## SCIE RESEARCH BRIEFING

### AIDING COMMUNICATION WITH PEOPLE WITH DEMENTIA

**Definition of a briefing:** A SCIE research briefing is a summary of information on a particular topic to update practice at the health and social care interface. It is a concise document summarising the knowledge base in a particular area to act as a 'launch pad' or signpost to more in-depth material. It is produced through a clear methodology involving identification of a focused question, comprehensive searching of multiple sources and filtering of materials for quality.

#### What is the issue?

Communication is a two-way process and can be defined as, "person-to-person transmission of ideas through ... language or ... non-verbal media" (1). Communication "is a fundamental aspect of all human relationships" (2) and is an essential element of good care (3). Effective communication can improve the quality of life for a person with dementia. However, experts highlight that people with dementia lack the opportunity to talk and express their feelings about the quality of their own life (4) and services they receive (5). It is vital that people with dementia are consulted on both issues: this can be achieved, given time (5, 6, 7). A number of interventions have been developed to work directly with people with dementia on an individual or group basis and also indirectly with family and professional carers and health/social care professionals (8) to improve communication and quality of life for the individual with dementia and their carers. However, many health and social care professionals have no specific training in dementia care. Factors in communication include the type of dementia a person has, the effects of previous life history and personality, and the current caring environment. On a day-to-day basis, it is vital to enhance communication at all times, take the time to listen and understand, continue in efforts to communicate.

## Why is it important?

The onset of dementia can create communication barriers within the person with dementia, such as word-finding problems (9), memory problems (10, 11), using the same words repeatedly, not appearing to understand what it said, saying very little, the use of empty phrases, a lessening ability to be coherent (2) and maintain a conversational topic (12) in which the decline in ability to communicate is progressive (13, 14, 15, 16, 17). Approximately 600,000 people in the UK have dementia: it is estimated that by 2026, there will be 840,000, rising to 1.2 million in 2050 (18). Projections made by the Alzheimer Society are slightly higher (19). Although the numbers involved are substantial, each individual with dementia is different with different communication needs, including people who may have

additional hearing and visual problems or from minority ethnic communities with English as a second language. Communication difficulties are distressing (11, 20) and frustrating (16) for the person with dementia themselves and represents one of the major problems for family carers (21) and care home staff (22, 23). It is vital that communication continues (24), both verbal and non-verbal, despite progression of the condition (2). As far as possible, communication strategies need to be individualised (2, 25) to take into account differences between individuals and different degrees of cognitive ability. In the same way, allowance must be made for individual responses to attempts to improve communication (26).

# What does the research show?

Much research has been done in this area of practice. Current research themes include: involving people with dementia and their families in discussions about service quality (27), identifying communication barriers and how to overcome them (28) and developing therapeutic ways for people with dementia to express themselves and communicate: examples are the use of memory aids (23), group meals (22, 29), the mirror as a therapeutic tool (30), music therapy (17), singing by carers (31), dance and movement (32). Other studies have assessed the effectiveness of interventions such as communication training for family carers (33, <u>34</u>) and care home staff (<u>12</u>, <u>35</u>, <u>36</u>), a planned walking/talking programme (16, 37), and communication techniques for later-stage dementia (38). Systematic reviews have also been produced for validation therapy (39), reminiscence therapy (40) and Snoezelen (41) and have stated that a drawback to much of the research in this area is that it is small-scale, has limited application to a wider population, uncoordinated and frequently has researcher-identified methodological weaknesses. More systematic research is needed in this area (40) together with more consistency in research (41, 42) and investigation into the effectiveness of combined interventions (1). High-quality qualitative research is also needed to explore the wide variety of approaches that can be used to enable communication.

# What are the ethical considerations?

It is essential to remember that it is a human right and a basic need to communicate with others. People who help and support a person with dementia should also be aware that behaviour is communication and try to develop skills in interpreting behaviour. Care should be taken not to provide too much or inadequate stimulation as this can cause emotions such as fear and anxiety (1) or confusion (11). Advocacy services are useful for people with dementia and can be a means of safeguarding their rights and that their voices are expressed.

# What do I need to do?

Be aware of your own interactions with people who have dementia and be positive and flexible in your approach. Take time to discover the meaning of what is being said. Realise that it is possible to communicate with people at all stages of dementia and develop skills and techniques to do this, including communication skills training and development. Apply the ABC of communication (1): avoid confrontation, be practical, clarify the person's feelings and offer comfort.

#### Read:

- The eLSC/SCIE Practice Guide: Assessing the Mental Health Needs of Older People (section 6. Assessing Need: b) Communication) at <a href="http://www.elsc.org.uk/knowledge\_floor/bpg2/older.htm">http://www.elsc.org.uk/knowledge\_floor/bpg2/older.htm</a>
- "Aging, Health and Society: News and Views" (Fall 2003) Theme: Strategies for Communication in Dementia at:
   <a href="http://www/socsci.mcmaster.ca/gerontology/emplibrary/newsletter\_fall2003\_vol9\_num1.pdf">http://www/socsci.mcmaster.ca/gerontology/emplibrary/newsletter\_fall2003\_vol9\_num1.pdf</a>

### The related SCARE briefing "The Use of Assistive Technology for People with Dementia Living in the Community". The starting point for improving communication must be that it is centred on the What are the person with dementia (11) in his/her uniqueness. The barriers to communication, implications? such as physical disability, the effects of medication (8) and the environment, such as noise (11) and lack of staff time (43) need to be tackled in addition to other strategies. The two types of method used to improve communication – practical day-to-day practices (11, 15, 43) and more formal projects (12, 16) must include a desire on the part of professionals (and carers) to listen more (23, 43) and talk less (23). A number of strategies are both simple and cost-effective such as planned walking (16), the use of a mirror (30) and toy stimulation (44). Training for carers is an accepted part of care (14) and this must also include informal carers (15, 45). A team approach can be used to develop and implement communication strategies: multi-disciplinary teams (2), including speech-language therapists (8, 14) and dental staff (46) where appropriate. Those assessing and providing personal care to people with dementia need to recognise that, with time and care, individuals can be helped to express themselves more clearly and also contribute to discussions about service evaluation and development. Who can I contact? Alzheimer's Society at <a href="http://www.alzheimers.org.uk/">http://www.alzheimers.org.uk/</a> Dementia Voice: the dementia services development centre for the South West at <a href="http://www.dementia-voice.org.uk/">http://www.dementia-voice.org.uk/</a> The Dementia Services Development Centres Network at http://www.dementia.stir.ac.uk/network/network.htm Kingshill Research at http://www.kingshill-research.org/ Dementia Advocacy and Support Network (DASN) at http://www.dasninternational.org/ Where can I find Alzheimer's Society has produced "The Alzheimer's Society book of activities" to improve the quality of people's lives. See: examples of http://www.alzheimers.org.uk/working\_with\_people\_with\_dementia/publicatio innovative practice? ns/activities.htm South of Tyne and Wearside Mental Health NHS Trust has developed a Dementia Services Collaborative in the Sunderland and South Tyneside localities. See: http://www.sunderland.nhs.uk/dsc/default.htm Stockport Dementia Care Training Project involved development of an education and training package (including communication) for carers. See: http://www.gmconfed.org.uk/downloads/2003/smallprojects/report2.99.31.pdf Dementia Advice and Support Services (part of the Mental Health Foundation) runs a number of pilot schemes to improve services for people with dementia and their carers. See: http://www.mhilli.org/dass/dassproject.htm Storyboard project. Contact: <a href="mailto:liz.wainwright@bradford.gov.uk">liz.wainwright@bradford.gov.uk</a> The Dementia Advocacy and Support Network (DASN) is promoting the involvement of people with dementia in service development. See http://www.dasinternational.org Alzheimer's Society has developed strategies to assist people with dementia in participating politically, including having them on their board of trustees. See http://www.alzheimers.org.uk/News and Campaigns/Policy Watch/involving. htm

What are the views of people who use services?	Research suggests that a high proportion of people with dementia both want and are able to give their opinions on the services received (3). When a number of people with early-stage dementia were asked for their opinions on services received, it was evident that they " do not have a uniformity of experience – a voice – but instead have individual, articulate voices that speak of unique life experiences." (47)
Resource sites	<ul> <li>Search <u>CareData</u> freely available via the <u>Electronic Library for Social Care</u></li> <li>The <u>Journal of Dementia Care</u></li> </ul>
Comments	Please address all comments, suggestions or ideas for improvement to the ScHARR Library at <a href="mailto:scharrlib@shef.ac.uk">scharrlib@shef.ac.uk</a>
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#### REFERENCES

(1) Powell J.A. (2000) Communication interventions in dementia. *Reviews in Clinical Gerontology* **10**(2): 161-168. Abstract available at: <a href="http://journals.cambridge.org/bin/bladerunner?REQUNIQ=1083838614&REQSESS=551687">http://journals.cambridge.org/bin/bladerunner?REQUNIQ=1083838614&REQSESS=551687</a> 1&117000REQEVENT=&REQINT1=57506&REQAUTH=0

Traditional review considering a range of recent claims concerning the validity of a wide range f communication interventions currently employed in dementia care.

(2) Richter J.M. Roberto K.A. Bottenberg D.J. (1995) Communicating With Persons With Alzheimer's Disease: Experiences of Family and Formal Caregivers. *Archives of Psychiatric Nursing* **9**(5): 279-285.

Exploratory study comprising focus group interviews with two groups of caregivers of persons with Alzheimer's Disease (formal and family).

(3) Joseph Rowntree Foundation (2001) *Exploring ways for staff to consult people with dementia about services*. Findings May 2001 – Ref 541. Available at: <a href="http://www.jrf.org.uk/knowledge/findings/socialcare/541.asp">http://www.jrf.org.uk/knowledge/findings/socialcare/541.asp</a>

Research study involving 31 people with dementia.

(4) Goldsmith M. (1996) *Hearing the voice of people with dementia: opportunities and obstacles*. London. Jessica Kingsley. Abstract available at: <a href="http://www.jkp.com/catalogue/book.php?isbn=1-85302-406-6">http://www.jkp.com/catalogue/book.php?isbn=1-85302-406-6</a>

Book based on interviews with people with dementia and professionals working in the field, extensive literature search and a consultative document.

(5) Bamford C, Bruce E. (2000) Defining the outcomes of community care: the perspectives of older people with dementia and their families. *Ageing and Society* **2**: 543-570.

Research based on a small consultation with people with dementia and their carers.

(6) Barnett E. (2000) *Including the person with dementia in designing and delivering care: 'I need to be me!'* London. Jessica Kingsley. Abstract available at: <a href="http://www.jkp.com/catalogue/book.php?isbn=1-85302-740-5">http://www.jkp.com/catalogue/book.php?isbn=1-85302-740-5</a>

Book looking at the roles of those who decide on who, what, where and when care is given, as well as those who deliver care.

(7) Proctor G. (2001) Listening to older women with dementia: relationships, voices and power. *Disability and Society* **16**(3): 361-376. Abstract available at:

Interview study of 4 older women with dementia.

(8) Clark L.W. (1995) Interventions for persons with Alzheimer's disease: Strategies for maintaining and enhancing communicative success. *Topics in Language Disorders* **15**(2): 47-65.

Discussion paper examining different interventions for people with Alzheimer's disease.

(9) Sabat S.R. Cagigas X.E. (1997) Extralinguistic communication compensates for the loss of verbal fluency: a case study of Alzheimer's disease. *Language and Communication* **17**(4): 341-351.

Case study of a form of communication used by an AD sufferer whose verbal fluency was highly comprised due to sever word-finding problems.

(10) Woods B. (1994) Management of memory impairment in older people with dementia. *International Review of Psychiatry* **6**: 153-161.

Traditional review of the management of memory impairment in older people with dementia.

(11) Zimmerman P.G. (1998) Effective communication with patients with dementia. *Journal of Emergency Nursing* **24**(5): 412-415.

Commentary on effective communication with patients with dementia by nurses.

(12) Dijkstra K. Bourgeois M. Burgio L. Allen R. (2002) Effects of a Communication Intervention on the Discourse of Nursing Home Residents with Dementia and Their Nursing Assistants. *Journal of Medical Speech-Language Pathology* **10**(2): 143-157. Abstract available at:

 $\underline{http://static.highbeam.com/j/journalofmedical speech language pathology/june 012002/effects of a communication intervention on the discourse o/index.html$ 

Evaluation of an intervention programme that included the use of effective communication techniques and memory books by nursing assistants in nursing homes.

(13) Greer K.L. Pustay K.A. Zaun T.C. Coppens P. (2001) A Comparison of the Effects of Toys versus Live Animals on the Communication of Patients with Dementia of the Alzheimer's Type. *Clinical Gerontologist* **24**(3/4): 157-182. Abstract available at: https://www.haworthpress.com/store/ArticleAbstract.asp?sid=&ID=20984

Six female nursing home residents with moderate dementia were randomly assigned into two groups and measurements were recorded in three conditions: without stimuli, in the presence of two toy cats, and in the presence of two live cats.

(14) Orange J.B. Colton-Hudson A. (1998) Enhancing Communication in Dementia of the Alzheimer's Type. *Topics in Geriatric Rehabilitation* **14**(2): 56-75.

Overview of current communication education and training programmes for caregivers of individuals with dementia of the Alzheimer's type, followed by case study involving a spousal caregiver of an individual with dementia of the Alzheimer's type.

(15) Small J.A. Gutman G. (2002) Recommended and Reported Use of Communication Strategies in Alzheimer Caregiving. *Alzheimer Disease and Associated Disorders* **16**(4) 270-278. Abstract available at: <a href="http://www.alzheimerjournal.com/pt/re/adad/abstract.00002093-200210000-">http://www.alzheimerjournal.com/pt/re/adad/abstract.00002093-200210000-</a>

 $\underline{00009.htm; jsessionid = AaTmKMF811KlMvvlhQA1GAk2pCfXWeuGV7YWfiqSmnsAYQE}\\ \underline{L29np!1547737409!-949856031!9001!-1}$ 

Traditional literature review and survey of 20 family (spouse) caregivers of persons diagnosed with Alzheimer's disease.

(16) Friedman R. Tappen R.M. (1991) The Effect of Planned Walking on Communication in Alzheimer's Disease. *Journal of the American Geriatrics Society* **39**: 650-654.

Randomized, non-blinded two-group experimental study of 30 patients with Alzheimer's disease.

(17) Brotons M. Koger S.M. (2000) The Impact of Music Therapy on Language Functioning in Dementia. *Journal of Music Therapy* **37**(3): 183-195.

Research study, using a within-subjects design, exploring the effects of music therapy versus conversational sessions on language functioning in 20 dementia patients.

(18) Department of Health (2001) *National Service Framework for Older People. Standard Seven: Mental health in older people* (pp 90-106). Available at: <a href="http://www.dh.gov.uk/assetRoot/04/07/12/83/04071283.pdf">http://www.dh.gov.uk/assetRoot/04/07/12/83/04071283.pdf</a>

Department of Health policy/ guidance document.

(19) Alzheimer's Society. Available at: <a href="http://www.alzheimers.org.uk/News\_and\_Campaigns/Policy\_Watch/demography.htm">http://www.alzheimers.org.uk/News\_and\_Campaigns/Policy\_Watch/demography.htm</a>

Alzheimer' Society Web site providing prevalence and incidence figures for dementia.

(20) Killick J. Allen K. (2001) *Communication and the care of people with dementia*. Buckingham. Open University Press. Available at: <a href="http://mcgraw-hill.co.uk/openup/chapters/033520774X.pdf">http://mcgraw-hill.co.uk/openup/chapters/033520774X.pdf</a>

Book covering both the theory and practice of communicating and caring for people with dementia.

(21) Touzinsky L. (1998) Validation Therapy: Restoring communication between persons with Alzheimer's disease and their families. *American Journal of Alzheimer's Disease* **13**(2): 96-101. Abstract available at: <a href="http://www.pnpco.com/pn02004.html">http://www.pnpco.com/pn02004.html</a>

Overview of validation therapy and case study employing the use of validation therapy between a man with Alzheimer's Disease and his daughter.

(22) Santo Pietro M.J. Boczko F. (1998) The Breakfast Club: Results of a study examining the effectiveness of a multi-modality group communication treatment. *American Journal of Alzheimer's Disease* **13**(3): 146-158. Abstract available at: http://www.pnpco.com/pn02004.html

Controlled research study evaluating a five-day-a-week programme of structured multi-modality group communication ("The Breakfast Club").

(23) Bourgeois M.S. Dijkstra K. Burgio L. Allen-Burge R. (2001) Memory Aids as an Augmentative and Alternative Communication Strategy for Nursing Home Residents with Dementia. *Augmentative and Alternative Communication* **17**: 196-210.

Controlled research study evaluating memory aids as an augmentative and alternative communication strategy for nursing home residents with dementia (N=66).

(24) Moss S.E. Polignano E. White C.L. Minichello M.D. Sunderland T. (2002) Reminiscence Group Activities and Discourse Interaction in Alzheimer's Disease. *Journal of Gerontological Nursing* **28**(8): 36-44.

Pilot research study of the effects of reminiscence group activities on 15 people with Alzheimer's disease.

(25) Runci S. Doyle C. Redman J. (1999) An Empirical Test of Language-Relevant Interventions for Dementia. *International Psychogeriatrics* **11**(3): 301-311. Available at: <a href="http://www.ipa-online.org/ipaonlinev3/publications/archive/11\_3toc.asp#An Empirical Test">http://www.ipa-online.org/ipaonlinev3/publications/archive/11\_3toc.asp#An Empirical Test</a>

Case study employing a randomized, alternating-treatments design to determine the effectiveness of an Italian-language intervention.

(26) Hopper T. Bayles K.A. Tomoeda C.K. (1998) Using Toys to Stimulate Communicative Function in Individuals with Alzheimer's Disease. *Journal of Medical Speech-Language Pathology* **6**(2): 73-80.

Single-subject experimental design with replications across subjects.

(27) Nolan M. Lundh U. Grant G. Keady J. eds (2003) *Partnerships in Family Care: understanding the care giving career*. Buckingham. Open University Press.

A book which considers how family and professional carers can work together more effectively.

- (28) Parker J. (2003) Positive Communication with people who have dementia. In: Adams T. Manthorpe J. (2003) *Dementia Care*. London. Hawkers Publications Ltd.
- (29) Altus D.E. Engelman K.K. Mathews R.M. (2002) Using Family-Style Meals to Increase Participation and Communication in Persons with Dementia. *Journal of Gerontological Nursing* **28**(9): 47-53.

Research study (ABAB reversal design) examining the effect of changing the mode of meal delivery to "family-style" on communication in persons with dementia in the US.

(30) Tabak N. Bergman R. Alpert R. (1996) The mirror as a therapeutic tool for patients with dementia. *International Journal of Nursing Practice* **2**(3): 155-159.

Survey of 100 patients suffering from dementia aged 67-85 years.

(31) Brown S. Gotell E. Ekman S.-L. (2001) Singing as a therapeutic intervention in dementia care. *Journal of Dementia Care* **9**(4): 33-37. Abstract available at: <a href="http://dementia.careinfo.org/cgi-bin/articles.pl">http://dementia.careinfo.org/cgi-bin/articles.pl</a>

Small-scale research study of 9 people with dementia to evaluate the effect of caregivermediated singing on verbal communication between people with dementia and caregivers during the daily morning routine.

(32) Coaten R. (2001) Exploring reminiscence through dance and movement. *Journal of Dementia Care* **9**(5): 19-22. Abstract available at: <a href="http://dementia.careinfo.org/cgibin/articles.pl">http://dementia.careinfo.org/cgibin/articles.pl</a>

Paper outlining the author's personal experiences as a practitioner and care staff trainer in Scotland of exploring reminiscence through dance and movement.

(33) Ripich D.N. Ziol E. Lee M.M. (1998) Longitudinal Effects of Communication Training on Caregivers of Persons with Alzheimer's Disease. *Clinical Gerontologist* **19**(2): 37-53.

Controlled research study evaluating a training programme designed to improve caregivers communication skills with their family members (Intervention N=19).

(34) Done D.J. Thomas J.A. (2001) Training in communication skills for informal carers of people suffering from dementia: a cluster randomised clinical trial comparing a therapist led workshop and a booklet. *International Journal of Geriatric Psychiatry* **16**(8): 816-821. Abstract available at: <a href="http://www3.interscience.wiley.com/cgi-bin/abstract/85011222/ABSTRACT">http://www3.interscience.wiley.com/cgi-bin/abstract/85011222/ABSTRACT</a>

Evaluation of a short training workshop in communication techniques (N=30) versus an information booklet (N=15) for carers of people with dementia.

(35) McCallion P. Toseland R.W. Lacey D. Banks S. (1999) Educating Nursing Assistants to Communicate More Effectively With Nursing Home Residents With Dementia. *The Gerontologist* **39**(5): 546-558. Abstract available at: <a href="http://gerontologist.gerontologyjournals.org/cgi/content/abstract/39/5/546">http://gerontologyjournals.org/cgi/content/abstract/39/5/546</a>

Research study (2 intervention conditions x 2 skilled nursing homes x 4 assessments partial crossover control design) describing the development and evaluation of a Nursing Assistant Communication Skills Programme (NACSP).

(36) Burgio L.D. Allen-Burge R. Roth D.L. Bourgeois M.S. Dijkstra K. Gerstle J. Jackson E. Bankester L. (2001) Come Talk With Me: Improving Communication Between Nursing Assistants and Nursing Home Residents During Care Routines. *The Gerontologist* **41**(4): 449-460. Abstract available at:

http://gerontologist.gerontologyjournals.org/cgi/content/abstract/41/4/449

Research study evaluating communication skills training and the use of memory books by certified nursing assistants on verbal interactions between nursing assistants (N=64) and nursing home residents (N=67).

(37) Cott C.A. Dawson P. Sidani S. Wells D. (2002) The Effects of a Walking/Talking Program on Communication, Ambulation and Functional Status in Residents with Alzheimer Disease. *Alzheimer Disease and Associated Disorders* **16**(2): 81-87. Abstract available at: <a href="http://www.alzheimerjournal.com/pt/re/adad/abstract.00002093-200204000-00005.htm;jsessionid=AaX44qS1T83l5ZEqCxw5Z41WTzm3vJ6Zx4xYFFLwp2W9QpShgE5x!1547737409!-949856031!9001!-1">http://www.alzheimerjournal.com/pt/re/adad/abstract.00002093-200204000-00005.htm;jsessionid=AaX44qS1T83l5ZEqCxw5Z41WTzm3vJ6Zx4xYFFLwp2W9QpShgE5x!1547737409!-949856031!9001!-1</a>

Randomized controlled trial of 86 people with Alzheimer disease in three geriatric long-term care facilities n Canada.

(38) Tappen R.M. Williams-Burgess C. Edelstein J. Touhy T. Fishman S. (1997) Communicating With Individuals With Alzheimer's Disease: Examination of Recommended Strategies. *Archives of Psychiatric Nursing* **11**(5): 249-256.

Interview study of 30 people with advanced Alzheimer's disease in the US.

(39) Neal M. Briggs M. (2002) Validation therapy for dementia (Cochrane Review). In: *The Cochrane Library*, Issue 2, 2003. Oxford: Update Software. Abstract available at: http://www.cochrane.org/cochrane/revabstr/AB001394.htm

Cochrane systematic review.

(40) Spector A. Orrell M. Davies S. Woods R.T. (2002) Reminiscence therapy for dementia (Cochrane Review). In: *The Cochrane Library*, Issue 2, 2003. Oxford: Update Software. Abstract available at: http://www.cochrane.org/cochrane/revabstr/AB001120.htm

Cochrane systematic review.

(41) Chung J.C.C. Lai C.K.Y. Chung P.M.B. French H.P. (2002) Snoezelen for dementia (Cochrane Review). In: *The Cochrane Library*, Issue 4, 2003. Chichester, UK: John Wiley & Sons, Ltd. Abstract available at:

http://www.cochrane.org/cochrane/revabstr/AB003152.htm

Cochrane systematic review.

(42) Jones G.M.M. (1997) A review of Feil's validation method for communicating with and caring for dementia sufferers. *Current Opinion in Psychiatry* **10**(4): 326-332.

Overview of Feil's validation method.

(43) Packer T. (1999) Dementia Part 3: communication. *Professional Nurse* **14**(10): 727-731.

Commentary on how nurses can communicate more effectively with people with dementia.

(44) Murray L.L. Dickerson S. Lichtenberg C.C. (2003) Effects of toy stimulation on the cognitive, communicative, and emotional functioning of adults in the middle stages of Alzheimer's disease. *Journal of Communication Disorders* **36**: 101-127. Abstract available at:

http://www.ingenta.com/isis/searching/ExpandTOC/ingenta;jsessionid=aintig17fuqjs.crescent?issue=pubinfobike://els/00219924/2003/00000036/0000002&index=1

Evaluation of the toy stimulation on the language, cognition, and emotional state of patients in the middles stages of Alzheimer's disease (N=18).

(45) Hendryx-Bedalov P.M. (1999) Effects of caregiver communication on the outcomes of requests in spouses with dementia of the Alzheimer type. *International Journal of Aging and Human Development* **49**(2): 127-148.

Case studies of three clinical and three matched non-clinical couples in the US.

(46) Chalmers J.M. (2000) Behavior management and communication strategies for dental professionals when caring for patients with dementia. *Special Care in Dentistry* **20**(4): 147-154.

Traditional literature review of behaviour management and communication strategies for dental professionals caring for patients with dementia.

(47) Reid D. Ryan T. Enderby P. (2001) What Does it Mean to Listen to People with Dementia? *Disability and Society* **16**(3): 377-392.

Interview study (N=19) of people with dementia in Sheffield.