10 per cent having multiple falls (National Ageing Research Institute (NARI), 2000). Over 30 per cent of falls in this age group require medical attention (NARI, 2000). It has been suggested that even when it does not result in any injury, the experience of a fall may cause a loss of confidence in mobility or a fear of falling (Kendig et al., 1996) which may result in the older person reducing the amount and types of physical activity they perform. Reducing activity levels may have a range of negative impacts on the person's health, as discussed in the previous section.

Evidence of Improvements

Two recent systematic reviews of randomised trials, each using somewhat different ways of examining the data, both concluded that interventions to prevent falls in older people are effective (Chang et al., 2004; Gillespie et al., 2004). The most effective type of intervention was identified as multifactorial risk factor assessment and management, with exercise programs also being effective (Chang et al., 2004). Home hazard assessment and modification was also found to be effective for older people with a history of falling (Gillespie et al., 2004).

Examples of Interventions

A number of risk factors for falls among community dwelling older people have been identified, many of which have been targeted in interventions to reduce falls. The intrinsic falls risk factors are:

- increased age
- past history of falls
- chronic medical conditions
- multiple medications, and some specific medications
- impaired balance and mobility
- sensory problems
- impaired cognition
- low levels of physical activity (NARI, 2000).

Comparison of individual with multiple interventions

A falls prevention program conducted in the City of Whitehorse, Melbourne, provides a useful comparison of several individual interventions (group based exercise, home hazard management and vision improvement) versus combinations of these interventions (Day et al., 2002). The program was undertaken with people aged 70 years or over who were living at home. The results indicated that a combination of all three interventions produced the strongest effect, reducing the number of falls by 14%. Among the single interventions, only exercise produced a significant effect in terms of reducing the number of falls over an 18 month period (Day et al., 2002). The exercise intervention comprised a one hour weekly exercise class for 15 weeks aimed at improving flexibility, leg strength and balance, with daily home exercises recommended (Day et al., 2002).

Multifaceted programs

One recent falls and falls injury prevention strategy implemented in South Australia was a multifaceted program that covered community, residential aged care and hospital settings (Brown, 2004). In the community this program included talks to target groups, media coverage, a falls hand-out package, lifestyle improvement advice, a falls and balance clinic which included exercise programs, assessment of risk of fracture, home assessments for environmental falls hazards and the supply of walking aids and hip protectors (Brown, 2004). In residential care accommodation the program included a falls risk assessment at admission, the promotion of the use of calcium and vitamin D supplements, regular exercise, the use of hip protectors for at-risk residents, and regular review of medication. A similar approach was used in hospitals, except for the promotion of calcium and vitamin D supplements, and exercise (Brown, 2004). A reduction in falls injuries over two years was achieved, although there was no overall effect on the frequency of falls. It is not possible to isolate which aspects of the program were most important, although a reduction in hip fractures was found in persons wearing hip protectors (Brown, 2004).

- **The Safe, Active and Independent Living (SAIL) Program**

The Safe, Active and Independent Living (SAIL) Program that is currently underway in the Barwon Primary Care Forum catchment area in Victoria is an example of a community based multifaceted approach to falls prevention (SAIL, 2004). The SAIL Program is directed at older people living in their own homes aged 65 years and over. It comprises screening and individual risk assessment, the provision of health information, health education and skills development for professionals, social marketing, and organisational development (SAIL, 2004). Referral to physical activity programs is built into the process, and a community advisory group provides guidance on the development and implementation of SAIL strategies.

Issues to be Considered

Similar to physical activity, it has been noted that it is most difficult to involve and sustain the involvement of participants who are frail and may be more at risk of falling (NARI, 2000).

The built environment

A number of extrinsic falls risk factors that relate to older people's interaction with the environment, both at home and in public spaces, are discussed in the literature (NARI, 2000). The findings in relation to the identification and modification of environmental risk factors in the home alone (not in combination with any other intervention) are inconclusive (NARI, 2000). There is however a lack of research formally evaluating the effectiveness of programs that target falls hazards in public places (NARI, 2000).

Key Points – Falls Prevention

There is evidence that falls prevention programs can reduce the incidence of falls or of injuries from falls:

- Multifaceted programs have been shown to be most effective.
- Exercise, particularly with an emphasis on balance, is effective.
- Home hazard assessment and modification is effective among people who have a history of falling.

Social and Cultural Involvement

The domain of culture has been included in this section. It is acknowledged however that culture in fact underpins human behaviour generally, and as such it relates to every aspect of this overview. It is customary practice to include cultural activities within the area of social activities. Leisure and learning will also be covered in this section.

The benefits of social capital within communities as a whole have been discussed in the introduction to this review. There are also important benefits to individuals that result from social engagement and these are the focus of this section of the overview.

Rationale for Inclusion

Social isolation has been shown to be linked with adverse health outcomes, including a greater risk of dying (Michael, Berkman, Colditz, Holmes & Kawachi, 2002), and a greater risk of cognitive impairment among elderly persons (Bassuk, Glass & Berkman, 1999). People who are socially isolated are at two to three times greater risk of dying compared with people who have a network of social relationships and sources of emotional support (Brunner, 1997). Older people can be more susceptible to social isolation as a result of the physical effects of ageing and their changed life circumstances (e.g. retirement, death of a significant other, decreased mobility etc.). Participating in community activities may enable some people to overcome isolation and perceived powerlessness, which in turn has a positive effect on health and well-being (Labonte 1997). It has been demonstrated that engaging in a greater number of quality social contacts is correlated with lower levels of morbidity and increased life expectancy (Rosenfeld, 1997). Research commissioned by the Barwon Primary Care Forum found that there were links between lower levels of social engagement and lower self-assessed physical and mental health (Savage et al., 2002). People residing in Melbourne and aged over 70 years themselves have nominated having close personal relationships as an important factor in successful ageing (Knight & Ricciardelli, 2003). The importance of social involvement to health is exemplified by the comment that “services should place greater emphasis on ‘social network assessments’ and relatively less on ‘health assessments’.” (Royal Melbourne Institute of Technology (RMIT), 1998, p. 33).

There is some evidence that a substantial proportion of older people have limited social connectedness. For example, 34% of 1000 people aged 65 and over and living in Melbourne were rated as having a low level of social interaction with friends and family (Kendig et al., 1996). People aged 65 years and over were significantly more likely to be classified as low participators in various activities than younger people in research conducted in the Barwon region (Savage et al., 2002). Twenty-five per cent of people aged 65 years and over in that study indicated some degree of social isolation (Savage et al., 2002).

Evidence of Improvements

There is a paucity of rigorous evaluations in this area. Anecdotal evidence and informal appraisals indicate that many programs are successful in enhancing the social involvement and connectedness of participants. Given the strong evidence of a link between engagement and health, it can be surmised that programs that increase social involvement and engagement will also enhance health.

The role of leisure activities

The role of leisure activities in enhancing social involvement is very important. Making friends is an important part of leisure activities: leisure programs provide a link to old and new friendship networks (RMIT, 1998). Research has found that the more satisfied people are with how they spend their leisure time, the more satisfied they are with their lives in general (Roelofs, 1999). An examination of case studies of friendships and leisure activities in Victoria identified five common themes:

- Developing shared interests with friends is very important, and helps to maintain people's sense of happiness and well-being.
- It is important to recognise older people as individuals with unique interests and insights.
- Providers of support services need to get to know older people when planning and providing programs, and ensure that older people can actively contribute to shaping programs.
- Older people need to feel a sense of control over their associations and activities.
- It is important to identify the conditions in which friendships can grow, and to nurture them. Environments where people can express themselves, develop new skills, where there is trust, understanding and appreciation, and where people are kind and understanding will foster friendships. (Adapted from RMIT, 1998).

Nawalaniec (1997) argues that meaningful activity for older people should involve choice, a supportive environment, community involvement and attention to cultural factors. It was noted that services should develop interest-specific activities rather than age-specific activities so that different age groups are able to form friendships based on shared interests (RMIT, 1998). They should also support people who challenge stereotypes of older people.

Examples of Interventions and Activities

Participation can be in a wide range of activities. It may occur within a formal club or organisation such as a sporting club or an arts group, or may be an informal arrangement between people with similar interests.

Formal clubs and organisations

Formal clubs and organisations have been used as a measure of social capital (Putnam, 1995), however social capital encompasses much more than only formal organisations. They are nevertheless an important means of participation for many people. Almost half of people surveyed by VicHealth cited reasons related to community and social connectedness as the aspects they most liked about their clubs (Australian Research Group, 2003). The important contribution of sport and recreation clubs to the health of communities has been acknowledged, particularly in the context of rural areas (Driscoll & Wood, 1999). VicHealth's 'Together We Do Better' program aims to get individuals thinking about how they can participate more themselves and groups thinking about how they can remove barriers that prevent others from participating in organisations, sporting clubs or activities (VicHealth, 2004).

There is a myriad of sport and recreation groups operating throughout Australia, offering an enormous range of options for participation. Most people will be familiar

with the type of organisations in existence and with the activities that are available. While participants will be from a range of age groups, there is evidence that older people are able to maintain their involvement for example in sporting clubs, even if their role changes as they age (RMIT, 1998). One example is provided of a formal organisation that offers older people the opportunity to participate in an arts activity. This example was chosen as it represents a somewhat different type of club to the more traditional type of club.

- City of Voices, South Melbourne

The City of Voices is a group of old and young people who meet weekly for drama workshops and rehearsals, and put on regular performances (RMIT, 1998). The City of Port Phillip supports the group by providing office space and assistance from the council's Special Needs Recreation Officer. The group is an incorporated organisation with members taking responsibility for running the group. The City of Voices puts on one major show each year and performs at Café nights, senior citizens' venues and at various functions in the City of Port Phillip. Comments from members of the group indicate that being part of City of Voices has enriched their lives, provided them with close friends and an avenue to express themselves and learn new skills (RMIT, 1998).

Planned interventions

Changes in the circumstances of some older people, due to the death of a partner, illness, or moving to a new area, introduces a need for interventions or specific programs to assist them to become involved in social and leisure activities. Two examples of planned interventions are presented below.

- HACC Social Support Program

The Home and Community Care (HACC) program has provided some programs that address the social needs of older people (RMIT, 1998). Typically they utilise trained and supported volunteers to act as community visitors to older people in the community. A program has been described in which a program coordinator adopted a resource approach that assists people to re-establish and maintain previous interests and social networks (RMIT, 1998). In one example a group of older people who met at a rehabilitation program continued to meet as a group and share activities and outings. Volunteers became friends to participants and the program was seen as very successful (RMIT, 1998). An important factor in forming social support groups is that people have individual choice and are able to direct their own lives.

- Life Activities Clubs

Life Activities Clubs are targeted at people aged 50 years and over, and provide members with "a variety of rewarding and stimulating sporting, leisure, personal development and social activities which the members enjoy in the company of friends and acquaintances" (Life Planning Foundation of Australia, 2004). Each club is a non-profit organisation run by its members (Surf Coast Life Activities Club, 2004). There are now 25 clubs in Victoria with a total membership of 8,000 (Stephenson, 2004). The Surf Coast Life Activities Club started in March 2002, in response to concerns about isolation amongst residents who have come to the coastal areas to retire (Stephenson, 2004). It is organised by a collaborative working group, and aims to improve social networks amongst older people. It has over 200 members who participate in 15 different activities, and also includes guest speakers from various backgrounds speaking at fortnightly meetings. Activities include walk and talk,

cinema, theatre, resistance training, book club, Tai Chi, cycling and social outings (Surf Coast Life Activities Club, 2004). Physical activity is encouraged as can be seen from the type of activities available through the Life Activities Club. While results of a formal evaluation are not yet available, it is reported that participants enjoy the activities and form friendships (Stephenson, 2004). The Surf Coast Life Activities Club has received some funding from VicHealth to conduct an evaluation of the program (Stephenson, 2004).

Intergenerational programs

This section summarises information presented in the report ‘A National Study of Intergenerational Programmes’ produced by the Alma Unit for Research on Ageing (AURA) at the Victoria University of Technology (2002). Intergenerational programs have been described as representing an important dimension of lifelong learning, and have been defined as “activities or programs that increase cooperation, interactions or exchange between any two generations” (Manheimer, 1997, p. 79, cited in AURA, 2002). The key focus of intergenerational programs is community capacity building including goals such as building the social cohesion of local communities and enhancing local cultural life and identity (AURA, 2002). The features of intergenerational programs that showed evidence of sustainability were found to be:

- support from key stakeholders;
- well established network systems;
- succession planning;
- marketing of project activities;
- information sharing and documentation that ensures the recording and storage of community and institutional memory; and
- evaluation of project activities, processes and outcomes to support future strategic decision making. (AURA, 2002, pp. 4-5).

The following examples of intergenerational programs that have a focus on older persons have been summarised from the AURA report (2002).

- **Melba Community Support Project**

This program aims to provide social support to older people, to facilitate social networks to maintain independence. It brings together older women living in the community (aged 70 years and over) and younger women in high school. This program is based in the Yarra Valley, Victoria, and is funded by the DHS HACC Program. The Melba Community Support Project has many components which overlap (AURA, 2002). An important part of the project is the production of “Listen To Older Voices” radio programs. Other intergenerational projects include shared activities between aged people and a Primary School based on a garden, and bringing together a group of elderly women and Year 11 girls to share stories from their lives (AURA, 2002). Other general projects include telephone social clubs, carer support groups and an exercise class. Anecdotal evidence suggests there are many positive outcomes from this project (AURA, 2002).

- **Grandfriends Intergenerational Program**

The Grandfriends Intergenerational Program involves older volunteers assisting in primary schools in the Liverpool area in NSW (AURA, 2002). This program aims to provide mentoring and surrogate grandparenting support by having older persons assist classroom teachers with learning tasks involving reading, mathematics and art.

There are reciprocal benefits for all participants, with the older persons being acknowledged as a valuable resource and able to make a worthwhile contribution. This project is supported by the NSW Council on the Ageing (COTA). It has assisted 5,000 students in 20 Liverpool primary schools, and another 20 schools in the greater Sydney area, and has involved 42 'grandfriends' (AURA, 2002). Feedback from a range of sources indicates that the Grandfriends Intergenerational Program is successful and popular amongst the children and older volunteers (AURA, 2002).

Issues to be Considered

Life long learning

Many leisure pursuits include an element of learning. This was identified as one of the criteria used by older people in selecting their leisure activities (Roelofs, 1999). Groups like the City of Voices and the Life Activities Clubs offer older people the opportunity to learn new skills in a social environment. The University of the Third Age (U3A) also provides learning opportunities for older people.

Volunteers

Encouraging older people to volunteer and supporting them in that role is critical. Volunteering is a particularly important way of being socially engaged. It provides benefits to the community as a whole, to the recipients of the voluntary work, and also to the volunteers themselves. A review of the literature on volunteering suggests that older people who volunteer are likely to maintain significantly higher levels of well-being, a strong sense of their own worth, and have better functional health than those who do not volunteer (Onyx & Warburton, 2003). Importantly, there is evidence that volunteering actually improves well-being and functional health: it is not just that healthier people are able to volunteer (Davis, Leveille, Favaro & Logerfo, 1998; Onyx & Warburton, 2003). The majority of clubs and organisations rely on volunteers to perform many functions, and volunteers play an important role in several of the interventions described above.

The changing nature of formal clubs and organisations

There has been a national trend for recreational and physical activities to be flexible and informal rather than occurring within more formal organisations such as sports clubs (City of Greater Geelong, 2004). A recent survey found that 55% of Geelong residents reported that their physical activities were not organised by a club or association (City of Greater Geelong, 2004). A report on rural sport and recreation clubs and organisations in South West Victoria indicated that in many towns there is a need for external support to be provided to clubs and organisations due to changing circumstances in many towns such as a decreasing population (Driscoll & Wood, 1999).

Transport

Transport was mentioned as a significant barrier to participation in organised clubs and activities in a recent VicHealth survey (Australian Research Group, 2003). The importance of transport to enable access to many leisure pursuits has also been noted by Barnes (2001).

Involvement in planning

The need to have older people involved in community recreation planning, and for planners to work collaboratively with older people to ensure that services and programs are provided that genuinely meet their needs has been noted (Barnes, 2001). The fact that older people are a diverse group also needs to be considered – involving a wide range of older people in the planning process is therefore important.

Key Points – Social and Cultural Involvement

- There are strong links between participation in social and other activities and enhanced physical and mental health.
- Appropriate leisure activities for older people enhances their overall satisfaction with life.
- Formal clubs and organisations play an important role in facilitating participation.
- Specific interventions to facilitate the involvement of older people have been received positively by participants.
- Intergenerational programs offer benefits to older people and to the younger people they become involved with, and the important contribution older people can make is acknowledged.
- Volunteering should be promoted as it is beneficial to the volunteer as well as to the community as a whole.

Transport

Rationale for Inclusion

Access to transport, whether it be private, community or public, is often essential to an older person's independence. It links individuals with many services and activities (Bishop, 2000) and has been described as necessary for "shopping, working, obtaining medical treatment, recreation and generally for broad participation in community activities" (Clarke, Baum, Rosenfeld & Dunn, 1988). It is also frequently necessary to get to places where supervised exercise classes are offered (Burns, 2002) and may therefore impact on the individual's access to some forms of physical activity.

The impact of transport on health has been discussed largely in terms of the current dominance of private cars for transport. This has been described as health-damaging due to noise and air pollution, road fatalities and injuries, decreased social contact between people, and the resulting reduction in access to local shops, particularly in poor areas (Catford, 2003). The social impact of the dominance of cars is stressed in the social model of health. Communities are separated by roads and traffic, fewer pedestrians means that streets are not social areas and pedestrians feel unsafe, and people without cars become isolated (Wilkinson & Marmot, 1998).

Older people experience the impact of transport in particular ways. When older people are involved in road traffic accidents, whether as drivers or passengers in cars or as pedestrians, the consequences are more serious than for younger people (Lilley, Arie & Chilvers, 1995). They are more likely to be seriously injured than younger people for a given crash exposure, will be hospitalised for longer for similar types of injury severity, are more likely to sustain disabling injuries, and to experience complications when hospitalised compared to younger people (Lilley et al., 1995). As people age they may cease driving, which results in dependence on public transport, community transport, taxis or walking.

Interventions to Make Transport More Healthy

Active transport

An important theme in the area of transport as it relates to health generally is the concept of active transport. This is described as physical activity undertaken as a means of transport and not purely as a form of recreation, and includes the use of public transport, cycling and walking (Catford, 2003). While the concept of active transport does not relate specifically to older people, it is highly relevant to them and to their health. The availability of alternative transport, an integral part of active transport, would ease the decision to stop driving (Stacey & Kendig, 1997).

The key determinants of active transport identified in a report prepared by the National Public Health Partnership (NPHP) and the Strategic Inter-Governmental forum on Physical Activity (SIGPAH) were:

- Social factors related to the creation of a milieu in which the use of active transport is seen as a normal and safe part of life.
- Urban planning that facilitates active transport between homes, workplaces, recreational and shopping facilities. This includes the development of mixed

use in neighbourhood areas, and the clustering of facilities such as shops that will provide a focus for walking.

- The provision of facilities that support active transport including the use of public transport. This includes the design of streets, the design of walking and cycling facilities and safety.
- The need for an intersectoral approach to increase the use of active transport (NPHP & SIGPAH), 2001).

There have been a number of specific suggestions as to how to decrease the current domination of cars, and thus promote more active forms of transport. These include councils setting maximum parking limits on new developments, preventing long-stay parking in areas that are easily accessed by public transport, and traffic calming measures. Some interventions to increase active transport are described in the literature. While these do not apply specifically to any age group, some will be summarised as examples of interventions in this area.

- **TravelSmart, Alamein Line Public Transport Project**

TravelSmart Alamein was a pilot project that delivered a voluntary behaviour change program to households along the Alamein train corridor in Melbourne (Socialdata Australia Pty Ltd, 2004). It used an individualised marketing intervention process. Approximately 6,100 households were contacted. Of these, 2,900 participated and were provided with tailored TravelSmart packs including public transport, walking and cycling information. Key elements of the individualised marketing approach were: personally contacting all target persons; motivating them to think about their travel behaviour; and informing them about alternative modes of transport (Socialdata Australia Pty Ltd, 2004). Incentives and rewards such as water bottles and umbrellas were also provided. The evaluation of the program indicated that after 5 months, there was a 17% increase in walking, an 18% increase in cycling, a 12% increase in public transport use, and a 10% reduction in car driver trips (Socialdata Australia Pty Ltd, 2004). While this project was not aimed at any particular age group, the evaluation data indicates that the car as driver trips decreased especially in the 60 years plus age group (Socialdata Australia Pty Ltd, 2004). The project was funded by the Victorian Department of Infrastructure and supported by the Boroondara City Council.

- **Canterbury Hospital promotion of active transport**

Mason (2000) argues that health service agencies can promote healthy forms of transport to their clients and visitors. The Canterbury Hospital in Sydney, in conjunction with the Health Promotion Unit, Central Sydney Area Service, produced a map indicating public transport access and the health benefits of walking from the station (Mason, 2000). This information is incorporated into brochures for various services, and enables visitors and clients to plan the journey without using a car. Mason argues that the health sector should attend to healthier transport policies within its own services and that this would help them learn more about influencing the policies of other sectors such as local government (Catford, 2003).

Preventing road accidents

Another approach to making travel safer, particularly for older people, is presented by Lilley et al. (1995). They suggest measures that would reduce the number of road accidents among older people, and argue that these would also lead to a reduction in

accidents in other age groups. Suggestions to prevent driver accidents include traffic calming measures, increasing the height of letters on road signs, increasing the size of street signs and improving street lighting (Lilley et al., 1995). Suggestions to prevent pedestrian accidents include more audible signals at pedestrian crossings, traffic calming measures, improvements to highway design and maintenance, and campaigns to encourage older people to wear something bright when walking (Lilley et al., 1995).

The development of driver information and training programs for older people has also been suggested as a way of reducing accident rates (Stacey & Kendig, 1997). Information that could assist older drivers includes details about physical limitations, medical conditions that may affect driving skills, drug-related problems and functional problems (Stacey & Kendig, 1997).

Issues to be Considered

Difficulties in using public transport

Older people have highlighted a number of problems they experience in using public transport. These include the lack of facilities associated with transport services, such as seats, shelter, good lighting at bus stops and closed toilet facilities at railway stations (Twible, 1992). Another difficulty, which was mentioned by 80% of older public transport users in one Melbourne survey, related to problems in getting on and off public transport (Stacey & Kendig, 1997). Experiencing trouble getting on and off public transport was also mentioned as a problem by 42% of the 74 public housing tenants in the Barwon region who reported having any problem with using public transport (Clarke et al., 2001).

How transport operators could improve public transport for older people

Participants at 15 meetings that discussed strategies for an ageing Australia held around Australia suggested the following ideas for transport operators:

- focus on the needs of the whole community, rather than particular groups that are most profitable;
- providers of health and other services and transport providers could coordinate their services better to match demand with a wider range of services;
- business be encouraged to provide 'seniors on the move' transport around business districts and town in return for the patronage of older people;
- subsidies for transport for school children should be gradually redirected to transport for older people as the number of younger people decreases over time (Andrews, 2003).

Cessation of driving

In the Health Status of Older People project conducted in Melbourne, it was found that people aged 65 years and over, particularly men, have a high reliance on private cars for transport (Stacey & Kendig, 1997). As people age however, they may need to cease driving. The most frequent reasons for ceasing to drive in the Health Status of Older People study were loss of confidence, medical conditions and failing eyesight (Stacey & Kendig, 1997). People ceasing to drive due to medical conditions or eyesight problems may be particularly disadvantaged by an environment that is dominated by cars.

The built environment

It is clear from the above discussion that the role of the built environment is of considerable importance in relation to the health promoting or health damaging effect of transport on older people. A need for intersectoral collaboration to ensure appropriate policy decisions and changes in the built environment where necessary is apparent.

Key Points - Transport

- Transport is an important factor in maintaining the independence and connectedness of older people.
- There are many health damaging aspects of the dominance of cars in communities.
- Active transport has been proposed as a health enhancing approach to transport.
- Pilot projects such as the TravelSmart Alamein project have demonstrated that it is possible to change transport behaviour.
- The role of the built environment is of considerable importance in the area of transport.
- Promoting healthy transport requires an intersectoral approach.

Nutrition

Rationale for Inclusion

It has been stated that nutrition is “a key factor in growth, development, the maintenance of health, the recovery from acute illness, and the management of chronic disease” (Chernoff, 1991). It has been argued that considerable savings in health care costs would be possible by providing health education to people with chronic conditions such as arthritis, hypertension, diabetes and heart diseases, and that nutrition is an important factor in these illnesses (Higgins & Clarke Barkley, 2003a).

While it is important to establish healthy eating habits early in life (Chernoff, 1991), health promotion strategies should also address nutrition in older persons. Nutritional problems that are identified in older persons are usually reversible and do not result in long-term effects (Chernoff, 1991). Data from the National Nutrition Survey indicates that the average nutrient intake of older Australians is consistent with the recommended levels for most nutrients (NHMRC, 1999). It appears that in general older Australians have a better diet than younger Australians (NHMRC, 1999). Data from a survey of public housing tenants in the Barwon region indicated that people aged 50 to 70 years were more likely to report usually being careful about what they eat, and less likely to eat takeaway food than people aged 20 to 40 years (Clarke et al., 2001)

Dietary Guidelines for Older Australians

The dietary guidelines for older Australians, published by the NHMRC are:

- Enjoy a wide variety of nutritious foods.
- Keep active to maintain muscle strength and a health body weight.
- Eat at least three meals every day.
- Care for your food: prepare and store it correctly.
- Eat plenty of vegetables (including legumes) and fruit.
- Eat plenty of cereals, breads and pastas.
- Eat a diet low in saturated fat.
- Drink adequate amounts of water and/or other fluids.
- If you drink alcohol, limit your intake.
- Choose foods low in salt and use salt sparingly.
- Include foods high in calcium.
- Use added sugars in moderation. (NHMRC, 1999, p. xix).

It has been suggested that as people age, some aspects of nutrition become less important: for example, that it is less important to restrict salt intake among people aged 85 years than among people aged 65 years (NHMRC, 1999).

Screening for Nutrition Risk

The warning signs assessed by a screening tool for nutrition risk (NHMRC, 1999) are:

- any disease, illness or chronic condition that affects eating
- eating less than 3 meals a day
- tooth loss or mouth pain
- economic hardship that results in food insecurity
- inadequate fluid intake
- inadequate fruit or vegetable intake

- inadequate dairy intake
- reduced social contact and therefore living and eating alone
- taking 3 or more medicines
- having 3 or more alcoholic drinks most days
- needing assistance in self care
- experiencing a 5 kg weight change in the past 6 months.

According to the Health Status of Older People Project data, the most common nutritional risk factors were taking three or more medicines (45%), having an illness that has caused changes in diet (35%), inadequate fluid intake (27%), and eating alone most of the time (26%) (Kendig et al., 1996).

Examples of Interventions

Secondary prevention strategies for older adults include an assessment of food security, access to shopping, cooking resources, and feeding skills (Chernoff, 1991). There is however a very strong tendency for health promotion activities related to nutrition to focus on children (Bell, 2002), although some do focus on older persons in residential care, or on the general population.

- **Braystone Fruit and Vegetable Supply Project**

This is one of several Food Insecurity community Demonstration Projects that were funded by VicHealth. It targets people living in an area of social disadvantage where there is an inadequate local food supply (Victorian Health Promotion Foundation, 2003). It targets people who have difficulty accessing fresh fruit and vegetables, in particular people on low incomes, the aged, frail and isolated. This project involves collaboration between Maribyrnong City Council, WestNet – a local disability organisation, and a Food Supply Working Group, in partnership with fruit and vegetable growers (Victorian Health Promotion Foundation, 2003). WestNet operates a shop, a phone order and delivery service, and a van for visiting public housing estates, rooming houses, and elderly persons' estates (Victorian Health Promotion Foundation, 2003). It is stated in the report that the project has “greatly improved access to affordable, nutritious food” (Victorian Health Promotion Foundation, 2003, p. 17). In addition to that important outcome, the project also gives WestNet clients a chance to work in a shop and develop many skills and improve their self-esteem.

- **The Puget Sound Eating Patterns Study**

This US project aimed to promote lower fat and higher fruit and vegetable consumption amongst adults. The intervention included a self-help manual, tailored print materials, telephone counselling and dietary assessment and behavioural feedback (Kristal, Curry, Shattuck, Feng & Li, 2000). This project utilised social learning theory, the stages of change construct from the Transtheoretical Model, and a diet individuation model (Kristal et al., 2000). There was a strong focus on tailoring the intervention to the individual needs of participants. For example, individual letters with motivational and behavioural feedback based on data from a baseline survey were computer generated, and nutritional goals and recommendations were generated based on data from regular food frequency questionnaires. The results, based on data from a twelve-month follow-up, indicate a modest decrease in the proportion of energy obtained from fat, and an increase in the consumption of fruit and vegetables of almost a half serving a day (Kristal et al., 2000). This project involved adults aged 18 to 69 years. A greater increase in the consumption of fruit and vegetables was

noted in the 55 to 69 age group, suggesting the intervention was particularly successful with older persons.

Issues to be Considered

Successful nutrition education

A review of the nutrition health education literature for older persons concluded that the successful programs were typified by the following elements:

- The use of personalised approaches such as self-assessment of nutritional status or behaviours.
- The use of a behavioural approach such as behavioural self-management techniques, goal setting, problem solving, enhancement of self-efficacy and social support.
- Active participation is essential.
- Attention to motivators and reinforcements is of primary importance.
- An empowerment philosophy that includes enhancing personal choice, control, and social support should be used.
- Subgroups of older adults need to be identified and targeted.
- Sensitivity to age-related physical changes is necessary (Contento et al., 1995).

The use of individual assessment and tailoring education programs to the specific needs and interests of participants has been supported and further elaborated upon in more recent literature (Higgins & Clarke Barkley, 2003b).

Relationship with other domains of interest

It is important to note that several of the nutrition risk factors relate to other domains that have been described in this overview. For example, eating alone as a risk factor is addressed indirectly by interventions that aim to engage older people in social activities. The Dietary Guidelines for Older Australians made an interesting suggestion in relation to the importance of the social aspect of eating in the context of older persons: it may be appropriate to change from delivering meals to lonely people to delivering lonely people to a sociable environment, where they can interact with others and be encouraged to talk and eat in ‘normal’ surroundings.” (NHMRC, 1999, p. 4).

Key Points - Nutrition

- Nutrition is important for the maintenance of health and in the management of chronic disease.
- There are clear dietary guidelines for older persons.
- Screening for nutrition risk includes food insecurity, social factors and needing assistance in self care in addition to assessing dietary behaviour.
- Many nutrition interventions focus on children.
- Tailored interventions have had some success in changing dietary behaviour.
- Access to fresh fruit and vegetables is important.
- Successful nutrition health education strategies for older persons include a personalised approach, active participation, use a behavioural approach, and attend to motivators and reinforcers.

Obesity and Overweight

Rationale for Inclusion

The issue of obesity and overweight warrants consideration as this has been identified as a key risk factor for preventable morbidity and mortality due to such diseases as hypertension, cardiovascular disease and non-insulin-dependent diabetes mellitus (NHMRC, 1997). Australian data from 1989 indicated that between 60 and 61% of men aged 55-69 years were overweight or obese, and between 52 and 57% of women aged 55-69 years were overweight or obese (NHMRC, 1997). A steady increase in the proportion of adults who are overweight or obese has been observed since the early 1980's (NHMRC, 1997). Self-reports from the National Health Survey indicate a 6% increase in the number of males aged 65-74 years who were obese from 1989-90 to 2001, and a 9% increase in females aged 65-74 years who were obese (Australian Institute of Health & Welfare (AIHW), 2004). Estimates of the potential savings in healthcare expenditure if the prevalence of obesity was reduced are substantial (NHMRC, 1997).

Examples of Interventions

Much of the recommended health promotion activity in relation to preventing obesity and overweight focuses on physical activity (NHMRC, 1997). In particular it was noted that "The greatest contribution to preventing further weight gain across the whole population is likely to be achieved by activating sedentary people, not by increasing the activity levels of people already exercising" (NHMRC, 1997, p. 132). Interventions to promote physical activity are covered in the earlier section on that topic, where the difficulties in activating sedentary people were noted. In particular active transport was also recommended as a way of combating obesity at the NSW Obesity Summit in 2002 (Catford, 2003). Other interventions relate to dietary behaviour, and some information on that topic is included in the Nutrition section.

Issues to be Considered

An ecological approach

The NHMRC strategy for preventing overweight and obesity proposes an ecological paradigm for understanding obesity that takes account of extra- and intra-individual influences (NHMRC, 1997). Thus environmental, biological and behavioural influences are all important. For example, in the physical environment, macro level influences include availability, price and fat content of food, and level of urbanisation and transport (NHMRC, 1997). In the sociocultural environment, at the macro level influences include advertising, customs, and attitudes to fast food and physical activity (NHMRC, 1997). It is important therefore not only to encourage individuals to take steps to control their weight, but also to promote environmental changes that support weight-control behaviours (NHMRC, 1997). Intervention strategies therefore need to address education and behaviour change, engineering and technology issues related to food, and relevant policy and legislation areas (NHMRC, 1997).

Perceptions of weight

There is some evidence that older people have inaccurate perceptions of their weight. In the Health Status of Older Persons Project, while the Body Mass Index of only 27% of survey respondents was classified as acceptable, 50% of respondents indicated

that their weight for height was 'about right' (Kendig et al., 1996). This is of some concern, as many people will not consider health promotion messages in relation to weight as relevant to them.

Key Points – Obesity and Overweight

- Overweight and obesity are key risk factors for preventable morbidity and mortality.
- Much of the health promotion activity in relation to obesity and overweight focuses on physical activity, and some on nutrition.
- An ecological approach which takes account of environmental, biological and behavioural influences on weight has been recommended.
- There is some indication that older persons do not have an accurate perception of their weight.

Housing

In relation to housing, there are two quite distinct groups of older persons: those who own their own home, and those who live in rented accommodation, either privately or in public housing. The latter group are more vulnerable to financial stress and insecurity (Kendig & Neutze, 1999). Home owners have considerably more choices in relation to modifying their home, obtaining necessary services, or financing a move to a different location.

Moving

There is some evidence that most older Australians are satisfied with their housing (Howe, 1992), and this is perhaps partly due to the fact that some adjust their housing to suit their needs. Howe (1992) identified four categories in relation to preferences for housing: those who want to move and do so; those who do not want to move and do not move; those who want to move but are unable to; and those who do not want to move but have to. The latter group is likely to involve forced moves due to needing increasing levels of care. The need for support services and the housing requirements of individuals within these categories will differ.

Frequently older people do not want to move out of a house that has been the home to them and their family for many years. The home encapsulates their family history, and therefore there is an attachment to it and frequently to the garden as well (Kendig, 1999). The importance of place attachment is described in the literature. A stable relationship with one place “enhances continuity, a strong self-image, independence, and feelings of competence” (Hays, 2002, p. 143). Assistance with home maintenance and gardening is sometimes necessary for people with low incomes and limited capacities, to enable them to remain in their home (Kendig & Neutze, 1999).

Older persons who choose to move to a different area, frequently at retirement, may find this a positive experience. A study of older people who had moved to Point Lonsdale reported mostly positive experiences for this group (Neyland, 1995). Several aspects of their new place of residence were seen as contributing to this, such as the size of the community, the flat terrain and the services of the local community health centre (Neyland, 1995). For others the move may bring about increased social isolation. The Life Activities Club in the Surf Coast Shire was initiated to address the needs of people in that situation (Stephenson, 2004).

Urban Development Issues

The Environments for Health report (Victorian Department of Human Services, 2001) argues that urban planning is “a form of primary prevention and a contributor to health outcomes” (p. 27). It is argued that planners should consider the potential unintended consequences of their planning efforts, and if they will enhance the social inclusion and participation of people, especially women with children, people with disabilities and older people. Land use planning is important for vulnerable individuals of all ages: it can ensure good access by people without a car to a range of services and to public transport (Kendig, 1999).

Access to services

An important urban planning issue relates to access to services. The services that people aged 65 and over rated as most important in a housing survey were shops,

doctors and health care, friends and relatives, hospitals and public transport (Howe, 1992). Interestingly, shops and doctors and health care were rated as important by 96% of older respondents, and by 94% and 92% respectively by people of all ages, indicating the importance of access to these services in general, and not as an age-related issue. Access to shops and public transport is however particularly important for vulnerable older people as the residential environment can have a critical impact on their independence and well-being (Kendig, 2000). Howe (1992) suggests that good practice in urban planning should incorporate measures to ensure that services move with populations, rather than being dictated by the present distribution of services.

Local shops and cafes in easy walking distance of housing are also valuable for the role they play in facilitating social engagement. As one resident of an Adelaide suburb commented: “And there used to be a shop and that made a big difference and that’s gone now ... they were like the hub, like the hub of the gossip network and the community” (Baum & Palmer, 2002). It has been argued that suburbs should be designed to encourage contact between people, and that well maintained parks, community cafes, neighbourhood houses and local shops provide ‘opportunity structures’ that encourage people being going out in their local area (Baum & Palmer, 2002). An interesting suggestion is that a subsidy scheme could be implemented to encourage local shops and cafes and thus provide meeting places and employment (Baum & Palmer, 2002).

Location and choice

Barnes (2001) argues that sites for accommodation for seniors need to be planned carefully, and “grey ghettos” avoided. Many older people wish to remain within the general community, and preferably centrally located so that they are part of the community and able to observe, if not participate, in the daily activities of the community (Barnes, 2001). Being centrally located, rather than on the outskirts of a community, enables older people who are mobile to visit local shops, the library, and other points of interest, and means they are more accessible to visitors (Barnes, 2001).

There is a need for a wide range of housing options to be available to older people as they do not represent a homogenous group, but have diverse needs, capabilities and preferences (Kendig, 1999). Choice in the matter of housing is important as it is in other domains.

The role of local government

A role for local government in ensuring that infrastructure and housing are appropriate for an ageing population was suggested by participants at 15 meetings that discussed strategies for an ageing Australia held around Australia in rural, regional and metro areas (Andrews, 2003). It was suggested that local government could:

- encourage the building of ‘granny flats’ to enable families to stay together;
- encourage innovative housing clusters – ‘living communities’ around community facilities and centres, which foster intergenerational activities;
- consider public housing options that accommodate older and younger people together, in contrast to grouping all older people into retirement homes/villages.

Home Modifications

Supportive environments can assist older people to maintain their independence without the need for additional services (Kendig, 1999). A range of home modifications can assist older persons to remain in their home without the need for expensive or intrusive support services. Home hazard assessment and modification prescribed by professionals for older people with a history of falling have produced beneficial outcomes (Gillespie et al., 2004). Kendig and Neutze (1999) argue that designs of new buildings should meet the needs of people throughout life, and that such features as flat entryways and wide doors are less costly when the building is first constructed, compared with later alterations.

Cooper and Hasselkus (1992) conducted interviews with a small number of people with disabilities and concluded that control was a key factor in the success of these people's independent living. Other factors found to be important were: safety /security; accessibility/mobility; function; privacy; and flexibility (Cooper & Hasselkus, 1992). These were the factors that encouraged and enabled independent living.

Key Points - Housing

- There are substantial differences in the situations of older persons who own their home compared with those who rent.
- Most Australians are satisfied with their housing, and many do not want to move out of a family home that they are attached to.
- Urban planning has a critical role in ensuring that environments are conducive to social inclusion and participation.
- Access to services such as shops and health care are very important to older people.
- It is preferable to locate accommodation for older people in central locations to facilitate involvement in the community.
- Home modifications can assist older persons to maintain their independence.

Oral Health

Good oral health is an important aspect of general health and well-being (Chalmers, 2003). As people age their need for dental care may increase due to the breakdown of existing restorations and caries of exposed root surfaces (Health Department Section, Department of Human Services, 1999). According to the Health Status of Older People Project data, dental problems that cause difficulties in eating was a nutritional risk factor for 14% of participants (Kendig et al., 1996).

There is some evidence that the dental health of older Australians has improved over the last decades. The proportion of people aged 65 years and over with no natural teeth decreased from 66% in 1970 to 34% in 2002 (AIHW, 2004). However, people on low incomes are more likely to experience toothache and to have had their teeth extracted (Health Department Section, Department of Human Services, 1999).

Promoting oral health

Access to dental services is an issue, particularly for low income groups. Long waiting periods for public dental services and high costs of private dental services have been identified as problematic for residents of low socio-economic areas of Geelong (Savage, Bailey & Wellman, 2003). Chalmers (2003) argues that as older persons visit the doctor the most frequently of any age group, but visit dentists the least frequently, oral health for older persons should be more integrated with general health.

Improved access to dental services and fluoridation have been suggested as important ways to promote dental health generally in the community (Barwon Primary Care Forum, 2004a). Specific ways of enhancing geriatric oral health promotion have been discussed in the literature, for example the need to re-orient dental services to improve access, and the need for portable dental equipment (Chalmers, 2003). Dispelling 'oral health myths', using older community peers in health promotion activities for older persons, and a focus on preventive oral hygiene strategies have also been suggested. The need for a more comprehensive assessment of dental needs and oral health for older persons has also been recommended (Chalmers, 2003). This should include attention to overall nutrition, not sugar intake alone, swallowing problems and oral adverse medication effects (Chalmers, 2003). Self-efficacy has been suggested as an appropriate theoretical construct to use in promoting oral health for older persons, that is promoting their belief that they have control over their oral health needs to be increased (Chalmers, 2004).

Key Points – Oral Health

- Oral health is an important aspect of general health and well-being.
- Access to dental services is an issue, especially for low SES groups.
- A number of ways of promoting the oral health of older persons have been suggested, including re-orienting dental services to improve access, dispelling 'oral health myths', a focus on preventive oral hygiene, and a more comprehensive assessment of dental needs and oral health.
- Improving older peoples' beliefs that they can control their oral health has been recommended.

Smoking

Rationale for Inclusion

Smoking is one of the major preventable risk factors for the onset of disease in older Australians (AIHW, 2004). It has been demonstrated that the benefits for smoking cessation for older people include a reduced risk of coronary events and cardiac death, a reduced risk from several smoking-related cancers, bronchitis and emphysema, and a reduction in the prevalence of respiratory symptoms (Hermanson et al., 1988; Wakefield, Kent, Roberts & Owen, 1996). There also appears to be a negative relationship between smoking and measures of quality of life in people aged 65 and over (O'Connell, 2001). There is therefore much to be gained by older people who stop smoking.

Available data indicates that the proportion of current smokers decreases after the age of 65 years (Teshuva et al., 1994), and also that the prevalence of smoking amongst older people is declining. Between 1989-1990 and 2001 there was a decline in the prevalence of smoking among people aged 65 years and over. For males aged 65-74 years, the percentage of smokers dropped from 20% to 12%, and for females in this age group from 14% to 9% (AIHW, 2004).

Interventions

There is a wealth of literature on the topic of smoking cessation. A brief summary of review findings will be presented here rather than detailed descriptions of interventions. There is evidence that educational strategies including proactive telephone counselling, group counselling and individual counselling are effective in smoking cessation in general (Garrard et al., 2004). Group behaviour therapy programs were reported as more successful than less intensive approaches such as self-help programs (Garrard et al., 2003). A rigorous review of the effectiveness of community interventions for reducing the prevalence of smoking concluded that overall community approaches have a limited impact on smoking rates (Secker-Walker, Gnich, Platt & Lancaster, 2004). However in one Australian study a significant quit rate was noted for men but not for women (Secker-Walker et al., 2004). It has been suggested that GPs could give messages to older people about quitting smoking (Wakefield et al., 1996). Overseas research indicates that older people are particularly influenced by health events and that therefore health care providers should explain to their clients the link between smoking and their health problems, where such a link exists (O'Connell, 2001). Interventions that prevent smoking in public places have shown some success in reducing the prevalence of smoking and cigarette consumption (Garrard et al., 2004). In relation to tobacco control, it has been stated that while regulatory, educational and environmental changes can make a difference in the longer-term, changes in the population prevalence of health-related behaviours can be slow (NHMRC, 1997). An additional influence is the changing social norms that can influence the decisions of individuals (for example to smoke or to quit smoking) (NHMRC, 1997).

There is some evidence that older smokers represent a group who are more committed to smoking, and who deny that the health risks of smoking are personally relevant (Wakefield et al., 1996). This group therefore may require further efforts to improve their knowledge of the benefits of smoking cessation, and personalised or tailored interventions.

The approaches to smoking cessation for the older person are the same as those suggested for all age groups, including nicotine replacement therapy such as nicotine gum or patches, getting rid of all cigarettes in the house, staying away from environments where smoking occurs and planning coping strategies to use when one feels the urge to smoke (O'Connell, 2001). The most frequently used coping responses include:

- behavioural distraction (e.g. knitting)
- breathing exercises
- food or drink
- self-encouraging thoughts
- distracting thoughts
- stimulus control (avoiding smoking situations)
- thinking about the negative effects of smoking (O'Connell, 2001).

Key Points - Smoking

- There are substantial benefits to be gained by older people who quit smoking.
- Individual or group counselling strategies have shown some success.
- Community interventions have generally had a limited impact.
- Regulatory measures such as bans on smoking in public have produced positive outcomes.
- Older persons who continue to smoke may need a personalised approach to smoking cessation.

Medications

Inappropriate medication use by older persons presents a serious problem that may result in health hazards to the older person, including adverse drug reactions (Teshuva et al., 1994). Problems associated with medications are also one of the risk factors for falls (NARI, 2000). Inappropriate medication use includes the mis-use, under use or over-use of pharmaceuticals that are prescribed by physicians or bought over the counter (Teshuva et al., 1994). Frequently the problem is discussed in terms of a lack of adherence (Haynes, McDonald, Garg & Montague, 2004). Taking multiple medications is quite common in older persons. In the Health Status of Older Persons Project, 45% of the 1,000 people aged 65 years and over indicated that they take three or more medicines every day (Kendig et al., 1996).

Interventions to increase medication adherence

A thorough review of interventions undertaken to help patients to follow directions for medications reported that most methods to achieve this are not very effective, and that the most successful interventions were quite complex (Haynes et al., 2004). The research included in the review did not involve only older persons, but these findings are pertinent to the older age group. The types of interventions covered by the review included more convenient care, additional instructions for patients, counselling, telephone follow-up, automated, computer-assisted patient monitoring, simplified dosing, reminder pill packaging, self-monitoring, reinforcement, family therapy, and additional supervision or attention by a health care provider (Haynes et al., 2003). The reviewers commented on the lack of rigorous trials of adherence interventions, and the need for further research.

Health literacy

One issue that is particularly important in relation to medication mis-use is health literacy. Health literacy is defined broadly as the capacity of individuals to obtain, process, and understand basic health information and services in order to make decisions about their health (Lee, Arozullah & Cho, 2004).

It has been suggested that doctors can improve how they communicate with patients with low literacy skills by identifying patients with poor literacy and learning to recognise how these patients deal with communication (Williams, 2002). Including family and friends when communicating instructions about medications is a useful approach (Williams, 2002), but only for patients with family or friends who are available and capable of assisting them. It has been proposed that social support may buffer the negative health impact of low health literacy (Lee, 2004), which is further support of the importance of social connectedness in promoting health.

One approach to increasing appropriate medication use by people with literacy problems is the use of pictographs (Houts et al., 1998). Pictographs utilise pictures and symbols such as a sun or moon and a spoon or picture of a tablet to inform the patient when and how much medication to take.

While health literacy is particularly relevant to the mis-use of medications, the concept is also relevant to any health promotion activities that involve written materials. Indeed, increasing health literacy has been suggested as a public health

goal, and that health literacy should be a key outcome of health education (Nutbeam, 2000).

Key Points – Medications

- Inappropriate medication use is a serious health problem amongst older persons.
- Most interventions to help people use medications according to instructions have not been very effective, and the most effective ones have been quite complex.
- Health literacy, or the capacity of individuals to obtain, process, and understand basic health information and services in order to make decisions about their health, is an important concept in relation to medication use.
- Approaches such as using pictographs for medication instructions help to overcome poor literacy problems.
- Increasing health literacy has been suggested as a public health goal.

General Approaches to Health Promotion

Some approaches to health promotion for older persons utilise a general approach that includes promoting a range of activities known to promote health. An examination of some of these, for example wellness centres and wellness guides, follows. Brice, Gorey, Hall and Angelino (1996) after reviewing the literature on a number of wellness programs conclude that participants express overall satisfaction with these programs, and tend to believe that their overall health has improved and that their motivation and confidence to change health-related behaviours have had positive impacts.

Wellness Centres

- NSW Far West Wellness Centres

An example of Wellness Centres for older people is presented by those established in the Orana and Far West region of NSW. These Wellness Centres offer older people gentle exercise, health screening, healthy refreshments and advice on nutrition, the opportunity to socialise and to discuss issues relating to their health and wellbeing (Hahn & Smith, 1995). They are located in local communities, and have regular guest speakers. In a qualitative evaluation, participants indicated that they liked the opportunity to gain knowledge about health and well-being, exercises, healthy refreshments and health screening, and that there was nothing they disliked about centres (Hahn & Smith, 1995). Local health administrators were interviewed and indicated that they felt the increased social contacts and preventative health care provided by the centres was useful (Hahn & Smith, 1995). The authors stated that community consultation was important in setting up the centres.

- Nurse-Managed Wellness Clinics

An approach using nurse-managed wellness centres for older people living in two urban, high-rise apartment buildings in the U.S. is described in the literature (Taylor, Resick, D'Antonio & Carroll, 1997). These clinics were staffed by Advanced Practice Nurses, were based in the high-rise buildings, and were used to train nursing students in addition to working with residents. The model of service provision was a wellness and health promotion model, focusing on promoting health, functioning and quality of life (Taylor et al., 1997). Each clinic was open one day a week. Consultation with residents of each building, and systematic geriatric assessments informed the activities at each clinic. It was noted that the difference in the backgrounds of residents from each high-rise apartment block necessitated different approaches in the clinics (Taylor et al., 1997). The range of activities conducted by the clinics included blood pressure monitoring, nutritional counselling, an exercise program, education about medications, foot care and promoting sleep. Residents reported being very satisfied with the clinics, and numerous behavioural changes were implemented (Taylor et al., 1997). Interestingly, at a focus group, some residents indicated that they perceived their role in helping students to learn about ageing was a worthwhile use of their time (Taylor et al., 1997).

Health Promotion Programs

- The STAYWELL Program

Another program implemented in the U.S. is the STAYWELL program – an 8-session health promotion and disease prevention program for older adults (Brice et al., 1996). Each group session lasts for 2.5 hours and comprises a didactic presentation by a

health professional, a nonaerobic exercise period, a segment on stress management, nutrition and relaxation techniques, and a nutritious snack (Brice et al., 1996). Results from a quasi-experimental evaluation of the program indicated that at 9 months follow-up, individuals who had participated in the program, compared with non-participants, had: increased beliefs that their own positive behaviour changes could promote their future health; increased their scores on a measure of healthy behaviours; and reduced their medication consumption (Brice et al., 1996).

While the results of the STAYWELL program are very encouraging, it should be noted that participants were mostly women, were a very healthy group prior to participating in the program, and were well educated (Brice et al., 1996). The finding that the program increased self-efficacy in relation to the effect of one's health behaviours is important given that other research has indicated that self-efficacy is an important predictor of health behaviours (e.g., Conn et al., 2003).

- 'Successful aging'

An approach to health education for older people that involved trained peer educators in the Netherlands is described by Kocken and Voorham (1998a). The aim of this program was to improve the social, psychological and physical well-being of participants by changing behaviours affecting health and increasing social participation. Groups of older people met once a week for four weeks and participated in a discussion of a topic of their choice, facilitated by the trained peer, called a senior health educator (Kocken & Voorham 1998a). Participants were aged between 55 and 79 years, and the majority were women. The course used the strategies of information transfer, modelling, education by peers and group interaction. Evaluation results indicated that at three months after finishing the course, in comparison with controls participants had increased their perception of everyday social support and their subjective health rating. No significant change in social participation, self-efficacy or well-being was observed (Kocken & Voorham 1998a). It should be noted that the course was of very short duration, and follow-up measures were quite close to the conclusion of the course to observe changes in social participation.

Health Nights or Sessions

- Men's health nights

This approach was developed in response to the fact that men have higher mortality rates from many diseases than women and yet attend GPs substantially less often than women (Verrinder & Denner, 2000). Men's health nights or men's health sessions have been held in Victoria since 1995, particularly in rural areas. They are held at local venues, often have a sporting personality as a drawcard, and usually have some input from local health professionals (Verrinder & Denner, 2000). An examination of attenders found that 65% were men aged 50 years or over, and that professional and retired men were disproportionately represented, suggesting more attenders were from a high SES (Verrinder & Denner, 2000). When asked about topics for future sessions, exercise and fitness, and heart disease were the most popular topics. One significant finding is that 62% of attenders surveyed indicated that they were more likely to visit a health professional as a result of attending a men's health night or men's health session (Verrinder & Denner, 2000).

Wellness Guides

The concept and value of Wellness Guides have been espoused by Leonard Syme and his colleagues at the University of California, Berkeley. An essential part of the process of developing a Wellness Guide is the use of a 'bottom-up' approach. Syme (1997) and his colleagues adopted this approach as a response to the marked failure of large health promotion interventions imposed on communities by 'experts'. The people for whom a guide is being prepared play an important role in the development of a Wellness Guide (Syme, 1997). This ensures that the information contained in the guide is relevant and useful to recipients, and that the language used is appropriate. A key rationale for developing this method was the failure of several large and expensive community interventions to produce significant improvements in various health behaviours (Syme, 1997). Assisting people to have more sense of control and confidence in solving problems is a key objective of a Wellness Guide (Syme, 1997). While not relevant to older people, an evaluation of a Wellness Guide distributed to mothers in California serves as an example of the usefulness of the model. Women who received the Guide were more confident at four months and eight months follow-up in solving problems, and were more knowledgeable about finding information than women who did not receive the Guide (Syme, 1997).

- **Wellness Guide for Older Carers**

A Wellness Guide for older carers was recently developed by a team from Deakin University and funded by the Department of Human Services (Fennessy, O'Connell & Bailey, 2003). This Wellness Guide follows the University of California's approach. The Wellness Guide covers a wide range of topics that were selected by a group of carers, it offers information, resources, and includes quotes from carers (Bound, Bailey, O'Connell & Fennessy, 2004). An early evaluation of this Guide indicates that it has been extremely well received by older carers, with 80% of those who evaluated it describing it as having a supportive, informative, reassuring or confidence-building impact on their carer role (Bound et al., 2004). Over 70% of carers indicated that their knowledge about health and well-being was quite improved or improved a lot (Bound et al., 2004).

Issues to Consider

The perennial problem of attracting individuals to programs who will most benefit also applies to general health promotion programs. One example highlights the potential extent of this problem. In a comparison of participants and non-participants in a Senior Health Promotion Program in the US, Wagner, Grothau, Hecht and LaCroix (1991) reported that non-participants had lower income, less education, lower involvement in community organisations and smoked more. Kocken and Voorham (1998b) provided a comparison of the characteristics of people who expressed an interest and those who did not express an interest, in the 'Successful aging' program described above. Those who expressed an interest were significantly more likely to be female, younger, unmarried, of higher occupational level, active in clubs or with hobbies, and showed lower psycho-social well-being (Kocken & Voorham, 1998b). The tendency for people who are already involved in activities, and people of higher SES to be over-represented amongst participants in health promotion programs is problematic, and suggests a need for recruitment strategies to target lower SES and less involved individuals. Special attention is also necessary to recruiting men.

Key Points - General Approaches to Health Promotion

- General health program programs or wellness centres have the advantage of combining a number of health promotion activities, usually in a social setting which is beneficial to participants.
- Participants in general health promotion programs are more likely to be women, already involved in other activities, and have a higher SES. This suggests a need for more effort to be put into recruiting less involved people, and those with a lower SES.
- Men's health nights or sessions seem to be a more effective way of accessing older men than general programs.
- Wellness Guides that are developed in partnership with the people for whom the guide is designed have been well received. This reflects the value of a 'bottom-up' approach to health promotion.

Special Groups / Populations

In this section a number of groups will be considered briefly: ethnically diverse communities; Indigenous people; people with disabilities; people with chronic illness; and people who are informal carers. Generally there is a paucity of good quality research on health promotion interventions conducted with these special groups (Bauman et al., 2002). It is beyond the scope of this overview of the literature to describe in detail the available research. A summary of some key points will be presented however.

Ethnicity

It has been suggested that ethnicity influences health, health beliefs and behaviours and also relationships with health care providers (Keller & Fleury, 2000). There is a need for health promotion interventions to be culturally meaningful and appropriate to particular target groups, and also for services to acknowledge the particular needs of different groups. This is likely to become increasingly important as numbers of migrants from many countries age (Barnes, 2001). A failure to understand cultural differences in relation to such areas as diet and mental health problems was identified as problematic by service providers in the Corio and Norlane areas (Savage, Bailey & Wellman, 2003). VicHealth's 'Together We Do Better' campaign stresses the importance of considering the needs of people from different cultural backgrounds (VicHealth, 2003).

Based on overseas research, Keller and Fleury provide a number of suggestions for culturally appropriate health promotion, which are summarised below:

- Identify appropriate spokespersons who can assist in communicating with the relevant community.
 - Target communication of health messages to reach population segments with specific attitudes, behaviours and preferences.
 - Understand cultural explanations of health and illness.
 - Use cultural expressions and idioms to communicate effectively.
 - Be aware of different concepts of family and of different patterns of relationships and social networks.
 - Use church-based programs for groups where the church plays a central role in social networks.
 - Acknowledge and respect private issues and personal values.
 - Conduct focus groups to enhance access to and acceptance of appropriate interventions.
 - Use family and kinship networks in the development and implementation of programs.
 - Use family members to support and encourage health-promoting behaviours.
- (Adapted from Keller & Fleury, 2000, pp. 103-106).

Australian research in relation to physical activity interventions has found that adherence to programs and maintenance of activity has been greatest when programs were conducted by bilingual community educators in culturally appropriate and accessible venues, and where there was strong community support for the program (Lee & Brown, 1998, cited in Bauman et al., 2002). Local church halls were

suggested as appropriate venues. These findings concur with the suggestions made by Keller & Fleury (2000).

The need for culturally appropriate leisure activities has also been noted, and particularly the fact that as they age, people often prefer the language and experiences from their earlier years (Barnes, 2001). It is important that these preferences do not lead to increasing isolation for older people. Research with carers has found that while the health and well-being of carers from Anglo or non-Anglo backgrounds was similar, non-Anglo carers used less services (Schofield et al., 1998).

Key Points – Ethnicity

- Ethnicity influences health, health beliefs and behaviours and relationships with health care providers.
- It is important that health promotion activities are culturally appropriate.
- Culturally appropriate physical activities and leisure activities will facilitate involvement from different ethnic groups.

Indigenous Persons

The burden of ill health suffered by Indigenous persons is greater than that suffered by other Australians, and includes higher rates of disability, reduced quality of life, and a shorter life expectancy (AIHW, 2004). Aboriginal and Torres Strait Islander people experience high rates of chronic disease, particularly diabetes and cardiovascular disease (AIHW, 2004). The prevalence of overweight and obesity is generally high in Aboriginal and Torres Strait Islander adults (NHMRC, 1997).

Specific health promotion strategies

In some domains specific health promotion strategies for Indigenous people have been developed, but these do not necessarily relate to older persons in particular. The Victorian Department of Human Services and the Victorian Aboriginal Community Controlled Health Organisation Incorporated (2004) have developed a strategic plan for achieving better health outcomes for Indigenous persons (Koori Health in Victoria, 2004). There is a National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan (National Public Health Partnership, 2001) and a National Aboriginal and Torres Strait Islander Tobacco Control Project has reported on the requirements of such projects (Garrard, 2004). In the Barwon-South Western Region, a Regional Aboriginal Services Plan has been developed that addresses many issues such as health and housing specifically for Indigenous residents of the area (Department of Human Services, 2004). A detailed description of these strategies is beyond the scope of this report.

The importance of cultural sensitivity

One issue that is highlighted in the literature is the need for culturally appropriate health promotion approaches. A failure of mainstream health and human services to be Indigenous friendly, and a lack of cultural sensitivity in the general service community was noted in a survey of service providers in the Corio and Norlane areas (Savage et al., 2003). It is likely that much health promotion activity also lacks cultural sensitivity. The need for Australia's approach to ageing to take into account the cultural differences of Aboriginal and Torres Strait Islander communities has been acknowledged (Bishop, 1999).

The importance of cultural sensitivity is demonstrated in the literature by the description of a health promotion project that used a word inappropriately in promotional materials (Creative Dialogue Project, 2002). The word 'deadly' was used as a warning against chroming aimed at Aboriginal youth. The materials were not used or displayed because 'deadly' means 'cool' or 'ok' in Aboriginal culture (Creative Dialogue Project, 2002). In relation to the promotion of physical activity to Indigenous communities, there is evidence that strategies that have local communities responsible for their development, implementation and direction are most likely to be effective (Bauman et al., 2002). Clearly involving the Indigenous community in these ways will ensure that programs are culturally appropriate.

Key Points – Indigenous Persons

- A greater burden of ill health is suffered by Indigenous persons than other Australians, and includes higher rates of disability, reduced quality of life, and a shorter life expectancy.
- Specific health promotion strategies have been developed in various domains for Indigenous persons.
- Cultural sensitivity is particularly important in health promotion activities for Indigenous communities.

People with Disabilities

Data from 1998 indicates that more than half (54%) of people aged 65 and over had a long term disability which restricted everyday activities (AIHW, 2004). The highest level of severe to profound disability was dementia, while the most common health conditions among people with a disability were arthritis and hearing conditions (AIHW, 2004). A description of the range of disabilities experienced by older persons, and the varying impact on them of different disabilities is beyond the scope of this review.

Much of the discussion on health promotion in general is relevant to people with disabilities. There is some literature on health promotion for people with disabilities, although this tends to focus on managing specific disabilities (Teshuva, 1994). There is some research available on physical activity programs developed specifically for people with disabilities (Wyman, 2001). Some additional points of note are briefly mentioned below.

There are ways of improving the environment to enhance the safety and independence of people with various disabilities. Specific examples are available in the published literature (Islington Council, 1989; Pinto et al., 1997). It is important to note that any action taken to increase the accessibility of the environment to people with disabilities also enhances the accessibility of that environment to other people, including all older persons.

It has been suggested that some care needs to be taken in the promotion of 'healthy ageing' or an emphasis on 'successful' ageing to ensure that it does not reinforce prejudice against older people with a disability, given that healthy ageing tends to be equated with disability free ageing (Bishop, 1999). The promotion of healthy ageing activities should be inclusive of older people with disabilities.

Many people who are informal carers themselves have some level of disability (ABS, 1998). This increases the importance of both supporting informal carers and people with a disability.

Key Points – People with Disabilities

- A large proportion of older persons have some type of disability.
- There are health promotion activities developed specifically for people with a disability.
- Improving the accessibility of the environment for people with disabilities will also enhance the accessibility of the environment for all older persons.
- Health promotion activities should be inclusive of older people with disabilities.
- Many informal carers have some level of disability themselves.

People with Chronic Disease

Rationale for Inclusion

Chronic diseases are most often characterised by complex causality, multiple risk factors, a long latency period, a prolonged course of illness, and functional impairment or disability (AIHW, 2001). Some of the chronic diseases that have a significant impact on the health and quality of life of Australians are arthritis, asthma, coronary heart disease, diabetes and cancers (AIHW, 2001). Chronic diseases present a serious health problem in Australia: they are highly prevalent, contribute significantly to ill health, and often lead to disability (AIHW, 2001). The key risk factors for chronic disease are poor diet and nutrition, physical inactivity, tobacco use, alcohol misuse, high blood pressure, high blood cholesterol and excess weight (AIHW, 2001).

Interventions

Many of the health promotion activities recommended to older persons with chronic diseases, for example physical activity and a well balanced diet, are the same as those recommended to all older persons. These activities also help to prevent chronic disease (Garrard et al., 2004). Health promotion interventions designed to address several of these risk factors have been described earlier in this overview of the literature. However, people who have a chronic disease do represent a different group to the general population, therefore some interventions aimed specifically at this group will be briefly described.

Self management training

Self-management training is an important approach to promoting the health of people with chronic disease. A review of the effectiveness of self-management education for people with Type 2 diabetes concluded that it was a successful strategy, particularly in the short term (Norris, Engelgau & Narayan, 2001). Many methodological problems with the research were noted that made generalisations difficult about specific approaches to self-management training that were most effective. However, training that involved patient collaboration tended to be more successful than didactic programs (Norris et al., 2001).

Better Health Self Management programs, based on a Stanford University model, have proven to be a successful approach to self management of chronic disease. This model includes training health professionals and volunteers who then deliver the program to groups of people with chronic disease (Banyule Nillumbik Primary Care Alliance (BNPCA), 2004). Consumer participation and engagement are important objectives of the program. Better Health Self Management programs have been evaluated positively by participants and have been associated with positive outcomes in terms of improved health and self efficacy (BNPCA, 2004). This model is currently being implemented with successful results in the Barwon region by the Barwon Primary Care Forum (Barwon Primary Care Forum, 2004b).

Home visits and coaching

An intervention that involved a single home visit by a nurse or a pharmacist to high risk patients with congestive heart failure, after discharge from acute hospital care, demonstrated a significant reduction in unplanned readmissions and out-of-hospital deaths amongst participants (Stewart, Pearson & Horowitz, 1998). The purpose of the

home visit was to optimise medication management, identify early clinical deterioration and ensure appropriate medical follow-up and caregiver vigilance (Stewart et al., 1998). Another Victorian program for people with heart disease involved patients receiving telephone coaching from trained nurses or dieticians after discharge from hospital (Dunn, 2003). The focus of the coaching was on reducing risk factors for coronary heart disease, particularly dietary factors. Individuals who received the coaching were more successful at reducing their risk factors than individuals who did not receive coaching (Dunn, 2003).

Key Points – People with Chronic Disease

- Chronic diseases are highly prevalent in Australia, contribute significantly to ill health, and often lead to disability.
- Many health promotion activities previously described are relevant to the prevention or management of chronic disease.
- Self management training is an important approach to the management of chronic disease.
- Better Health Self Management programs have demonstrated positive outcomes.
- Home visits by nurses or pharmacists and coaching by telephone have also demonstrated positive outcomes for people with chronic disease.

Informal Carers

Rationale for Inclusion

The proportion of older persons who are informal carers is significant. In 1998, 21% of all primary carers in Australia were aged 65 years and over (AIHW, 2002). In the Health Status of Older People Project, 27% of respondents indicated that they were currently a caregiver, with the majority caring for a husband or wife, and a greater proportion in the over 75 years age group being caregivers (Kendig et al., 1996).

There are significant impacts of caring on the physical and mental health of informal carers in general (Savage, 2002). Research conducted with carers aged 60 years and over in the Geelong region utilising the SF-12, reported that 73% had physical health scores below the cut-off score of 50, and 31% had mental health scores below the cut-off score of 42, indicating compromised physical and mental health (O'Connell, Bailey & Walker, 2003). Importantly, many of these carers reported being unable to participate in social and health-type activities (O'Connell, 2003) which reduces their opportunities to enhance or maintain their own health. As they age themselves, the carers of adult offspring with intellectual disability must deal with the issue of who will care for their offspring when they are no longer able to (Bigby & Ozanne, 1999). Services that exist to support carers may be considered as a form of health promotion as they potentially reduce the negative health impacts of caregiving on the carer.

Services to Assist Carers

There is a problem with the literature that evaluates services provided to informal carers as research typically relies on carers who are currently using services as participants. Thus the experiences and needs of carers who do not use services are not included. It is acknowledged that frequently carers who are caring for a spouse, and are likely to be in the older age group themselves, do not access services until they reach a crisis point (Coe & Neufeld, 1999; Strang & Haughey, 1999).

Respite care services

A large proportion of the overall services available for older caregivers is respite care or "those services that provide alternative care arrangements with the primary purpose of giving the carer and/or the care recipient a short term break from usual care arrangements" (Aged and Community Care Division, 1996). While qualitative data indicates that caregivers find respite care very helpful to them in their caring role, the quantitative data provides equivocal evidence of the positive impact of respite care services (Savage, 2002). The benefits of respite care are transitory, and many caregivers do not use respite services for a variety of reasons (Savage, 2002).

A summary of the findings from 22 Australian reports on carer needs and respite services identified the following issues or needs of people caring for people aged 65 years and more living in the community, in relation to respite care (McVicar & Reynolds, 1993):

- Some information on impact of caring / need for respite.
- Problems in identifying some carers who could need assistance.
- Problem of duplication of assessment.
- Special needs of people from a non-English speaking background.

- Need for facilities suitable for people with dementia, or with behavioural problems.
- Some carers distrust substitute carers.
- Need for co-ordination between services.
- Need for greater flexibility, choice, and immediate response.

Other support services for carers

The types of services listed as used by 976 carers, 48% of whom were aged 75 years or more, in a Victorian Carers Program report included: home modifications (32%), general home help (24%), transport (24%), counselling or therapy (17%), and specific home help (13%) (Schofield et al., 1998). Only 12% of carers interviewed had used respite care in the last 12 months (Schofield et al., 1998). Other research has indicated that support groups and educational programs are useful to carers (Savage, 2002).

The Wellness Guide for older carers has been extremely well received by older carers (Fennessy et al., 2003). This provides information on a range of topics and also information about services available.

Key Points – Informal Carers

- A substantial number of older people are caregivers to others.
- Caregiving has a negative impact on the physical and mental health of many carers.
- Respite care services are a common type of service provided to carers.
- The evidence on the value of respite care is equivocal.
- Home modifications, home help and transport are other useful services provided to carers.

Gay and Lesbian Older Persons

This section summarises some of the information presented in a recent strategic plan for the needs of gay, lesbian, bisexual and transgender (GLBT) people as they age which was published by the ALSO Foundation (Birch, 2004).

Issues for Older GLBT Persons

A Ministerial Advisory Committee on Gay and Lesbian Health identified the following issues of specific concern for gay, lesbian, bisexual, transgender and intersex (GLBTI) older persons:

- “obstacles to maintaining friendship, family and social networks for older GLBTI people who come out later in life and those GLBTI people living in rural communities;
- ageism within GLBTI and mainstream communities, including exclusion from GLBTI social networks and invisibility within mainstream social networks;
- issues associated with caring for older partners, relatives and friends;
- invisibility within the (community and residential) aged care sector in relation to service provision and general acknowledgment and positive representation of the needs of older GLBTI people; and
- discrimination in institutionalised aged care and other forms of service provision that older GLBTI people access.” (Birch, 2004, p. 15).

Suggested Actions

The strategic plan outlined a range of actions seen as appropriate to address the above issues. Many of these actions highlight the specific needs of GLBT older persons.

Recommended actions include:

- Advocating for the inclusion of culturally appropriate care standards and associated staff training relating to GLBT seniors in relation to aged care, home and community care and other health care services.
- Encouraging seniors’ advisory or representative groups associated with local councils and health care providers to be aware of the specific needs of GLBT seniors.
- Initiate a pilot project to develop standards for GLBT friendly or responsive seniors’ service provision.
- Investigating the options for contributing to on-site training initiatives for seniors’ services staff.
- Investigating options for a range of housing and care models of service provisions for GLBT seniors.
- Investigating the options to develop a GLBT seniors friendly visitor / volunteer program.
- Investigating options to develop social activities for GLBT seniors.
- Investigating options to develop intergenerational social and mentoring activities with participation by GLBT seniors.
- Investigating options to develop options to develop GLBT seniors’ caregiver support activities (Birch, 2004).

Key Points – Gay and Lesbian Older Persons

- Gay, lesbian, bisexual and transgender (GLBT) people face particular issues as they age including obstacles in maintaining friendships and networks, ageism and exclusion, issues associated with caregiving and discrimination.
- Many actions to address these issues have been suggested, including the inclusion of culturally appropriate care standards and training, the development of a GLBT seniors friendly visitor / volunteer program, GLBT seniors social activities, intergenerational activities and caregiver support activities.

Conclusions

Given the frequent lack of good quality, comprehensive evaluations of individual health promotion projects targeted at older persons (Bauman et al., 2002, Higgins & Clarke Barkley, 2003a), it is not possible to conclude this overview with any definitive guidelines on best practice or optimal interventions. However, some generalisations on the types of approaches that are likely to work are possible.

The fact that older people, or the aged, do not represent a homogenous group, but are in fact “a great variety of individuals who have already grown older, just as the rest of us will grow older” (Kendig, 1999, p. 3) is an important point to remember. Thus the ‘one size does not fit all’ rule should be applied to the development of any health promotion activities for older people.

Inter-Relationships Between Domains

This overview of the literature has been divided into separate sections but in fact many aspects of health promotion are inter-related. For example, in many ways physical activity, transport, and social and cultural activities are not discrete domains. Health promotion activities that combine aspects from multiple domains, for example physical activity with social involvement, have been shown to be successful (Foreman et al., 2004; VicHealth, 2004). General programs that promote a wide range of health activities, such as the NSW Far West Wellness Centres (Hahn & Smith, 1995) also have merit. The Life Activities Club approach also has the potential to include health promotional activities in addition to those already part of the usual activities which include social and physical activities. If health promoting activities are presented in a format or using a vehicle that is intrinsically interesting to older persons, they are likely to maintain participation without necessarily realising that they are involved in health promotion.

Physical Activity

Based on this overview of the literature, it is clear that promoting physical activity should be considered as a high priority, as there are multiple health and well-being benefits to be gained from being regularly physically active. These include a reduced risk of many diseases including cardiovascular disease, type 2 diabetes, osteoporosis, and colon cancer, reduced obesity, reduced risk of injury due to falls, improved stress management, decreased depression and anxiety, and improved mental alertness (Bauman et al., 2002).

Walking was found to be an appropriate type of physical activity to encourage in older persons. Programs like ‘Walk and Talk’ and 10,000 Steps have the advantage that they can be adopted by various clubs and organisations or by informal groups. Another advantage of the 10,000 Steps program is that it includes incidental and everyday activities, not just planned or formal physical activity. Being able to accumulate activity over the day and having flexibility in what type of activity one does has been demonstrated as a more sustainable form of physical activity (Dunn et al., 1998).

Many aspects of the built environment have been highlighted as important in encouraging walking. Given that older people from lower SES backgrounds are less active than those from higher SES backgrounds, it is particularly important to attend

to the environmental issues in lower SES areas that may facilitate walking. Useful information is available on how to ensure that environments are supportive of physical activity (Heart Foundation, 2004).

Social Engagement

There is clear evidence of a strong link between physical and mental health and social engagement (Bassuk et al., 1999; Michael et al., 2002). Older people may be vulnerable to social isolation due to the death of a spouse, retirement, ill health, or moving into a new area. It is therefore particularly important to incorporate the promotion of social engagement for older persons into a health promotion strategy for older persons. Combining social involvement with physical activity provides additional benefits. Successful examples of this combination have been provided in this overview.

The use of volunteers in health promotion interventions has been described as a successful strategy in the literature, for example in relation to falls prevention (NARI, 2000), in supporting isolated people (RMIT, 1998), and in encouraging physical activity (Foreman et al., 2004). There are also benefits to volunteers themselves (Davis et al., 1998; Onyx & Warburton, 2003; Ory et al., 2003), and to the community as a whole (Putnam, 1995). Intergenerational programs with older people working with younger people in a voluntary capacity are beneficial to both groups (AURA, 2002). It may be possible to utilise volunteers who are from the younger end of the older age group to assist or work with those from the older age group.

The Importance of the Built Environment

A recurring theme throughout this overview of the literature is the importance of the built environment to the overall health of older persons. Indeed, an American writer has commented: “We now realize that how we design the built environment may hold tremendous potential for addressing many of the nation’s greatest current public health concerns, including obesity, cardiovascular disease, diabetes, asthma, injury, depression, violence, and social inequities” (Jackson, 2003).

Kendig (2000) has suggested that sometimes what are perceived as individual limitations may in fact be unnecessary demands in the environment: “problems with shopping and transport depend as much on access to shops and public transport as they do on the physical abilities of older people” (p. 104). The role of shops and cafes was seen as so critical to facilitating social contact between residents that one author has suggested a subsidy scheme to encourage their presence in residential areas (Baum & Palmer, 2002). Another suggestion was having community facilitators in parks who could play a role in increasing safety in the park and also encourage community development (Baum & Palmer, 2002). This approach would be likely to facilitate social and physical activity and is perhaps most appropriate for areas with parks that are not well used by most residents. These ideas would be of value to all age groups, not just older persons.

Aspects of the built environment can be conducive to or can inhibit both social engagement and physical activity. Change at the policy level to promote active transport has been suggested as a more sustainable way of encouraging regular physical activity than individual programs where ongoing adherence is a major issue (Mason, 2000).

Ensuring that the built environment is accessible to older persons, and supports and promotes physical activity and social connectedness for older persons will also benefit other members of the community. Useful resources are available to facilitate designing environments that promote physically and socially active communities (National Heart Foundation of Australia (Victorian Division), 2004).

The Role of Health Professionals

General practice is an ideal place to promote a range of health promoting behaviours to older persons, given that the majority will visit a doctor regularly (Teshuva et al., 1994). This approach has been specifically recommended for promoting physical activity (VICFIT, 2004), falls prevention (NARI, 2000), smoking cessation (Wakefield et al., 1996), and nutrition education (NHMRC, 1997). However, difficulties are experienced in obtaining the necessary time and commitment from GPs (Brown, 2004). Some of the barriers to health promotion in general practice cited in the literature, such as lack of time and financial disincentives (Bauman et al., 2002), are systemic and difficult to overcome. These barriers are particularly problematic when all of the areas of health promotion that GPs are expected to cover are considered. There is simply not enough time in the average consultation to incorporate even a brief mention of so many areas. Some change in how services are delivered to older persons may be necessary. Alternative approaches such as nurse practitioners or practice nurses having a health promotion role in general practices may be more feasible.

Recruitment Issues

The need to attract individuals who will most benefit from specific health promotion programs or activities is particularly important. This has been noted in the overview in relation to various areas of health promotion. Recruiting men is often particularly problematic. One solution to the problem, proposed for physical activity, was the suggestion that an active person could recruit an inactive person known to them to participate in some physical activity (Brown et al., 1999). Another possible solution is the promotion of incidental activity rather than more formal exercise programs as this is more appealing to inactive people (Dunn et al., 1998). Environmental changes that promote healthier lifestyles also counter the recruitment difficulty.

The Importance of Community Involvement

There is a general consensus in the literature on the importance of community input into the planning and implementation of health promotion projects in general. There are sufficient examples in the literature of large-scale health promotion activities failing to have a significant impact when they have been imposed on communities by professionals (NHMRC, 1997; Syme, 1997). Acknowledgment of the need to involve local communities has been made in the Australian literature (Bauman et al., 2002; Kendig, Andrews et al., 2001; Norris et al., 2001) and in the overseas literature (Syme, 1997). It has been stated that this is particularly important where changes at the policy level need to occur, to ensure a consensus building approach rather than a coercive approach to changing behaviour (McLeroy, 1988). Specific studies have demonstrated the value of including community input into the development of health promotion activities (Bound et al., 2004; Norris et al., 2001; Stephenson, 2004).

Similarly, the importance of tailoring health promotion strategies to meet the needs and interests of individuals is another theme that has emerged from the research literature. The use of appropriate theoretical approaches such as the Transtheoretical Model are useful in this respect. In the area of nutrition for example, there are clear examples in the literature of broad approaches failing to bring about dietary change (Huot, Paradis & Ledoux, 2004), whereas a more personalised approach guided by the Transtheoretical Model did result in some changes in fat and fruit and vegetable intake (Kristal et al., 2000).

Theoretical Approaches

Some evidence has emerged on the value of having a theoretical framework for health promotion activities (Conn et al., 2003). It is apparent that various approaches are useful for different forms of activities. Aspects of behaviour modification and social learning theory such as reinforcement, increasing self-efficacy by setting small achievable goals, and self-monitoring have demonstrated value in shaping some behaviours such as physical activity (Jett et al., 1999; Lindburg, 2000). In tailoring interventions to individuals, many theoretical approaches are useful: perceived barriers and benefits from the Health Belief Model; an individual's preparedness to change from the Transtheoretical Model; an understanding of the influence of other people from the Theory of Reasoned Action; and some knowledge of lay beliefs.

Many of the findings of this overview of the literature highlight the value of an ecological approach to health promotion for older persons. This is exemplified in the case of promoting walking as a form of physical activity. Small-scale, individual level actions such as individuals encouraging others to join a walking group or program, have been shown to be effective (van Dort, 2003). These programs may be assisted by the presence and support of larger community level programs such as 10,000 Steps (10,000 Steps Barwon, 2004). The success and sustainability of all programs, and of individuals maintaining their walking behaviours is enhanced by aspects of their environment that facilitate walking. Thus the environmental or policy level is also vital in promoting walking behaviours.

The value of an ecological paradigm, and the importance of environmental factors has been stressed in relation to preventing obesity and overweight. It has been proposed that the macro-environment of food supply and opportunities for physical activity determines the prevalence of obesity in a population, and the micro-environment of knowledge, beliefs, social attitudes and behaviour determine the presence of obesity in the individual (NHMRC, 1997). Similarly the impact of all levels can be identified in many other health promoting activities.

Delivering Programs

It is accepted that "knowledge is necessary *but not sufficient* to produce behavior change" (National Cancer Institute, 2004). While a mass media approach is useful for education and for informing communities about programs, more individual approaches are often needed to induce behaviour change. Programs delivered to groups by a teacher or leader have been successful (Williams & Lord, 1997). Tailoring interventions to the needs and interests of individuals has been recommended in the domains of nutrition (Higgins & Clarke Barkley, 2003; Kristal et al., 2000) and physical activity (Brown et al., 1999). Telephone support, reminders or counselling have been shown to be effective in maintaining behaviours (Dunn et al.,

1998; King et al., 1998). Involving the relevant community in planning programs should ensure that appropriate delivery formats are utilised.

Intersectoral Collaboration

The findings from this examination of the literature on health promotion for older persons concur with the recommendations from the Victorian Department of Human Services in so far as they support an integrated approach to health promotion (Victorian Department of Human Services, 2003).

The importance of intersectoral collaboration is highlighted frequently in the literature. To be successful, collaborating organisations need to bridge their differences to achieve mutual benefits, they need to develop a shared understanding of the problems they aim to solve and of the goals they aim to achieve and they need the support or involvement of management and staff at various levels (Catford, 2003). The need for integrated policies rather than a piecemeal approach to planning for the needs of older persons generally has also been noted (Barnes, 2001). There are many examples of successful collaborations involving a range of organisations included in the interventions described above, including ‘Walk-it Bunbury’ (Norris et al., 2001) and ‘Walk and Talk’ (van Dort, 2003). Typically in such interventions there is input from an organisation that has health promotion expertise, such as the Heart Foundation or VICFIT, local government and also from academic institutions for evaluation.

Further Research

The need for further research in the area of health promotion for older persons is raised frequently in the literature, for example to identify the optimal way to increase physical activity in older persons (Bauman et al., 2002; Conn et al., 2003), and in the population generally (NHMRC, 1997), to clarify aspects of falls prevention programs that are most efficacious (NARI, 2000), and to identify appropriate nutrition education programs (Higgins & Clarke Barkley, 2003a). The need for rigorous evaluation of health promotion programs in particular was noted. Given that our population is ageing, this need is becoming increasingly imperative.

Key Points – Conclusions

- Promoting physical activity should be considered as a high priority, as there are multiple health and well-being benefits to be gained from being regularly physically active.
- It is important to incorporate the promotion of social engagement into a health promotion strategy for older persons.
- It is important to ensure that the built environment is accessible to older persons, and supports and promotes physical activity and social connectedness for older persons.
- General practice is an ideal place to promote a range of health promoting behaviours to older persons, but some change in how services are delivered to older persons may be necessary.
- Attention needs to be given to attracting individuals who will most benefit from specific health promotion programs or activities.
- There is a general consensus in the literature on the importance of community input into the planning and implementation of health promotion projects in general.
- Having a theoretical framework for health promotion activities is advisable, with various approaches being useful for different forms of activities. The value of an ecological approach to health promotion for older persons was highlighted in the literature.
- Various approaches to program delivery have been successful. Involving the relevant community in planning programs should ensure that appropriate delivery formats are utilised.
- The importance of intersectoral collaboration in health promotion for older persons is highlighted frequently in the literature.
- There is a need for further research in the area of health promotion for older persons, in particular for rigorous evaluation of health promotion programs.

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