An exploration of national calls to Lifeline Australia: social support or acute crisis care?

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Abstract

Lifeline Australia Inc provides a telephone counselling and referral service to all Australians with the support of more than 50 national member call centres. The service began in Sydney Australia in 1963 in response to the suicide of Roy Brown. The service receives an average national call rate of more than 1200 calls per day annually, which are answered by its trained volunteer counsellors. The telephone counsellors of the service record information on many of these calls in Lifeline's 'Client Service Management Information System' (CSMIS).

This paper presents a descriptive summary of the national CSMIS data set for the months of April, May, and June 2003. 90128 cases were examined and variables such as caller focus, gender, age, marital status, call issue, and suicide and mental health information were examined. People generally seek out informal sources of social support before more formal supports are sought. Telephone counselling and referral can be regarded as rather impersonal and a more formal source of social support, thus its calls may reflect a breakdown of the caller's more usual or traditional sources of social support. The CSMIS data set was examined to ascertain if its data supported the suggestion that the service is a generalist telephone counselling service. Such services have been reported to provide the majority of their clients with social support rather than acute crisis care.

The CSMIS data provided a clear national profile of the callers to the service. The results of this study support the hypothesis that callers are generally seeking social support from the service, with potentially socially isolated groups such as singles being over represented. The implications of this finding are explored, with particular regard to Lifeline's role in suicide intervention and prevention. The findings of this study suggest the Lifeline service has an important role in meeting the social support needs of socially isolated Australians, a role that needs further research. The paper presents preliminary findings from an Australian Research Council (ARC) Linkage project with industry partners UnitingCare Ballarat – Lifeline Ballarat and Lifeline Australia Inc.

Telephone counselling was first used widely by suicide prevention and crisis intervention services, in the 1960s, as a means of providing immediate and inexpensive access to crisis intervention for those in distress (Lester, 2002). There is now a wide variety of community services that address individuals' psychological needs via the telephone (Coman, Burrows, & Evens, 2001). Lifeline's telephone counselling and referral service grew from humble beginnings in Sydney Australia in 1963, to now be a leading national and international organization in its field. Generalist telephone counselling and referral services are said to service very heterogeneous populations (Apsler & Hoople, 1976). This study presents a descriptive summary of national Lifeline data and examines if it is congruent with the service being a generalist telephone counselling and referral service, which in the main serves people seeking social support rather than acute crisis care such as suicide intervention.

Bobevski and Holgate (1997) suggest that telephone counselling tends to be of three types. The first are the large generalist community agencies that provide 24-hour telephone counselling to the 'community at large'. The Samaritans in Great Britain and Lifeline in Australia were identified as providing such a service by these authors. The second are those that provide very specific telephone counselling services for people with particular needs and specific groups. The third type is health and welfare agencies offering telephone counselling within normal business hours. Lazar and Erera (1998) suggest generalist telephone counselling services fill an important niche in providing social support to the community. The 24-hour, accessible and equitable nature of a generalist telephone counselling service have been claimed to make them an interesting case study for the examination of social support (Lazar & Erera).

Social support refers to social interactions that are perceived by the recipient to facilitate coping and assist in responding to stress (Letvak, 2002). Social support is thought to reduce

the total amount of stress a person experiences as well as help one cope better when stressed (Bunker et al., 2003, Dalgard, Bjork, Tambs, 1995, House, Landis, & Umberson, 2003). Cunningham and Barbee (2000) define a social support network as the people from whom an individual can reasonably expect to receive help from in a time of need. Social support has been said to contain emotional, practical, and informative dimensions (Landmark, Strandmark, Wahl, 2002). The term social isolation is used in the context of the debate about social support and health status, and may be defined as the absence of satisfying relationships and low level of involvement in community life (Rosenfield, 1997). Data from long-term, prospective studies suggest that a lack of social relationships constitutes a major risk factor for mortality (House, Landis & Umberson). For example, social isolation has consistently been shown to have an independent causal association with the prognosis of coronary heart disease (Bunker et al., 2003; Hemmingway & Marmot 1999; Salovey & Rothman, 2003). Two broad categories of support are informal and formal. The Hierarchical Compensatory Model of Source Utilization suggests that people seek social support in an ordered way beginning with the closest informal sources of support such as partners or spouse, where available, before seeking assistance from more formal sources (Cheers, 2000). Telephone counselling may be regarded as rather impersonal and a more formal source of social support, thus its calls may reflect a breakdown of the caller's more usual or traditional sources of informal social support.

Lazar and Erera (1998) used generalist telephone counselling for an examination of social support in Israel. Calls from non-married married persons (64.7%) were almost twice those for married persons (35.3%). Such findings are consistent with others (Johnson, 1979; Kliewer, Lepore, Broquet, & Zuba, 1990; Teare, Garrertt, Coughlin, Shanahan, & Daly, 1995) that report 'helplines' basically providing social support to the large majority of their callers, rather than acute crisis care. This study looks at national Lifeline Australia call data from its

computerised Client Service Management System (CSMIS), to examine if it supports the previous reports of generalist telephone counselling services providing a source of social support to the community.

Method

Materials

Lifeline Australia Inc provided CSMIS cases logged between 01-04-2003 to the 29-06-2003. Fifty-one Lifeline centres and sub-centres from around Australia contributed the 90,128 individual cases contained in to the data set supplied. The Statistical Package for the Social Sciences (SPSS® 11.5) (SPSS Inc, 2003) was used for the analysis.

Procedure

The 2003 CSMIS data provided by Lifeline Australia Inc was imported as a comma delimited text file into an SPSS® 11.5 file (SPSS Inc, 2003) data editor. Variable labels and codes were then added to the file, based on information supplied by Lifeline Australia Inc and the CSMIS 'User Manual' (Cameron, 2001). A descriptive analysis of selected variables was undertaken.

Results

The CSMIS data set supplied for the project contained 90128 individual cases and 126 variables. Missing data presented a substantial problem. A number of the columns were devoid of data or contained repeated data and other variables had only a small number of cases. The gender variable indicated 52481 female (58.2%), 24868 (27.6%) male, and 12779 (14.2%) unidentified callers were recorded. Table 1 presents a breakdown of the CSMIS estimated age groupings for these cases.

Table 1
CSMIS caller age groupings

CSMIS Age Group	Number	Percentage
0-14	364	.4
15-19	1740	1.9
20-24	4598	5.1
25-34	14509	16.1
35-44	17909	19.8
45-54	14245	15.8
55-64	8573	9.5
65-74	2509	2.7
75-84	924	1 .0
85+	283	.3
Unknown	24471	27.2
Totals	90128	100.0

Caller focus was recorded for 59730 calls (66.3% of all calls), and miscoded for a further eight cases. Caller focus information was coded incorrectly for eight cases, which could not be identified. Calls focusing on the caller were responsible for 51425 cases (86.1% of valid cases), family member 4012 cases (6.7%), friend 1307 (2.2%), professional capacity 872 (1.5%), partner or spouse 31(0.1%), other 2075 (3.5%) cases.

Marital status was reported for all 90128 cases. Table 2 presents the frequency and percentage of calls received for each relationship grouping in the CSMIS.

Table 2
CSMIS Caller Marital Status Data

Relationship	Frequency	Percentage
Divorced	6486	7.2
Married	10764	11.9
Partnered	5313	5.9
Separated	7007	7.8
Single	23112	25.6
Widowed	2901	3.2
No Code	5	0.0
Unknown	34540	38.3
Total	90128	100.0

CSMIS information for the 'called before' variable was available for 26506 cases (29% of valid case) (male 8776; females 17498; unknown 232). Information was available on 'how long' the caller had been using the service for 18619 cases (21% of valid cases) (males 6214; female 12281; unknown gender 124). The how long variable was made up of 1645 cases (8.8% of case for the how long variable) were recorded for the variable indicating the caller had been calling for a 'few weeks', 2187 (11.7%) for a 'few months', 7355 (39.5%) for more than a year, and 1000 (5.4%) as a 'few months to a year'. A total of 6424 (34.5%) cases recorded the caller using the service for an 'unknown' time and 18 entries were improperly coded and could not be assigned to a CSMIS grouping for the variable.

CSMIS data for the caller's presenting issue was almost complete with valid (N = 90110). Calls creating the non-counselling CSMIS grouping (*n*=20313) consisted of 14049 cases (15.6% of valid cases for the issue variable) recorded as being 'hang-up' or 'other' non-counselling calls. A further 810 cases were recorded in the CSMIS non-counselling grouping as nuisance, abuse, hoax, and breather non counselling calls. Thanks and appreciation type non counselling calls were recorded for 447 (0.5%) cases. Figure 1 presents the frequency of calls in each of the 10 CSMIS general (level 1) categories for presenting issues and the total number of calls recorded for each issue.

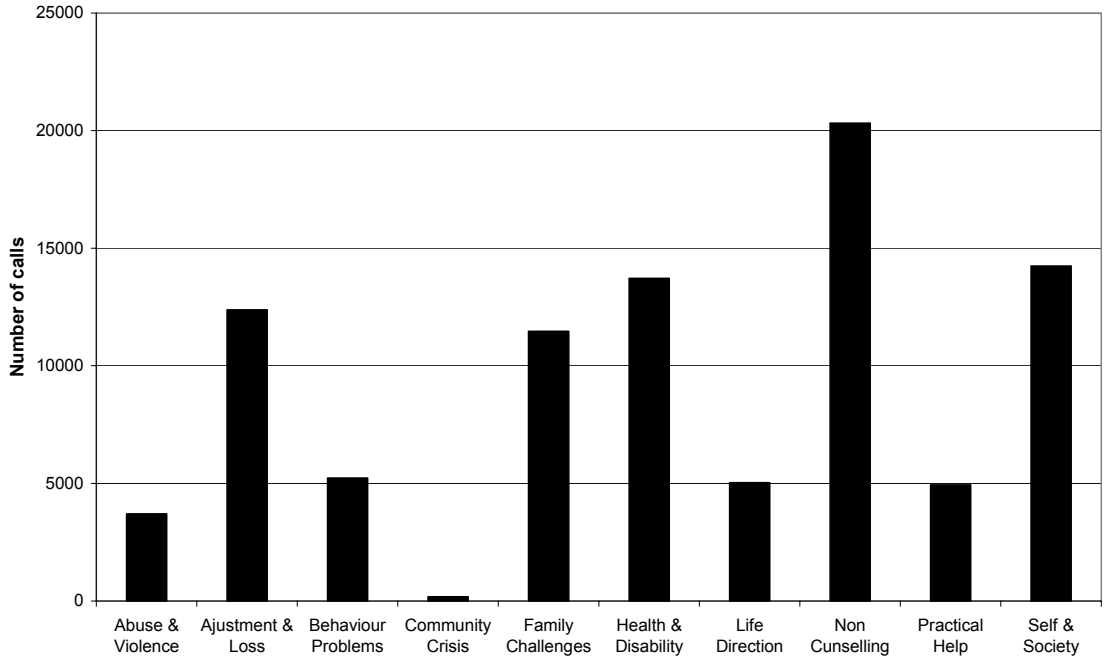

Figure 1. CISMS issue categories and call totals.

The CSMIS data indicated that suicidal thoughts were recorded for 2386 calls (2.6% of valid cases). A total of 2563 cases (2.8% of valid cases) were recorded as involving suicidal thoughts or plans. Mental health disorders were reported for 7591 cases (8.4% of valid cases). Specific mental health problems were identified by the callers as having been diagnosed at some time for 7363. A breakdown of the total number of cases for each mental health disorder is presented in Figure 2.

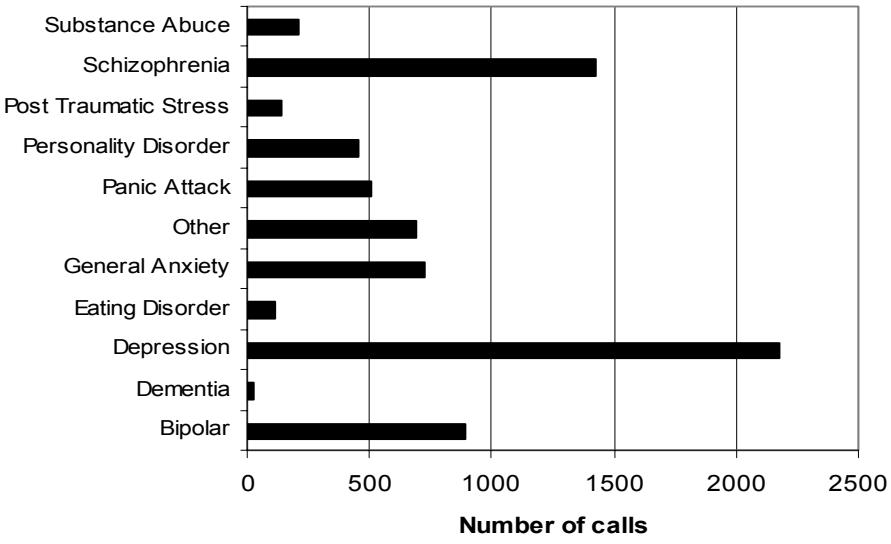

Figure 2. Number of previously diagnosed mental problems reported by callers within each CSMIS mental health category.

Discussion

Females contacted the Lifeline telephone counselling and referral service at a considerably greater rate than males. Calls to the service generally were about the caller. Callers without a partner or spouse were over represented in the sample. It was apparent a large proportion of callers identified as regular callers had been calling the service for some time. Suicide related calls only seem to have contributed to a small proportion of all calls to the service. These results and others supported the hypothesis that callers to the service were generally seeking social support, rather than acute crisis or suicide interventions.

The proportion of female callers (58.2%) to the Lifeline service was more than twice the male proportion of callers (27.6%). Such a result would be consistent with females taking health related action much more often than males (Titulaer, Trickett, & Bhatia, 1997). Male

perceptions in this area are suggested to be less accurate than females, with males said to use more denial and escapist coping. Males and females may even use different standards in evaluating whether they are lonely (Vandervoort, 2000). It has also been reported that male callers may need to experience significantly higher intensity of stress than females before initiating a call (Ullmann, & Garrison, 1976). The increased use by females of telephone counselling services seems congruent with findings that women generally appear to be better than men in providing and receiving emotional support (Vandervoot). An alternative explanation has been put forward by Ullmann and Garrison (1976). They suggest that women are exposed to more stressful events than men. Both explanations seem to point to stress and its reduction as being involved in help-seeking behaviour to Lifeline. The stress hypothesis is supported by McLennan's (1991) findings that students who did not seek help of face-to-face counselling, had lower levels of emotionality and perceived problem seriousness than those participants who did seek counselling

The difference in male and female use of the Lifeline service is consistent with other research (see, Lazar & Erera 1998). For example, a 'Hot Line' to specifically support widowed clients reported 90% of their callers were from women (Abrahams, 1972). In Yugoslavia, males have been reported to call their telephone counselling service at about half the rate of females. In Los Angeles calls by males were made significantly more often than Yugoslavia, but women were still over represented. The difference in male call rates between Yugoslavia and Loss Angeles was suggested to reflect less prejudice against and more acceptances of emotional problems in the men of Los Angeles (Tekavcic-Grad, Farberow, Zavasnik, Mocnik, & Korenjak, 1988). Females have also been reported to have a greater tendency than men to reuse telephone counselling services (Apsler & Hoople, 1976). This result was also supported by this study, which showed that females were using the service repeatedly at about twice the rate of men.

Of the 59730 calls that had CSMIS caller focus details, 86.1 percent were entered as focusing on the caller. This result suggests that the majority of calls to the service are from callers who are seeking support for themselves. The result suggests the service has a primary role of supporting its callers. The small proportion of callers identified as seeking assistance for another may indicate the service plays a lesser, but perhaps non the less important, role in assisting callers to support family, friends, partner or spouse, clients, and others.

In line with past reports (Johnston, 1979; Lazar & Erera, 1998; Teare et al., 1995) of generalist telephone counselling and referral services primarily providing social support to their clients, it was found that single and other non-partnered or non-married callers seemed to be overrepresented in Lifeline's calls. Single, widowed, divorced, and separated people do not have the fundamental informal support of a partner or spouse available to them. Thus, it may be expected this potentially isolated grouping of people would be using the more formal Lifeline service with greater frequency than those with the informal support of a partner or spouse.

Further evidence that the Lifeline service is a provider of social support may be inferred from the results for regular callers, with over 29 percent of all calls being from people who had called before. It seems highly possible this figure is a conservative estimate of the true proportion of cases, as identification of regular callers by frequently changing counsellors is problematic. For example, the Gladstone centre reported 41.4% of all calls as repeat. Of the 18619 cases recorded as having called before, 74 percent were from callers identified as calling for a few months to more than one year. The results suggest the service is catering for large proportion of repeat cases, many of whom seem to use the services across an extended

period of time. Such a finding would be consistent with a social support role being adopted by the service.

Caller issue categories provided further evidence that callers to the service were accessing it for general social support, rather than for acute crisis or suicide interventions. For example, the largest category was for the non-counselling issue, accounting for over 20 percent of the 90128 cases. The next largest issue grouping was 'self and society', with 16 percent of all calls. The 'self and society' grouping contains cases the sub-issues of belonging, discrimination, identity, loneliness, relationships, self confidence, social justice, stigma, gender identity, and sexuality. These call themes all seem to point to the callers being potentially socially isolated from support. This seems true of the next two largest most frequently occurring issues. 'Health and disability' accounted for 15 percent of all cases and includes issues such as mental health issues, intellectual disability, personal injury, and physical illness. The 'adjustment and loss' category accounted for 14 percent of all cases and includes death , illness and disability, relationship breakdown, retirement, role change, separation/divorce, and migration or relocation. The five largest sub-groupings, which made up the major CSMIS issues categories, were: mental disorder (Health & Disability) (n = 8108), loneliness (Self & Society) (n = 6086), relationships breakdown (Adjustment & Loss) (n = 5561), relationships (Self & Society) (n = 4075), and marriage/partner (Family Challenges) (n = 3409). These five sub groupings accounted for 27239 calls, or 39% of all 69797 designated counselling calls for the period examined. All of these major categories and sub groupings seem to point to possible isolation from primary sources of social support. Further support for the hypothesis that social support rather than acute crisis care dominates the calls to Lifeline may be inferred from the fact that the 'community crisis' (.2% of all cases) and 'abuse and violence' (4% of all cases) groupings received the smallest proportions

of calls. Indeed, only 2563 cases (2.8% of all cases examined) were recorded as involving suicidal thoughts or plans.

The investigation of CSMIS data suggests that the service is indeed servicing callers who may be at risk of being socially isolated. There was little evidence that the service has a primary role of dealing with acute crisis situations such as suicide calls or community crisis. The analysis suggests that the service has evolved from its original role in providing crisis intervention and now seems to be a true generalist service. This finding has important implications for the service. Lifeline Australia and its associated centres have found it impossible to meet the demand from its callers, with many calls going unanswered. This sadly can lead to callers who are in acute crisis being unable to reach the service in their time of need, potentially increasing the risk of suicide for the callers. The Lifeline Australia service has plans to introduce a system whereby calls can be transferred from a centre with no further capacity to take calls to one with lines that are free. While this may seem a simple answer to the problem of excess demand, it may create further problems for the service and still can not guarantee a line will be available when it is needed by callers at high risk of suicide. For example, such a change could conceivably increase the use of the service by regular and managed callers, who already place a large pressure on the service's resources, by redirecting these calls to other centres where their histories and management are not known or recognised.

Lifeline Australia's volunteer counsellors are recruited and trained at a rate that is generally matching the rate at which counsellors leave the service. Kinzel and Nanson (2000) report this problem is not one confined to the Lifeline service. It seems probable that Lifeline's proposed call diversion system will increase the number of calls taken by a volunteer

counsellor during a shift. Busier shifts may then contribute to greater stress levels being experienced by the volunteer telephone counsellor during and after a shift. In support of this contention it has been reported that the greatest predictor of stress in volunteer telephone counsellors was the total length of time spent on calls per shift (Mishara & Giroux, 1993). Inturn, an increase in stress may lead to more of what Kinzel and Nanson (2000) identify as compassion fatigue. Such fatigue seems to have the potential to result in greater burnout and in higher rates of trained counsellors leaving the service, thus potentially leading to an overall reduction in the capacity of the service to take calls (for more information on burnout in telephone counselling services see, Littlefield & Koff, 1986; MacKinnon, 1998). A possible solution to deal with callers in acute suicide situations, which may also assist in reducing the stress levels for Lifeline's counsellors, could be to have dedicated suicide lines that deal exclusively with high risk acute (urgent) suicide cases alone. This would remove a highly stressful group of callers (Mishara & Giroux) from the general Lifeline service and provide a dedicated service to those in greatest immediate risk of suicide. Such an approach would seem a possible step towards a solution to high risk suicide calls going unanswered and assist in addressing the drop-out rates of the service.

A further possible step in addressing the over demand problems would be to deal with the drop out rate of the service. If the drop out rate of trained telephone counsellors were addressed it could directly effect both the over demand and further reduce the drop out rate problems. For example, more trained telephone counsellors available to take shifts may mean centres could then have multiple cover on shifts, at present centres can have trouble filling shifts with a single telephone counsellor and can have lines unattended. Multiple cover on shifts, particularly during the potentially busier times of the day, would conceivably lead to more calls being answered per shift. Multiple cover, inturn, may also reduce the stress levels

of the telephone counsellors (Mishara & Giroux, 1993), which would then have the potential to further reduce drop out rates.

The social support role of the Lifeline service is no doubt an important one with possibly unidentified and perhaps more covert outcomes. The role of telephone counselling services such as Lifeline in supporting socially isolated callers who may be at increased risk of illness, both psychological and physical, and premature death (see Bunker et al., 2003; House et al., 2003,) is at present unclear. A review of telephone counselling information and referral services (Community Services Victoria & Health Department Victoria, 1988) found that telephone counselling can avert the need for further professional assistance (also see Carver, 1995; Evans, Morgan, & Hayward, 2000), which suggests it has a role to play in reducing the strain on other health care providers. It has also been demonstrated that telephone counselling can alleviate psychological distress (Carver, 1995; Ko & Lim, 1996). Dealing with caller stress before it reaches critical levels may avert potential crisis situations from occurring. The benefits that may accrue to the community and clients by having a service such as Lifeline providing social support should not be underestimated and seem to warrant further empirical research.

Lifeline Australia telephone counselling service appears to be a generalist telephone counselling service with a primary role in providing social support to potentially socially isolated callers. It may be that the Lifeline telephone counselling and referral service needs to decide whether it continues trying to provide both social support and acute crisis intervention. Impending changes to the Lifeline telephone system that would allow calls to be directed from a busy centre to one that has free counselling lines could alleviate the existing problems with unmet demand for counselling from the service. However, this change may not help Lifeline deal with the fundamental problem of trained volunteers leaving the service at around

the rate of recruitment. The change and may even increase this problem and would not seem to solve the problem of high risk suicide calls to go unanswered.

References

Abrahams, R. B. (1972). Mutual help for the widowed. *Social Work, 17,* 54-61.

Apsler, R., & Hoople, H. (1976) Evaluation of crisis intervention services with anonymous clients. *American Journal of Community Psychology, 4,*293-302.

Bobevski, I., & Holgate, A. M. (1997). Characteristics of effective telephone counselling skills [Electronic version]. *British Journal of Guidance & Counselling, 25*, 239-249.

Bunker, S. J., Colquhoun, D. M., Esler, M. D., Hickie, I. B., Hunt, D., Jelinek, V. M., Oldenburg, B. F., Peach, H. G., Ruth, D., Tennant, C. C., & Tonkin, M. (2003). Position statement “stress” and coronary heart disease: psychosocial risk factors [Electronic version]. *Medical Journal of Australia, 178*, 272-276.

Cameron, L. (2001). *Lifeline Australia telephone counselling CSMIS user manual*. Brisbane: Lifeline Brisbane.

Carver. F. A. (1995). *Crisis counselling: an exploratory study of outcomes*. Canberra: University of Canberra.

Cheers, B. (2000). Social support in remote areas of Australia. *Rural Social Work, 6,* 4-16.

Coman, G. J., Burrows, G. D., & Evans, B. J. (2001). Telephone counselling in Australia: applications and considerations for use. *British Journal of Guidance & Counselling, 29*, 247-258.

Community Services Victoria, & Health Department Victoria. (1988). *Review of telephone counselling, information and referral services: final report*. Melbourne: Community Service Victoria.

Cunningham, M. R., & Barbee, A. P. (2000). Social support. In C. Hendrick, & S. S. Hendrick (Eds.), Close relationships: A sourcebook (pp. 51-84). Thousand Oaks, CA: Sage.

Evans, M. O., Morgan, G., & Hayward, A. (2000). Crisis telephone consultations for deliberate self-harm patients: how the study groups used the telephone and usual health-care services [Electronic version]. *Journal of Mental Health, 9,* 155-165.

Hemmingway, H., & Marmont, M. (1999). Psychosocial factors in the aetiology and prognosis of coronary heart disease: Systematic review of prospective cohort studies [Electronic version]. *British Medical Journal, 318*, 1460-1468.

House, J. S., Landis, K. R., & Umberson, D. (2003). Social relationships and health. In P. Salovey., & A. J. Rothman (Eds.). *Social Psychology of Health.* New York: Psychology Press.

Johnston, R. J. (1979). The homes of callers to a telephone counselling service: towards a mapping of community in the city. *New Zealand Geographical Society, 35,* 34-40.

Kinzel, A., & Nanson, J. (2000). Education and debriefing: Strategies for preventing crises in crisis-line volunteers. *Crisis, 21,* 126-134.

Kliewer, W.S., Lepore, S. A., Broquet, A. Zuba, L. (1990). Developmental and gender differences in anonymous support-seeking: analysis of data from community helpline for children. *American Journal of Community Psychology, 18*, 333-339

Ko, S., & Lim, H. B. L. (1996). SAGE telephone counselling. *Stress Medicine, 12,* 261-265.

Landmark, B. T., Strandmark, M., & Wahl, A. (2002). Breast cancer and the experience of social support: in-depth interviews of 10 women with newly diagnosed breast cancer [Electronic version]. *Journal of Caring Sciences, 16*(3), 216-224.

Lazar, A., & Erera, P. (1998). Telephone helplines as social support. *International Social Work, 14,* 89-101.

Lester, D. (Ed.). (2002). *Crisis intervention and counselling by telephone* (2nd ed.). Springfield: Charles C. Thomas.

Letvak, S. (2002). The importance of social support for rural mental health [Electronic version]. *Issues in Mental Health Nursing, 23*, 259-261.

Littlefield, S. N., & Koff, S. Z. (1986). Hotlines that burnout: a study of the factors which contribute to the failure of crisis intervention centres. *Journal of Health and Human Resources, 8,* 278-295.

MacKinnon, C. (1998). Empowered consumers and telephone counselling. *Crisis, 19*, 21-23.

McLennan, J. (1991). Formal and informal counselling help: students' experiences. *British Journal of Guidance & Counselling, 19*, 149-159.

Mishara, B., & Giroux, G. (1993). The relationship between coping strategies and perceived stress in telephone intervention volunteers at a suicide prevention centre. *Suicide and Life-Threatening Behaviour, 23, 221-229.*

Rosenfield, M. (1997). *Counselling by telephone*. London: Sage Publications Ltd.

Salovey, P., & Rothman, A. J. (Eds)(2003). *Social Psychology of Health.* New York: Psychology Press.

SPSS Inc. (2003). *SPSS for Windows 11.5 (standard version).* USA: SPSS Inc.

Teare, J. F., Garrett, C. R., Coughlin, D. D., Shanahan, D.L., & Daly, D. L. (1995). America's children in crisis; adolescents' requests for support from a national telephone hotline. *Journal of Applied Developmental Psychology, 16.* 21-33.

Tekavcic-Grad, O., Farberow, N. L., Zavasnik, A., Mocnik, M., & Korenjak, R. (1988). Comparison of the two telephone crisis lines in Los Angeles (USA) and in Ljubljana (Yugoslavia). *Crisis, 9*, 146-157.

Titulaer, I., Trickett, P., & Bhatia, K. (1997). *The health of Australians living in rural and remote areas: preliminary results.* Paper presented at the National Rural Public Health Forum, Available Rural and Remote Health Papers 1991-2003 CD-Rom, National Rural Health Alliance Inc, 2003.

Ullmann, R. W., & Garrison, S. S. (1976). Life stress events: an exploratory analysis of crisis line callers. *Crisis Intervention, 7*, 162-175.

Vandervoort, D. (2000). Social isolation and gender [Electronic version]. *Current Psychology, 19,* 229-237.