Achieving Health Promotion Behaviour Change Among Older Victorians

LITERATURE REVIEW

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1. Successful ageing: Health in older people

Historically, healthy ageing has been conceptualised from a purely medical perspective with the focus being on the absence of disease and disease related disability (Crowther, Parker, Achenbaum, Larimore, & Koenig, 2002). Health is now understood to be more complex than the medical perspective suggests; this is exemplified by the World Health Organisation (WHO) declaration that health is defined as “a state of complete physical, mental, and social well-being, and not merely the absence of disease and infirmity” (World Health Organisation, 1986). Rowe and Kahn’s (1997) model of successful ageing is consistent with the WHO declaration. It defines successful ageing as the avoidance of disease and disease-related disability, the maintenance of high cognitive and physical functional capacity, and an active engagement with life; that is, maintaining physical, mental and social health. Crowther and colleagues (2002) have proposed that healthy ageing is also related to a fourth dimension, spiritual health.

The promotion of each aspect of health in older age is important to maintain quality of life. The World Health Organisation Ottawa Charter (1986) defines health promotion as

> the process of enabling people to increase control over, and to improve their health. To reach a state of complete physical, mental and social wellbeing, an individual or group must be able to identify and to realise aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasising social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy lifestyles to wellbeing (World Health Organisation, 1986, pp. 2).

Health promotion priorities change for individuals and cohorts as they grow older (Hickey & Stilwell, 1991). Generally as people get older they are confronted with multiple losses of health, independence, roles, possessions, friends and family (McBee, 2003). Hickey and Stilwell (1991) suggest that the goal of health promotion in the elderly should be to prevent the progression of disease and the management of disabilities with the ultimate aim being to allow older people to maintain their functional independence for as long as possible (Hickey & Stilwell, 1991).

The health and conditions of older people are very complex, often impacting on an individual’s thoughts and feelings as well as physiological mechanisms, and therefore demands a holistic approach (McBee, 2003). Furthermore, each component of health

(physical, mental, social and spiritual) contributes to whether an individual has a sense of wellbeing, not just their disease status.

1.1 Physical health

Physical health involves the prevention and control of chronic disease and illness, especially those conditions that are linked with premature death such as coronary heart disease, cancer, respiratory diseases, type 2 diabetes and musculo-skeletal disorders (Victorian Health Promotion Foundation, 2003b). The ageing process is accompanied by increased risks of morbidity and mortality and a greater need for health care services (Hickey & Stilwell, 1991).

Physical health means a lot to older people; this is illustrated by the finding that self-rated health in older people tends to be determined by levels of physical health, and not by the emotional, social and spiritual dimensions of health (Ratner, Johnson, & Jeffery, 1998). It is important for older people to maintain their physical health, in particular muscle strength, flexibility, range of motion and sense of balance as the decline in these abilities frequently contributes to falls and functional decline (Burbank, Reibe, Padula, & Nigg, 2002). For example, falls in the elderly, even those that don't result in injuries, are very costly to the health care system and are frequently associated with 'hidden' outcomes such as fear of falling and reduced activity levels which may, over time, increase an individual's risk of subsequent falls (Hill et al., 2004).

1.2 Mental health

Mental health has been defined as the embodiment of social, emotional and spiritual wellbeing (Victorian Health Promotion Foundation, 1999a). Mental health provides individuals with 'the vitality necessary for active living, to achieve goals and to interact with one another in ways that are respectful and just' (Victorian Health Promotion Foundation, 1999d, p. 4). Mental health is a broad domain of health, encompassing maintenance of psychological and emotional wellbeing as well as the detection and effective management of mental illness (Victorian Health Promotion Foundation, 1999a).

While the prevalence of mental illness generally declines with age (Australian Bureau of Statistics, 1998), use of medication for mental wellbeing (such as sedatives) tends to be greater among older people (Australian Bureau of Statistics, 2001). Nigg and colleagues (1999) found that as people get older they have more effective stress management strategies. Older adults, however, have been suggested to be more vulnerable to mental health problems, particularly depression and anxiety, as they have a lower capacity to deal with the multiple threats to mental health that they face compared to younger, more adaptive cohorts (Watson & Hall, 2001). Such threats to mental health may include the cumulative impact of chronic

conditions, loss of status and respect following retirement, lower income, negative community attitudes, loss of spouse, loss of social networks due to decreased mobility, change in residence and/or death (Watson & Hall, 2001). The older person's heightened vulnerability to a decline in mental health means that conditions such as depression cause significant and often ongoing disability as well as increased risk of death (Apgar, 2000).

1.3 Social health

The social environment continues to influence health and wellbeing throughout the entire lifespan (Seeman, 2000). The social environment is predominantly defined by an individual's socio-economic status; that is, their social networks and their financial status—determined by their employment history and current income (Watson & Hall, 2001). It is apparent that "connected, supportive communities that value diversity; are open and inclusive; and provide opportunities for everyone to participate in community life, will have better mental and physical health outcomes" (Victorian Health Promotion Foundation, 2004). Older adults have the advantage of the discretionary time to build and maintain networks by visiting and telephoning friends and relatives and attending community meetings. Older people also face the barriers of physical and mental incapacity or lack of finances which may restrict mobility and promote isolation (Watson & Hall, 2001).

Having an extensive social network—or a high level of social integration—has been shown to have a protective effect on health, for example by reducing the incidence of diseases such as coronary heart disease and depression (Seeman, 2000). Positive social integration can be very beneficial as it can "enhance an individual's self-esteem, sense of belonging and efficacy or mastery through positive supportive actions" (Seeman, 2000, p. 365).

Social ties can also have negative effects on health as they can be sources of "demands, conflict, embarrassment, envy, disappointment, and devaluation, as well as serving as models for 'risky' or 'unhealthy' behaviours" (Seeman, 2000). These negative aspects of relationships are likely to have a stronger impact on health than positive characteristics and often result in increased isolation (Bouchard, Meredith, MacLean, & Orange, 1995; Seeman, 2000). Social isolation and poor quality social ties are also associated with increased morbidity and mortality, such that isolated people die at two to three times the rate of people with a network of social relationships and emotional support (Brunner, 1997; Rowe & Kahn, 1997; Seeman, 2000).

Social mobilisation and the reconnection of older people with their community has been identified as a mechanism for improving overall health and quality of life (Nutbeam, 1998). Social mobilisation can take the form of building social networks, supporting participation in

social activities, and fostering a commitment to social support and mutual aid among older people (Nutbeam, 1998). This is an important process that can not only improve older people's self-esteem and sense of belonging but also helps to overcome negative perceptions of older people that act as a social barrier to participation in the community (Australian Research Group, 2003; Nutbeam, 1998).

1.4 Spiritual health

Spirituality involves the "personal quest for understanding answers to ultimate questions about life, about meaning and about relationship to the sacred or transcendent" (Crowther et al., 2002, p 614). The definition of spirituality that has most frequently been used in relation to health promotion however is that of positive spirituality as it extends the concept of spirituality to involve the formation of a cognitive framework that reduces stress and increases purpose and meaning in the face of illness. Positive spirituality involves "a developing and internalised personal relation with the sacred or transcendent that is not bound by race, ethnicity, economics or class and promotes the wellness and welfare of self and others" (Crowther et al., 2002, p. 614).

Crowther and colleagues (2002) have identified a number of outcomes that are associated with positive spirituality and religion, including:

- The association between religious and related voluntary activity and a longer life span and better adaptation to illness and to the burden of caring for those with illness;
- An association between religious activity and better immune system functioning; and
- Religiously committed people being less likely to engage in health risk behaviours like cigarette smoking and excessive alcohol use. They are also more often involved in close family systems and supportive communities that may influence health through other explanatory mechanisms.

Spiritual health is particularly significant for older people as it does not necessarily succumb to the degenerative ageing process, even in the presence of debilitating physical and mental illness (Phillips, 2003). In fact, while older people are experiencing a decline in physical abilities, it may be possible for them to find inner strength, resources and meaning through their spirituality (McBee, 2003; Phillips, 2003).

2. Health and culture

Cultural beliefs and practices—particularly culturally defined social, family and gender roles—will inevitably influence beliefs about the uptake and practice of health promoting behaviour. Many ethnic minority groups in Australia, from new arrivals to established communities tend to have a strong emphasis on community and family support, drawing wellbeing from their connection to their own community (Victorian Health Promotion Foundation, 1999d 280). For many ethnic women empowerment and identity comes from their connections to family and community rather than personal accomplishments (Henderson & Ainsworth, 2000). For example, Haralambous and colleagues (2003) found that Italian women spent much of their time cooking and teaching grandchildren to cook, looking after their grandchildren and preparing food for extended family.

Indigenous Australians are also very community oriented. They have traditionally and culturally embraced a holistic concept of health that is defined by the maintenance of balance and harmony with nature and natural forces (Hazell, 2000). According to the National Aboriginal Health Strategy (1989) the central Aboriginal definition of health is defined by:

1. The social, physical, environmental and cultural wellbeing of the community as a whole and not simply the well-being of the individual;
2. The three dimensional network of the relationship between body, land and spirit; and
3. The integration of health in aspects of life, and the impossibility of addressing the management of health in isolation from the broader agenda of self-determination.

Health is therefore not conceptualised as an individual state of well being, but in terms of the health of the whole community according to the notion of *kinship*—the establishment of each person's relationship and responsibilities within their group and within Aboriginal society (Burden, 1994). It seems that for Aborigines "a sense of community is essential to a sense of self and that this in turn is essential to health" (Eckermann, 1992, pp.174).

Cultural groups often face many obstacles and challenges to participation in health promoting activities, and accessing services. These include language barriers, racism and discrimination on the basis of cultural stereotypes, and limited services and formal supports that are culture sensitive (Black, Osborne, & Lindeman, 2004; Victorian Health Promotion Foundation, 1999d). In particular it is important not to undermine a cultural group's religious, racial or cultural integrity as this has a negative impact on identity and sense of belonging and may lead to people feeling a sense of humiliation and shame about their heritage (Victorian Health Promotion Foundation, 1999b). Cultural and social networks can be very important in the maintenance of wellbeing and social connectedness.

Health messages have been found to be transmitted to Aboriginal communities much more successfully when they are culture sensitive. For example, the use of Aboriginal art and language has been employed in the development of health promotion literature for women's health issues for Aboriginal communities in the Kimberley region of Western Australia (Davis et al., 2003). Davis and colleagues (2003) have proposed that this may serve as a model for addressing health issues in other culturally diverse populations.

A study by Haralambous and colleagues (2003) examined rates of participation in physical activity among older people from four cultural backgrounds (Chinese, Croatian, Italian and Australian). These groups were found to hold unique beliefs about participation in physical activity, and highlighted barriers to their participation. The Chinese and Croatian communities identified that activities and programs (such as Planned Activity Groups) in their own language would be beneficial, and some individuals found the language barrier to be so profound that they chose not to participate in programs run in English. For members of the Italian community participation in physical activity was defined more by gender roles with a stronger emphasis on social and family activity. The Chinese community reported high rates of participation in physical activity and low incidence of functional limitations. Clearly the 'one approach for all older people' may be counter productive and specific programs tailored to account for language, cultural views and needs may be required (Haralambous et al., 2003).

3. The older person’s concept of health

Older people appear to bring a unique perspective to the definition of ‘health’ such that it is considered primarily in functional terms, as a “resource for life rather than the object of living” (Nutbeam, 1998, p.122). For example, the National Health Survey in Australia found that older people generally have a positive outlook on their health, finding that while most respondents rate their health as either ‘good’ or ‘excellent’, many of them have at least one chronic condition (Australian Bureau of Statistics, 2001). Older adults in rural America have similarly been found to perceive health as a resource for functioning within the local community (Arcury, Quandt, & Bell, 2001). Arcury, Quandt and Bell (2001) identified seven domains of health maintenance behaviours that were important to older people. These behaviours included:

1. eating right;
2. drinking water;
3. ‘taking’ exercise;
4. staying busy;
5. being with people;
6. trusting in God and participating in church; and
7. taking care of yourself.

These older people believed that health was intrinsically related to balanced participation in activities in the community, remaining socially integrated and taking personal responsibility for their own health. Ultimately, older people were found to possess a holistic view of health consistent with the current perspective on health promotion.

It is important that people prepare for the potential challenges of older age when they are younger. It appears that many people are aware of the benefits of increasing participation in health behaviours on long-term health outcomes. For example, Hunter and O’Dea (1999) found that women in the United Kingdom believed that improving their health behaviours (diet, physical activity, smoking) would reduce their risks of cardiovascular disease (CVD) and osteoporosis, while breast cancer was not seen as modifiable by lifestyle changes. This study also found that hormone replacement therapy was perceived to reduce the risk of osteoporosis, increase the risk of breast cancer but not alter the risk of developing CVD.

While people tend to be aware of the benefits associated with health behaviours, they also tend to see themselves as invulnerable and therefore do not tend to perform the health behaviours that they associate with better health outcomes. For example, a study by Weinstein (1987) found that people believed that they were more likely to experience

positive events and less likely to experience negative events throughout their life. This finding was not limited to any particular age, sex, educational, or occupational group—although the sample only included those aged between 18 and 65 and cannot be generalised to older cohorts. It can be interpreted that this unrealistic optimism is a distortion of reality that serves the function of reducing anxiety and exempts the individual from having to perform preventive behaviours (Weinstein, 1980). The fact that people tend to expect more positive than negative outcomes may indicate that they are (1) unaware of health risks associated with particular behaviours, or (2) if they are aware of the risks they simply believe that they are not susceptible, or (3) if they believe that they are susceptible, they choose to have an optimistic outlook in order to cope with the prospect of negative health.

It appears that many older people may not be aware of their risk for major disease. For example, older women have been found to lack knowledge regarding their risks for major diseases (Wilcox & Stefanick, 1999) and similarly older men tend to be unaware of risk factors associated with prostate cancer (Steele, Miller, Maylahn, Uhler, & Baker, 2000). The factor that is associated with more realistic expectations regarding vulnerability to disease is knowledge of a family history (Brownlee, 1998). However, it has been suggested that fear of a diagnosis of major disease and the pain and disability associated with investigation and treatment for that disease may prevent older people from reporting or acknowledging their risk of disease (Hickey & Stilwell, 1991). Older people appear to live in the present when it comes to their health and unless they have knowledge about their own future likelihood of disease they tend to maintain a sometimes unrealistic optimism.

4. Health promotion models and approaches for older people

There are three main approaches towards health promotion: the medical, behavioural and socio-environmental approaches. Each of these approaches has a unique understanding of the origins of health and health behaviour and subsequently of their objectives in health promotion. These approaches complement each other well and each one has the capacity to contribute to the development of effective health promotion interventions (Lindeman, Nankervis, Black, Osborne, & Smith, 2001).

4.1 Medical approach

Health promotion from this perspective endeavours to understand the epidemiological and biomedical factors related to disease with the objective to eliminate and control disease through screening and treatment. Typical medical interventions may include population wide programs such as immunisation, cancer screening, and other opportunistic interventions such as cholesterol or bone density tests (Holman, 1992). Historically, the medical approach has led to a dramatic rise in health standards by controlling the spread of disease (Holman, 1992). Public health efforts have progressed from this "survival" focus towards a more holistic emphasis on positive wellbeing and lifestyle (Crowther et al., 2002; Holman, 1992). Public health efforts now focus on changing health risk behaviours and constructing an environment that is conducive to health promoting behaviour change—that is, eliminating health risk behaviours and increasing performance of healthy behaviours.

4.2 Behavioural approach

Health promotion from the behavioural approach focuses on implementing interventions to change or remove behavioural health risk factors. Interventions from this perspective target a particular behavioural risk factor associated with a particular negative health outcome(s); they target a population performing the behavioural risk factor and endeavour to promote health through various strategies. These strategies may include raising awareness of health risks through health education, social marketing, and policies that support lifestyle choices. There are a number of theoretical approaches that have been shown to predict and describe health behaviour change. Four key models have been identified, these are the health belief model (HBM), theory of planned behaviour (TOPB), transtheoretical model (TTM) and the communication enhancement model (CEM). The health belief model is useful to understand the formation of the intention to perform a health behaviour; the constructs in the theory of planned behaviour have been found to predict performance of a particular behaviour; and the

stages of change model allows us to understand an individual's readiness to change and the processes and patterns of change (Armitage & Conner, 2000). The communication enhancement model illustrates the importance of appropriate communication in empowering older people to take ownership over their health. An understanding of each of these models, particularly the processes and patterns of change are important as they allow for the implementation of effective interventions that are relevant to each individual's readiness to change.

4.2.1 Health Belief Model

The health belief model (Rosenstock, Strecher, & Becker, 1988) is a motivational model that describes six determinants of health behaviour: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, health motivation and cues to action (Armitage & Conner, 2000). All six components are regarded as independent predictors of health behaviour. This model hypothesises that health-related action depends upon the simultaneous occurrence of the following three classes of factors:

- the existence of sufficient motivation, for example a health concern/scare, to make health issues salient or relevant;
- the belief that one is susceptible to a serious health problem, or the perception of a threat of disease; and
- that performing a particular behaviour will be beneficial by reducing the threat of disease with few barriers to performing the behaviour (Rosenstock et al., 1988).

The emphasis in the health belief model is on the individual's perception of each of the above factors, rather than their objective status, in determining his or her decision to take action (Aiken, West, Woodward, & Reno, 1994). The health belief model has generally been found to predict behaviour change—although the effect sizes for most studies have been small (Harrison, Mullen, & Green, 1992). For example, Aiken and colleagues (1994) found that the constructs of perceived susceptibility and perceived benefits were positively associated with compliance with women getting a mammography screening, whereas perceived barriers were negatively related. The perceived severity of a health threat, as in previous mammography studies, was found to be unrelated to compliance.

Ferrini and colleagues (1994) examined the association between health beliefs and health behaviour (diet, exercise, and an individual's willingness to spend money on 'healthful' items) change in older adults. The study found that respondents who expressed positive beliefs about the behaviours were more likely to report positive changes in health behaviour. On the other hand those who reported confusion or a motivational problem were less likely to report positive health changes; these people were also more likely to be women and older

individuals. Generally, those who were more informed about the benefits of health behaviours were found to be more likely to take on those behaviours.

4.2.2 Theory of Planned Behaviour

The theory of planned behaviour (Ajzen, 1991) proposes that a person's intention to perform a behaviour is the central determinant of performing that behaviour (Courneya, 1995b). Intention is determined by three conceptually independent variables: *behavioural beliefs* or *attitudes*, *normative beliefs* and *perceived behavioural control*.

Firstly, *behavioural beliefs*, or *attitudes*, are defined by the positive and negative evaluation of performing a behaviour (Armitage & Conner, 2000). Secondly, *normative beliefs*, or subjective norm, are defined by the perceived social pressure that individuals may feel to perform, or to not perform, a behaviour (Armitage & Conner, 2000). In particular, people may give more weight to the beliefs of certain individuals or groups (Montano, Kasprzyk, & Taplin, 1997). Finally, *perceived behavioural control* is defined as the perceived ease or difficulty of performing the behaviour and whether it is within the control of the individual or under the control of external factors (Ajzen, 2002; Courneya, 1995b). The concept of perceived behavioural control is the central concept of the theory of planned behaviour such that when all other variables are held constant—such as intention—an increase in perceived behavioural control is associated with an increase in the likelihood that the behaviour will be successfully carried out (Armitage & Conner, 2000).

Perceived behavioural control is therefore a determinant of both intentions and behaviour (Armitage & Conner, 2000). Short-range intentions have been found to predict behaviour, for example physical activity, better than longer-range intentions (Courneya & McAuley, 1993a, 1993b). When the interval between intention and observed behaviour becomes longer, intention is likely to change as new information becomes available. Furthermore, intentions based on previous experience also improves the likelihood of the performance of the behaviour. Research by Doll and Ajzen (1992) have demonstrated that attitudes based on direct experience produce stronger attitude-behaviour correlations than indirect experience. Attitudes that are based on experience "rely on more information, are better defined, are held with greater confidence, are more stable over time and are more accessible in memory" (Doll & Ajzen, 1992, p. 754).

Behavioural intentions and perceived behavioural control have been found to predict whether people will attend a recommended health screening with their GP (Sheeran, Conner, & Norman, 2001). Sheeran and colleagues (2001) found that behavioural intentions and perceived behavioural control were significant predictors of both attendance versus non-

attendance and frequency of attendance at a health screening, however, these constructs could not discriminate among participants who consistently attended, those who delayed attending, and those who did not maintain attendance. This study demonstrated that lack of experience with a behaviour is associated with less stable intentions to perform the behaviour, and less stable intentions are inturn associated with weaker relations between intentions and behaviour.

Sheeran and colleagues (2001) suggested that the TOPB is not an ideal model to understand and predict behaviour. They recommend that the theory may need to incorporate implementation intentions (specifying where, when, and how one will perform a health behaviour) and processes of change from the Transtheoretical model in order to understand patterns of behaviour change. The latter proposal is supported by the research of Courneya (1995b) who found that there was a significant linear relationship between each TOPB construct and the stage of physical activity for older people with the most important discriminators among the stages of change being intention, attitude and perceived behavioural control. Ultimately, the TOPB is primarily an account of goal setting rather than goal pursuit and is ill equipped to explain patterns of behaviour change (Sheeran et al., 2001).

4.2.3 The Stages of Change Model, or Transtheoretical Model

The Transtheoretical Model (Prochaska, DiClemente, & Norcross, 1992) was developed as an explanatory model of intentional behaviour change. The theory was based on the observation that people tend to move through a series of stages in their attempt to change a behaviour (Armitage & Conner, 2000). Five stages have been described in the model: precontemplation, contemplation, preparation, action and maintenance.

1. **Pre-contemplation:** the individual is not doing the target behaviour and is not intending to make changes toward the new behaviour. They are uninformed about the long-term effects of their present behaviour and/or are demoralised about their ability to change. They do not want to think about change and may be defensive due in part to social pressures to change. The new health behaviour may also not be supported by the perceived (subjective) norm.
2. **Contemplation:** the individual is seriously considering change. They may be ambivalent about changing because they see the pros and cons of sustaining the risk behaviour as approximately equal.
3. **Preparation:** this stage is defined by making small changes. The individual may have a plan of action or have made some behaviour changes, but have not yet reached a pre-set behaviour criterion to reach the action stage. This stage is a combination of intention and behaviour, it is not a very stable stage and contains people who are more likely to progress than the pre-contemplation and contemplation stages.

4. **Action:** the individual actively engages in the new behaviour, and has done so within the last 6 months. This is the least stable stage and has the highest risk for relapse.
5. **Maintenance:** the individual has sustained the change over time. Continued change is clear when the individual is working to prevent relapse and to consolidate the gains attained during the action stage.

Two main constructs are involved in progressing from one stage to another. These are *decisional balance*—that requires the individual to focus on the benefits and costs of a behaviour—and *self-efficacy*—a construct taken from Bandura's (1986) social cognitive theory, that involves the judgement of one's ability to perform a behaviour required to achieve a certain outcome (Nigg et al., 1999). As people progress through the five stages, often in a cyclical rather than linear manner, they participate in overt and covert activities to change their experiences and environments to support their decision to change their behaviour. People tend to participate in different processes during different stages and this is illustrated in Table 1 using the example of physical activity.

The TTM is an appealing model as it gives insight to both patterns and processes of change and is linked with practice (Armitage & Conner, 2000). Furthermore, it has significant implications for the type of intervention required to change behaviour and the likely effectiveness of that intervention when targeted to the individual's readiness to change (Courneya, 1995a). A number of studies have used the TTM to describe and predict behaviour change in many different domains of health behaviour, for example risk-taking behaviour (Nigg et al., 1999), exercise (for examples, see Burbank, Padula, & Nigg, 2000), and smoking cessation (DiClemente et al., 1991). The TTM has been found to be a useful framework to conceptualise behaviour change in both younger and older adults (for example, exercise behaviour: Booth et al., 1993; Burbank et al., 2000; Burbank et al., 2002).

A study by Nigg and colleagues (1999) examined stages of health behaviour change for ten risk behaviours in older adults. The risk behaviours examined included using seatbelts, avoiding fat, eating fibre, losing weight, exercising, avoiding sun, using sunscreen, reducing stress, smoking and cancer self-exam. This study found that across each of the behaviours examined, the highest proportion of older people were in the precontemplation stage. This could mean that either a "large part of the older population is not cognizant of their need to change their unhealthy behaviours or that they are in denial and resistant to change" (Nigg et al., 1999, p. 480). Those in the maintenance stage who had been engaging in healthy behaviours for a considerable amount of time still represented a substantial portion of the population. The following findings were reported:

- **Avoiding fat eating fibre and losing weight**. The number of people who maintained a low-fat, high fibre diet increased with advancing age. There was a trend of successfully

losing weight with increasing age until the 75+ age group—in this age group, weight maintenance appears to become essential, rather than weight loss.

- **Exercising**. The distribution of older people exercising increases towards the extreme stages as age increases, such that as people get older they are more likely to have been either exercising for a while, or not even thinking about it. Another study by Booth and colleagues (1993) supports this with the finding that older adults were less likely to intend to increase their level of exercise.
- **Avoiding sun/using sunscreen**. Safe sun behaviours increased with advancing age, whereas use of sunscreen revealed a slight decrease in the older group, perhaps indicating their lack of experience with this behaviour.
- **Reducing stress**. Older groups were more successful at reducing their stress compared to their younger counterparts. It is possible that the older groups had more access to resources for dealing with stress producing situations, as well as more experience of exposure and response to stress.
- **Smoking and cancer self-exam**. Compared with younger individuals in the sample, more older participants identified themselves as not smoking for more than 6 months. These older participants also engaged in more cancer self-exams, illustrating the increasing salience of cancer issues in older adults. Although another study by Lyna and colleagues (2002) found that older adults are less likely to quit smoking as they see themselves as at risk of lung cancer whether they quit or not.

The above study by Nigg and colleagues (1999) found the TTM to be useful in describing stages of change in older adults and found that the distribution of older adults across the stages of change did not resemble distributions from other age groups. This finding indicates that interventions for older adults need to be designed specifically with older adults in mind and tailored to the older individual's readiness to change (Nigg et al., 1999).

Table 1
Processes and related strategies for each stage of exercise behaviour change (Burbank et al., 2000, p. 30)

Stage	Goal	Processes	Strategies
Precontemplation	To increase awareness of need to change	Consciousness raising Dramatic relief Environmental re-evaluation	• Provide education about risks of not exercising • Provide information on benefits of exercise • Provide specific examples of problems caused by not exercising • Provide evidence for increased illness risk if sedentary
Contemplation	Motivation and increased confidence in ability to change	Consciousness raising Self-re-evaluation Social liberation Self-liberation	• Identify questions about exercising • Identify small steps • Use imagery to increase emotional awareness • Point out people who include regular exercise in their lives • Create a new self-image
Preparation	Negotiate plan for exercise	Self-re-evaluation Helping relationships Self-liberation	• Create a new self-image as an exerciser • Gather support from others • Make a public commitment to exercise • Identify alternatives for exercise
Action	Reaffirm commitment and follow up	Reinforcement management Helping relationships Counter conditioning Stimulus control	• Provide a reward (e.g., seeing a movie or concert) for exercising regularly • Initiate walking clubs • Introduce exercise alternatives • Check off each time you exercise
Maintenance	Problem solving to prevent relapse	Counter conditioning Helping relationships Reinforcement management	• Exercise instead of watching commercials • Join support groups or have exercise buddies • Provide a meaningful reward for long-term regular exercising (e.g., a season)

The concept of perceived severity from the HBM has been found to motivate older people to seriously consider behaviour change (Courneya, 1995a). The perceived severity of the consequences of physical inactivity were found to separate:

- Those in the **precontemplation** stage from those in the **contemplation** stage;
- Those in the **preparation** stage from the **action** and **maintenance** stages; and
- Those in the **contemplation** stage were not distinguished from any of the **active** stages.

Courneya (1995b) examined the relationship between the constructs of the theory of planned behaviour—behavioural beliefs, control beliefs, attitude, perceived behavioural control, and intention—and stage of readiness for regular physical activity in older people. The TOPB framework was found to enhance understanding the stages of readiness for physical activity in older people. The following findings from Courneya's (1995b) study illustrate the contribution of TOPB constructs to describing individuals in different stages of change:

- **Pre-contemplators** had more negative attitudes and lower control beliefs than contemplators and they had lower intentions, attitudes, normative beliefs, and perceived behavioural control.
- **Contemplators** could be differentiated from preparers, actors and maintainers, based on intention, attitude, perceived behavioural control, subjective norm and control beliefs.
- **Preparers** had more positive beliefs than those in the precontemplation stage but not as positive as those in the action and maintenance stages. Important cognitions in this stage were intention, attitude, perceived behavioural control, control beliefs, subjective norm and behavioural beliefs.
- There was no distinction evident between the **action** and **maintenance** stages.

Haber (1996) has criticised the use of the TTM with older adults, proposing that regardless of readiness to change, strategies for older people must provide health information, engender social support, offer easy to learn behavioural and psychological management skills, and provide community referrals. Essentially this suggestion still endorses the principles of the TTM, that people require encouragement, support and appropriate information to move from stage to stage. Haber (1996) has simply identified that older people as a group face more barriers than younger groups, for example older people have more limited access to information, less social support, fewer community resources and poor behavioural/psychological management skills. Ultimately the TTM adequately describes behaviour change in older adults. Constructs from other models of behaviour change—in particular, perception of severity of risk behaviours (HBM) and constructs from the TOPB—can be used in conjunction with the TTM to further understand and describe older people in the different stages of change.

4.2.4 Client-Centred Practice

Client-centred practice involves forming a "therapeutic alliance based on consensus over realistic goals" (Hobson, 1996, p.134). Playing an active role in the decision-making process enhances the adoption of shared responsibility in relation to setting and achieving health goals (Hobson, 1996). When health professionals respond to individual needs and readiness to change, health behaviours are more likely to be maintained (Burbank et al., 2000). As

Adelman and colleagues (2000) attest, “healing in its broadest sense can only occur through a humanistic approach to geriatric care” (, p.1). Humanistic, client-centred practice not only enables better healing, but also the successful promotion of health in older people, the formation and adoption of health goals, and subsequent compliance with health promoting interventions.

In a study on patient-centredness, Stewart and colleagues (2000) found that patient’s perceptions (but not objective observer ratings) of patient-centredness were associated with improved health status. Patient-centred practice was found to result in increased efficiency of care with reduced diagnostic tests and referrals, and fewer subsequent visits to the GP, diagnostic tests and referrals.

Client-centredness is largely determined by the quality of communication between the clinician and patient. The quality of communication “affects how satisfied the patient is with the physician’s care, how well the patient understands the medical condition and complies with the treatment regimen, and whether or not the patient adopts other health-related behaviours” (Hodes, Ory, & Pruzan, 1995, pp.1167).Various factors determine whether clinicians interactions with older patients is client-centred. In particular, ageist stereotypes influence whether health practitioners involve older people in decision making processes. Ageist stereotypes not only place limits on the successfulness of interactions between clinician and client, they pervade multiple other interactions between older people and society and are harmful to older adults’ psychological well-being, physical and cognitive functioning (Ory, Kinney Hoffman, Hawkins, Sanner, & Mockenhaupt, 2003).

Ageist stereotypes tend to emerge in response to the appearance of decline associated with aging. Generally, older people experience changes that threaten their communication skills; these include impaired hearing and vision, slower processing of information, memory difficulties, neurological, depressive and physical illness, and increased use of medications (Bouchard et al., 1995). Not only do they experience these physical and mental challenges, people tend to modify their speech when communicating with older people, often without realising it. For example they tend to speak slower with:

> exaggerated intonation, high pitch, increased loudness, greater repetition, simpler vocabulary and reduced grammatical complexity. Also identified in the literature are occurrence of: baby talk, patronising talk, controlling parental talk, feigned deference, avoidance of talk due to anticipated verbosity or generation gap, less listening to concerns, restricted range of topics, age-biased interpretation of elder’s comments, and discussion of the older person’s problems with a third party as if the elder were not present (Bouchard et al., 1995, p. 92).

All of these features of communication with elders convey a fundamental lack of respect for the older person. Older people tend to infer from such communication that they must be visibly in decline and as a result may have reduced self-esteem and may be more likely to decide to withdraw from activities in the future that have been enriching and challenging of their abilities (Bouchard et al., 1995).

4.2.4.1 Communication Enhancement Model

Bouchard and colleagues (1995) propose the communication enhancement model (CEM) with the objective of empowering older people to improve their health in all possible domains. Benefits of the CEM vary from improving social and mental health by increasing social interaction to improving physical health by enhancing the confidence to be involved in decision making processes about their health. To enhance communication with older people health professionals need to better understand normal ageing processes and develop a new cognitive map of the abilities of older people. Health professionals should undertake new roles and use new skills in interacting with, and providing information for older people such that they are enabled and motivated to actively participate in decisions about their health. Older people would benefit if not only health professionals followed these guidelines, but if the general public did as well. Communication enhancement can be achieved through changes in three main areas of intervention:

1. *Self care*: Older people need to be supported to develop the skills and motivation to ask questions, explore options and make health care decisions. Ultimately older people need to be assisted to take an active interest in their own health.
2. *Mutual aid*: This is defined as "people's efforts to deal with their health concerns by working together… helping each other, supporting each other emotionally and sharing ideas, information and experiences" (Bouchard et al., 1995, p. 94). For example, spousal support, informal networks, support groups, and voluntary organisations can provide mutual aid.
3. *Healthy environments*: This is defined as "altering or adapting our social, economic or physical surroundings in ways that will help not only to preserve but also to enhance our health" (Bouchard et al., 1995, p. 94). There is a need to adapt the psychosocial and physical environments in which communication occurs and examine system barriers (such as legislation, intake procedures, schedules, funding formulae, and assessment tools).

4.2.5 Communication of health messages: Mass media

The mass media has a major influence on behaviour today as it reaches a broad audience being disseminated through various mediums (such as television, radio, newspapers, press

conferences, the internet and the workplace). It is able to communicate health messages across a nation, often generating discussions and influencing social norms (Sogaard & Fonnebo, 1992). Mass media campaigns tend to be aimed at individuals within the population who are practicing a health risk behaviour and endeavour to make these people change their lifestyle to reduce the risk of disease. Media based interventions aim to move people through the stages of behaviour change with the objective of reducing risk behaviours and increasing desired health behaviours. A number of studies have developed intensive media campaigns at a local, state or national level to improve health. For example, through reduced smoking and dietary change (Sogaard & Fonnebo, 1992) and increased physical activity (Bauman, Bellew, Owen, & Vita, 2001; Owen, Bauman, Booth, Oldenburg, & Magnus, 1995). Many of these programs have been found to move people to a higher level in the stage of change process (Owen et al., 1995; Reger et al., 2002; Sogaard & Fonnebo, 1992; Wimbush, MacGregor, & Fraser, 1998), however they haven't consistently resulted in increasing the desired behaviour following broadcast of the campaign (Dunt, Day, & Pirkis, 1999; Wimbush et al., 1998) and behaviour change has been found to depend on recall of the key message.

The sustainability of the impact of mass media campaigns is questionable given that recall of the message tends to decline steadily once the campaign finishes (Wimbush et al., 1998). There is also some evidence that recall is greater among those who are not being targeted; that is, those who are already undertaking the desired behaviour and those from higher socio-economic backgrounds (Wimbush et al., 1998). It appears that for strategies to be most effective they need to systematically consider the services, settings and community environment that support behaviour change—for example by making physical activity accessible and enjoyable (Owen et al., 1995). Furthermore, the messages disseminated through the media need to be simple and clear in order to be understood by a broad audience (Wimbush et al., 1998). Ultimately, the focus should not just be on the individual to make health behaviour changes, but also on the community to support those changes through the planning and integration of services and strengthening the capacity of communities to take collective action (Harris & Wills, 1997).

4.2.6 Summary

The behavioural approach holds great promise as it allows us to understand the processes and patterns of behaviour change and therefore allows us to design interventions appropriate for specific individuals, groups or cohorts. Furthermore, some people may be less likely to change health behaviours than others, such as the oldest cohorts and women (Ferrini et al., 1994), and it may be necessary to target strategies to this group.

The theories reviewed here allow us to understand how people form the intention to perform

a behaviour (HBM) and formulate goals (TOPB), the processes involved in the decision to change behaviour (TTM), and the importance of supportive communication to enhance an individual's capacity to make informed health decisions (CEM).

Essentially successful behaviour change is associated with the empowerment of individuals through the provision of appropriate communication, information and support. Interventions need to respond appropriately to an individual's readiness to change through various strategies tailored to the individual's needs. Ultimately, complex interventions are required that communicate health messages and support health promoting behaviour change. These can be implemented through various mediums, from mass media, to general practice, community planning and public policy.

4.3 Socio-environmental approach

The socio-environmental approach highlights the role of the physical, social and cultural environment in promoting health and well-being. In the past the focus from the socio-environmental perspective was on hygiene and sanitation for the control of infectious diseases (Nutbeam, 1997). We now have a greater understanding of the broader impact of the natural, constructed, social, economic and political environments on health (Harris & Wills, 1997). This has led to health promotion moving away from a medical focus on health to a holistic view aimed at developing healthy communities and reducing health inequalities (Harris & Wills, 1997). From the socio-environmental approach, health is promoted through concurrent interventions between persons and environments over time. This is consistent with the current emerging perspective on health promotion using an ecological framework (Sallis & Hovell, 1990; Stokols, 1992). According to Hoehner and colleagues (2003), the ecological framework considers the individual, interpersonal, community, organisational, policy and environmental influences as well as the interaction between these domains as a way or contextualising health promotion.

One of the major strengths of the ecological model lies in the fact that it helps to highlight the importance of the effects of social systems, public policy and physical environments on behaviour change.

The following sections will draw on literature regarding how the physical and social environments impact on health. Attention is also given to how the new approach to public health has had an impact on health promotion strategies and the role of health professionals and health organisations.

4.3.1 Constructed physical environment

Features of the constructed physical environment can have positive and negative impacts on health providing support for, or barriers to, physical activity and social interaction. Rural communities in particular offer conditions that promote social connection (Victorian Health Promotion Foundation, 1999c). Increased social connection results from the smaller size of rural communities, their connection with a particular environment, closer community ties and lower rates of residential mobility (Victorian Health Promotion Foundation, 1999c). Urban sprawl in Australia on the other hand has led to fewer people walking and cycling and a greater reliance on cars creating reduced air quality as a result of car fumes (Frumkin, 2003; Lavizzo-Mourey & McGinnis, 2003). In recent years, changes in patterns of residence, work, transportation and personal behaviour have been said to have “effectively engineered physical activity out of American’s lives” (Lavizzo-Mourey & McGinnis, 2003, p. 1386). This has also been identified in Australia by Baum and Palmer (2002) who used in-depth interviews to examine sense of place (that is, sense of community cohesion and belonging) on levels of participation in activities and general health. They identified that there was a weaker sense of community due to structural changes such as the shift from local shops to large shopping centres. Local shops were generally close to home so people could walk to them and chat to neighbours and shop keepers. Large shopping centres are less geographically accessible for most people, requiring a greater reliance on cars. They are also more commercial and less personal, thereby reducing sense of community and social interaction.

For older people, slower walking speeds, difficulties with vision and hearing and other difficulties associated with getting older, can discourage access to the outside environment (Frank, Engelke, & Schmid, 2003). Older people may cease driving due to difficulty dividing attention, poor vision and slower processing skills and many women may never have learnt to drive (Messinger-Rapport, 2003). Access to public transport has been found to be an important factor in determining the extent of physical and social activity among older Victorians in a metropolitan setting (Haralambous et al., 2003). In rural areas, access to public transport is often limited and not available; private transport for older people in rural areas is also problematic due to greater distances and higher costs compared to metropolitan regions (Victorian Health Promotion Foundation, 1999c). In areas that are more geographically isolated there is evidence that poorer access to transport is associated with decreased levels of physical activity (Smith, Owne, Leslie, & Bauman, 1999). While access to public transport can promote healthy, active lifestyles in older people there are a number of obstacles associated with their use. These obstacles include the costs associated with public transport, the limited number of services on weekends and in the evening, and physical limitations. For example, problems experienced with buses that stop too far from the gutter, and steps that are too high on trams (Haralambous et al., 2003).

Literature on older people, health and the constructed environment often focuses on function and disability. Dannenberg and colleagues (2003) suggest that a better understanding is needed of how the environment impacts on the ability of older people and people with disabilities to move around as "individual capacity and the resources of the environment intersect to affect levels of independence and mobility" (Satariano, 1997, p. 331). The impact of the relationship between the person and the environment on mobility suggests that improving the environment has the potential to increase mobility and independence. Satariano (1997) suggests that more research is needed to identify modifiable factors that can enhance mobility, including factors in the home environment (for example, the number of rooms, stairs, rails, hazards such as rugs and clutter) and in public (such as street lighting, traffic volume, condition of side-walks, duration of lights at crossings and accessibility of transport and grocery stores).

A study by Balfour and Kaplan (2002) in the US assessed the impact of various neighbourhood problems on functional losses in older people. Controlling for demographic, socio-economic health and behavioural risk factors, they examined six aspects of the neighbourhood including: traffic, noise, crime, litter, lighting and public transportation. The factors identified to be most associated with loss in function included excessive noise, inadequate lighting, heavy traffic and access to public transport. In Australia a study by Booth and colleagues (Booth, Owen, Bauman, Clavisi, & Leslie, 2000) found that for older people, the most significant factor in the constructed environment that influenced participation in physical activity was the condition of footpaths, and whether they were perceived to be safe. A study by Rabiner and colleagues (1997) examined whether the functional independence and self-care behaviours of older people differed between rural and metropolitan settings in America. Rural older adults were found to be more likely to report being able to perform functional activities, activities of daily living and self-care activities—in the presence and absence of disability—than their metropolitan counterparts. Rabiner and colleagues (1997) suggested that rural older adults may discount the significance of declining functional status and normalise the trajectory of aging differently to metropolitan adults.

4.3.2 Natural environment

Contact with the natural environment is considered to have a positive influence on health (Frumkin, 2003). The constructed environment, according to Kaplan and Kaplan (2003), creates mental fatigue with the constant distractions of advertising, fast traffic and the fast pace of life. Access to parks, on the other hand, has been identified as a key enabler for older people for participation in physical activity (Booth et al., 2000; Haralambous et al., 2003). In Adelaide, the ambience of beaches have also been found to encourage social interaction

(Baum & Palmer, 2002). Public health literature has recognised the importance of developing sustainable 'natural' environments—such as through land preservation, environmentally conscious construction and the use of alternative energy sources—for the ongoing health and wellbeing of communities (Srinivasan, O'Fallon, & Dearry, 2003).

4.3.3 Socio-economic environment

The constructed and natural environment cannot be considered in isolation as they are closely related to social, economic and political environments. Kaplan and Kaplan (2003) explain that fear of crime in inner cities has caused people to move from city dwelling to the suburbs, resulting in increased urban sprawl, greater reliance on cars, a reduced sense of community and reduced levels of physical activity.

Socio-economic status (SES) impacts on the physical environment and subsequently on health outcomes. Lower socio-economic areas are associated with poorer health due to poor housing, higher crime, less participation in outdoor activity and fewer healthy food options (Haralambous et al., 2003; Srinivasan et al., 2003)

Opportunities for social interaction and participation in physical activity for older people may be limited to activities that can be carried out close to home—talking to the neighbours, walking to the local shops and remaining socially mobile. The diminishing sense of community may, therefore, also have negative effects on an older person's sense of social connection. These social and physical barriers may cause isolation for older people, discouraging participation in physical activity and impacting negatively on their social, emotional and physical well-being (Haralambous et al., 2003).

4.3.4 Creating healthy environments

Health promotion strategies are beginning to focus on creating "healthy environments". These strategies aim to overcome physical and social barriers to health and to enhance the characteristics of the environment that are related to better health and well-being. Sense of belonging provides members of a community with a positive social identity and a healthy connection with the community (Baum & Palmer, 2002). One successful strategy for improving social cohesion has been the development of local meeting areas that are neither domestic or commercial (Baum & Palmer, 2002).

The challenge in the implementation of strategies to create healthy environments is that outcomes are difficult to define and as a result programs and strategies are difficult to evaluate. A significant amount of work is being undertaken in Australia to create healthy environments, such as the development of municipal health plans, however, the impact is not

noticed due to a lack of evaluation and outcome measures (Harris & Wills, 1997).

Development of health promotion policy is important as it results in the articulation of principles and goals, and provides a template for reproducing the outcomes of successful programs that have been implemented in the past (Leeder, 1997). However, implementation of policy based state-wide programs is challenging as it demands efficient cross-sector collaboration. Often input is required from local community members as well as housing, urban development, land-use and transportation, industry and agriculture sectors (Srinivasan et al., 2003). Dwyer (1997) suggests that to foster a healthy environment, communities need to develop their own programs and priorities, consider the needs of their specific community or organisation, and evaluate and monitor strategies to ensure ownership and relevance of the program. While the community plays a principal role, the state is responsible for developing inter-sectorial policy to support the programs, provide seeding funds, encourage communities to develop local programs, provide resources and to encourage networking between organisations and communities. There are different types of partnerships in health promotion, ranging from networking to coordination, cooperation and collaboration of services (Victorian Health Promotion Foundation, 2003a).

4.3.5 Health professionals and health promotion

The evolving definition of health promotion has created many challenges for health professionals and health organisations. While treatment of disease was the traditional objective, health professionals are now expected to promote health and prevent disease from a broader socio-environmental approach (Garcia & Henry, 2000). The health promotion workforce in Australia is very diverse, covering a range of health disciplines and varying in levels of impact from working with individuals to whole communities. A survey in Victoria described that health promotion activities of GPs are predominantly done through direct client activity, while health promotion professionals are responsible for program planning, administration and evaluation (Swerissen & Tilgner, 2000). Health professionals in rural areas tend to be involved in a broader range of health promoting activities than those in metropolitan regions (Swerissen & Tilgner, 2000). The health promotion workforce crosses over to other ‘non-health’ sectors that are concerned with the development and maintenance of the healthy physical environments (Shilton, Howat, James, & Lower, 2001) such as housing, urban development and transportation (Srinivasan et al., 2003).

Fawkes (1997) describes the importance of health services creating health promoting environments not only for clients and patients but also for the benefit of the staff. Health care organisations employ a large proportion of the Australian workforce and over 80% of the population use health services in any one year (Fawkes, 1997). It is therefore important that

the physical environment of health services is improved so that services are accessible and that clients are more likely to take up health care plans and recommendations. The physical environment should:

- Be safe from chemical and environmental hazards;
- Have pleasant, natural, garden areas that engage the 'restorative' effect of nature;
- Consider economic barriers, such as cost of parking, transport, child minding and the cost of the services provided;
- Provide timely services, with staff conveying acceptance and respect, and encouraging self-esteem, self-reliance and dignity in clients.

Ultimately health promoting health services should provide social support that is sensitive to age, language, history, culture, religion, sexuality, disability and chronic illness (Fawkes, 1997).

Presently, many people are passive users of the health system and are provided with health care information in a prescriptive manner. For optimum health promotion, people need to be assisted to actively participate in defining their own treatment goals (Garcia & Henry, 2000). Health professionals play a primary role in empowering individuals to promote their own health. The term 'empowerment' actually shifts the responsibility of health promotion away from professionals, institutions and bureaucrats to individuals to manage their own health (Ekpe, 2001). The provision of services or prescription of health behaviours per se does not empower an individual or community to promote their own health, however self-awareness and access to resources and information do (Ekpe, 2001). Consequently, the role of health professionals is to collaborate with clients, provide information, education, respect, trust and support. This is in keeping with the recommendations of the communication enhancement model such that health professionals should create an environment within their practice that empowers clients through sensitive communication and support (Garcia & Henry, 2000).

The role of general medical practitioners in health promotion is primarily concerned with encouraging patients to take up preventive behaviours such as physical activity (Bull, Schipper, Jamrozik, & Blanksby, 1995). Despite the apparent ease for GPs to encourage patients to take up behaviours such as physical activity a survey of GPs in Perth identified that lack of time, insufficient educational materials and patient preference for drug treatment were barriers to promoting physical activity (Bull et al., 1995). GPs were also reluctant to give lifestyle recommendations unless the patient had a particular condition that could benefit from physical activity, essentially providing a disease management function rather than preventive function.

Access to information and material resources, staff experience, knowledge, skills, partnerships with community agencies and research or needs assessment data can all act as barriers or enablers to promoting health for health services (Garcia & Henry, 2000). Difficulties accessing Home and Community Care services (HACC) in Australia has occurred since the policy focus has moved towards providing care at home rather than in residential care. It has been argued that the subsequent reduction in residential aged care places has not been met with a commensurate increase in community based services (Clare, DeBellis, & Jarrett, 1997). Particular groups within the community also face obstacles to accessing services, particularly people from rural areas and people from culturally and linguistically diverse communities (Black et al., 2004; Victorian Health Promotion Foundation, 1999c). Older adults in rural regions have significant difficulties in accessing health services partly due to the increased move towards urban settings. Rural populations are declining as people are forced to go to more metropolitan regions to access employment, education and health. As a result of this urban shift rural areas have lost a large number of services including hospitals and aged care facilities (Victorian Health Promotion Foundation, 1999c).

4.3.6 Summary

The known impact of the natural, constructed, social, economic and political environments on health has shifted health promotion from a medical to a holistic view of health. Health promotion strategies not only consider individual approaches to changing behaviour but now develop strategies to create healthy environments and communities. This has introduced new challenges for organisations and professionals within the health industry.

5. Summary and conclusions

Health, and health promotion, currently holds a holistic view of health that not only takes into account each of the domains of health (physical, mental, social and spiritual) but also the socio-environmental and systemic factors that are likely to affect the wellbeing of older people. This holistic understanding is shared by health professionals and older adults alike. As individuals and cohorts age, their health promotion priorities change such that health promotion for older people focuses less on the elimination and prevention of disease and more on the promotion of functional independence and quality of life. Ideally, this is achieved through effective management of disease and disease related disability (physical health) and promotion of mental, social and spiritual health to create a balanced sense of well-being.

There are various ways of describing health behaviour change, depending on the approach taken towards health promotion. Appendix 2 presents a summary of the approaches described throughout the literature review and highlights the main themes involved in successful health promoting behaviour change. Each of the perspectives reviewed—the medical, behavioural and socio-environmental—contribute to health promotion for older people and need to be considered in concert. The main points from each perspective will now be summarised.

<u>Medical perspective</u>

- Encourage older people to continue with screening and treatment programs to ensure the effective management of diseases and the reduction of disease related disability.

<u>Behavioural perspective</u>

- Educate older people about the salience of health risks associated with unhealthy behaviours that they are practicing, their susceptibility to these negative outcomes. Help older people to realise that the benefits outweigh the costs when discontinuing unhealthy 'risk' behaviours and taking up alternative health behaviours. In particular, older people as with younger people may believe themselves to be invulnerable so it is important to clarify health risks so that preventive measures can be taken.
- Create positive, supportive beliefs about target health behaviour(s) and incorporate these into the 'social norm'. To do this, provide examples (such as through advertising) of older people who successfully practice the target health behaviours, highlighting the benefits that they have achieved;
- Support an individual's belief that they have the ability to practice the target behaviour and to subsequently achieve better health. Inform that the target behaviour(s) and subsequent outcomes are, if not fully, at least somewhat within their control.

- Promote supportive social relationships between older people and their family, friends and neighbours. Also enhance social mobilisation through formation of new supportive social ties.
- Create a supportive environment between the principal health professional and older person. In particular this environment should allow for the provision of information and support for older people that empowers them to take ownership of their health and to make informed health decisions.

Environmental perspective

- Improve accessibility of natural environments such as local parks and beaches. This may be done by such measures as controlling dogs on leashes or installing more park benches.
- Make the physical environment elder- and disability-friendly. For example, improve street lighting, the condition of pavements, the duration of lights at the crossing, and access to public transport.
- Identify and manage socio-economic barriers to health promotion—such as tendency towards poorer nutrition and social isolation.
- Identify the issues associated with increased urban sprawl and enhance older people's sense of community and social cohesion.
- Improve access to services.
- Address transport and independence problems.

Summary

Health promotion priorities for older people are determined by the overarching need to maintain functional independence and quality of life. This notion is shared between health practitioners, health promotion workers, and older people alike. Ultimately, to ensure the most beneficial promotion of health in older people, health practitioners need to respond holistically to each person's unique needs. Rather than prescribe a remedy for a health problem, older people need to be empowered to set their own health goals and to take ownership of their own health.

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7. Appendix 1: Search strategy

A sample of the literature published in peer reviewed journals was considered for this review. The sample was derived from the following electronic databases: Medline, PubMed, PsycINFO, Current Contents and Web of Science. Other information sources included journals and books, back referencing from journal articles and textbooks, world wide web-based materials, and on-line electronic journals.

Search terms included combinations of:

1. health promotion/ health promoting behaviour
2. changing individual behaviour/ health behaviour change
3. older people/ aged
4. determinants
5. compliance/ barrier/ motivator
6. participation
7. empowerment
8. socio-environmental
9. Culture or CALD
10. Rural/metropolitan

Appendix 2: Summary of approaches to health promotion and behaviour change

Approach	Concept of health promotion/behaviour change	Defining principles	Methods of intervention
Medical approach	Elimination and prevention of disease and disease related disability	Focus on the epidemiological and biomedical factors related to disease Eliminate/prevent disease	• Preventive research • Screening • Pharmacological treatment
Behavioural approach	To change behaviour through the implementation of incentives, rewards and supportive environments.	Focus on beliefs about risk compared with health behaviour and other factors that may affect this relationship (e.g., normative beliefs or self-efficacy)	• Identify behavioural risk factor • Target a population performing the behavioural risk factor • Implement behavioural interventions to eliminate risk behaviour and replace it with a health behaviour
Health belief model	Assumes that behaviour change is most likely when there are high levels of perceived susceptibility and severity of a health risk and high levels of perceived benefits and motivation to perform a health behaviour.	*Perceived susceptibility*	• Make health risks/issues salient to the individual
		Perceived severity	• Inform the population about the negative outcomes associated with the risk behaviour
		Perceived benefits	• Demonstrate that discontinuing the risk behaviour/adopting a health behaviour will be beneficial
		Perceived barriers	• Eliminate barriers to performance of the desired behaviour
		Health motivation and cues to action	• Provide information that makes action seem essential as soon as possible.
Theory of planned behaviour	Proposes that high levels of perceived behavioural control, together with positive beliefs about a behaviour and the judgement that the behaviour fits the social norm will result in intention to change behaviour.	*Behavioural beliefs/attitude*	• Inform the population's attitudes with positive characteristics of performing a health behaviour.
		Normative beliefs	• Change social norms so that the health behaviour appears socially acceptable.
		Perceived behavioural control	• Create sufficient motivation (see HBM above) to form the intention to perform a behaviour • Draw on past experiences with the behaviour and increase the population's belief that it is within their control to adopt that behaviour.
Transtheoretical Model	People differ in their readiness to change and will seek out, or need to be provided with, different information and support during different stages of change.	*Stages & processes of change* Precontemplation	• See Table 1 for the processes of change during each stage • Increase awareness of the need to change • Provide information about the risks of existing behaviour (using examples) and benefits of alternative health behaviour.
	During each stage people will continuously weigh up the benefits and costs of the risk behaviour compared with the health behaviour (decisional balance), and their assessment of whether they have the ability to achieve the desired outcome (self-efficacy).	Contemplation	• Motivate and increase confidence in the ability to change • Identify small steps towards health behaviour, use imagery to increase emotional awareness, point out people who have successfully incorporated the health behaviour into their lives and create a new self image.

Approach	Concept of health promotion/behaviour change	Defining principles	Methods of intervention
		Preparation	• Negotiate a plan for behaviour change • create a new self-image, gather support from others, make a public commitment to the behaviour and identify ways in which this can be carried out.
		Action	• Reaffirm commitment and follow up • Provide a reward for doing the new behaviour, create relationships/social activity that support the behaviour, introduce alternatives and check off each time you perform the behaviour.
		Maintenance	• Problem solving to prevent relapse • Join support groups, having a meaningful reward for performing the behaviour over a long period (e.g., at the end of the season/year).
		Decisional balance	• During each stage people will weigh up the benefits and costs of a risk behaviour compared with a healthy behaviour; empower people to make the correct decision.
		Self-efficacy	• Empower people to judge that they have the ability to perform a behaviour in order to achieve the desired outcome.
Communication Enhancement Model	That health depends on respectful relationships between people, particularly health professionals, and older people.	Self care	• Need to support older people to develop the skills/motivation to ask questions, explore options and make health care decisions. Need to be helped to take an active interest and investment in their health.
		Mutual aid	• Work together with older people, sharing information, ideas and experiences. Support can come from spouses, health professionals, organisations.
		Healthy Environments	• Adapt the environment in which communication takes place removing system barriers (such as legislation, procedures/schedules, assessment tools etc.).
Socio-environmental approach			
Healthy environments	To create a social, political and physical environment that is supportive of health promotion activity and health behaviour change.	Socio-economic environment	• Understand the association between lower SES and poorer health outcomes • Reduce fear of crime and increase sense of community
		Constructed environment	• Create policy to support reduction in health inequalities • Build on strengths within the community • Create a sense of community, social cohesion within the urban sprawl • Make the physical environment 'elder-friendly' by creating conditions that promote mobility (e.g., street lighting, condition of side-walks, and duration of lights at crossing); • modify environment to reduce reliance on cars and promote walking and cycling
		Natural environment	• Increase natural lighting and plants in buildings • Increase green spaces and gardens in urban areas • Adopt environmentally sustainable technologies
Health professionals	GPs have a key role with direct contact with clients, while health promotion professionals are essential in the planning, administration, delivery and evaluation of programs.		• Ensure that services are sensitive to age, language, history, culture, religion, sexuality, disability and chronic illness. • Empower older people by collaborating with them and providing timely, appropriate information and support.