Can Using a Communication Tool within the Emergency Department Enhance Verbal Interactions between Nurses and Patients with Moderate Cognitive Impairment related to Dementia?

Gary Cleeve, Sandra Walker

Abstract

Dementia is a decline in mental ability, (Bickley 2007, Breitung 2004, Dementia UK 2012, Griffiths & Rooney 2004 and The Alzheimer's Association UK 2012), and cognitive impairment related to dementia can take many forms (Baker 2011, DOH 2009 and Kitwood 2007). This project looks at how cognitive impairment can impact on verbal communication between patients that have dementia and the nurses looking after them. The project aims to identify if using a communication tool can enhance these verbal interactions and if any in particular can be identified as suitable for use within the Emergency Department (ED). A literature search was done as part of an evidence based project, applying the principles of evidence based practice through identification, selection and critical appraisal of the evidence available to answer the question posed.

The conclusions that have been drawn are that firstly; valid and tested communication tools do exist, but none have been tested thoroughly enough to immediately apply to clinical practice specifically within the ED. Secondly; validation techniques as described in works by Feil (2005) can be implemented as a general means of improving communication outcomes for patients with dementia, although full training would be required in order to disseminate the techniques across all nursing staff within EDs.

Author details
Gary Cleeve
(Corresponding Author)
Clinical Nurse Specialist for Older People
Southampton University Hospitals Trust
gary@gdcleeve.com

Sandra Walker
Senior Teaching Fellow
Southampton University
Faculty of Health Sciences
University Road
Southampton
SO17 1BJ
Tel: 02382597897
Scw1y10@soton.ac.uk

Dementia and Related Cognitive Impairment.

Dementia is described as an acquired decline in mental ability, although the term Dementia can be explained as an umbrella description of many illnesses where similar effects are seen (Bickley 2007, Breitung 2004, Dementia UK 2012, Griffiths & Rooney 2004 and The Alzheimer's Association UK 2012). Those suffering with dementia often experience memory loss; reduced reasoning and communication skills; anxiety and rapid mood changes (Baker 2011). As the dementia progresses, it is likely that the affected person will become more dependent on others to meet their own needs and eventually become completely reliant on others to care for them (Bickley 2007, Breitung 2004, Dementia UK 2012 and The Alzheimer's Association UK 2012). While those providing day to day care may be loved ones, there are significant proportions of time where patients with dementia will need to interact with Health Care Professionals (Dementia UK 2012, DOH 2009 and Santo-Pietro & Ostuni 2003).

Cognitive impairment (CI) related to dementia can take many forms (Baker 2011, DOH 2009 and Kitwood 2007). CI can be generally defined as a detrimentally altered state of knowing, perceiving and experiencing (Pearsall & Hanks eds 2009). Health Care practitioners are often required to measure a patients cognitive functioning in order to diagnose or exclude illness as part of a primary examination (Bickley 2007), tests based on algorithms such as the Mini Mental State Examination (MMSE) (Folstein et al 1975) and Abbreviated Mental Test Score (AMTS) (Hodkinson 1973) are utilised throughout EDs in the UK and world-wide (Hooijer et al 1992). The measurement of CI has been shown to inform how we as nurses provide care for and interact with our patients, making this an important consideration.

Epidemiology of Dementia

The incidence of dementia within the United Kingdom is rising in line with an ageing population (DOH 2009), in 2010 the Alzheimer's Research Trust estimated that more than eight hundred thousand people in the UK were living with dementia (Dementia UK 2012). Around fifteen thousand of these people were under sixty-five years old and it is acknowledged that this figure included those without a formal diagnosis (Dementia UK 2012). It can be anticipated that this figure is set to become more accurate by 2015 in line with an increase in NHS Memory Clinics (DOH 2009), which could lead to more accurate diagnosis of Dementia and what type of dementia a person has. Alzheimer's disease is acknowledged as being the most frequently occurring form of dementia world-wide, followed by Vascular Dementia (Griffiths & Rooney 2004). Other forms of dementia include HIV-Associated Dementia, Alcohol Related Dementia, Lewey Body Dementia; Frontotemporal Lobe Dementia and more rarely Dementia Pugilistica (Boxer's Syndrome) (Breitung 2004, Dementia UK 2012 and Griffiths & Rooney 2004).

Current Practice

In many EDs the Abbreviated Mental Test Score (Hodkinson 1973) method is used to aid initial assessment. Often, in practice no evidence is offered to support why this is the preferred measurement although all practitioners within the area may use the same method. This may be an evolution of clinical practice, as sometimes practices evolve with no apparent supporting evidence despite evidence existing (Benner 1984, and Hall 2005). Key to effective evidence based practice is the ability to critically review your own actions (Moule & Goodman 2009, Moule & Hek 2011), however in this case using the AMTS tool without understanding the evidence to support it is acceptable as this is unlikely to hinder the test or alter the result.

One supporting indication of its use could be that the AMTS is not dependent on reading, writing or drawing ability and therefore not dependent on the educational level of the subject being tested (Bonaiuto et al 1992). Given that there are many educationally deprived areas in the United Kingdom, it is reasonable and inclusive to apply an assessment process that does not rely on the ability to read, write or draw. Critics of the AMTS would argue that potential results are not detailed enough to provide accurate long term diagnosis (Bonaiuto et al 1992), however the area of practice is the Emergency Department (ED) and the usual window of assessment is less than four hours, meaning that long term diagnosis of cognitive impairment is not the role of the ED team but dealing with the immediate and individual needs of a patient is and this cannot be achieved effectively without good levels of communication (DOH 2009, and Gray et al 2007).

The AMTS provides a score out of ten, zero being the lowest and ten being the highest. A Score of zero to five would indicate a severe level of CI, six to eight a moderate level of CI and eight to ten no significant CI (Schaller et al 1012 and The DOH 2000a). A cognitive deficit classified as severe is often likely to be accompanied by other comorbidities such as acute sepsis or head injury (DCA 2007, DOH 2009, Hooijer et al, 1992 and Mitchell & Malladi 2010), also in the presence of no acute illness or injury it has been demonstrated that a person with 'severe' cognitive impairment is likely to be unable to communicate their needs and wishes in a traditional verbal sense (DCA 2007, DOH 2009, Hooijer 1992). In light of this it was decided prudent to concentrate on how a 'moderate' cognitive impairment affects verbal communication. Moderate cognitive impairment is more likely to be seen in a patient with advancing dementia who still demonstrates some capacity and functional ability to make their choices known and to understand the risks associated with any decisions they make (DCA 2007, DOH 2009 and Mitchell & Malladi 2010). It was hoped that by adopting this approach, meaningful conclusions could be drawn from the available evidence to better enhance practice.

Verbal interactions between nursing staff and patients with CI can vary from being excellent to disappointing for one or both parties (Caris-Verhallen et al (1999), Egan et al 2010, Feil 2005, and Santo-Pietro & Ostuni 2003). Clear communication is an essential part of nursing care for all patients, but the added difficulties presented by CI impact greatly on these interactions (DOH 2009, Egan et al 2010 and Vasse et al 2009). Nationally, improving care for those with dementia is high on the health service agenda as part of wider improvement plans (The Alzheimer's Association UK 2002, Baker 2011, DOH 2001, DOH 2003, DOH 2008, DOH 2009, and TSO 2000). Recent environmental improvements have been completed within many EDs, including a 'dementia friendly ward area'.

Importance of, and challenges to Verbal Communication in the Emergency Department

Verbal communication is the most widely used form of information sharing that takes place within a health care setting, during caring interactions between nursing staff and patients (Feil 2005, McCabe 2004 and Santo-Pietro & Ostuni 2003).

Constraints related to staffing pressures; noise and the physical environment of the emergency department are listed as barriers to effective communication when dealing with patients who have a CI related to dementia (Hwang & Morrison 2007). Interactions between patients who have moderate CI and staff have been shown to be biased toward the nurse, demonstrating that the client is not given the opportunity to communicate as effectively as they would like (Gordon et al 2009). Patients should be able to expect communication with their nurse that enhances the quality of their care and allows them to express themselves comfortably regardless of the care setting (DCA 2007, DOH 2009, Feil 2005, Gordon et al 2009 and Santo-Pietro & Ostuni 2003).

Findings

Moule and Goodman (2009) describe Evidence Based Practice (EBP) as using the latest evidence in a particular subject to inform the practitioner's decisions regarding patient care, advice and treatment, drawing upon the practitioners own knowledge and expertise. Sackett et al (2000) describes EBP as the process of using best available evidence coupled with clinical expertise and individual patient values. Nursing research challenges the traditional views of academia and continues to push boundaries, as the traditional evidence hierarchies are questioned and paradigms pulled apart into subdivisions that better suit the way in which nurses undertake,

evaluate and apply research (Richards & Borglin 2011), reducing the research-practice gap within our own profession as a means of improving outcomes for patients, as practitioners become the researchers.

It was widely agreed, in the literature reviewed, that dementia has a debilitating and long lasting detrimental effect on cognitive impairment, which in turn leads to diminished communication capabilities that are further emphasized in unfamiliar situations like visits to an ED (Egan et al 2010, Parke et al 2011, and Vasse et al 2009). Interactions between nursing staff and those with CI are becoming more common, as is the apparent lack of satisfaction for patients and their primary carers regarding these interactions. Improving how nurses verbally communicate with our patients who are experiencing CI will be likely to improve caring interactions (Egan et al 2010, Parke et al 2011, and Vasse et al 2009).

The ED is a busy, noisy and fast paced environment that challenges the mentally capable. It is an area that has a heightened level of risk associated with it for older people with dementia (Egan et al 2010, Parke et al 2011, and Vasse et al 2009). Nurses are the one constant factor in ED care, it is impossible to pass through an emergency department as a patient, without interacting with a nurse. The evidence suggests that nurses are at the forefront of improving communicative interactions for patients (Egan et al 2010, Parke et al 2011, and Vasse et al 2009).

Verbal interactions remain the most common form of communication and verbal ability is usually retained by someone with a moderate cognitive impairment related to dementia, as is an ability to make their needs and wishes known (Egan et al 2010, Parke et al 2011, and Vasse et al 2009). Improving verbal communication between nurses and these patients does improve caring outcomes for both parties (Egan et al 2010, Parke et al 2011, and Vasse et al 2009).

The results of using memory aids and other communication tools are varied and depend on multiple factors, but they are measureable and can be evidenced (Egan et al 2010, Parke et al 2011, and Vasse et al 2009). This evidence can be applied to practice in various settings including the ED, despite an apparent lack of specific ED related evidence.

This in turn highlights a specific need for further research to determine the best way to implement improvements.

Using communication tools to guide and structure verbal interactions between nursing staff and patients has been shown to enhance the value of these interactions, for both parties (Egan et al 2010, Parke et al 2011, and Vasse et al 2009). No one tool or method is shown to be more or less beneficial and therefore no sound conclusion can be drawn to facilitate use in the ED at this time. Further research into the area is needed and this research may be most beneficial if it took the form of an RCT that reviewed multiple communication tools and measured them against not using a tool. This has been established to be difficult; given that no one interaction can ever be completely replicated in order to measure the outcome accurately, considering the patient as an individual. Ethical considerations would also need to be addressed to achieve this research, given that patients with a moderate CI are unlikely to retain information and may have variable capacity to consent to taking part in research or trials. Also to be considered is the time frame in which these patients are treated. Within the four hour window of care in the ED, it would be difficult to test different communication tools on one patient.

Recommendations for Future Practice

A need for an increased level of training has been identified as part of an educational programme that focuses on initiation of interaction and validation for the patient (Egan et al 2010, Parke et al 2011, and Vasse et al 2009). This training must include theory and practical elements to ensure that the techniques are properly applied to the clinical practice of nursing staff. The training programme would ideally be open to all registered nurses and their nursing assistants, ensuring wide spread dissemination of knowledge and an all-encompassing approach to the application of this change. It would be possible to open this training out further, to other health care professionals whose practice may benefit.

Following the initial training session a yearly update would be advisable. This would enable staff to re-affirm their skills in communicating with patients who have

a moderate cognitive impairment related to dementia, but would also ensure a chance to practice the taught techniques again as some staff may not have used them since initial training. Delivery of this training would need to be agreed locally, and be designed to fit alongside the current training for dementia awareness if available. However, this training would be specifically designed to address communicating with patients who have CI. Consideration must be given to the fact that the ED is a unique environment and that training will need to be tailored specifically for ED staff (Egan et al 2010, Parke et al 2011, and Vasse et al 2009). This could mean that this training is seen as too specific in relation to its overall value, as it will not be generalised to the entire local NHS trust. Training could be based on the Validation Breakthrough works by Feil (2005), as validation techniques were identified as the most beneficial short-term intervention available within literature reviewed (Egan et al 2010, Parke et al 2011, and Vasse et al 2009).

Another point that could provide a short term improvement to this area of practice is some basic tips on effective communication for people with dementia. These could include some bullet points on validation techniques, the rule of never paraphrasing and keeping interactions focused to one topic or task. It is not helpful to paraphrase for people with moderate cognitive impairment; this is akin to asking them to process two or three conversations at once and can hinder effective information sharing. Additionally, 'keeping on track', being single task or objective focused can help people with moderate cognitive impairment maintain their attention on a particular subject for longer and achieve more effective positive outcomes for them (Egan et al 2010, Parke et al 2011, and Vasse et al 2009).These findings could be quickly disseminated to nursing staff in the ED via a poster campaign, which would immediately fill a small gap in knowledge while awaiting further training. A draft poster has been created (Figure 2) and implemented locally.

One overarching finding from literature is that not enough research of a desired quality was available (Egan et al 2010, Parke et al 2011, and Vasse et al 2009). It was noted that no robust RCTs had been completed to test the validity of communication and memory aids within
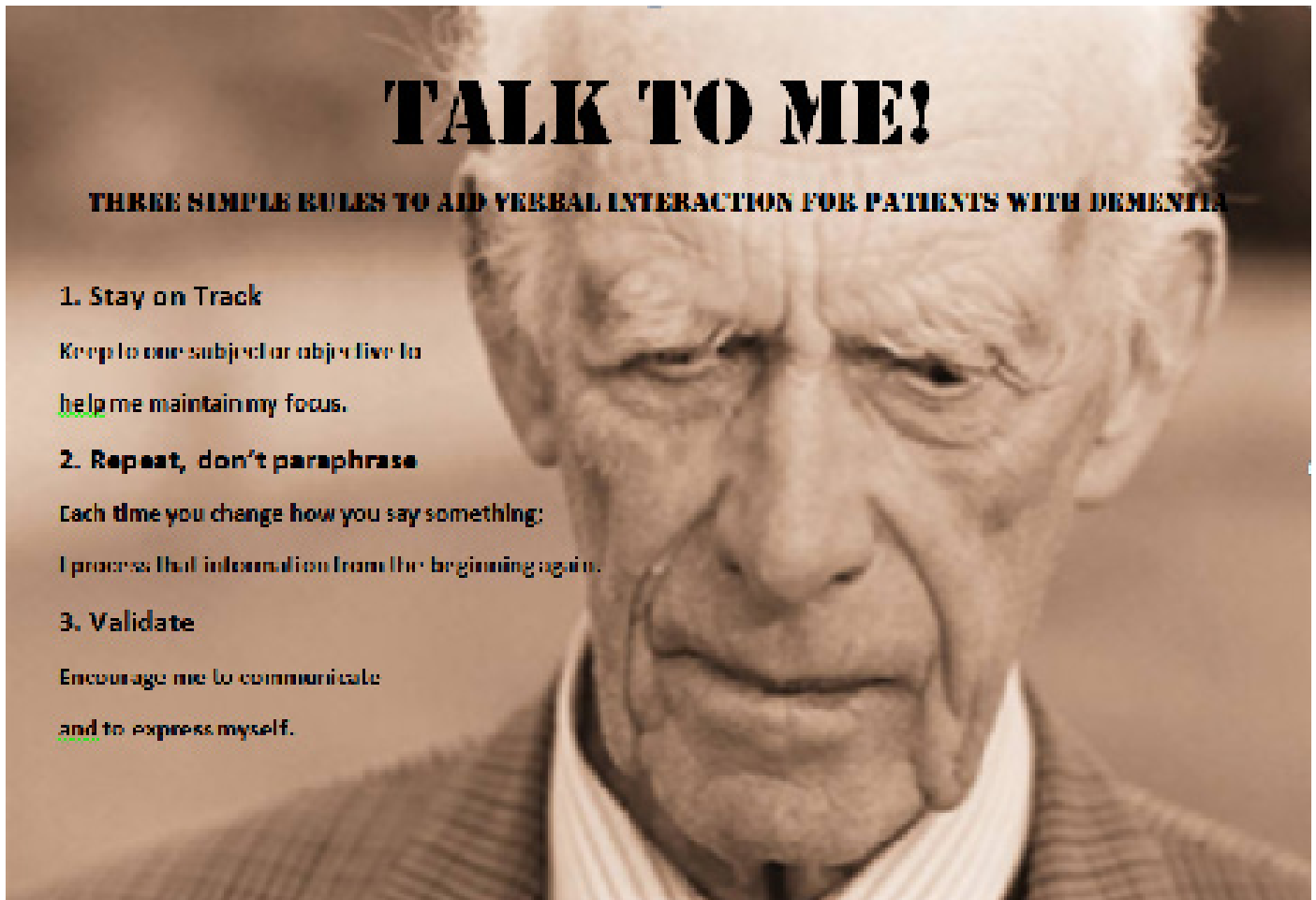
Figure 2. A draft poster

the field of dementia care (Egan et al 2010, Parke et al 2011, and Vasse et al 2009). A few examples of tools and methods were commented on, however no one could be advocated over another. Common threads throughout the tools were noted, and they correspond to those mentioned above – repetition, validation, focus. Gray et al (2007) review the use of communication mats as a tool to enhance all forms of communication between all care givers and people with dementia. This was not reviewed as part of this project as its focus was not verbal communication, however it does warrant further research. Careful consideration should take place when designing the study as a multi-centred approach would be needed to capture cultural variances (Polit & beck 2012).

Conclusion

The NHS and clinical practice are an ever evolving entity, driven by the transient needs of the people who access its services, new technologies and new ways of knowing (Burritt 2005 in Marquis

and Huston 2009, DOH 2000b, and DOH 2008). Services have to constantly adapt to better and more efficiently meet the needs of patients, and these changes need to be embedded into practice (Goodwin et al 2006). Successful change depends on staff understanding and commitment to the change (Ackerman-Anderson & Anderson 2009). To effectively promote a change in ED practice an understanding of what driving and resisting forces exist is needed. Many things can affect how a change is implemented in practice and careful consideration to these factors can lead to successful changes, or if not forecast adequately they lead to failure (Ackerman-Anderson & Anderson 2009, Kiefer 2010, and Young 2010).

Cross boundary working is now common place and expected within the NHS as a means of ensuring improved patient outcomes and streamlined transitions between services (DOH 2008). Releasing staff from clinical commitments to take part in training forms part of continuing professional development (CPD). CPD, although well established, still plays a fundamental part in a nurse's day to

day practice (Desilets et al 2010, NMC 2008). It is easy to see how issues like education can be overlooked during times of financial pressure, short staffing and high service use. Implementation of the recommendations above and further research, as outlined, will be another step forward in ensuring high quality care in the ED for all regardless of cognitive ability.

Key Points

• Clear communication is an essential part of nursing care for all patients, but the added difficulties presented by CI impact greatly on these interactions

• Patients should be able to expect communication with their nurse that enhances the quality of their care and allows them to express themselves comfortably regardless of the care setting

• Interactions between nursing staff and those with CI are becoming more common, as is the apparent lack of satisfaction for patients and their primary carers regarding these interactions. Improving how nurses verbally communicate with our patients who are experiencing CI will be likely to improve caring interactions

• Using communication tools to guide and structure verbal interactions between nursing staff and patients has been shown to enhance the value of these interactions, for both parties

• It is not helpful to paraphrase for people with moderate cognitive impairment; this is akin to asking them to process two or three conversations at once and can hinder effective information sharing.

Reference

Ackerman-Anderson L, Anderson D (2009), Leading Change; Avoid the ten common mistakes, Leadership Excellence [accessed online 19/01/13] http://web.ebscohost.com/ehost/df?vid=5&hid=112&sid=9607514d-2f1f-4eed-8c81-2cf4d0084506@sessionmgr104

Baker J (2011), The Nurse Explains: Dementia, Alzheimer's Disease & Vascular Dementia, United Kingdom John Baker Independent Publishing

Benner P (1984), From Novice to Expert, California Addison-Wesley Bickley L (2007), Bates' Guide to Physical Examination and History Taking, Philadelphia Lippincott Williams and Wilkins

Bonaiuto S, Rocca WA, Lippi A, Luciani P, Giannandrea E, Cavarzeran F, Amaducci L (1992) Study on the validity of the Hodkinson Abbreviated Mental Test Score (AMTS) in detecting dementia of elderly subjects in Appignano (Macerata province), Italy. Archives of Gerontology & Geriatrics, 15:1 p75-85

Breitung J (2004), Understanding and Managing Dementia, Surrey Garev Publishing International
Caris-Verhallen W, de Gruijter I, Kerkstra A, Bensing J (1999), Factors related to nurse communication with elderly people, Journal of Advanced Nursing, 30:5 p1106-1117

Dementia UK (2012), What is Dementia?, [accessed online 09/07/12] http://www.dementiauk.org/information-support/about-dementia/#2

Department for Constitutional Affairs (DCA) (2007), Mental Capacity Act 2005; Code of Practice, London The Stationary Office

Department of Health (2000a), Psychological well-being among older people, Department of Health Archives, London The Stationary Office

Department of Health (2000b), The NHS Plan: a plan for investment, a plan for reform, London The Stationary Office

Department of Health (2001),The National Service Framework for Older People, London The Stationary Office

Department of Health (2003), Essence of Care: Patient Focused Benchmarks for clinical governance, London The Stationary Office

Department of Health (2008), Lord Darzi's Report – High Quality Care for All: NHS Next Stage Review Final Report, London The Stationary Office

Department of Health (2009), Living Well with Dementia; A National Dementia Strategy, London The Stationary Office

Desilets L, Dickerson P, Dickerson P (2010), Continuing nursing education: enhancing professional development, Journal of continuing education in nursing, 41:3 p100-101

Egan M, Bérubé D, Racine G, Leonard C, Rochon E (2010), Methods to Enhance Verbal Communication between Individuals with Alzheimer's Disease and Their Formal and Informal Care Givers: A Systematic Review, International Journal of Alzheimer's Disease, Vol 2010 p1-12

Feil N (2005), The Validation Breakthrough, Maryland Health Professionals Press

Folstein M, Folstein S, McHugh P (1975), ''Mini-mental state'' a practical method for grading the cognitive state of patients for the clinician, Journal of Psychiatric Research, 12 p189-198

Gordon C, Ellis-Hill C, Ashburn A (2009), The use of conversational analysis: nurse-patient interaction in communication disability after stroke, Journal of Advance Nursing, 65:3 p544-553

Goodwin N, Gruen R, Iles V (2006), Managing Health Services, Berkshire Open University Press

Gray C, Murphy J, Cox S (2007), Communication and Dementia: How Talking Mats can help people with dementia to express themselves, University of Stirling in association with The Joseph Rowntree Foundation, York York Publishing Services

Griffiths C, Rooney C (2004), Trends in Mortality from Alzheimer's, Parkinson's Disease and Dementia, Office of National Statistics, London The Stationary Office

Hall A (2005), Defining Nursing Knowledge, Nursing Times, 101:48 p 34-37

Hodkinson M (1973), Mental impairment in the elderly, Journal of the Royal College of Physicians, 7 p305-317

Hooijer C, Dinkgreve M, Onker C, Lindeboom J (1992) Short screening tests for dementia in the elderly population: I. A comparison between AMTS, MMSE, MSQ and SPMSQ. International Journal of Geriatric Psychiatry, 7:8 p559-571

Hwang U, Morrison S (2007), The Geriatric Emergency Department, Journal of American Geriatric Society, 55:1 p1873-1876

Kiefer R (2010), Leading Change, The Official Journal of Rehabilitation Nurses, 35:1 p41-43

Kitwood T (2007), Dementia Reconsidered the person comes first, Berkshire Open University Press

McCabe C (2004), Nurse-patient communication; an exploration of patients' experiences, Journal of Clinical Nursing, 13:1 p41-49

Mitchell AJ, Malladi S (2010), Screening and case finding tools for the detection of dementia. Part I: evidence-based meta-analysis of multidomain tests, American Journal of Geriatric Psychiatry, 18:9 p759-782, Moule P, Goodman M (2009), Nursing

Research an Introduction, London Sage Publications Ltd

Moule P, Hek G (2011), Making Sense of Research, 4th ed. London Sage Publications Ltd

Nursing and Midwifery Council (NMC) (2008), The code: Standards of conduct, performance and ethics for nurses and midwives, London NMC

Parke B, Beaith A, Slater L, Clarke A (2011), Contextual factors influencing success or failure of emergency department interventions for cognitively impaired older people: a scoping and integrative review, Journal of Advanced Nursing, 67:7 p1426-1448

Pearsall J, Hanks P eds (2009), Oxford Dictionary of English 2nd Edition Revised, Oxford Oxford University Press

Polit D, Beck C (2012), Nursing Research Generating and Assessing Evidence for Nursing Practice 9th Edition, Philadelphia Lippincott Williams and Wilkins

Richards D, Borglin G (2011), Complex Interventions and Nursing: looking through a new lens at nursing research, International Journal of Nursing Studies, 48:5 p531-533

Sackett D, Straus S, Richardson W, Rosenberg W, Haynes R (2000), Evidence Based Medicine; How to practice and teach EBM 2nd Edition, Edinburgh Churchill Livingstone

Santo-Pietro M, Ostuni E (2003), Successful Communication with Persons with Alzheimer's Disease An In-Service Manual, Missouri Butterworth Heinemann

Schaller F, Sidelnikov E, Theiler R, Egli A, Staehelin HB, Dick W, Dawson-Hughes B, Grob D, Platz A, Can U, Bischoff-Ferrari HA (2012), Mild to moderate cognitive impairment is a major risk factor for mortality and nursing home admission in the first year after hip fracture, Bone, 12;51(3):p347-352
The Alzheimer's Association UK (2012), What is Dementia?, [accessed

online 09/07/12] http://alzheimers.org.uk/site/scripts/documents_info.php?documentID=106

Vasse E, Vernooij-Dassen M, Spijker A, Olde Rikkert M, Koopmans R (2009), A Systematic Review of communication strategies for older people with dementia in residential and nursing homes, International Psychogeriatrics Association, March Vol 2009 p1-12

Young K (2010), 10 tips for managing change, Training Journal, January 2010 [accessed online 25/01/13] via http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=35480604-c2ca-4bb1-907a-478d0868cd74%-40sessionmgr115&vid=7&hid=105