

A Controlled Trial of a Nurse-led Psychoeducation Program for Families of People with Dementia

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Abstract

Taking care of a family member with dementia may have adverse psychosocial health effects on the family caregivers. Preliminary evidence indicates that psychosocial interventions could be effective in improving family caregivers' mental health and delaying the illness deterioration and institutionalization of individuals with dementia. The randomized controlled trial reported here tested the effectiveness of a nurse-led dementia family psychoeducation program (NLPP) on caregivers' and patients' health outcomes over a 15-month follow-up period. The participants were 80 Chinese families living with and caring for a relative with dementia at home (40 each in the intervention group and the routine care group, with the latter serving as the controls). The results show that the intervention group realized significantly greater improvements in the patients' symptoms and institutionalization rates, and in the caregivers' quality of life and burden, over the 15-month follow-up period when compared with the routine care group. These findings suggest that this psychoeducation program can improve the psychosocial functioning of Chinese dementia patients and their caregivers. Further research is recommended to explore the therapeutic components of the family program.

Keywords: Controlled Trial, Nurse-led Psychoeducation Program, Families of People with Dementia.

Introduction

Dementia is characterized by a progressive decline in cognitive and functional abilities, and is often associated with non-cognitive

disturbances such as psychotic and depressive symptoms and abnormal behavior. Those with dementia are increasingly dependent upon family members to provide daily care, and they finally become wholly reliant on their

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caregivers (Gwyther & Strulowitz, 1998). In 2005, the prevalence rate of dementia in Hong Kong was about 3% overall, or about 360,000 persons aged 65 years and older (Census & Statistics Department, 2006). Its prevalence rate is estimated to increase from 4% in persons aged 65 to 75 years to more than 28% in those aged 85 and older (Chien & Brennan, 2009).

Family members often experience a considerable burden and a significant amount of distress in caring for a relative with dementia, thus contributing to their own physical and psychiatric problems and a higher risk of mortality (Belle et al., 2006). In recognition of the personal and psychosocial health effects of dementia care, different psychosocial interventions have been developed in the U.S., for example, the Program of All Inclusive Care for the Elderly (PACE; Schultz, Martire, & Klinger, 2005). The preliminary evidence on this program supported its effectiveness in improving caregivers' mental health and delaying the institutionalization of clients with dementia. Of the few existing effective intervention approaches, available evidences suggest an integrated, multi-component psychoeducation intervention may be the most effective approach in responding to complexity and the varying levels of needs and difficulties in dementia caregiving (Schultz et al., 2005). This intervention involves multiple support strategies, such as information giving, problem-solving skills training, cognitive stimulation, and stress management techniques, to enhance caregivers' knowledge of and skills in providing dementia care. Some of these strategies have been reported to have significant impacts on caregivers' ability to deal with the behavioral problems of dementia sufferers, but few have shown any long-term effects (e.g., effects that last

at least one year) in improving caregivers' health condition or quality of life (Bradatz et al., 2003; Schultz & Martire, 2004). This paper reports a clinical trial that evaluated the effect of a nurse-led family psychoeducation program (NLPP) on Chinese family members caring for a relative with dementia at home in Hong Kong.

Background of the study

From 1980 to the present, research on family care for dementia sufferers was primarily focused on better understanding the nature and levels of families' caregiving burden, the role played by family members in dementia care, and the aspects of this care that were the most problematic for and detrimental to caregivers (Brodaty et al., 2003). In line with the general trend toward community care, it is believed to be better for the elderly with dementia to remain at home and be cared for by relatives, as opposed to being placed in institutions. Along with this emphasis on community care, a considerable amount of research literature published in the past decade has focused on the stress of caregiving and the effects it has on caregivers' health (Schulz & Martire, 2004).

Qualitative and cross-sectional survey data reported in research studies carried out in a number of Western countries (Cummings et al., 2002; Peak, Toseland, & Banks, 1995) have identified the stages of transition experienced by caregivers over time, such as suspecting, noticing, confirming (through diagnosis), taking up, and letting go. To address the health needs of dementia caregivers, increasing numbers of clinical trials have been conducted to determine whether psychosocial intervention is effective in helping these caregivers to cope with their caregiving role, and which approach is relatively more effective.

Among the various intervention approaches commonly employed in caring for the families of dementia clients, supportive and caregiving skills training programs have been found to be relatively more effective in reducing family distress and strengthening dementia client management (Acton & Winter, 2002; Ostwald et al., 1999). Skills training approaches, such as behavioral management techniques, cognitive stimulation, prosthetic memory aids, and general problem solving, have been used to help caregivers deal with the behavioral problems of those with dementia (Acton & Winter, 2002). Other types of skills training programs focus on strengthening family caregivers' assertive and cognitive skills in dealing with a patient's negative thoughts, coping with loss and grief, increasing enjoyable activities, and making better use of supporting resources. An experimental Hong Kong study on dementia care indicated that educational and mutual support group intervention can improve caregivers' psychosocial health condition (Fung & Chien, 2002). Studies on psychoeducational intervention for families of patients with severe mental illness found the intervention to have positive effects on the health outcomes of both the patients and their families (Chan et al., 2009; Cheng & Chan, 2005; Chien & Wong, 2007).

More recently, researchers and clinicians involved in elderly care have suggested that interventions for the family members of patients with dementia should also emphasize the establishment of alternative coping strategies because a greater range of effective coping techniques may be predictive of better psychological well-being and less likelihood of burnout in care. In addition, researchers have suggested that the active learning of problem-focused coping is useful in enhancing caregivers' self-efficacy and competency (Acton & Winter, 2002; Dunkin & Anderson-Hanley, 1998).

Most family intervention studies have focused on Western populations, with few studies carried out in Asian societies where great importance is attached to intimate interpersonal relationships and interactions with family members (Schult et al., 2005; Schultz & Martire, 2004). In Hong Kong, as well as in some Asian countries, there are relatively few nursing and elderly care homes devoted to dementia care compared with Western countries such as the United States (Chou et al., 1999). Families are expected to care for their dependent elders at home. Most Chinese families are dominated by Confucian principles, such as showing respect for one's elders and adhering to individual notions of filial piety. This is especially true for Chinese women, particularly in their roles as wives and daughters. There are expectations that they will assume the role of primary caregiver in the family (Chou et al., 1999; Yeh, Gift, & Soeken, 1994). Those providing care to an elderly family member with a debilitating chronic illness such as dementia or other mental health problems often encounter numerous difficulties due to inadequate psychological and social support (Chou et al., 1999).

Recent family intervention studies had several limitations: the under-estimation of patients' problem behavior and caregivers' health needs (Schultz & Martire, 2004); poor adherence to published dementia care guidelines and insufficient study power; and the failure of many programs to be integrated into the health care system, thus lacking a sufficient level of collaboration between health professionals and community agencies (Schultz et al., 2005). In the present study, an innovative, comprehensive nurse-led psychoeducation program (NLPP) for the family caregivers of relatives with dementia was tested to determine its potential to

help both the caregivers and the dementia sufferers.

The aim of this study was to test the effects of a nurse-led family psychoeducation program that incorporates educational, supportive, and interdisciplinary community mental health care components on Chinese family members who care for a relative with dementia at home in Hong Kong. We hypothesized that the families who received the community-based NLPP would show greater improvements in terms of the caregivers' quality of life, caregiving burden, and level of social support and the dementia patients' symptoms and rates of institutionalization over a 15-month period relative to those who received routine care.

Method

Design and Sample

This study involved a randomized, controlled trial using a repeated measures design. It was carried out over the 21 months from August 2006 to May 2008. Eighty out of 200 eligible participants (pairs of dementia clients and their primary caregivers) were selected randomly from a list of dementia clients attending one of the regional dementia resource centers in Hong Kong. Based on previous studies of family intervention (Belle et al., 2006; Fung & Chien, 2002), this sample size was considered adequate to detect any significant differences between the groups at a 5% significance level with a power of 80% (Cohen, 1992), taking into account about 15% of the potential attritions.

The inclusion criteria for the main family caregivers were: at least 18 years of age, living with a relative who had been diagnosed with Alzheimer's type dementia (mild or moderate illness stage) according to the DSM-IV (American Psychiatric Association, 1994) criteria, and able to understand the Chinese

language. Caregivers with mental health problems or cognitive impairment and/or those who had cared for the dementia client for less than three months were excluded.

The patients and their primary caregivers who met the inclusion criteria were informed of the purpose and procedures of the study, as well as their right to terminate their participation at any time, and written consent was secured from them. They were then randomly assigned either to the NLPP program or to a routine dementia care group (the control group).

Interventions

For the NLPP group, nurse case managers from the dementia care center collaborated with a multi-disciplinary team, including a psychiatrist, a social worker, and the researchers. They discussed the health care and psychosocial needs of the individual families and subsequently designed an information and psychological support program for each family (Cumming et al., 2002; Schultz et al., 2005). This process allowed collaboration among the case managers, their treatment teams, the dementia families, and mental health care services, to ensure that appropriate services were provided and appropriate referrals were made.

Each family was assigned to one nurse case manager who had received formal training in dementia care from the research team and who coordinated all levels of the family care of the dementia clients based on the results of a structured, individualized family needs assessment (Chien, 2005). In addition, in collaboration with the caregivers and the multi-disciplinary committee, these case managers also prioritized any problems and formulated a structured education and supportive program on effective dementia care for each family. This preparatory phase of the study lasted for about two weeks.

After the initial needs assessment and preparatory phase had been completed, each family and its case manager met bi-weekly, for a total of 12 two-hour sessions. Following an agreed program protocol and the results of the needs assessments, all of the family sessions consisted of education, sharing and discussion, psychological support, and problem solving, which are the elements that have been found effective for caregivers in previous studies (Belle et al., 2006; Brodaty et al., 2003; Fung & Chien, 2002; Townsend, 2000). Seven major themes associated with family supportive care programs were used in this NLPP: (1) information about client's illness, condition, prognosis, and current treatment and care; (2) development of social relationships with close relatives and friends, and thus a satisfactory extended social support network; (3) sharing and adaptation to the emotional impact of caregiving; (4) learning about problem solving, self-care, and motivation; (5) improvement of interpersonal relationships with other family members and the client; (6) establishing support from community groups and health care resources; and (7) the improvement of home care and finance skills. Two experienced caregivers were invited to share their personal caregiving problems and problem-solving techniques (based on the six steps recommended by Zarit, Orr, and Zarit [1985]) with the families during the third and fourth sessions at the center.

Both the routine care (control) and intervention groups received the usual family services provided by the dementia center. Usual family services included (1) weekly medical consultation and advice on the client's illness, condition, and treatment plan and the effects of the medications provided with a psychiatrist; (2) advice and referrals to sources of financial aid and social welfare services from a social worker; and (3) a weekly social and recreational activity program and monthly educational talk on dementia care organized by a registered psychiatric nurse or other center staff.

Instruments

The participants were assessed at baseline (before subject assignment) and at one week (post-test 1) and 15 months (post-test 2) after the completion of the six-month NLPP or routine dementia care. Six health-related outcome measures were administered to the family caregivers and dementia patients before randomization and at one week and 15 months after completion of the intervention, as follows.

Family caregivers:

The Family Caregiving Burden Inventory developed by Novak and Guest (1989) is a 24-item scale with five aspects of the caregiving burden (i.e., time-dependence burden [5 items], developmental burden [5 items], physical burden [4 items], social burden [4 items], and emotional burden [6 items]). It was translated into Chinese and validated by Chou, Jiann-Chyun, and Hsin (2002) and shown to have satisfactory internal consistency (the Cronbach's alpha coefficients ranged from 0.79 to 0.93) and test-retest reliability (Pearson's $r = 0.87$ to 0.93). The items are rated on a 5-point Likert scale that ranges from 0 (do not agree at all) to 4 (totally agree). A subject's total burden score ranges from 0 to 96, with a higher score indicating a greater burden.

The World Health Organization Quality of Life Measure-Brief Version [WHOQOL-BREF(HK)] was modified from the WHOQOL-100 by the World Health Organization (1995) and translated into Chinese by Leung et al. (1997). The items on this measure are structured in four domains, physical health, psychological health, social relationships, and the environment, and are rated on a 5-point Likert scale, with a high score indicating a better quality of life (the total score ranges from 28-140). The Chinese version has been found reliable (Cronbach's alpha coefficients = 0.67-

0.79; test-retest reliability = 0.64-0.90) for applications in clinical settings in Hong Kong (Leung et al., 1997)

The Family Support Service Index (Heller & Factor, 1991) is a checklist that measures the need for and usage of formal support services by psychiatric patients and their families. It was translated into Chinese and modified into 16 items according to the family support services available for psychiatric outpatients in Hong Kong. An expert panel of psychiatrists, community psychiatric nurses, and medical social workers reviewed the index and agreed that it was appropriate for application in a Hong Kong setting. The responses to this scale indicate the number and types of services that families are in need of and currently receiving (rated in a Yes/No format). The inter-rater and internal reliabilities were .88 and .84, respectively (Chien, 2001).

Dementia patients:

The patients' rate of institutionalization (frequency and days/months of residential placement) in the previous six months was measured.

The Neuropsychiatric Inventory was used to assess the patients for the frequency and severity of the 12 major behavioral and psychiatric symptoms of dementia. The total score for each domain was calculated by multiplying the frequency by the severity. The total score (ranging from 12-144) was calculated by the sum of all of the item scores (each item score was obtained by multiplying the frequency by the severity). The internal consistency of the Chinese version was satisfactory (Cronbach's alpha = 0.86), and the test-retest reliabilities were 0.79 for frequency and 0.86 for severity (Fung & Chien, 2002).

The Mini-Mental State Examination developed by Folstein et al. (1975) is a brief test used to measure cognitive mental status

and includes assessment in five memory and orientation domains. It was translated into Cantonese by Chiu et al. (1994) and found to have test-retest reliability of 0.78 and discriminant validity of 97.9%. There is a high level of illiteracy among the Hong Kong elderly with cognitive impairment; thus, a cut-off point ≤ 18 is recommended for elderly persons who are illiterate, a cut-off point ≤ 20 for those with one to two years of schooling, and a cut-off point ≤ 22 for those with two or more years of education (Chiu et al., 1994).

Data Collection

After the participants had signed a consent form, a research assistant (RA) who was blinded to the subject assignment administered the pre-test before randomization. This RA also conducted the two post-tests at one week and 15 months after the intervention. The family caregivers were asked to complete the caregivers' burden, quality of life, and family services scales, and to rate the patients' symptom severity, at the center. The patients were asked to complete the Mini-Mental State Examination during a visit to the center. Their rate of institutionalization (frequency and days/months of residential placement) in the previous six months was determined from their clinical records and confirmed with their families.

Data Analysis

SPSS 16.0 for Windows was used to analyze the data. This analysis was performed on an intention-to-treat basis. Patient and caregiver data on demographics, session attendance (frequency and percentage), dropout rate, and outcome measures were summarized with descriptive statistics. Socio-demographic characteristics found to differ between the intervention and control groups using the Chi-square or Student t-test were used as the covariates in the analysis

of the pre and post-test scores. Repeated-measures MANOVA was used to test for significant differences between the two groups in the pre-test and two post-test mean scores of family and client outcomes. The Helmert contrasts test was used on the results of the scores with significant differences between groups.

Results

Characteristics of Study Participants

Table 1 presents the main socio-demographic characteristics of the study participants. The

family caregivers in this study were mainly child (n=44; 55.0%) and spouse (n=26; 32.5%), with a mean age of 42.3 years (SD=7.2). More than two-thirds were female (n = 57; 71.3%) and had a secondary school level of education or above (n = 59; 73.8%). Their average monthly household income was HKD\$12,800 (US\$1,641). Over half of the patients were male (n = 46, 57.5%), with a mean age of 65.8 years (SD = 6.4). About half (n = 42) received cholinesterase inhibitors or N-methyl-D-aspartate antagonists (e.g., donepezil and memantine). Their average duration of dementia was 2.0 years (SD = 1.0) at subject recruitment.

Table 1
Socio-demographic characteristics of 80 caregivers of relatives with dementia

Characteristics	NLPP (n=40)		Routine Care (n=40)	
	f	%	f	%
<i>Family Care-givers</i>				
Gender				
Male	12	30.0	11	27.5
Female	28	70.0	29	72.5
Age				
20-29	2	5.0	2	5.0
30-39	6	15.0	5	12.5
40-49	23	57.5	22	55.0
50-62	9	22.5	11	27.5
Education level				
Primary school or below	10	25.0	11	27.5
Secondary school	27	67.5	26	65.0
Tertiary ^a	3	7.5	3	7.5
Relationship with patient				
Spouse	14	35.0	12	30.0
Child	21	52.5	23	57.5
Sibling & others	5	12.5	5	12.5
Monthly household income (HK dollars) ^b				
10,000 or below	13	32.5	14	35.0
10,001 – 20,000	16	40.0	15	37.5
20,001 – 30,000	9	22.5	10	25.0
30,001 – 40,000	2	5.0	1	2.5

(Continue Table 1)

Table 1 (Continued)

Socio-demographic characteristics of 80 caregivers of relatives with dementia

Characteristics	NLPP (n=40)		Routine Care (n=40)	
	f	%	f	%
Number of family members living with patient				
One	20	50.0	20	50.0
Two	15	37.5	16	40.0
Three to Five	5	12.5	4	10.0
<i>Patient</i>				
Gender				
Male	24	60.0	22	55.0
Female	16	40.0	18	45.0
Age				
55-60	7	17.5	6	15.0
61-70	28	70.0	29	72.5
71-80	5	12.5	5	12.5
Duration of illness (years)				
Less than 2	24	60.0	25	62.5
2 to 3	13	32.5	12	30.0
4 to 5	3	7.5	3	7.5
Education level				
Primary school or below	11	27.5	12	30.0
Secondary school	25	62.5	26	65.0
Tertiary level ^a	4	10.0	2	5.0

Note: f = frequency, % = percentage

^aTertiary level of education refers to studies completed in university and other postgraduate programs in Hong Kong.

^bUS\$1 = 7.8 Hong Kong dollars

There were no differences between the treatment and control groups with respect to their socio-demographic characteristics or their mean scores on the baseline measures. More than 90% of the families in the treatment group (n = 37) completed the NLPP, and only two each in the treatment and control groups could not be contacted at the 15-month follow-up (i.e., attrition = 5.0%).

Treatment Outcomes

A statistically significant difference was found between the two study groups on

the combined outcome measures using the repeated-measures MANOVA test (F = 6.95, df = 5, p < 0.005; Wilks' Lambda = 0.92, eta squared = 0.38). The mean scores and results of the MANOVA test for the outcome measures (and the F values of the ANOVA test for individual measures) are shown in Table 2. The results indicate that there were statistically significant differences between the groups in the caregivers' burden and quality of life, as well as the dementia clients' symptom severity and frequency and length of institutionalization, over the

15-month follow-up. The Helmert contrasts comparisons indicate that caregiver burden and quality of life and patient rates of institutionalization improved significantly among those in the NLPP group at the one-week and 15-month follow-up. The symptom severity of the dementia patients in this group improved significantly relative to the controls only at the one-week follow-up. In addition, the utilization of family services on the part of those taking part in the NFPP was significantly reduced at the 15-month follow-up.

Discussion

The findings of this study provide preliminary support for the effectiveness of the dementia family support program under study (i.e., the NLPP). Consistent

with previous trials (Brodaty et al., 2003; Chien, 2005), the treatment group demonstrated significant improvement in terms of caregiver burden and quality of life and patient rate of institutionalization. Dementia care has increasingly become a burden to both family members and community mental health care services. It is noteworthy that the families who underwent this psychosocial intervention reported significant improvement in both their caregiving burden and quality of life, but with no accompanying increase in their demand for family support services.

The study findings show that the family caregivers in the NLPP witnessed a significant and consistent reduction in their distress levels when managing the dementia patients' symptoms of

Table 2

Outcome Scores and Results of Repeated-Measures MANOVA for the Two Study Groups

Instrument	NLPP (N = 40)			Routine Dementia Care (N = 40)			F †
	Baseline Mean±SD	Post-test 1 Mean±SD	Post-test 2 Mean±SD	Baseline Mean±SD	Post-test 1 Mean±SD	Post-test 2 Mean±SD	
FCBI (0-96) ^a	68.1±14.9	56.7±15.7	48.3±13.9	67.8± 15.7	63.0±15.1	65.9±16.3	6.98**
WHOQoL (28-144)	64.9±15.0	75.1±16.8	81.4±16.0	67.1± 15.5	69.8±16.7	65.2±17.5	6.70*
FSSI (0-16)	4.1±0.8	4.4±1.1	4.0±1.4	4.2±1.1	4.2± 1.2	4.3± 1.8	3.88*
MMSE (0-30)	17.5± 4.7	19.6± 4.0	19.8± 5.8	17.3± 3.9	18.5± 4.1	19.1± 4.8	1.02
NPI (12-144)	81.2± 9.1	76.1±10.2	75.2±11.8	83.8± 9.5	84.5± 9.8	85.1±12.1	3.50*
Rate of institutionalization							
Number ^b	5.1± 0.9	3.2± 1.0	2.9± 1.1	5.5± 1.2	5.4± 1.3	6.4± 2.1	4.03*
Duration ^c	13.2± 4.0	11.1± 5.1	9.4± 2.3	14.2± 3.8	16.9± 5.1	17.1± 5.2	5.17**

Note. Baseline, before subject assignment into study groups; Post-test 1, one week after completion of the intervention; Post-test 2, 15 months after intervention.

FCBI, Family Care-giving Burden Inventory; WHOQoL, World Health Organization Quality of Life Scale (Brief HK version); FSSI, Family Support Services Index, MMSE, Mini Mental State Examination; NPI, 12-item Neuro-psychiatric Inventory;

^aPossible score range of each scale is indicated in parentheses.

^bAverage number of residential placements or hospitalizations over the past nine months.

^cLength of institutionalization in a residential home or hospital unit in terms of the average number of days per month over the past six months.

† df = 1, 78** p < .01 *** p < .001

delusions, hallucination-related behavior, and aggressive behavior relative to the caregivers who received routine dementia care over the 15-month follow-up. This reduction in psychological distress allowed them to better cope when providing care to their family member with dementia. The stress associated with caring for such a family member can be relieved by involvement in psychosocial intervention, together with multi-disciplinary support, because they help the caregivers to identify concerns and develop systematic problem-solving techniques to resolve them (Heller, Roccoforte, Hsieh, Cook, & Pickett, 1997). A nurse case manager and his or her treatment team can also provide much-needed assistance and advice about community resources, and assure caregivers that their role is important and essential (Chien & Lee, 2008). Equipped with a better understanding of the client's illness and condition, family caregivers who take part in a NLPP may feel less frustrated when their caregiving efforts are not met with appreciation, especially from the client. Hinrichsen and Niederehe (1994) also investigated educational and support interventions for families in dementia care. They suggested that psychosocial supportive intervention is effective in universalizing and normalizing caregivers' experiences as well as instilling hope in the provision of quality care to their relatives with dementia.

Such positive findings for this type of intervention are particularly important in China and other Asian countries, where the majority of elderly people with dementia rely solely on family members and close relatives to provide them with a level of independence, as well as concern, love, and care which would not otherwise be possible (Lin et al., 1995). Comprehensive education and supportive intervention can equip caregivers with knowledge about the

debilitating nature of dementia, and provide them with effective methods of coping with the demands placed on them, including the close monitoring and supervision of the progressive deficits in memory, personality, cognitive-intellectual functions, and self-care abilities that accompany dementia (Chou et al., 1999; Dunkin & Anderson-Hanley, 1998). Despite these progressive deficits, the intimate relationship between family caregiver and dependent elderly relative results in a quality of care that cannot easily be replaced by health professionals.

In this study, the treatment group showed significantly greater improvement than the control group in perceived quality of life, both psychologically and socially. This improvement may be related to the knowledge and caregiving skills that the caregivers in this group learnt from the NLPP. The NLPP may also have contributed to changes in their attitudes and behavior towards dementia care. Further, those more experienced family caregivers may have served as role models for how to take care of a relative with dementia. Heller et al. (1997) suggested that significant improvement in the psychological well-being of families may reflect the specific benefits of a supportive program. The program equipped the family with more information about the illness and its care, an increased ability to cope physically, emotionally, and socially with their relative with mental disabilities, and greater knowledge of how to advocate more effectively for this relative.

This study also found significant improvement in the social life of the caregivers involved in the NLPP, as indicated by the items on the WHOQOL-BREF(HK) scale, such as the opportunity to participate in social and recreational activities, satisfaction with interpersonal

relationships, and ability to provide care for family members. As indicated in the education session records, the participants in the NLPP learned about the situations of other families, which may be similar to their own. It helped most of the participants feeling less guilty about their limitations in providing care to their relatives. It also equipped them with greater competence in coping with difficult life situations.

Previous studies (Brodaty et al., 2003) have emphasized the importance of identifying the therapeutic components of a family intervention, which can contribute to its therapeutic effects. The findings of this study suggest that the potential therapeutic components of the NLPP may be the provision of adequate and up-to-date information about the patient's illness, condition, prognosis, and treatment; the development of social relationships and a network of close relatives and friends; the ability to adapt to the emotional impact of caregiving; and the enhanced motivation and improvement in self- and home-care skills.

Improving problem-solving skills within a family may also be an essential part of a supportive intervention for family members who have lived with difficult life situations such as those that arise during caregiving (Zarit et al., 1985). However, this aspect was not assessed in this study.

The majority of the participating caregivers in this study were women. The strong kinship systems that constitute the extended Chinese family, as well as the traditional beliefs of obligation and respect and care for elders (Yeh et al., 1994), result in family members (particularly wives, elder daughters, and daughters-in-law) being more likely to blame themselves for any deterioration in a client's condition. For

women, the burden and distress that result from expectations that they will assume the role of primary caregiver have become pervasive problems in Chinese societies. There is thus a need to better understand and meet the specific needs of female caregivers.

Despite the common belief that Chinese people are passive and uncomfortable discussing their personal problems with outsiders, the participants in this study were willing to express their feelings and discuss their experiences with others who understood their life circumstances. The professional relationship between a nurse (or therapist) and family members may be effective for Chinese families, especially when little help or support is available elsewhere. The results of this study show that many caregivers are willing to openly share their concerns, feelings, and needs during an education program, but that increased knowledge of the community resources available does not contribute to an increase in service utilization. The explanation for this may lie in the families' improved problem-solving abilities, increased level of communication, and enhanced competence in handling the demands of caregiving, as these skills were emphasized in the intervention process.

This study has several limitations. The sample size adopted in the trial was small. The results may thus not be generalizable to the total population of families caring for a relative with dementia. The degree of involvement (Schulz & Martire, 2004) and high attendance rate of the NLPP group in this study (i.e., average attendance was 86%) may have contributed to the significant psychosocial effects on quality of life and distress levels. These factors which may have influenced the success of the family intervention, should be further explored in

future research. In addition, the families in this study included only those who were highly motivated and willing to participate. Their desire to participate and co-operate in the interventions may have been because they had the time and interest to do so. Lastly, further investigation of the caregivers' personal appraisal of their changes and the benefits of NLPP participation would help us to better understand the beneficial elements of a needs-based psychosocial intervention for individual families.

Conclusion

The findings of this study suggest that providing a comprehensive, nurse-led psychoeducation program for families caring for a relative with dementia may improve the main caregiver's psychosocial health condition and the dementia sufferer's rate of institutionalization. Future research could involve a larger, more diverse sample in a Chinese or Asian population and with a longer period of follow-up. It would allow a more in-depth investigation of the possible relationships among the perceived benefits, caregiving learning process, therapeutic components of the intervention, and the intervention techniques applied in the program.

摘要

護士主導的老人痴呆症家屬精神教育課程的隨機對照實驗

老人痴呆症對家屬心理社交的負面影響，初步科研實據顯示，心理社交上的干預措施能夠有效改善照顧家屬的精神健康及減低病者病情的惡化和住院的需要。這項隨機對照實驗主要是測試一個護士主導的老人痴呆症家屬精神教育課程對照顧家屬和病者的健康效果。這項實驗的參加者是八十位中國香港老人痴呆症患者及其照顧家屬（治療組、對照組各四十個家庭），這

些家庭參予精神教育課程或慣常護理服務後會被跟進十五個月。在跟進期結果顯示，與對照組比較，治療組在病者的病徵和入院率及照顧家屬的生活質素和負擔上都有顯著改善。實驗結果為這項精神教育課程對中國老人痴呆症病者及其照顧家屬的精神健康療效提供實證。作者建議繼續探討精神教育課程的療效成份及其功能。

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