

**Well-being Programming for
People with Dementia in Day Care Centres
in Singapore and Australia:
Guiding and Evaluating Person-Centred Practice**

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1. EXECUTIVE SUMMARY

The Well Being Profiling (WBP) project for persons with dementia is a joint research collaboration between Alzheimer's Australia Western Australia (AAWA) and Alzheimer's Disease Association (ADA), Singapore. This project recognizes the need for an effective system for evaluating emotional care provided for persons with dementia. It demonstrates that improved practice in care delivery can improve the capacity for well-being in such individuals. WBP, derived from the Dementia Care Mapping (DCM) tool developed by the University of Bradford Dementia Group, is used to guide the implementation of a Person-Centred Care (PCC) approach in the day care centres managed by AAWA and ADA. The WBP tool evaluates care from the perspectives of the persons with dementia. The need to make careful observations, based on the 14 indicators in the WBP tool, sharpens the observational and attentive skills of the care staff. This process facilitates an open exchange of views among the staff, thus enabling them to identify interventions that are more focussed and person-centred. A related training programme on PCC and WBP was conducted to raise the awareness and acceptance of the staff for this project. This tool has become a common language for organizing care for the clients. The Approaches to Dementia Questionnaire (ADQ) was used to measure the attitude and knowledge of staff about PCC, before and after the implementation of the WBP project.

Preliminary analyses of the results showed that 91% of the participants improved their total WBP scores from pre- to post-implementation. These changes in well-being scores were not significantly related to change in level of cognition or depression. The majority of carers (87%) indicated that their relationship with the person they are caring for either maintained or improved. Family caregivers also endorsed fewer behavioural symptoms observed in the clients, and reduction in associated caregiving stress. Based on self-ratings on the ADQ, care staff at the day care centres showed positive change in their attitudes and knowledge. The ADQ item with the greatest improvement was 'Spending time with people with dementia can be very enjoyable'.

The following recommendations were suggested from this study:

- Incorporate the WBP tool as part of the Individualised Care Planning for clients at the ADA New Horizon Centres and recommend review on a 3-monthly basis. Involve all care staff to have a greater understanding of the PCC approach and the WBP indicators.
- Extend training in PCC and Foundation Course in DCM to all senior staff at the New Horizon Centre.
- Involve other eldercare centres in Singapore in PCC training to improve the overall standard of dementia care in Singapore.
- Use information from the WBP to update the client's doctor and family members about the client's condition, and to chart the progress and interventions provided to the clients at the Centre.

The continuing use of this new care delivery system should lead to better quality care for persons with dementia and greater job satisfaction for the staff.

2. INTRODUCTION

2.1 MODEL OF DEMENTIA CARE

There are many approaches to dementia care. More recent approaches have focussed on care that acknowledges the social, interpersonal and emotional aspects of the person with dementia. Such care is provided to persons with dementia in addition to their need for custodial, medical and nursing care.

Alzheimer's Disease Association (ADA) runs three New Horizon Centres for dementia clients in different parts of Singapore. These are day care centres providing physical and rehabilitative care to the clients and granting respite to the family carers. ADA acknowledges the need to identify a model of care that will assist their staff in providing a better standard of emotional care to the clients.

The Mary Chester Day Centre in Perth is managed by staff of Alzheimer's Australia Western Australia (AAWA). The Person-Centred Care (PCC) model, advocated by the late Dr Tom Kitwood and the University of Bradford Dementia Group, is used in this Centre.

This sets the background to an exchange programme between the staff of AAWA and ADA in July 2005 and September 2005. The objective of this exchange was for ADA to learn more about the principles of PCC, its applications and the different kinds of services for dementia available in Western Australia. Reciprocally, the AAWA staff visiting ADA could gain some insight into the care services available in Singapore.

2.2 EVALUATION OF CARE

The evaluation of care given to people with dementia can be challenging. Often, to obtain an indication of the standard of care administered, we only seek the views of the family caregivers and care staff rather than the views of the persons with dementia.

AAWA and ADA recognise the need for an evaluation tool to gauge the care given to the clients in their Day Care Centres. This became the impetus for the research collaboration between the two organizations to identify a common tool that will guide and evaluate the application of PCC principles in their delivery of dementia care.

3. BACKGROUND TO THE STUDY

3.1 DAY CARE CENTRES

The foundation for effective dementia care is the support given to caregivers (Asia Pacific Consensus Statement on Dementia, 2001). Day care centres for persons with dementia are one component of a range of community based dementia care services. Services provided by day care centres allow people with dementia to continue living at home and delay institutionalization. This is especially essential because of the fragmentation of families and increasing numbers of elderly who are now living alone both in Australia and Singapore. A report of an evaluation of day care services for people in Scotland (Walker et al., 2001) included recommendations to develop high quality and innovative approaches to day care that will enable the family carers to feel supported and to provide therapeutic experiences that will enhance the well-being of the person with dementia. There is, therefore, an acknowledgement that there is a need to continue to improve the standard of care in the centres run by AAWA and ADA and to meet the changing needs, aspirations and expectations of caregivers and the care recipients.

3.2 QUALITY OF LIFE

Improving the quality of life for persons with dementia and their families is the aim of Alzheimer's Disease organizations internationally. Quality of life has been defined as the "individual's perception of their position in life in the context of the culture and value systems in which they live" (WHO QOL Group, 1995). The expectations from day care centres in terms of services rendered to the person with dementia have grown considerably over the years. Increasingly there is a recognition that the care environment and the actions of staff have a critical role in determining the quality of care provided. This quality of care contributes to better well-being and higher quality of life for the person with dementia.

3.3 PERSON-CENTRED CARE

Person-centred care values all people regardless of age and health status, is individualised, emphasises the perspective of the person with dementia, and stresses the importance of relationships (Brooker, 2004). This model of care was developed by the late Dr Tom Kitwood and the University of Bradford Dementia Group.

The key elements of person-centred care are to value persons with dementia and giving them individualized assessment and care. There is also a need to take the perspective of the person with dementia and to provide a supportive social environment (Kitwood, 1997).

The primary outcome of person-centred care for people with dementia is to support and maintain the individual's personhood in the face of declining mental powers and disabilities. Kitwood defined personhood as that of "a standing or status that is bestowed upon one human being, by others, in the context of relationship and social being. It implies recognition, respect and trust." (Kitwood, 1997)

Caring for very vulnerable people with dementia in large groups with low staffing levels and at the same time trying to provide person-centred care can be very challenging. The staff must also provide support for each other in this endeavour because the person-centred approach should encompass all relationships. This includes not just people with dementia but for care staff who are providing direct care and interventions to them. In identifying a tool to guide and evaluate the process of implementing person-centred care, the needs of the person with dementia and the care staff are all taken into consideration.

3.4 WELL-BEING PROFILING

The Well-Being Profiling (WBP) emerged from Dementia Care Mapping (DCM), an observational method developed by the University of Bradford Dementia Group. This simple, more flexible and easy to use tool was presented by Errollyn Bruce to help care staff observe, reflect and use their observations in care planning (Bruce, 2000). Profiling well-being is a way to record subjective observations of people with dementia based on 14 indicators and assess their emotional care needs based on these signs. It is an assessment of “the capacity for well-being, rather than estimating the proportion of their time spent in one or another state. In a sense the profile can be seen as an approach to assessment rather than a definitive ‘test’ of a person’s state of well/ill-being” (Bruce, 2001). This profiling assists in the identification of interventions, focuses the interventions and then enables assessment of the impact of those interventions and their effectiveness in improving well-being and ameliorating ill-being.

Well-Being Profiling had been identified as potentially useful in the evaluation of the quality of care on an ongoing basis, in addition to its role in enhancing the quality of life for people with dementia (Bruce, 2000). Wey (2001) also reported on the benefits of using this tool as part of an assessment for people with dementia living in the community.

It is quite common for a single or a number of specific care approaches to be evaluated (Kilstoff & Chenoweth 1998), rather than the process for supporting the implementation of new and improved care practices. AAWA and ADA aim to use the WBP to evaluate and guide the implementation of person-centred care in our centre-based environment so as to improve our care practices.

It is important for the care staff in the two organizations to be able to empathise with what their clients experience. Christine Bryden, a young victim of Alzheimer’s disease wrote, “As we become more emotional and less cognitive, it’s the way you talk to us, not what you say, that we will remember. We know the feeling, but don’t know the plot. Your smile, your laugh and your touch are what we will connect with. Empathy heals. Just love us as we are. We’re still here, in emotion and spirit, if only you could find us.”(Bryden, 2005)

4. PROJECT OBJECTIVES AND HYPOTHESES

4.1 PROJECT OBJECTIVES

- 4.1.1 Implement well-being programming to guide and evaluate person-centred practice in day care centres for people with dementia.
- 4.1.2 Demonstrate a tool for monitoring and measuring the capacity for well-being among people with dementia attending day care centres.
- 4.1.3 Increase well-being and reduce depressive symptoms of people with dementia attending these centres.
- 4.1.4 Reduce the carer burden and related stress of primary carers of a person with dementia.
- 4.1.5 Increase staff knowledge and capacity to implement person-centred practice in dementia care.
- 4.1.6 Demonstrate the benefits of Well-Being Profiling for improving the quality of dementia care in centre based dementia care.
- 4.1.7 Share information on well-being programming in centre based dementia care, including information on training and assessment with local and international agencies.

4.2 STUDY HYPOTHESES

- 4.2.1 People with dementia attending day care centres that use Well-Being Profiling to guide person centred practice, demonstrate an increased capacity for well-being and decreased depressive symptoms.
- 4.2.2 Primary carers of people with dementia attending day care centres that use well-being profiling to guide person centred practice, report decreased care-giving burden and related stress.
- 4.2.3 The person with dementia's capacity for well-being and the care-giving burden and related stress experienced by the primary caregiver are similar across cultures.
- 4.2.4 Staff who use the Well-Being Profiling demonstrate an increased knowledge, skills and motivation to implement person-centred practice in dementia care.

5. METHODOLOGY

The study used pre- and post-intervention comparisons of quantitative and qualitative data to develop the implementation of well-being programming to guide and evaluate person-centred care. Data was obtained for clients, carers, and care staff. Consent forms (Annex 13.1) were explained and signed by primary carers for clients to participate in this study.

5.1 TRAINING

A Person-Centred Care and Well-Being Profiling training module was developed by Dr Phillip Yap and his team from Alexandra Hospital for ADA. A workshop was conducted by the team in January 2006 for all the care staff in ADA involved with this research project.

5.2 STAFF ATTITUDES AND KNOWLEDGE

The Attitudes to Dementia Questionnaire (ADQ) (Lintern, 2000) was administered during pre-training and at the end of the study, that is after the post-implementation WBP profiling for the clients were done. This is to measure the staff attitudes and their knowledge towards person-centred care and well-being profiling. (Annex 13.2)

5.3 CLIENT DATA

Clients were randomly selected from a Master List from each of the 3 ADA centres. Their well-being is measured during the pre- and post-implementation phases, using the following tools:

- 5.3.1 ***Well-Being Profiling.*** This was conducted twice, at the beginning and end of the study. After the initial profiling was done by the team of care staff, a well-being summary was completed to guide the development of intervention strategies to support the clients and increase their sense of well-being. The interventions were implemented by the care staff between the initial and final profiling. (Annex 13.3 – 13.5)
- 5.3.2 ***Cornell Scale for Depression.*** It is an observational tool to measure depressive symptoms, completed by the main carer or family member. This instrument was selected because some of the clients involved may have difficulties with self-reporting mood and emotional symptoms. (Annex 13.6a)
- 5.3.3 ***Mini-Mental State Examination (MMSE).*** This was administered to assess the level of cognitive function for the selected clients. (Annex 13.6b)

5.4 PRIMARY CARER DATA

Baseline and follow-up data was collected through a structured interview on the relationship between the carer and the person with dementia. Information obtained from the carer included aspects of family support, family pressure, time spent in caring, carer's

emotional and mental health. Quality of relationship between clients and their family caregivers was enquired as part of the overall intake assessment process. This was rated by the primary carer as 'Better', 'Good', 'Poor', 'Strained', or 'Worse'. (Annex 13.7)

5.5 PRIMARY CAREGIVER BURDEN

The following tools, completed during the pre- and post-implementation stages, were used to identify the problems experienced by carers of the person with dementia and the level of caregiving strain they experienced.

5.5.1 *Relative's Stress Scale* (Greene et al., 1982) – Annex 13.8

5.5.2 *Problem Checklist v 1.1* (adapted from Gilleard) – Annex 13.9

6. PROJECT IMPLEMENTATION SCHEDULE

RESEARCH PROCESS	IMPLEMENTATION
ADA submits application for VCF/Social Service Research Grant	Oct 2005
Staff of Alexandra Hospital develops training module on Person-Centred Care and Well-Being Profiling	Nov / Dec 2005
Staff training on Person-Centred Care and Well-Being Profiling Staff completes pre-training Attitudes to Dementia Questionnaire	14 Jan 2006
Pre-implementation pilot with 2 clients and 2 carers	Jan 2006
Random selection of clients (total of 34 clients) Collection of pre-implementation data for clients and carers	Feb 2006
Initial Well-Being Profiling and summary for selected clients	Feb 2006
Implementation of Well-Being interventions	Feb to Apr 2006
Final Well-Being Profiling and summary	May 2006
Implementation of Well-Being interventions	May to Aug 2006
Collection of post-implementation data for clients and carers	Jul to Aug 2006
Staff completes post-implementation Attitudes to Dementia Questionnaire	Jun to Jul 2006
Write up report	Sept to Oct 2006
ADI CONFERENCE PRESENTATION	
Submit abstract for oral conference presentation	May 2006
Abstract accepted for presentation	Jul 2006
Registration for conference	Jul 2006
Preparation for presentation	Aug / Sep 2006
Presentation at ADI Conference in Berlin	12 to 14 Oct 2006

7. RESULTS & DISCUSSION

7.1 STAFF ATTITUDES AND KNOWLEDGE

The hypothesis (4.2.4) that staff would demonstrate increased knowledge about dementia as measured by the ADQ was supported by the results. Among the 14 staff members who completed the questionnaire, 13 of them showed improved scores. Only one staff had ADQ scores which maintained the same before and after WBP implementation.

The graph presented in Annex 13.10 shows the mean scores for each ADQ item before and after well-being profiling implementation.

The graph presented in Annex 13.11 indicates the mean change in ADQ self-ratings from pre- to post-implementation. 17 of the 19 questions in the ADQ had positive mean score changes following implementation of well-being profiling. Item 16 (Spending time with people with dementia can be very enjoyable) showed the greatest positive mean score change of 14. Two items showed negative mean change. Question 10 (Once dementia develops in a person, it is inevitable that the person will go downhill) had a mean change of -3, and Question 13 (It is important not to become too attached to the clients) had a mean change of -1.

Qualitative exploration of these results with some of the care staff who completed the ADQ revealed that while the WBP project had encouraged staff to think more creatively about developing interventions, they had no expectations of improvement in their clients. The positive responses from the clients observed as a result of the interventions positively reinforced the care staff, who were in turn motivated by their clients' spontaneous interactions (conversing, teasing, joking, etc.).

In general, care staff who were interviewed felt that the project was worthwhile to continue, especially in the Early Intervention programmes. They appreciated the benefits of specific interventions with well-developed Individualized Care Plans that provided structure for consistent and goal-directed dementia care.

The care staff also raised concerns about increased administrative workload associated with additional documentation. Suggestions were discussed on how to streamline the summary forms to make them more user-friendly.

7.2 CLIENT DATA

Of the 34 selected clients, one client withdrew midway during the project as he was discharged from the day care programme. Of the remaining 33 clients, 11 were men and the mean age of the participants was 79.

7.2.1 Well-Being Profiling. The graph presented in Annex 13.12 shows the overall change in total WBP scores from pre- to post-implementation. 91% of the sample showed improvement in total well-being measures and none of the participants showed a decline. 9% of them maintained the same WBP scores between the profilings at the start and end of the study. 'Improvement' was defined as a 1 or 2 point increase in the total WBP

scores, while ‘decline’ was defined as a 1 or 2 point decrease in the total WBP scores. The hypothesis (4.2.1) that people with dementia would exhibit increased capacity for well-being following the use of well-being profiling was supported.

The data presented in Annex 13.13 shows the number of participants who improved, maintained or worsened on particular items of the WBP. Participants improved most on Question 6 “Uses remaining abilities”, and maintained their well being most on Question 10 “Expresses appropriate emotions.” Only 1 participant worsened in the area of “Alertness, responsiveness” for Question 5.

The graph presented in Annex 13.14 summarises the proportion of participants who showed improvement on each of the WBP items. Of the participants who showed improvement in total WBP scores, most of them (44%) improved on the item ‘Uses remaining abilities (6)’, while only 18% of them were observed to improve on the item ‘Expresses appropriate emotions (10)’.

7.2.2 *Cornell Scale for Depression.* Baseline and post-intervention mean scores on the Cornell Scale were 9.4 and 8.4 respectively, and they were not statistically different (Paired Samples Test, $t=0.99$, $df=29$, $p=0.33$). There was no significant correlation between change in depression scores and change in total WBP change scores from pre- to post-implementation (Pearson’s $r=0.09$, $p=0.65$).

These results suggest that the change in WBP scores between and pre- and post-implementation were unlikely to be related to any significant change in mood symptoms.

7.2.3 *Mini-Mental State Examination (MMSE).* Baseline and post-implementation mean MMSE scores for all participants were 13.3 and 13.6 respectively. There were no significant change in MMSE scores between pre- and post-implementation (Paired Samples Test, $t=-0.05$, $df=29$, $p=0.96$). There was no significant correlation between change in MMSE scores and change in total WBP change scores from pre- to post-implementation (Pearson’s $r=-0.25$, $p=0.16$).

These results suggest that the change in WBP scores between and pre- and post-implementation could not be explained by any significant change in cognitive status of the clients.

7.3 PRIMARY CARER DATA

The hypothesis (4.2.2) that well-being profiling would help primary carers alleviate care-giving burden and related stress was supported by the results. 87% of the carers indicated that their relationship with the person they are caring for was either maintained or improved from pre- to post-implementation stage. Only 4 carers (13%) rated their relationships to have worsened. This was due to crisis in the family during the time when the questionnaire was administered, which affected the stress level of the carers in caring for their loved one. These results are presented in Annex 13.15.

7.4 PRIMARY CAREGIVER BURDEN

- 7.4.1 *Relative's Stress Scale.*** This scale is subdivided into the Personal Distress (PD) and the Domestic Upset (DU) subscales. 63% of the carers who responded indicated either an improvement or maintenance on the DU items, and 54% of them rated improvement or maintenance on the PD items. These results are presented in Annex 13.16.
- 7.4.2 *Problem Checklist v 1.1.*** There are two measures obtained from this checklist – frequency of maladaptive behaviours and the degree of caregiver stress associated with caregiver difficulty in coping with these behaviours. Overall, 50% of the carers who responded indicated an improvement or maintenance of the behavioural symptoms of the clients, and 53% of them indicated a reduction of caregiver stress associated with these symptoms. These results are presented in Annex 13.17.
- 7.4.3 *Correlation between primary carer data and quality of relationship between carer and client.*** Further subgroup analyses were conducted by comparing the primary carer data between those who indicated that their relationship with the client ‘worsened’ and those who indicated that their relationship either ‘improved’ or ‘maintained’. Carers who indicated ‘worsened’ relationship with the clients indicated significantly more negative items on the Relative Stress Scale than those who indicated either ‘improved’ or ‘maintained’ relationships with the clients ($t=4.21$, $p<.01$ for PD subscale; $t=2.62$ $p=.01$ for DU subscale). There was also a significance difference between the two groups on the frequency of maladaptive behaviours endorsed on the Problem Checklist ($t=2.26$, $p=.03$) but no significant difference was found on the caregiver difficulty associated with these behaviours.

7.5 PAPER PRESENTATION AT THE ADI CONFERENCE

Singapore’s submission to present the preliminary results of the research project was accepted for presentation at the 22nd Conference of Alzheimer’s Disease International in Berlin in October 2006. It was jointly presented by Ms Fong Yoke Leng representing Alzheimer’s Disease Association and Ms Wendy Hudson representing Alzheimer’s Association, Western Australia. The PowerPoint presentation slides for this paper are included in Annex 13.18.

8. LIMITATIONS OF THE STUDY

8.1 STAFF ATTITUDES AND KNOWLEDGE

Based on qualitative feedback from care staff, the ADQ item (10) ‘Once dementia develops in a person, it is inevitable that the person will go down hill’ was generally found to be ambiguous. They indicated that as a result of their participation in the WBP, they have become more observant and hence more aware of subtle deterioration. This may have accounted for the ambiguous interpretation of this item. Some care staff also found the questionnaire difficult to understand due to their lack of familiarity with English and thus may have misunderstood the statements in the questionnaire.

8.2 CLIENT DATA

The most difficult WBP items to rate were ‘Uses remaining abilities (6)’ and ‘Expresses self-creativity (7)’. These were felt to be more subjective than the other items and may be associated with cultural differences in client’s social backgrounds. This may have resulted in poor inter-rater reliability for some of the ratings. It was suggested that the concept of self-creativity could be more broadly defined, such as one’s ability to match colours of clothing, creative use of jewellery and clothing accessories, making substitutions and improvising with recipes, etc. The extent to which a client ‘uses remaining abilities’ may be constrained by the opportunities he or she is provided to try out new things. It was noted that sometimes the care staff are unaware of other possibilities for the clients to attempt new activities, or attempt new ways of doing routine tasks, hence limiting the client’s perceived abilities.

8.3 PRIMARY CARER DATA

Complete information from primary carers was occasionally difficult to obtain. Self-administered questionnaires were sometimes returned partially completed. There were practical difficulties for care staff to follow-up with telephone calls or face to face interviewing.

8.4 DATA FROM ALZHEIMER’S ASSOCIATION, WESTERN AUSTRALIA

At the time of completion of this project, results were inadequate to address the hypothesis (4.2.3) that well-being capacity of the persons with dementia and the caregiver burden and associated stress experienced by the primary caregiver are similar between the Singapore and Australian samples. A letter of explanation for the lack of this data is included in Annex 13.19

9. RECOMMENDATIONS

Questionnaires

- 9.1** WBP summary forms need to be streamlined and modified so that they are more user-friendly. Attached in Annex 13.20 is a revised format for the Centres' use.
- 9.2** The wording in Q10 and Q13 on the ADQ seems to be ambiguous and interpretation may be misleading. These items require some modification if the questionnaire is to be used in the future.
- 9.3** Translations of the ADQ into other local languages may be helpful to care staff who are unfamiliar with English. Alternatively, verbal translations by centre managers could be considered, making this scale more widely accessible and ensuring reliability of the data collected.
- 9.4** The Cornell Scale was found to be useful and could be considered as an alternative to the Geriatric Depression Scale in assessing depression in dementia.

Internal

- 9.5** Incorporate the WBP tool as part of the Individualised Care Planning for clients at the ADA New Horizon Centres and recommend review on a 3-monthly basis.
- 9.6** Extend training in Person Centered Care and Foundation Course in Dementia Care Mapping to all senior staff at the New Horizon Centres. Involving all care staff to have a greater understanding of the PCC approach and the WBP indicators.
- 9.7** Use information from the WBP to update the client's doctor and family members about the client's condition, and to chart the progress and interventions given to the client at the Centre.

External

- 9.8** Extend training in Person Centred Care to other dementia eldercare centres in Singapore so as to improve the overall standard of dementia care in Singapore.

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Ms Wendy Hudson, Manager, Respite Care Services, Alzheimer's Australia Western Australia Limited.

Mr Frank Schaper, Chief Executive Officer, Alzheimer's Australia Western Australia Limited.

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11. REFERENCES

- Auchus, AP & Chen, CP. Asia-Pacific Consensus Statement on dementia. *Journal of Alzheimers Disease and Associated Disorders*. Apr-Jun 2001; 15(2), 63-65.
- Bruce, E. 2000. Looking after well-being: a tool for evaluation. *Journal of Dementia Care*. Nov/Dec p.25-27.
- Bruce, E. 2001. Looking after well-being: how it works in practice. *Journal of Dementia Care*. Jul/August p.18.
- Bryden, C. 2005. *Dancing With Dementia: My story of living positively with dementia*. London, Jessica Kingsley.
- Gilleard, C. J. 1984. *Living with Dementia, Community Care of the Elderly Mentally Infirm*, The Charles Press Publishers, Philadelphia.
- Greene, J.G. Smith, R. Gardiner, M. & Timbury, G.C. 1982. Measuring behavioural disturbance of elderly demented patients in the community and its effects on relatives. *Age and Ageing*; Vol 11, p. 121-126.
- Kilstoff, K. & Chenoweth, L. 1998. New approaches to health and well-being for dementia day-care clients, family carers and day care staff. *International Journal of Nursing Practice*. Jun 4(2) p. 70-83.
- Kitwood, T. 1997. *Dementia Reconsidered: The person comes first*. Open University Press, Buckingham.
- Lintern, T. (2000). *Quality in Dementia Care: Evaluating Staff Attitudes and Behaviour*. Ph. D. thesis, University of Wales Bangor.
- Walker, E. Dewra, B. Dewing, J. & Pritchard, E. 2001. An evaluation of day care services for people with dementia from the perspective of major stakeholders. The Royal Bank of Scotland Centre for Advances in Care of Older People.
- Wey, S. 2001. Looking after well-being: a community perspective. *Journal of Dementia Care*. Jan/Feb p.18-20
- WHO QOL Group. 1995. The World Health Organization Quality of Life Assessment (WHOQOL) position paper from WHO. *Social Science and Medicine*, 41, p.1403-1409.

12. LIST OF ABBREVIATIONS

AAWA	Alzheimer's Australia Western Australia Limited
ADA	Alzheimer's Disease Association (Singapore)
ADQ	Attitudes to Dementia Questionnaire
DCM	Dementia Care Mapping
DU	Domestic Upset (subscale of Relative Stress Scale)
MMSE	Mini Mental State Examination
NHC	New Horizon Centre
PCC	Person-Centred Care
PD	Personal Distress (subscale of Relative Stress Scale)
QOL	Quality of Life
WBP	Well-Being Profiling
WHO	World Health Organization

13. LIST OF ANNEXES

- 13.1 Consent Form
- 13.2 Attitudes to Dementia Questionnaire (ADQ)
- 13.3 Well Being Individual Profile Sheet
- 13.4 Well Being Profiling Summary Sheet
- 13.5 Well Being Profiling Sheet (Chinese)
- 13.6a Cornell Scale for Depression
- 13.6b Mini Mental State Examination (MMSE)
- 13.7 Primary Carer Data Form
- 13.8 Relative's Stress Scale
- 13.9 Problem Checklist v 1.1
- 13.10 Mean change scores for each ADQ item before and after WBP implementation
- 13.11 Analysis of Pre and Post Score of ADQ
- 13.12 WBP Individual Profile Analysis (Overall)
- 13.13 Total number of participants who improved, worsened or maintained their scores on each WBP item
- 13.14 WBP Individual Profile Analysis (Individual Items)
- 13.15 Percentage of carers' ratings of quality of relationship post-implementation
- 13.16 Percentage of carers who improved, worsened or maintained their scores on the Relative's Stress Scale post-implementation
- 13.17 Percentage of carers who improved, worsened or maintained their scores on the Problem Checklist post-implementation
- 13.18 Powerpoint presentation slides for the paper presented at the 22nd Conference of the Alzheimer's Disease International in Berlin in October 2006
- 13.19 Letter from Alzheimer's Association, Western Australia
- 13.20 Revised format of Well Being Profiling Summary Sheet