

# **The Effectiveness of a Natural Locality-Based Networking Approach in Rehabilitating Singleton Disabled Elderly in a Public Housing Estate in Hong Kong**

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## **Abstract**

The United Christian Nethersole Community Health Service in Hong Kong has been using a natural locality-based supportive networking approach for the singleton disabled elderly in public estates housing estate for ten years since 1991. In this approach, various psychosocial interventions are developed to strengthen mutual support among neighbors, able-bodied elderly, mental-filled outpatients and volunteers who are being matched and integrated with the disabled singleton elderly to form a locality-based mutual support community. Feedback from clients, social workers and community has been positive and encouraging. A number of successful mutual support networks have been built and various types of social network formed building up a mutual supportive community. Since last year, a research has been started to measure the effectiveness of this approach in helping the singleton disabled elderly in their rehabilitation process. Two groups, one experimental group and one control group, each consisting of forty disabled singleton elderly are randomly sampled in a public housing estate in Tai Po. The control group will get no intervention or service while the experimental groups will receive the natural locality based networking interventions for six months. By means of pre-test and post-test of both the control and the experimental groups before and after the interventions, the effectiveness of the natural locality based support network approach will be tested. Various validated scales like: General Health Questionnaire, Lubben Social Support Scale, Quality of Life and Activity Daily Living will be employed to measure the change of physical and psycho-social capabilities of the disabled singleton elderly before and after the intervention. The research findings will be available by the end of this year or early next year.

## INTRODUCTION

### **The Need of Singleton Elderly**

*'Hong Kong has an elderly population of 890,000, it is estimated by the Census and Statistics Department that about 800,000 elderly persons are in one person household... Of these elderly, only 15% are receiving welfare service. There is a large group of vulnerable old persons who are fragile and living alone or with a similarly informed spouse or a disabled dependent' (Hong Kong Government, 1996).*

Hong Kong is a highly industrialized and commercialized city. Within such a business- orientated and competitive life style, the elderly usually are the ones who have poor social support and social network (Ngan, 1990; Chow, 1987). Chow (1987), Ng (1990) and Ho (1996) studies all found that family support to the elderly in Hong Kong is diminishing. Many singleton elderly have lonely lives within the community. It is estimated by the Hong Kong Government that about 800,000 elderly persons are in one-person household, some of whom may have no little support from family members or relatives. Many of them are frail or have mobility problems, are home bound and are not aware of community resources. They may lack friends, relatives or other social networks to give them support (Hong Kong Government, 1996:1).

### **Ten Years' Experience in Supporting Singleton Disabled Elderly**

In response to this, ten years ago, the Good Neighbor Centre of the United Christian Nethersole Community Health Services had pioneered a 'Natural Locality Based Supportive Networking Approach' as intervention for the disabled singleton elderly in a public housing estate in Hong Kong (Yip, 1994; Yip and Law, 1999). Within these ten years' experience, Yip was the professional consultant in this centre. Law was the centre-in-charge and also the front-line network organizer and she later became the service coordinator of this agency. Under their supervision, there were several social workers in pioneering this approach. They formulated, implemented and evaluated this approach vigorously within these ten years' time. This approach was well-received and shared in international conferences (Yip, 1994; Yip & Law, 1999). In the 1999 Conference in Community Based Care in the New Millennium: Service for People with Chronic Illness, the article introducing this approach has received the Outstanding Paper Award.

## NATURAL LOCALITY BASED NETWORKING APPROACH

### Networking Approaches

#### **The Networking Project by the Social Welfare Department**

In 1995, a cold spell attacked Hong Kong causing a few deaths of singleton disabled. Facing the pressure from the public, the government promised to set up 36 integrated team by 2000 to provide dedicated social networking and outreaching services to the vulnerable singleton elderly (HKSAR, 1998)

#### **Various Types of Networking Approaches**

Strictly speaking, the Networking Project by the Social Welfare Department is only a preliminary form of individual volunteer visits by matching volunteers to visit disabled singleton elderly (HKSAR, 1998). In social work practice, networking has a mixed meaning. It may mean a form of comprehensive sociological social network analysis in intervention (Auslander & Litwan, 1987) in which a social workers analyses the personal support network of individual client and tries to pull in resources to help the client (Seed, 1990, Yip & Law, 1999). It may mean a kind of long term **volunteer help** to client in need (Gottlieb, 1998; Barnes, 1972). It may mean integrating informal and formal social care (Oslen, 1986). Various forms of **informal social support groups and mutual aid groups** are formed for the clients and among the clients (Chan, 1995; Yuen, 1995; Hansson, 1994; Pickard, 1995 & Wenger, 1992).

### The Natural Locality-Based Supportive Networking Approach in UCNCHS

#### **The Mutual Support Community**

In this project, networking is the establishment of a locality based mutual support community. Based on the concept of a **dynamic mutual support community** (Milson, 1974 & Kelin, 1968), in this approach, the social workers try to establish a supportive, mutually concerned and normalized community for the singleton disabled elderly within their own living locality. The social workers link up the **disabled elderly with their neighbors, volunteers and clients with mental problems to form a locality based mutual support community. Within this locality based mutual support community, disabled singleton elderly are not just dependent, but also able to care for others.** The dichotomy of carers and careers turned into shared and reciprocal within a community (Yip and Law, 1999).

### **Stages of Networking**

There are four stages in establishing a mutual support community. They are network assessment, network matching, network formation and network strengthening. In **network assessment** the needs, characteristics, personal social support network of every disabled elderly, potential helpful neighbors, volunteers were assessed. In **network matching**, by means of organizing suitable programmes and activities, the workers tried to encourage interaction among members who shared similar interest and helpful to one another. In **network formation**, the workers actively fostered the development of relationships among network members by means of natural daily activities. In **network strengthening**, the workers tried to firm up existing mutual supportive network by regularized daily activities (Yip & Law, 1996).

### **Various Psychosocial Interventions**

In this approach, various psychosocial interventions were developed to strengthen mutual support among neighbors, volunteers, able-bodied elderly and mentally ill outpatients. They are the use of cultural activities, use of relational formalism in relationship establishment, use of give and return in network formation, use of pseudo-blood link in building intimate relation, use of locality approximation and use of clients' potential and capacity. By means of these psychosocial interventions, neighbours, volunteers and clients with mental problems are being matched and integrated with the disabled singleton elderly to form a locality-based natural-supportive community.

### **CASE VIGNETTES :CHANGES OF MEMBERS IN THE NATURAL LOCALITY BASED SUPPORTIVE NETWORKING**

In social work practice, evaluation and effectiveness can be defined in various ways. Apart from a measurement of results in experiments, it can also imply a meaning in considering the input of resources, feedback of the clients involved and successful cases and experience gained (Chelthum, 1995). In the natural locality-based networking approach, the effectiveness of this approach may be interpreted in the following ways:

1. The feedback of the singleton disabled elderly and related parties;
2. Successful cases of singleton disabled elderly with better physical and mental health;
3. Successful mutual support networks built and their maintenance and impacts on their members;

4. Experimental and Control group design with validated scales and random sampling to measure the change of the singleton disabled elderly.

### **The Feedback and Change of the Members in the Natural Locality Based Supportive Networking Approach**

Throughout our ten years' of experiences, there were plenty of successful cases demonstrating the positive impact of the natural locality-based approach on the disabled elderly, neighbours, volunteer and clients with mental problems. Perhaps the following case vignettes can best illustrate the changes of the disabled elderly, the volunteers and neighbours and how all these changes can promote the a healthy aging with a supporting and caring community. It can also show the effort and intervention given by the workers in the locality based network approach.

#### **Case A: Madam Lee with Stroke and Her Caring Neighbour Mrs. Cheung**

*Madam Lee was 75 years old and live alone. She suffered from stroke and had difficulty in mobility. Hence her very little interaction with her neighbours was limited to polite greetings with Mrs. Cheung, who lived in the flat opposite Madam Lee's. Madam Lee basically had positive impression of Mrs. Cheung. Mrs. Cheung was a 55-year-old housewife. When social worker took the initiative to talk to her, she was willing to tell the social worker about her family and her domestic life. For example, Mrs. Cheung often took care of housework during daytime when her children went to work. She didn't have special hobbies and interacted with other neighbours very little, only nodding head and saying polite greetings to them. Mrs. Cheung impressed that Madam Lee was very lonely and visited by very few people even during festival days. But she also expressed that Madam Lee was very kind. Once, when Mrs. Cheung's granddaughter walked past Madam Lee's door Madam Lee gave her sweets. The incident left Mrs. Cheung with a positive impression of Madam Lee. After two visits and assessing the potential for further development of relationship between Madam Lee and this neighbour, the social worker left the neighbour the contact telephone number of the centre and its service leaflets to make it convenient for future communications.*

#### **Case B: Matching Mr. Chu with Stroke and Diabetes and the Volunteer Keung**

*Mr. Chu was 70 years old and suffered from stroke and diabetes. He had difficulty in mobility and was wheelchair bound. He had a hot, impatient temper. Keung was an introverted 23 years old. He was patient, agreeable and respected the elderly. He liked to listen to other people and was easily accepted by others. After preliminary assessment, the social worker attempted to bring Mr. Chu and Keung together. During a festival day Keung was invited to accompany the social worker and bring gifts to Mr. Chu. In the process the social worker demonstrated social skills in person and encouraged the two to set up contact. After two more similar visits to Mr. Chu the social worker*

*observed that Keung and Mr. Chu got along harmoniously and had common topics of conversation, with Mr. Chu being the more talkative one while Keung the listener. The two had matching characters – one active and strong-minded, the other passive and softhearted. The social worker would work according to this matching and regularly monitored the establishment of their relationship.*

### **Case C: Building Friendship Between Mr. Tsang with rheumatism and Mr. Ng with Asthma**

*Mr. Tsang was 61, lived alone and suffered from arthritic rheumatism. Mr. Ng was a 64 years old singleton elderly with asthma. They both lived alone on the 10<sup>th</sup> and 14<sup>th</sup> floors of the same block and received home care services. Mr. Tsang and Mr. Ng went through the networking matching stage with good impression of each other. To further consolidate their relationship, when social worker organized centre's activities, like birthday parties, festival party and major functions etc., Mr. Ng and Mr. Tsang were arranged in the same group and were encouraged to sit together. The social worker also deliberately invited and took Mr. Tsang together when they visited Mr. Ng, in order to strengthen their contact outside the centre. Mr. Tsang was once not feeling well the social worker encouraged Mr. Ng to visit and console him. After continuous encouragement lasting about four months, Mr. Tsang and Mr. Ng visited and greeted each other during the Lunar New Year without initiation from the social worker. Mr. Tsang even invited Mr. Ng to have Chinese hotpot together at Mr. Tsang's home, and divided out the purchase of food between them. They became good friends.*

### **Case D: The Long Lasting Relationship Among Madam Chung, Madam Au and Madam Chong.**

*Madam Chung was 63 years old and lived alone. She suffered from diabetes and heart disease. Madam Au was 67, lived alone, and suffered from diabetes and cataract. Their backgrounds shared similar features: diabetes, no children, husbands died many years ago. Hence they had similar conversation topics. They lived in the same housing estate block but on different floors. With continuous intervention, they had become good friends. Without the arrangement of social worker they were already visiting each other. For example, if Madam Chung was not feeling well, Madam Au would tell the social worker about the situation on her own initiative; the two also asked each other out in the morning to go for a stroll, or shop in the market. When the need arose they accompanied each other to see the doctor. The social worker had already faded out at this stage, and only observed how the two developed their friendship. As they had already developed into a stable and lasting relationship, the social worker then proceeded to widen their support network. Madam Chong was 65, lived alone, and had heart disease and hypertension. The social worker carried out assessment for her and brought her into Madam Au and Madam Chung's relationship. After matching and network formation they had developed positive relationship. For example, if Madam Chong went into the hospital, Madam Chung and Madam Au would go to visit Madam Chong together. They also*

*participated in community activities together, like seeing Cantonese opera and going on trips. They also often shared self-care tips for their illnesses, for instance, diets appropriate for diabetes and heart disease. The trios were already sharing the joys of life with each other; they helped and supported each other in the face of hardships.*

## **THE RESEARCH ON EFFECTIVENESS OF INTERVENTION**

To further validate our experiences in the natural locality based networking approach, last year an experimental and control group research design is implemented. This research is funded by the University Research Grants from the Hong Kong Polytechnic University. The details of the research are described as follow.

### **Research Questions**

The aim of this research is to measure the effectiveness of this approach which include the following research questions:

- a. To measure the effectiveness of a natural locality based networking approach in improving the quality of life of singleton disabled elderly in a public estate in Hong Kong;
- b. To measure the effectiveness of a natural locality based networking approach in improving the general health condition of singleton disabled elderly in a public estate in Hong Kong;
- c. To measure the effectiveness of a natural locality based networking approach in improving the social support for singleton disabled elderly in a public estate in Hong Kong &
- d. To measure the effectiveness of a natural locality based networks approach in improving the daily activities of singleton disabled elderly in a public estate in Hong Kong.
- e. Do different types of networking approach differ in the effectiveness in rehabilitating singleton disabled elderly in a public estate in Hong Kong.

### **Related Organisation and Collaboration**

This study is organised by the Department of Applied Social Studies in the Hong Kong Polytechnic University with the collaboration of the United Christian Nethersole Community Health Service (UCNCHS). The experimental and control groups are formed from clients in the UCNCHS. UCNCHS, previously known as the Kwun Tong Community Health Project, is the first and the largest non-governmental organisation running community health project in Hong Kong. Together with the United Christian Hospital and the Alice Ho Mui Ling Nethersole Hospital, they are

under the same umbrella of Nethersole group.

### **Subject and Sampling**

This study employs a quasi-experimental design in data collection. Subject in the control and experimental groups are disabled singleton elderly under the care of the UCNCHS since this research. There are 20 singleton disabled elderly in two experimental groups and one control group.

By means of random sampling, disabled singleton elderly in a public estate referred by related organisation were randomly sampled into the two experimental and control groups (for each intake, 15 singleton disabled elderly are encouraged to join in each of the three groups). It is estimated that 30 singleton disabled elderly will be encouraged to join each of the three groups but around 20 to 25 singleton elderly will stay in each of the three groups for protest measurement. Because of random sampling, it is hoped that the general characteristics of the two experimental groups are matched with those in the control groups in the following areas:

- diagnosis of chronic illness or physical disabilities
- duration of chronic illness and physical disabilities
- age, sex, educational background &
- living condition.

### **Methods and Design**

This is a quasi-experimental study which employs a control group interrupted time series design in data collection. Apart from the control group, there are two experimental groups. One group of 20 to 25 singleton disabled elderly will receive the Natural Locality Based Networking Approach, in which disabled elderly are matched with neighbours, volunteers, able elderly and other disabled elderly to form a mutual support community. One group of 20 to 25 singleton disabled elderly will receive only regular volunteer visit. Both the experimental and control groups will be measured by the following instruments before and after six months of networking intervention:

#### **General Health Questionnaire (GHQ 30)**

This is a self administered scale of measurement developed by Goldberg (1972). It had been validated and widely used in clinical and social research internationally as well as in Hong Kong to measure the general mental health

condition of the subjects. The Chinese Version with 30 items (GHQ 30) was validated specially for Chinese elderly in Hong Kong (Chi & Obey, 1992).

### **Quality of Life (WHOQOL-BREF(HK))**

Quality of life is an international validated scale to measure the psycho-social condition of subject. Among various versions, WHOQOL-BREF is a most widely used scale developed by the World Health Organisation. The WHOQOL-BREF (HK) is a validated Chinese version developed by the Hospital Authority (Leung et.al, 1998).

### **Lubben Social Network Assessment (LSNA)**

Lubben Social Network Assessment is a validated scale used to measure the social network of the elderly. The Chinese Version has been validated by Chi & Boey (1992)

### **Activity of Daily Living & Instrument ADL (ADL & IADL)**

ADL is a modified version of the instrument known as Physical Activities of Daily Living from OAR Multidimensional Functional Assessment Questionnaires (Kane & Kane, 1981). It measures the functional health of a persons in terms of one's capacity to self care (Chi & Boey, 1992). IADL encompasses some complex activities like social and interpersonal activities. Both scales are widely used for the elderly. The Chinese version of this scale was validated by Chi & Boey in 1992.

### **Data Analysis**

The general characteristics of the members in the experimental groups and the control group will be listed. The results of the control group and the experimental groups will be analysed and compared. The scores of GHQ30, LSNA, ADL, IADL, WHOQOL (BREF-HK) before and after the six months networking interventions in the two experimental groups will be compared with those in the control groups. ANOVA test will be induced to test the significance of the difference of scores between the experimental groups and the control group. In the same ways, the scores for each experimental group will be compared with one another to see which type of networking approach is more effective in rehabilitation the disabled singleton elderly in public estate.

## **The Progress of this Research**

Up to now, the researchers have achieved the following:

1. The researchers have undergone a large-scale study to find out the singleton disabled elderly in a Kwong Fuk Public Estate in Tai Po. There were about four hundred elderly households in this public estate. Their health conditions, family situations and willingness to receive the networking approach as well as to participate the research were explored.
2. Among these four hundred elderly, about elderly with chronic illness and certain degree of disability.
3. To measure the effectiveness of this networking approach, elderly were randomly selected into two groups, the experimental and the control group. In each group there were two sub-groups, one with singleton elderly and the other with elderly with family members.
4. A pre-test was done for the elderly in the experimental group and the control group before receiving the locality based networking approach.
5. Only the elderly in the experimental group are receiving the locality based networking approach from March 2001 to August 2001.
6. A post-test will be done to both groups in September 2001.
7. Data analysis will be done in October and November 2001.

## **CONCLUSION**

As a conclusion, this paper described the effectiveness of a pioneering locality-based networking approach in rehabilitation disabled singleton elderly in public estates in Hong Kong. Instead of delivering formal care for the singleton disabled elderly, in this approach, social workers tried to match the elderly with their neighbours, volunteers, and clients with mental problems to form a mutual support community. In this mutual support community, members could support each other in daily routines as well as during crises. With ten years' experiences in this approach, effectiveness of this approach can be demonstrated by the positive feedback and changes from the disabled singleton elderly, neighbours, volunteers, and clients with mental problems. Furthermore, starting from last year, an experimental and control groups and pre and post test research is carrying out to measure the effectiveness of this approach in improving the health, quality of life and daily activities level of disabled singleton elderly.

## REFERENCE

- Auslander, G.A. & Litwan H., (1987) 'The parameters of network intervention: a social work application' Social Service Review, 61, 305-310.
- Barnes.J.A. (1972) Social Network, New York: An Addison Wesley Module in Anthropology.
- Blumenfield, S., & Rosenberg, G., 'Towards a network of social health services: re-defining discharge planning and expanding in social work domain' Social Work in Health Care, 13, 31-41.
- Chi I., & Boey K.W. (1992) Validation of Measuring Instruments of Mental Health Status of the Elderly in Hong Kong, Department of Social Work & Social Administration, University of Hong Kong.
- Chow W.S. (1987) 'Factors influence the support of the elderly by their families' Hong Kong Journal of Gerontology, 1, (1) 4-15.
- Gottlieb B.H., (1998) Social Network and Social Support, London: Sage.
- Hansson R.G., (1994) Relationship in Old Age: Coping with Challenge of Transition, New York: Guildford Press
- Ho, K.F., (1996)\_ The Social Support Networks of Residence of a Care and Attention Home for the Elderly in Coping with Institutionalization, Unpublished M.A thesis, Hong Kong Polytechnic University.
- Hong Kong Government (1991) White Paper: Social Welfare into the 1990s and Beyond, Hong Kong: Social Welfare Department.
- Hong Kong Government (1996) Operational Guidelines : Social Networking for the Elderly, Hong Kong: Social Welfare Department.
- Hong Kong Special Administration Region Government (1998) The Five Year Plan for Social Welfare Department in Hong Kong Hong Kong: Social Welfare Department.

- Goldberg, D., (1972) Manual of the General Health Questionnaire, Great Britain: NFER Publishing Company.
- Kane, R.A., & Kane, R.L., (1981) Assessing the Elderly: a Practical Guide to Measurement, California: Lexington Books, the Rand Corporation.
- Klein D., (1968) Community Dynamics and Mental Health, New York: John Wiley Press.
- Lubben, J.E., (1988) 'Assessing social networks among elderly populations' Family Community Health, 11: 42-52.
- Milson F. (1974) An Introduction to Community Work, London: Routledge and Paul.
- Ngan R. (1990) 'Availability of informal support network to the Chinese elderly in Hong Kong and its implications for practice' Hong Kong Journal of Gerontology, 4, (2) 19-25.
- Oslen M.R., (1986) 'Integrating formal and informal social care the utilization of social support network' British Journal of Social Work, 16: 6-10.
- Pickard S., (1995) Living in the Front Line: a Social Anthropological Study of Old Age and Aging, Brookfield: Averbury.
- Seed P., (1990) Introduction Network Analysis in Social Work, London: Jessica Kingsley.
- Wenger, G.C., (1992) Help in Old Age: Facing up to Challenge: A Longitudinal Network Studies, Liverpool: University of Liverpool Press.
- Yip K.S. (1994) 'a Report of the informal community care project for the disabled elderly in Sau Mau Ping estate' in Stopp G.H. ed., International Perspectives on Healthcare for the Elderly, New York: Peter Lang, pp. 53-67.
- Yip K.S. & Law S.O., (1999) 'Natural locality based networking for disabled singleton elderly: a nine year (1991-1999) experience in a Hong Kong public estate' paper presented in Conference for Community Based Care in the New Millennium: Services for People with Chronic Illness (20-24/9/1999)