



THE UNIVERSITY
OF QUEENSLAND

AUSTRALASIAN CENTRE ON AGEING

**SOCIAL ISOLATION & OLDER PEOPLE:
A LITERATURE REVIEW**

Robyn Findlay
Colleen Cartwright

2002

Report for Seniors Interest Branch &
Ministerial Advisory Council on Older People,
Queensland Government

TABLE OF CONTENTS

INTRODUCTION.....	2
SECTION 1: BACKGROUND	3
DEFINITIONS OF SOCIAL ISOLATION	3
RISK FACTORS FOR SOCIAL ISOLATION AMONG OLDER PEOPLE.....	3
<i>Loss</i>	4
<i>Poor physical health</i>	4
<i>Mental illness</i>	4
<i>Being a carer</i>	5
<i>Communication</i>	5
<i>Non-English-speaking background</i>	5
<i>Place of residence – rural/remote</i>	5
<i>Place of residence - residential aged care facility</i>	6
<i>Fear and feeling vulnerable</i>	6
<i>Gender/marital status</i>	6
<i>Community attitudes</i>	6
<i>Transport</i>	6
EXTENT OF SOCIAL ISOLATION.....	7
SOCIAL ISOLATION AND SUICIDE	7
GOVERNMENT POLICIES/PRIORITIES	8
SECTION 2: INTERVENTIONS TO ADDRESS SOCIAL ISOLATION	9
GENERAL POINTS TO CONSIDER	10
INTERNATIONAL RESPONSES.....	11
<i>Teleconferencing</i>	11
<i>Telephone</i>	11
<i>Computer networks</i>	12
<i>Support groups</i>	13
<i>Community initiatives</i>	14
RECENT GOVERNMENT RESPONSES IN AUSTRALIA	16
<i>Teleconferencing</i>	16
<i>Telephone</i>	17
<i>Computers/technology</i>	17
<i>Local services for older people</i>	17
RECENT NON-GOVERNMENT RESPONSES IN QUEENSLAND.....	18
<i>Telephone</i>	18
<i>Computers/technology</i>	19
<i>Older people's groups</i>	19
<i>Support groups</i>	19
SECTION 3: DISCUSSION	20
<i>International approaches</i>	20
<i>Evaluation</i>	20
SECTION 4: CONCLUSIONS	22
<i>Targeting</i>	23
<i>Strategies</i>	23
<i>Evaluation</i>	23
REFERENCES.....	24

INTRODUCTION

The issue of social isolation among older people in Australia features prominently in ageing strategies at all levels of government. At a State level, the Queensland Government in its five-year plan on ageing (Department of Families Youth and Community Care Queensland, 1999) has stated that social supports and social networks are fundamental to overall quality of life, but that many older people experience a significant degree of isolation. To promote social networks and improve the social participation of older people, the Queensland Government has funded a range of projects throughout the state. The current literature review is part of one such project that was an initiative of the Mental Health and Social Isolation Working Party of the Queensland Government's Ministerial Advisory Council on Older Persons. The Working Party was asked to investigate the issue of social isolation among older people and possible responses to the problem.

Early developmental work on the project highlighted the fact that problems related to social isolation, and their potential solutions, involved many sectors of government. Therefore, an interdepartmental working party was established, which subsumed the original MACOP working party and also involved the Department of Veteran's Affairs, the Home and Community Care (HACC) unit and the Mental Health Branch of Queensland Health, Seniors' Interests Branch of Department of Families, Multicultural Affairs Queensland and the Community Engagement Unit (Premier's Department).

The aims of the project were:

- to undertake a review of the literature to clarify the extent of social isolation among older people;
- to identify initiatives that had been undertaken at governmental and community levels to address the problem;
- to highlight best practice in the area;
- to conduct interactive community forums both to inform community members and professionals working in the area and to learn from them what initiatives have been undertaken in their geographic areas;
- to produce a report on the project that could be distributed to communities throughout Queensland to assist those communities to address social isolation among older people; and
- to encourage community organisations in Queensland to develop demonstration projects to put into practice some of the findings of the forum.

The Australasian Centre on Ageing was commissioned to write the review of the literature. The review, presented here, is in four sections.

Section 1: Background information on social isolation.

Section 2: International responses to social isolation and any evaluations of these initiatives; recent government and government-funded initiatives in Australia; and recent non-government responses in Queensland.

Section 3: Discussion of international approaches and a brief evaluation of the types of interventions covered in Section 2.

Section 4: Conclusions

SECTION 1: BACKGROUND

Definitions of Social Isolation

Social isolation has been variously defined in the literature. Day (1992) defined it as “the absence of satisfying relationships and a low level of involvement in community life” (p.7). Gardner et al. (1998) considered participants in their study to be socially isolated if they were experiencing a combination of factors that included low levels of social participation and levels of social activity that the older person perceived as inadequate. Cattani and White (1999) and Hall and Havens (1999) defined social isolation as the objective measure of having minimal interaction with others, and emotional isolation (or loneliness) as the subjective feeling of dissatisfaction with having a low number of social contacts. The approach taken in the current review is that “social isolation” encompasses both social and emotional isolation.

There are several other related terms used in the literature. These include social inclusion/social exclusion, community involvement/community participation, community engagement, social capital, and social cohesion. The Queensland Government uses the term social participation (Department of Families Youth and Community Care Queensland, 1999).

Risk Factors for Social Isolation Among Older People

There are many risk factors that can lead to loneliness and social isolation among older people. Factors identified in the literature include loss (in its many forms), poor health, mental illness, being a carer, geographic location, communication difficulties (including being from a non-English-speaking background), place of residence, being male and single, and transport difficulties (Brennan et al., 1995; Edelbrock et al., 2001; Gardner et al., 1998; Hall & Havens, 1999; Havens, 1989).

Loss

Losses contributing to social isolation include:

- loss of health and function, including hearing and other communication abilities; vision; mobility; and health generally;
- loss of relationships (loss of partner through death or divorce; loss of children when they leave home or through premature death; loss of grandchildren if the family move away or following divorce);
- loss of social networks (leave work, move to a new area in retirement; have financial restrictions on activities); and
- loss of transport options (having to give up a driver's licence or being unable to afford to run a vehicle; public transport not being available or not accessible). This is likely to be an even greater problem for older people living in rural & remote areas (especially, eg. farms in outlying areas).

Poor physical health

Gardner et al. (1998) found that poor health was the most important predictor of social isolation, followed by reduced social activity in the previous five years. Conversely, "social support and social network measures have been associated with improved health and well-being" (Edelbrock et al., 2001, p.19). However, the reverse is also of concern. That is, older people who are socially isolated are at increased risk of poor health (Hall & Havens, 1999).

Mental illness

A person who has a mental illness may suffer many of the losses listed above and may also lose the confidence to make new friends or undertake new social activities. The issue of depression is very important and one that can be easily overlooked or misdiagnosed in primary health care. Depression and social isolation are closely linked (Anderson, 2001) and in fact, it can be a circular problem. That is, a person may become depressed, which then causes them to withdraw from family, friends, society and to become socially isolated which in turn leads to further depression. The danger also is that it may be the social isolation per se, rather than the depression itself, which is the precipitating factor, that is, a person who becomes socially isolated, perhaps for some of the reasons listed above, may become depressed which in turn may exacerbate the social isolation (as was the case above for health more generally).

An additional problem with depression is that insufficient attention may be paid to the use of medications such as anti-depressants which can remove motivation and increase social isolation.

Being a carer

Providing long-term, full-time care to a spouse or other family member, especially where there are few other informal supports available, can cause an older person to be socially isolated. Carer support groups have been established, including Queensland Council of Carers, but not all carers can access the services provided.

Communication

Lack of functional literacy may make accessing information difficult for some older people, thereby increasing their isolation. Inability to use banking technology such as automatic teller machines can also be a barrier that isolates people. Conversely, as older people become more familiar with technology, such as computers and email, there is the potential “for the use of technology to facilitate social inclusion” (Workshop, Qld Dept of Families, 2001).

Non-English-speaking background

Not having English as a first language has been identified as a risk factor for social isolation among older people, particularly those whose major migration groups came to Australia in the 60s and 70s and for whom there had been little or no follow-on migration. The numbers in their cultural groups are diminishing. Some of the older members of the groups have never learned English and, in many cases, their children do not speak their parents’ original language (Williams et al., 1999). Even those who have learned English may lose this ability if they develop dementia.

Place of residence – rural/remote

Social isolation is closely associated with geographic location (Havens, 1989). Older people in rural and remote areas may be at risk of social isolation, particularly those who live at a distance from the town, no longer drive and whose families have moved away from the area. In rural and remote areas loss of rail services removed one form of access to social interactions for some older people, especially for older women who may never have learned to drive. Lee (1983) found that older people living in inner-city Hobart had much more frequent contact with friends or relatives than those living in outer suburban areas. This was largely due to better public transport, to shorter distances making taxis affordable and even the convenience for family and friends of the older person being closer and so, easier to visit. Lee concluded that the inner city was actually a more amenable location for older people than outer areas, a point frequently overlooked when residential aged care facilities or retirement villages are being built.

Place of residence - residential aged care facility

Moving to a residential aged care facility can sometimes exacerbate social isolation even though the move may have been designed to do just the opposite (White et al., 1999). Although staff may be kind and caring, that is not the same as having family and friends close by. Buys (2001) found that even longstanding friendships rarely sustain the move of one of the parties to an institution, after which the dependent person may become “even for their ‘good friends’ socially dead” (p. 55). “It’s a sad fact that about one person in every three who is in a nursing home doesn’t have a visitor in a twelve month period” (Staple, 1991, p.15).

Fear and feeling vulnerable

Many older people may become isolated because they will not leave their homes at night and some will not even leave their homes in the daytime. Although there is a high level of fear of assault among older people, statistically they are the least likely group in society to be attacked. (Everyone’s Future: Queensland’s Forward Plan on Ageing, Progress Report, 1997; Owen, 2001).

Gender/marital status

In the study by Gardner et al. (1998) “Men were much more likely to be isolated than women”, p. 87. Edelbrock et al. (2001) also identified being male as a risk factor for social isolation. Teshuva et al. (1994) found that:

[w]hile marriage is beneficial to health among men, marital status may not significantly reduce mortality among older women [and] women seem to benefit as much or more than men from relationships with friends and relatives, which tend to run along same-sex lines (p. 20).

However, Kunugi (1989) notes that women’s longer life expectancy often means an old age aggravated by financial problems and social isolation.

Community attitudes

Community attitudes towards older people can have a detrimental effect on the ability of these people to have satisfying, meaningful interactions within their community. “Negative attitudes towards older people and ageing limit opportunities for older people to participate in the community” (Qld Dept of Families, Youth & Community Care, 1999).

Transport

Older people may have to give up their driver’s licence due to health impairment or, in the case of many older women who never learned to drive, their transport options may significantly reduce if their husbands die.

“Transport is critical for maintaining independence and quality of life. An inability to access transport can lead to social isolation and a deterioration in general health and well-being” (Department of Health and Ageing, 2000, p.23). Difficulty getting on and off public transport, resulting in loss of dignity, and poor design factors which impact on safety, such as lighting and steps, may result in older people not being willing to use public transport (ibid.; Peel et al., 2002; Sheehan et al., 1997).

Lack of suitable transport may be a problem for older people even in urban areas. Newman (1991) points out that:

The vulnerability of the elderly in a car dependent city is highlighted by showing that they are:

- (a) less transport independent due to a much higher proportion who do not drive;
- (b) more isolated due to the physical distances and poor public transport in low density suburbs; and
- (c) more prone to injury from vehicles whilst walking (p.26).

Newman sees isolation as “the counterpart of independence” and in particular, transport independence as the means by which “elderly people can maintain their friendships and awareness of what is going on in the rest of society” (p. 34). He adds that, “if that independence is lost elderly people can find themselves increasingly cut off from friends and isolated from society in general” (ibid.).

Extent of Social Isolation

A study of loneliness and isolation in the UK in 2000 “revealed that nearly one million people aged 65 and over (12%) feel trapped in their own home” (Owen, 2001). In Australia, a study of 2000 Veterans found that “approximately 10% of respondents were classified as socially isolated and another 12% were at risk of social isolation” (Gardner et al., 1998, p.6). The researchers concluded that, nationally, more than 34,000 veterans and war widows were socially isolated and an additional 41,000 were at risk of isolation. A study by Edelbrock et al. (2001) of social isolation/social support issues among older people in the Sydney area found very little difference between older veterans and older people in the general community. It is therefore likely that at least 10% of people aged 65 and over are socially isolated and a further 12% are at risk.

Social Isolation and Suicide

Social isolation has been identified in the literature as a risk factor for suicide. De Leo et al. (2000) found that living alone (for men 75+), having had a recent (or current) physical illness and having received recent psychiatric treatment were related to risk of suicide. Rosenman (1998) found that, for older people, loneliness and physical morbidity may be risk factors for suicide and these factors also increase the possibility of older people becoming socially isolated.

Monk (2000) in an international comparison of the link between suicide, stress and living in isolation found that in rural areas of Australia, Europe and North America, isolation is associated with increased risk of suicide. How this specifically applies to older people was not evaluated in this study.

The Australian national suicide prevention strategy acknowledges the contributory role of social isolation in suicidal behaviour. One of the strategy's stated aims is to "enhance resilience and resourcefulness, respect, interconnectedness and mental health in [the whole population], and reduce the prevalence of risk factors for suicide" (Department of Health and Aged Care, 2000, p. 16).

Government Policies/Priorities

The issues outlined above will need to be addressed across the three levels of government, as well as by private and not-for-profit organisations.

Federal Government

A stated priority of The National Strategy for an Ageing Australia is:

The need for age-friendly infrastructure and community support (including housing, transport and communications) to enable greater numbers of older Australians to participate in and remain connected to society (Department of Health and Ageing, 2002, p.14).

The National Strategy also highlights the role that access to health and aged care services, as well as recreation, tourism, leisure activities and life-long learning have in ensuring that older people do not become socially isolated.

In addition, the Commonwealth Government has recognised not only the extremely important role that carers in our community play, but also the desperate need that exists for these carers to be supported. As noted above, being a carer is, in itself, a risk factor for social isolation. To this end, the government has "pledged \$80 million over four years to support carers, including ageing carers of people with disabilities and carers of people with dementia" (Andrews, 2002, p.2).

Queensland Government

The Queensland Government's policy in relation to older people is reflected in the vision statement of *Our Shared Future: Queensland's Framework for Ageing 2000 – 2004*. The vision is for "an inclusive and fair society where all older people in Queensland are able to lead productive and fulfilling lives as valued members of their community" (Department of Families, 2001, p.5). To achieve that vision requires action to address social isolation, which in part is being addressed by the interdepartmental project that is the focus of this review.

Local Government

The role of local government will be particularly important and the Federal Minister for Ageing stated in February that he has “already begun discussions with the Australian Local Government Association to encourage the development of ageing strategies by local government” (Andrews, 2002, p.4).

There are many areas where the needs of older people for greater community access and participation rely on local government. An area of particular importance, where local government can play a major role, is in the provision of transport that is safe, flexible and well-designed, and in which drivers have adequate training to enable them to understand the needs of older commuters, and to assist with those needs. Other areas include “age-friendly” cities and towns, with clearly designed signs, safe footpaths and appropriate parking.

SECTION 2: INTERVENTIONS TO ADDRESS SOCIAL ISOLATION

Social isolation is one of the most difficult situations to resolve (Lachs, 2000; Russell & Schofield, 1999). At both a community and government level, numerous interventions to address social isolation have been tried, but very little information is readily available on evaluations of the effectiveness of these interventions both in terms of reducing social isolation and in terms of whether the interventions are worthwhile given the costs involved. Indeed, Cattan and White (1999) in a systematic review of interventions targeting social isolation and loneliness noted that there are only a small number of evaluation studies and these examine a narrow range of interventions. Cattan and White stated that the significant proportion of inconclusive studies highlight the need for further rigorous research.

Most existing evaluations have been conducted on projects with explicit short-term objectives and less attention has been given to evaluating the sustainability and long-term benefits of various interventions. This is the case internationally, but especially in Australia, and Queensland in particular. It may be that additional information is available within government departments, but this avenue has not been explored within the constraints of the current project.

The current review is not intended to be an exhaustive dissection of what is available, nor is it an analysis of different systematic approaches to the problem, but rather, it seeks to provide a preliminary review that presents and evaluates one or two examples of each type of common intervention. This section of the review begins by outlining issues that are important to consider when designing interventions to reduce social isolation among older people. Then some of the interventions that have been implemented overseas and in Australia are presented. Where information is available, the results of evaluative studies are

presented. To assist the reader, the target group for each intervention is noted in the right-hand margin.

General Points to Consider

- A trap that is easy for well-meaning people to fall into is to assume that all older people have a desire to participate in community life and activities (eg The National Strategy for an Ageing Australia, 2002). This is not always the case and people who do not participate do not necessarily feel socially isolated (Gibson, 2000).
- Communities need support to establish their own projects rather than have them imposed on them (Joseph Rowntree Foundation, 2001).
- When developing interventions to reduce social isolation, it is important to take the time to understand the extent of isolation and loneliness amongst older people within a community, and the associated factors (Victor et al., 2000).
- Older people need to be engaged in the planning process and allowed some level of control over the implementation of interventions (Cattan & White, 1999; Joseph Rowntree Foundation, 1999). Given that approximately one in five Australians aged 65 years and over undertake voluntary work each year (Department of Health and Ageing, 2000), there is a ready pool of skill, knowledge and enthusiasm that can be utilised for mutual benefit.
- Services that are inflexible, bureaucratic and impatient with older people are generally ineffective because isolated older people may need proper time and support to regain control of their lives.
- One should not assume that all older people who are prone to social isolation have the skills to: pick up the phone to ask for help; respond to information posted to them; and/or be comfortable to accept services or visits or assessments from care professionals – this can be very stressful (Owen, 2001).
- Forcing people into social situations may result in these people isolating themselves even further (Killeen, 1998; Windriver, 1993). A better strategy is to visit them at short frequent intervals to acclimatise them to the interaction (Acorn & Bampton, 1992).
- Merely bringing older people who seek new contacts together in structured group interaction is not sufficient to alleviate loneliness for some people. Studies of older persons matched through such a process have found that few lasting relationships develop and loneliness persists (eg Bodden, 1994; Jerrome, 1981, 1983; van Lammeren & Geelen, 1995 cited in Stevens, 2001).

What these people have in common, that is, loneliness, is not necessarily enough to make them relationship partners (Stevens, 2001).

- Interventions are more effective if they target specific groups, such as women, the widowed or those at risk of serious mental health problems (Cattan & White, 1999).
- Interventions need to be transferable, that is, tailored to meet the needs of the target group in terms of location, transport, safety and personal confidence issues, timing, content, existing services, and existing budgets (Cattan & White, 1999; Joseph Rowntree Foundation, 2001).
- Isolated people need to be provided with a single point of entry to all services and help. Complex systems of access will deter most people. Therefore, all services need to be linked (Department of Families Youth and Community Care Queensland, 1999; Owen, 2001).

International Responses

Teleconferencing

A project in Nova Scotia examined telephone support groups for seniors with disabilities, where groups met once a week via teleconferencing for 12 weeks. Interviews with participants and leaders revealed that the program produced decreased support needs, diminished loneliness, and enhanced coping. Selection, training, and support of peer and professional leaders and member control of discussions were important ingredients of the successful support groups (Stewart, Mann, Jackson et al., 2001).

Seniors with disabilities

Shanley (2001), in an evaluation of teleconferencing as a strategy for carer support in NSW, suggested that it is a cost-effective strategy for bringing people together, especially from geographically isolated areas. Some of its drawbacks are that it takes time and effort to organise, people do not have direct contact with each other, and it may be difficult to talk if others are at home.

Carers

Swindell (2001), in another evaluation of teleconferencing in Australia, showed that isolated frail elderly people with sound minds gained benefit from educational programs delivered by teleconference. The educational program was a catalyst that allowed them to gain new social networks through interacting with others in the teleconference groups, and it allowed them to try new methods of communication.

Isolated frail older people

Telephone

Link-Plus (St Louis) is a free social network service provided via phone to target older people at risk of suicide because of their depression, social isolation, and

Older people at risk of suicide

unmet needs. The program builds on existing crisis centre frameworks and identification of clients comes from crisis hotline calls, community professionals, hospitals, and home health care agencies. The service has two components: clinical case management and supportive therapy using traditional crisis intervention. Evaluation of the program by Morrow-Howell et al. (1998) using a two-group pre-test-post-test method with randomisation showed that the program significantly increased the amount of in-person contact, but not telephone contact. Importantly, the program had no effect on the level of satisfaction with socialisation or the frequency of loneliness, two factors associated with suicide. Unfortunately, the study did not include suicide rate as a dependent variable.

The above contrasts with a study undertaken in Italy by De Leo, Carollo, & Dello Buono (1995) that demonstrated significantly lower suicide rates associated with a **Tele-Help/Tele-Check** service for older people in the community. This was a for-profit project and its success was considered to be due, in part, to the quality of the training received by the telephone contact staff.

Older people at risk of suicide

Computer networks

Because most seniors have not used computers as children or younger adults, they may require support in small self-paced classes to achieve basic computer skills (Charness, Schumann, & Boritz, 1992). They also must overcome the cultural barrier to access that stereotypes them as techno-phobic and technically incompetent. But this situation is changing. Swindell (2001) reported that research from the USA indicates that older people are increasingly interested in using the Internet. The fastest growing group of users on the Internet is women over the age of 55 years, and the primary reason for older people becoming interested in the Internet is to keep in touch with their relatives and friends. Older non-computer owners have stated that they would be more likely to become interested in using computers if they had access to easy-to-understand learning materials, if they could access health information more readily through a computer, and if it allowed them to correspond with others (Adler, 1996).

There have been very few attempts to investigate the impact of computer technology on the quality of life and well-being of older adults (Ito et al., 1999). Conclusions drawn from the few studies that have examined the efficacy of computer use in reducing social isolation and loneliness are equivocal.

In the USA, **ComputerLink**, a computer network providing information, communication, and decision-support functions is available for caregivers of persons with Alzheimer's Disease. A randomised control trial to test the effectiveness of this program found that although *ComputerLink* improved caregivers' decision-making confidence, it did not enhance their decision-making skill nor did it reduce their social isolation. The findings were consistent with another evaluation of computerised decision-support systems (Brennan et al., 1995).

Carers of older people with dementia

A study by Ito et al. (1999) found positive effects from the use of computers. Ito et al. evaluated **SeniorNet**, a non-profit website in the USA that provides adults 50+ access to and education about computer technology and the Internet. That study found that older people who are regular users of SeniorNet reported positively on the medium's potential for social interaction and individual empowerment.

All older people

In the USA, the Carnegie Mellon University's *HomeNet* study conducted by Kraut et al. (1998) found on the other hand, that Internet use had a negative impact. This study found that greater use of the Internet was associated with declines in participants' communication with family members in the household, declines in the size of their social circle, and increases in their depression and loneliness. Kraut et al. subsequently advocated computer policy that encourages interpersonal dialogues and relationships and fosters social ties (such as Email) rather than only information-seeking usage (such as Web searching).

General population

However, Kraut et al. (2002) in a 3-year follow-up study of 308 of the participants in their earlier study showed that when Internet impact is considered over time negative effects seem to dissipate. An important finding of this study was that use of the Internet predicted better outcomes for extroverts and those with more social support but worse outcomes for introverts and those with less social support. Among extroverts, Internet usage was associated with increases in community involvement and self-esteem and declines in loneliness; it was associated with the reverse for introverts. The implication is that socially isolated people may not benefit from Internet usage unless they already have an outgoing personality.

General population

Support groups

Stewart et al. (2001) examined the impact of support groups on widowed seniors' loneliness, affect, and perceived support in Canada. Groups met for 1 – 1.5 hours per week for a maximum of 20 weeks. Some groups only lasted 5 weeks. Each group was co-led by a peer (widow) and an experienced facilitator. Although there was a trend toward decreased emotional and social isolation pre-test-post-test, it was not significant, but the number of participants may have been too small to detect an effect (n = 21). However, during the post-test qualitative interviews, widows reported that one important impact of the support group was decreased loneliness and isolation. Those for whom the intervention was most effective were those for whom it was an early intervention. Other research also points to the need for early intervention (Faberow et al., 1992; Ott, 1999). The results of Stewart et al's study suggested that beneficial effects may not appear for some time and that most participants thought that interventions needed to last around 20 weeks to be effective.

Widowed older people

Structured group interventions may have some success. Andersson (1985) in a Swedish study cited in Stevens (2001) used a randomised control trial to evaluate a structured group intervention for older women who were on the

Older women waiting for housing

waiting list for housing in Stockholm. Intervention consisted of four meetings led by home health aides. Topics such as leisure activities and the neighbourhood were discussed. Six months after these meetings, participants demonstrated more frequent social contacts, an increase in participation in organised activities, and a decline in loneliness. There was however, no change in the availability of a close friend or confidante.

An **educational program on friendship enrichment for older women** that was developed and implemented in the Netherlands has been evaluated by Stevens (2001). Participants in the evaluative study were 40 women aged 54-83 years (average age = 63.7yrs). Subjects were self-selected, therefore it was a biased sample of women who wanted to change. They were likely to belong to what De Jong Gierveld (1984) calls the “socially active, but lonely” and not “the resigned lonely” or “the disappointed lonely”. The program was designed to help women clarify their needs, desires and expectations in friendship; to analyse their current relationships and identify potential friendships; then develop friendship goals and action strategies. The program consisted of 12 weekly sessions to groups of 8 to 12 women. The program was evaluated via a questionnaire at the 12th week and follow-up interviews within 1 month and at 10 to 12 months post-intervention. Results showed a significant reduction in loneliness during the year following the intervention, but the average loneliness score remained within the range of the moderately lonely. The results, however, may be an artefact of subject bias.

Older women

In an earlier study (Stevens & van Tilburg, 2000), a group of 32 women aged 54-80, who completed the friendship enrichment course, were compared to a matched control group from a large nationally representative sample. The researchers found that twice as many women who completed the friendship course were successful in reducing their loneliness and feelings of isolation compared with the control participants. The women in the education group had also developed new friendships of varying degrees of closeness and their friendship networks were more complex (people tied to other people in more varied ways).

Older women

A study in the UK by Killen (1998) suggested that self-selection may play a part in the success of support group interventions. Killen evaluated the effect of support groups on older people and found that although these groups may help to reduce social isolation, it is usually only people who are already socially competent who attend such groups. Thus, isolated, socially incompetent people may not benefit from the establishment of the typical support group.

Older people

Community initiatives

The **Adopt a Granny** programme was set up over 25 years ago in the UK and now helps to provide basic items such as food, clothing and medicine to over 25,000 older people in Africa, Asia and Latin America. It is also used to help improve the lives of the whole community in the long term by providing, for example, shelter and clean, safe water. In Australia, the **Adopt-a-Granny**

Linking older people and families for mutual benefit

scheme usually involves a young family who has no grandparents or the grandparents live a long way away. The family is linked with an older person in the local community for mutual benefit (eg “grandparenting” of children in return for company and social inclusion for the older person). There are no available evaluations of either of these schemes.

The Elderly in Need project in Canada (Moyer, Coristine, MacLean, & Meyer, 1999) identified a four-stage model for building collective capacity within a community to decrease social isolation in frail older people. The four stages were: identifying common ground; establishing self as community player; working on a common project; and working on a multi-agency, multi-sectoral project.

Frail and isolated

The Elder Abused Woman Project was a Toronto-based program that used education, counselling and group activities to address the social isolation faced by older abused women. “Client empowerment through the development of social networks, the pooling of resources and the sharing of information was the overall goal, and achievement, of the program. Program strengths included its low cost and its multi-ethnic approach” (Nahmiash, 1996).

Abused, isolated older people

Project Synergy II was a Calgary-based program that used the advocacy and information service approach. Seniors were highly involved at each stage of detection, prevention and intervention (ie, counselling) in cases of abuse and neglect of older adults. Services were offered to both the abused and the abusers. The evaluation study showed that the program was effective in reducing levels of abuse, loneliness and isolation (Nahmiash, 1996).

Abused, isolated older people and their abusers

Gatekeepers program (especially for early intervention for older people at-risk) is a service-linking community outreach program that originated in Washington by the Spokane Community Mental Health Centre. It enlists mental health professionals, postmen, and meter readers to identify older adults living alone and possibly at risk for a serious health problem such as dementia or suicide (Raschko, 1990). The model has been adopted (and adapted) elsewhere. The results of this program are difficult to measure, but findings in Canada suggest its success. “Specifically, increases have occurred in the community health centre’s caseload of these under-served and hard-to-reach older adults; nursing home bed shortages are no longer experienced in the county, and 40% of the referrals to a related in-home case management program are the result of the gatekeeper system” (Dyck, Mishara, & White, 1998).

Older people living alone and at risk

Because disadvantaged older people do not as a rule self refer in times of need (Raschko, 1990), the gatekeeper model may be particularly effective for targeting older people at risk. Major life changes such as bereavement, discharge from hospital and entry into public accommodation may bring them into contact with key people who are in a position to identify their needs and link them with support groups and other community resources that might reduce their social isolation (Moyer, Coristine, Jamault et al., 1999).

In the UK, the **National Benevolent Fund for the Aged** is a charity that helps people who are over 65 years and on low incomes. To overcome isolation and loneliness resultant from low income, NBFA provides free holidays, emergency alarms, and transcutaneous electrical nerve stimulation (TENS) machines to those in need.

Low income,
poor health

Homeshare was launched in Adelaide in 1997. It has been established in a number of countries to help older people stay in their homes longer. It helps to address social isolation by bringing together older people, who need some help around the home, and younger people who need accommodation. The latter do 10 hours of agreed work in exchange for free accommodation. Evaluation has shown that the matching process requires dedicated coordinators with a caseload of a maximum of 30 matches. The program receives HACC funding, but the restrictions inherent in this are an ongoing source of frustration (Squires, 2001).

Older people
at home and
younger
accommod-
ation
seekers

Retirement village living is another accommodation option that may have a beneficial effect. Buys (2001) in an evaluation of retirement village living in Queensland found that living in close proximity with other older people in congregate accommodation influences informal contact with others and is beneficial for those who seek alternative accommodation due to isolation or loneliness. However, there is some debate around whether this type of accommodation does in fact reduce loneliness or has no effect at all.

Older
alternative
accommod-
ation
seekers

In the USA, Cohen (1992) found that **community-based senior support programs**, that is, services that provide one-on-one support such as preparing meals and bathing might lead to greater isolation by discouraging older people from engaging their social network (i.e. family, friends, neighbours who in the past have provided these services).

Older people
in need of
home help

Recent Government Responses in Australia

Teleconferencing

Link-a-Friend was a teleconferencing program set up by Queensland Health. In this program, a facilitator linked up about eight usually geographically isolated older people by phone on a regular basis and participants contributed to discussion. Topics were sometimes pre-arranged to allow participants time to think or read about the issue in advance.

Rural
and
remote

Homereach Teleconferencing Dementia Project is another example of a teleconferencing program that in this case operates in NSW. The State and Commonwealth governments jointly fund it under their HACC program. The project is a structured intervention to support dementia sufferers and their carers over the phone. *Homereach* is an 8-week program that aims to raise carers' awareness of self-care and empowers them to use respite care and other

Carers,
dementia
sufferers

services. There are now *Facilitators* and *Participants Handbooks* to assist carers as well as *Getting in touch: a carer support model using teleconferencing* (Central Sydney Area Health Services, 1999).

Telephone

Seniors' Enquiry Line is a Queensland government-funded state wide telephone service that provides information about community groups, social activities and other matters of interest to older people. Seniors Enquiry Line started in 1999. It was initially funded for 3 years and is currently being evaluated. Use of the service has been steadily increasing, and in the second year of operation (October 2000 - September 2001) telephone calls had risen to 9,917 and Web visits to 3,711.

All older people

Computers/technology

E-Democracy is a program being developed by the Queensland Government to help provide equitable online access. It aims to engage the community on selected issues and policy matters and is not "older person" specific. Similar government projects operate in other countries (eg UK Online). However, to date there is no evaluation of these programs available and there is some concern that programs of this type may actually increase social isolation. However, evaluation studies should heed the warnings of a series of previously cited studies of the HomeNet program in the USA (Kraut et al., 1998; Kraut et al., 2002). That is, evaluations of the effects of computer usage need to be conducted over a lengthy user period.

General population

Many local governments offer computer courses at libraries, for example Brisbane City Council has classes and Internet access at the majority of their libraries. These are well-used by older people.

Local services for older people

Services funded by the Queensland government to increase the social participation of older Queenslanders operate across rural, remote and urban areas of Queensland. These services include:

- Older people's services or programs at Thursday Island, Marlin Coast, Yarrabah, Burdekin, Redcliffe and Toowoomba;
- Blue Care Senior Oriented Support and Blue Care Brisbane South Region – Redlands Community Service;
- Safe and Confident Living Projects in Central Queensland, Sunshine Coast, Ipswich Region, Inner Brisbane Suburbs, Logan City, and the Gold Coast ;
- Ipswich/Laidley/Boonah/Esk Social Participation Project;
- Maryborough and District Committee on the Ageing Action Program;
- Focus on Older People;

- Senior Women Affirming Life, Love Originality and Wisdom (SWALLOW);
- Active Lifestyles; and
- Multicultural Seniors Program.

Recent Non-Government Responses in Queensland¹

Telephone

Silver Cord Telephone Reassurance Program is provided by St John Ambulance volunteers in Queensland for isolated, older members of the community. Trained volunteers contact clients every day, providing them with social contact, security and regular communication. Since its inception in 1990, the demand for this service has continued to increase. The *Friends for Older People Program* is a similar program in Victoria. Overseas, the *Geriatric Outreach* program in San Francisco is similar.

All
isolated
older
people

The 24-hour Dementia Helpline offered by the Alzheimer's Association throughout Australia is a confidential information and support service for people with dementia and their families, friends, professionals, students and the general public. In Queensland the Helpline funding is mostly provided by the Queensland Government through the HACC programme, with some additional Commonwealth funding.

People with
dementia
and all
citizens
including
those in
rural and
remote
areas

The Helpline was started in 1989, with the number of calls steadily increasing since then by approximately 10% per year. Between July 2000 and June 2001, there were almost 4000 calls to the Helpline. Half of the callers were in the Brisbane Metropolitan area but as this is a state-wide service with a 1-800 number, many calls were from people in rural and remote parts of Queensland. Support groups have also been set up throughout Queensland and trained professionals are available for home visits or resource centre visits.

The majority of callers to the service are females, with the biggest group being daughters of older parents, followed by wives and daughters-in-law.

Elder Abuse telephone help line - The Queensland Department of Families provides funding to Lifeline Brisbane for the operation of the Elder Abuse Prevention Unit. This unit operates the *Elder Abuse telephone help line*, a confidential state-wide telephone information, support and referral service for anyone experiencing or witnessing the abuse of an older person.

Abused
older
people
and
concerned
citizens

¹ Although many of the following projects receive government funding, they are community-based and are run either by community groups or by non-government organizations.

Computers/technology

A number of community-based groups in Queensland such as **60 & Better** and the **Council on the Ageing** (COTA) run free or low-cost courses which teach older people to use computers. Once skilled, many older people use the computer to keep in touch with family and friends via email, or log on to chat rooms, or use the computer for things like family tree research.

All older people

A programme which links carers together by email in the Darling Downs (Toowoomba) area has been set up by **Queensland Council of Carers**. There are now more than 100 so connected.

Carers, geographically isolated

The University of the Third Age in Australia developed **Isolated Bytes** in 1998, a program for isolated older people. One of its primary goals is to foster communication between participants. The program is in the early stages of evaluation, but results of a pilot study indicate that at least half of the participants live in cities with populations greater than 20,000, thus highlighting the fact that many older people are isolated even though they live in large cities. One of the advantages of the program is that it allows participants to retain whatever level of privacy they want.

General population

Older people's groups

There are many social and community groups and organisations aimed specifically at older people. Whether an intentional goal of the organisation or not, such groups are extremely important in preventing social isolation. Some of these groups include National Seniors Association; the Council on the Ageing; 60 & Better; Australian Pensioners and Superannuants' League; Independent Retirees; Self-funded Retirees; Retired Teachers; and Retired Unionists. In addition, clubs such as Bowling Clubs and RSL Clubs also provide a social network for many older people. However, in most cases such groups and clubs require a reasonable level of health in order to participate in them.

Support groups

For older people who may not have good health, or who have disabilities, there are a number of support groups available. The most relevant support groups for older people include the Queensland Council of Carers which has approximately 90 carer support groups throughout Queensland, including some ATSI groups; the Alzheimer's Association; the Queensland Cancer Fund support group; Meals on Wheels and various day care and respite centres.

Other support groups which operate to inform older people or lobby for their rights include Queensland Aged and Disability Advocacy, Older People Speak Out and Seniors' Infolink.

SECTION 3: DISCUSSION

International approaches

Internationally, although many countries have a range of programs to address social isolation among older people, it appears that individual countries commit most of their resources to specific types of programs. For example, many of the programs in the **USA** are computer- or teleconference-based. However, the very effective Gatekeeper program, which is a community-based support program, originated in Washington and has been implemented throughout the USA.

Canada has been very active in developing programs to address social isolation and there the focus has been very much on community-based support programs, including the Gatekeeper program and programs for specific “at risk” groups, such as the Elderly in Need Project and the Elder Abused Woman Project. Teleconferencing has also had some success in Canada.

Sweden and **The Netherlands** have used structured group interventions and educational programs, and in **Italy** a privately-run tele-check program has been effective in reducing suicide rates among older people.

In the past, projects in the **UK** to address social isolation among older people have drawn heavily on the charitable model and have mainly provided basic essentials and health care aids for older people of low socio-economic status. More recent support-group models have been found to attract older people who are already socially competent and thus these programs may not be meeting the needs of those most at risk.

It appears that **Australia** in general, and Queensland in particular, have adopted aspects of both models. While the focus has been on community-based support groups, including social clubs and illness-specific groups, there has also been early acceptance of teleconferencing, tele-check and other telephone-based information and support services. Computer-linked projects are also becoming more accessible through community-based organisations and local government libraries. In addition, innovative projects such as Homeshare have attempted to address social isolation.

Evaluation

Although there has been a range of projects developed to address social isolation, evaluation of the projects, in Australia and elsewhere, has been limited and it is essential that this be built into any future projects from the outset. Of the interventions that have been evaluated, a factor underpinning the success of many of them is the quality of the selection, training and support of facilitators or coordinators of the programs.

Teleconferencing and telephone support services

The evidence suggests that teleconferencing can be effective in reducing loneliness and social isolation and is especially suitable for use in geographically isolated areas.

Whether telephone interventions are effective in reducing loneliness and social isolation is unclear. One of their uses has been to target older people at risk of suicide by virtue of their social isolation. The evidence shows that this intervention does not reduce feelings of social isolation and loneliness, but it may reduce suicide rates. Telephone interventions are popular interventions aimed at reducing social isolation, but further research is needed to determine whether they actually achieve their purpose.

Computer usage

Individual differences and types of program usage are important factors to consider when evaluating the effectiveness of computer usage. Specialised computer programs appear to be effective in improving the decision-making confidence of isolated care-givers of people with Alzheimer's disease, but the programs neither improve their decision-making skill nor do they reduce the care-givers' feelings of social isolation.

The best types of computer programs for reducing social isolation appear to be those such as Email that encourage interpersonal dialogue. Programs that encourage processes such as Web searching may in fact increase social isolation, depression and loneliness and decrease community participation. However, it may be that the success of computer interventions needs to be evaluated after a longer trial period than is usually the case, because older people may need time to adjust to the new technology. Initial negative effects may dissipate over time.

There is some evidence that Internet usage may increase community involvement and decrease loneliness in extroverts, but that it may have the opposite effect on introverts. This may mean that socially isolated older people may not gain from Internet usage unless they are or were previously socially outgoing people.

Support groups

To have any effect on reducing social isolation and loneliness, support group interventions need to have a lengthy implementation period of at least 20 weeks.

There was no relevant research available on gender differences - much of the evaluative research has been done using groups of women - but it may be that support groups are a more effective intervention for women. In addition, it may be that support groups are only effective in reducing social isolation among people who are already socially competent enough to attend such groups.

The implication is that when planning is being undertaken to develop support group projects, energy may need to be invested in developing strategies for enhancing some older people's feelings of self worth, self esteem, social confidence and other associated characteristics if such groups are to be a successful targeted intervention.

Community initiatives

One model that may be particularly effective for targeting older people at risk is the Gatekeeper model especially because disadvantaged older people do not as a rule self-refer in times of need (Raschko, 1990). Major life changes such as bereavement, discharge from hospital or entry into public accommodation may bring them into contact with key people who are in a position to identify their needs and link them with support groups and other community resources that reduce their social isolation (Moyer, Coristine, Jamault et al., 1999).

Programs such as Homeshare that involve mutual intergenerational sharing of accommodation may be effective in reducing social isolation.

In Canada, a number of initiatives have been effective in reducing social isolation associated with elder abuse. These programs have generally used empowerment approaches that emphasise self-esteem, social support and control.

Other support services

To help overcome social isolation there is a need for specific services and information that are available, accessible, and affordable for older people. In addition, there needs to be greater public spending on services that have a socialising function such as accessible transport, user-friendly road crossings, good street lighting, and appropriate housing [Department of Health and Ageing, 2001; Hall & Havens, 1999; Healey, 1990; Joseph Rowntree Foundation, 1999; Minichiello, 1992; Newman, 1991).

SECTION 4: CONCLUSIONS

The evidence suggests that an interventions plan to reduce social isolation amongst older people should pay specific attention to three factors; targeting, strategies, and evaluation.

Targeting

Effective projects use specific targeting approaches including:

- Identifying those population groups or individuals at greatest risk and directing programs towards them;
- Acknowledging individual differences among older people and not assuming that all older people should participate.

Strategies

Certain strategies have been demonstrated to be more effective than others. These include:

- Developing a framework for action on social isolation within specific communities and involving older people in all levels of planning, implementation and evaluation; and encouraging the ready pool of volunteers within the older population to engage in the process;
- Ensuring interventions have well-trained and appropriately supported facilitators and/or project co-ordinators;
- Promoting healthier living in old age, poor health being strongly related to social isolation;
- Involving all levels of government in the dissemination of information related to ageing and social isolation to all communities across Queensland, including multicultural and Indigenous communities, and encouraging seniors' groups or influential community elders to lead the dissemination process;
- Linking older people to a single point of access for all services and help;
- Providing public service systems that cater for the needs of older people (eg transport, especially when the person no longer has a driving licence);
- Promoting awareness among the general public of older people's important contributions to society, and discouraging negative stereotyping (as Qld Government does);
- Implementing programs that focus on skill development (eg social competence – confidence, self esteem, and the skills to form social relationships) to potentially address the needs of particular persons who may not otherwise be covered by programs that rely on these personal skills for participation.

Evaluation

Because there is limited understanding of what constitutes effective interventions for social isolation, it is important that:

- Evaluation is built into community-based projects from their inception, and projects are preferably preceded by the trial of pilot programs;

- Evaluations of government-funded programs and interventions, including their sustainability and long-term benefits, are promoted and appropriately funded;
- Networking between communities, university researchers and policy makers is developed to provide the technical expertise and financial support necessary for thorough evaluation of interventions, and to prevent duplication of efforts, to share experiences, and to serve as think tanks.

REFERENCES

- Acorn, S., & Bampton, E. (1992). Patients' loneliness: a challenge for rehabilitation nurses. *Rehabilitation Nursing, 17*(1), 22-25.
- Adler, R. P. (1996). *Older adults and computers: Report of a national survey*. Retrieved, from the World Wide Web: <http://www.seniornet.org/intute/survey2.html>
- Anderson, D. N. (2001). Treating depression in old age: the reasons to be positive. *Age and Ageing, 30*, 13-17.
- Andrews, K. (2002). *The next phase of the National Strategy for an Ageing Australia. Speech given in Melbourne, 17th February*. Melbourne.
- Bodden, N. (1994). *Intermediating activities for older persons: a study on factors influencing successful intermediation*. University of Nijmegen, the Netherlands.
- Brennan, P. F., Moore, S. M., & Smyth, K. A. (1995). The effects of a special computer network on caregivers of persons with Alzheimer's disease. *Nursing Research, 44*(3), 166-172.
- Buys, L. (2001). Life in a retirement village: Implications for contact with community and village friends. *Gerontology, 47*(1), 55-61.
- Cattan, M., & White, M. (1999). *Health promotion interventions targeting social isolation and loneliness*. Paper presented at the Health Promotion for Elderly People: A Research into Ageing Workshop, London School of Hygiene and Tropical Medicine, London.
- Central Sydney Area Health Services. (1999). Homereach helps the helpers. *CSAHS Newsworks, November*.
- Charness, N., Schumann, C. E., & Boritz, G. M. (1992). Training older adults in word processing: Effects of age, training technique, and computer anxiety. *International Journal of Technology and Aging, 5*(1), 79-106.
- Cohen, J. W., & Spector, W. D. (1996). The effect of Medicaid reimbursement on quality of care in nursing homes. *Journal of Health Economics, 15*, 23-28.
- Day, A. (1992). *Opening address*. Presented at the Social Isolation in Australia Conference, Canberra.
- De Jong Gierveld, J. (1984). *Loneliness: a multi-method approach*. Deventer: Van Loghum Slaterus.
- De Leo, D., Carollo, G., & Dello Buono, M. (1995). Lower suicide rates associated with a Tele-Help/Tele-Check service for the elderly at home. *American Journal of Psychiatry, 152*, 632-634.

- De Leo, D., Hickey, A., Neulinger, K., & Cantor, C. (2000). *A Hidden Problem: Suicide in Older Men in Queensland. Report to Office of Ageing, Families, Youth & Community Care Queensland*. Brisbane: Australian Institute for Suicide Research and Prevention.
- Department of Families. (2001). *Our Shared Future Progress Report 2001 Highlights*. Brisbane: Queensland Government
- Department of Families Youth and Community Care Queensland. (1999). *Our Shared Future: Queensland Government's Framework for Ageing 2000-2004*. Brisbane: Queensland Government.
- Department of Health and Ageing. (2000). *Attitude, Lifestyle & Community Support. Discussion Paper for the National Strategy for an Ageing Australia*. Canberra: AusInfo.
- Department of Health and Ageing. (2002). *National Strategy for an Ageing Australia*. Canberra: Commonwealth of Australia
- Department of Health and Aged Care. (2000). *LIFE: A framework for prevention of suicide and self-harm in Australia: Areas for action*. Canberra: Publications Production Unit.
- Dyck, R. J., Mishara, B. L., & White, J. (1998). Suicide in children, adolescents and seniors: key findings and policy implications. In *Canada Health Action: Building on the Legacy. Vol 3: Settings and Issues*. Paper presented at the National Forum on Health Canada, Ottawa.
- Edelbrock, D., Buys, L., Creasey, H., & Broe, G. A. (2001). Social support, social networks and social isolation; The Sydney older persons study. *Australasian Journal on Ageing, 20*(3).
- Faberow, N. L., Gallagher-Thompson, D., Gilewski, M., & Thompson, L. (1992). The role of social supports in the bereavement process of surviving spouses of suicide and natural deaths. *Suicide and Life Threatening Behavior, 22*(1), 107-124.
- Gardner, I., Brooke, E., Ozanne, E., & Kendig, H. (1998). *Improving social networks: A research report*. Adelaide: Lincoln Gerontology Centre, La Trobe University.
- Gibson, H. B. (2000). *Loneliness in the life cycle*. New York: St. Martins Press.
- Hall, M., & Havens, B. (1999). *Ageing in Manitoba Study*. Winnipeg: Department of Community Health Sciences, University of Manitoba.
- Havens, B. (1989). *Social Isolation: 12 Years Later*. Paper presented at the Presented at the Canadian Home Economics Annual Meeting, Winnipeg.
- Healey, J. (1990). Community services: long-term care at home? In H. Kendig & J. McCallum (Eds.), *Grey Policy: Australian Policies for an Ageing Society* (pp. 127-149). Sydney: Allen and Unwin.
- Ito, M., Adler, A., Linde, C., Mynatt, E., & O'Day, V. (1999). *Broadening Access: Research for Diverse Network Communities, 1998* Retrieved from the World Wide Web:
http://www.seniornet.org/research/snaccess_980303.html
- Jerrome, D. (1981). The significance of friendship for women in later life. *Ageing and Society, 1*, 175-196.

- Jerrome, D. (1983). Lonely women in a friendship club. *British Journal of Guidance and Counseling*, 11, 10-20.
- Joseph Rowntree Foundation. (1999). *Developing a Preventive Approach with Older People*. Retrieved 27th February 2002, from the World Wide Web: <http://www.jrf.org.uk/knowledge/findings/socialcare/639.asp>
- Joseph Rowntree Foundation. (2001). *Tackling Social Exclusion through Social Care Practice*. Retrieved 27th february 2002, from the World Wide Web: <http://www.jrf.org.uk/knowledge/findings/socialcare/211.asp>
- Killeen, C. (1998). Loneliness: an epidemic in modern society. *Journal of Advanced Nursing*, 28(4), 762-770.
- Kraut, R., Kiesler, V., Boneva, B., Cummings, J., Helgeson, V., & Crawford, A. (2002). Internet paradox revisited. *Journal of Social Issues*, 58(1), 49-74.
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, V., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: a social technology that reduces social involvement and psychological well-being? *American Psychologist*, 53(9), 1017-1031.
- Kunugi, T. (1989). Women and population aging. *Asia-Pacific Population Journal*, 4(2), 75-79.
- Lachs, M. S. (2000). I want my mother to get her own life! *Prevention*, 52(3), 188-190.
- Minichiello, V., Russell, C., & Swerissen, H. (1992). A framework to make sense of public policy and aged care. In V. Minichiello & L. Alexander & D. Jones (Eds.), *Gerontology: Multidisciplinary Approach*. Sydney: Prentice Hall.
- Monk, A. (2000). The influence of isolation on stress and suicide in rural areas: An international comparison. *Rural Society*, 10(3), 393-403.
- Morrow-Howell, N., Becker Kempainen, S., & Judy, L. (1998). Evaluating an intervention for the elderly at increased risk of suicide. *Research on Social Work Practice*, 8(1), 28-46.
- Moyer, A., Coristine, M., Jamault, M., Roberge, G., & O'Hagan, M. (1999). Identifying older people in need using action research. *Journal of Clinical Nursing*, 8(1), 103-111.
- Moyer, A., Coristine, M., MacLean, L., & Meyer, M. (1999). A model for building collective capacity in community-based programs: the Elderly In Need Project. *Public Health Nursing*, 16(3), 205-214.
- Nahmiash, D. (1996). Preventing, Reducing and Stopping the Abuse and Neglect of Older Adults. In Canadian Communities in What Determines Health? Summaries of a series of Papers on the Determinants of Health Commissioned by the National Forum on Health, *National Forum on Health*.
- Newman, P. (1991). *Successful ageing, transport and urban design*. Paper presented at the Challenges for an ageing society: charting the future for Western Australia: proceedings of a conference held by th November, 1991 as part of the state strategy on ageing. West Perth, WA: Office of Seniors' Interests.

- Ott, C. (1999). Patterns of change in mental health status during the first two years of spousal bereavement. *Dissertation Abstracts International*, 59(7(B)), 3706.
- Owen, T. (2001). The high cost of isolation. *Working with Older People*, 5(1), 21-23.
- Peel, N., Westmoreland, J., & Steinberg, M. (2002). Transport safety for older people: A study of their experiences, perceptions and management needs. *Injury Control and Safety Promotion*, 9(1), 19-24.
- Raschko, R. (1990). The gatekeeper model for the isolated, at-risk elderly. In N. L. Cohen (Ed.), *Psychiatry takes to the streets: Outreach and crisis intervention for the mentally ill* (pp. 195-209). New York: The Guilford Press.
- Rosenman, S. J. (1998). Preventing suicide: what will work and what will not. *The Medical Journal of Australia*, 169(2), 100-102.
- Russell, C., & Schofield, T. (1999). Social isolation in old age: a qualitative exploration of service providers' perceptions. *Ageing and Society*, 19(1), 69-91.
- Shanley, C. (2001). Teleconferencing as a strategy for carer support. *Australasian Journal on Ageing*, 20(3, Supp.1), 3.
- Sheehan, M., Davey, J., Schonfeld, C., Ferguson, M., Findlay, R. & O'Brien, C. (1997). Final Report - Development of a Package of Learning Materials to Assist Older Drivers in Managing Their Day-to-Day Driving. Report to Land Transport and Safety Division, Queensland Transport, Brisbane.
- Squires, B. (2001). *Homshare NSW: the innovation trap*. Paper presented at the Australian Association of Gerontology National Conference, Canberra.
- Stevens, N. (2001). Combating loneliness: a friendship enrichment programme for older women. *Ageing and Society*, 21, 183-202.
- Stevens, N., & van Tilburg, T. (2000). Stimulating friendship in later life: a strategy for reducing loneliness among older women. *Educational Gerontology*, 26(1), 15-35.
- Stewart, M., Craig, D., MacPherson, K., & Alexander, S. (2001). Promoting positive affect and diminishing loneliness of widowed seniors through a support intervention. *Public Health Nursing*, 18(1), 54-63.
- Stewart, M., Mann, K., Jackson, S., Downe-Wamboldt, B., Bayers, L., Slater, M., & Turner, L. (2001). Telephone Support Groups for Seniors with Disabilities. *Ageing and Mental Health*, 20(1), 34-39.
- Swindell, R. (2001). Technology and the over 65s? Get a life. *Social Alternatives v.20 no.1 Jan 2001: 17-23*.
- Teshuva, K., Stanislavsky, Y., & Kendig, H. (1994). *Towards Healthy Ageing*. North Blackburn, Victoria: Collins Dove.
- Victor, C., Bond, J., Bowling, A., & Scambler, S. (2000). *Loneliness, Social Isolation and Living Alone in Later Life*. Economic and Social Research Council. Retrieved, from the World Wide Web: <http://www.shef.ac.uk/uni/projects/gop/gop21.html>

- White, H., McConnell, E., Clipp, E., Bynum, L., & et al., (1999). Surfing the net in later life: A review of the literature and pilot study of computer use and quality of life. *Journal of Applied Gerontology, 18*(3), 358-378.
- Williams, G. M., Cartwright, C. M., Steinberg, M. A., & King, J. A. (1999). *A double jeopardy? NESB and ageing*. Report to Multicultural Affairs Queensland. Brisbane: Queensland Department of the Premier and Cabinet.
- Windriver, W. (1993). Social isolation: unit based activities for impaired elders. *Journal of Gerontological Nursing, 19*(3), 15-21.