Singh. Int Arch Nurs Health Care 2015, 1:1
ISSN: 2469-5823

International Archives of
Nursing and Health Care

Review Article: Open Access

Training and Professional Development for Nurses and Healthcare Support Workers: Supporting Foundation for Quality and Good Practice for Care of the Acutely Ill Older Person

Inderpal Singh*

Department of Geriatric Medicine, Ysbyty Ystrad Fawr, Aneurin Bevan University Health Board, Ystrad Mynach, Wales, UK

***Corresponding author:** *Inderpal Singh, Consultant Physician and Geriatrician, Department of Geriatric Medicine, Ysbyty Ystrad Fawr, Ystrad Mynach, CF82 7EP Wales, UK, Tel: 01443 802205; Fax: 01443 802431; E-mail: inder.singh@wales.nhs.uk*

Abstract

Background: A wide range of formal taught and online professional nursing diploma/degree courses are currently available. In addition nursing education is available in most health care settings but it could be difficult to participate in such training events due to time and service constraints. Populations are ageing worldwide and older people usually have multiple chronic and disabling diseases, which will bring new challenges to healthcare systems. An increasing number of older people are currently being admitted to the acute hospitals and more than two-third is older than 65 years. This requires specialized medical knowledge and enhanced understanding of the ageing process and its associated complications.

Aims and objectives: The aim of this review is to discuss the need to implement special education and training programs for nurses and health care support workers to meet current service demands and as a result reduce their stress burden and improved efficiency at work. This review is not for specialist nurses but could support continued learning in key areas needed in the routine care of older people such as falls, incontinence, dementia, delirium, pain and nutrition.

Methods: A MedLine review was conducted using search items including nurses training, falls, dementia, delirium, pain, continence, hospitals, acute illness and older people. Specialist websites including Nursing Times, Royal College of Nursing were also searched to complete this review article. The only filters used were English language review articles and research papers.

Conclusion: Healthcare needs of older people require a multidisciplinary team approach in which team members should have appropriate knowledge about the ageing process and associated complications.

Relevance to clinical practice: Continued training of Health and Social care staff will enhance the quality of care, ensure patient safety and meet the individual needs of older people. The evaluation of such teaching programs could also identify other training areas to deliver safe, holistic, high-quality and dignified care to this growing and vulnerable population.

Keywords

Nurses training; Older people; Acute illness; Geriatric giants; Patient safety

Introduction

Populations throughout the world are ageing, with the oldest old being the most rapidly growing segment of society [1]. By 2050, 2 billion people worldwide will be aged above 60 years; 80% of them living in developing countries [2]. It is challenging for healthcare systems to care for this ageing population, some of whom have multiple chronic and disabling diseases. Older people presenting to hospitals with acute illness tend to have further complications including delirium, malnutrition, incontinence, or pressure sores. Instability (falls), immobility, incontinence, and intellectual impairment (dementia) have collectively been labelled as "geriatric giants" to highlight the major illnesses associated with ageing [3,4]. Nurses are currently caring for more adults aged over 65 years than any other patient population. Caring for older people requires specific knowledge and training to manage both acute and chronic problems in older people [5]. The aim of this review is to discuss the training and professional development of nurses and healthcare support workers (HCSWs) and how this may enhance the care of the acutely ill older person.

Method

A MEDLINE review via PubMed was conducted using search items including nurses training, falls, dementia, delirium, pain, continence, hospitals, acute illness and older people. Specialist websites including Nursing Times and Royal College of Nursing were also searched to complete this review article. The only filters used were English language review articles and research papers.

The Importance of Education in Nursing

The healthcare needs of older people require a multidisciplinary team (MDT) approach where all team members have knowledge of the ageing process. Specific skills are needed in the assessment and management of chronic illness in older people. Team members should have the ability to practice in an interdisciplinary environment to deliver appropriate care for older people, particularly those who are frail or at risk of adverse clinical events.

ClinMed International Library

Citation: Singh I (2015) Training and Professional Development for Nurses and Healthcare Support Workers: Supporting Foundation for Quality and Good Practice for Care of the Acutely Ill Older Person. Int Arch Nurs Health Care 1:007

Received: July 20, 2015: **Accepted:** September 15, 2015: **Published:** September 19, 2015

Nurses are the key members of the multidisciplinary team (MDT) and often the first point of contact for the patient and families. Education helps nursing staff to keep up-to-date and continue to develop professionally and, therefore, deliver best practice care. In addition, current training programmes are generating relatively low numbers of geriatricians, largely because students and residents lack interest in a career in geriatric medicine. The current number of specialists in geriatric medicine is insufficient to meet the healthcare needs for the increasing number of older people in acute hospitals [6]. This can compromise the quality of care and increases the risk of harm for all older people. No single healthcare professional could possibly master the broad range of knowledge and skills needed to provide high-quality care for older adults [7]. There is a responsibility to ensure that successful practices and essential skills are shared among all professional involved in the care of older people, although the general tendency is to train doctors [6]. An understanding of the key principles and practices of geriatric medicine is essential for the nurses and HCSWs/healthcare assistants (HCAs) as well as medical students.

Key Areas for Training

Formal curricula for the training of nurses and HCSWs in geriatrics are needed to prepare health professionals from other non-physician disciplines to achieve effective interdisciplinary team working. Existing models of training such as the Geriatric Interdisciplinary Team Training (GITT) model [8] showed that, when advanced practice nurses, medical residents, and social workers are educated together in geriatric teams, there is an improvement in attitudes towards teams and team skills [8].

The key aspects covered in this review include the most commonly encountered clinical scenarios in older people, including geriatric giants, and opportunities to achieve competence and skills in these clinical areas. The continued learning in key areas such as falls, incontinence, dementia, delirium, pain and nutrition is discussed to support learning experiences of nursing staff.

Most Common Clinical Scenarios

Falls

Falls are common at all ages, particularly in the elderly and are the second commonest cause of unintentional injury and death worldwide. A fall is an unexpected event in which the participant comes to rest on the ground, floor or lower level with no associated loss of consciousness [9]. The occurrence of falls increases progressively with age, from 35% in older adults (>65 years) [10] to 45% in adults over the age of 80 [11].

Harmful falls in older people result in loss of independence, socioeconomic burden to families, and increased costs to the healthcare system. The psychological burden of falls is not only related to the fear of falling or loss of confidence, but it also impacts on the physical well-being of a person.

Although most falls do not result in serious injury but annually approximately 5% of older people living in the community who fall experience a fracture or need hospitalisation [12]. Approximately 1% of falls in older people results in a hip fracture [13]. Nearly one-tenth of those with a hip fracture will die within a month, and a third will die within a year [14]. Half of a hip fracture survivors fail to regain their previous level of independence and another half need long-term institutional care [15]. Thus, falls and fragility fractures in older people remain a significant public health concern, particularly important as the proportion of elderly people worldwide is ever increasing.

Falls assessment and care plan: Older people who present with a fall, report a history of recurrent falls in the past year, or who demonstrate abnormalities of gait and/or balance should undergo a detailed but targeted evaluation for risk factors. Common falls risk factors include leg muscle weakness, balance problems, postural hypotension (defined as a drop in blood pressure - systolic by 30mm or diastolic by 10 mm after standing for 3 minutes), sensory impairment (e.g. deafness or blindness), acute confusion (delirium), medical illness (e.g. urinary tract infection), incontinence (e.g. urgency), polypharmacy or memory problems (dementia).

Nurses and HCSW are usually the first point of contact on admission to hospital and falls screening on admission could be another milestone towards improved quality of care and patient safety. Nursing teams are encouraged to record the risk factors leading to fall and a formulate care plan with the MDT members. The care plan should incorporate appropriate footwear, regular toileting and ensuring mobility aids/calls bells are in close proximity [16].

Bed rest in the hospital may result in loss of muscle strength of up to 11-12% per week [17]. In other words, each extra day in bed in older adults in the hospital can lead to approximately 1% loss of muscle strength. Consequently, older people should be encouraged to mobilise to minimise the risk of inpatient falls. Patients who are confused or have memory problems should be re-oriented and sedation should be avoided. Nurses should be supported to withhold antihypertensives including nitrates (e.g. isosorbide mononitrate), Calcium channel blockers (e.g. amlodipine) followed by diuretics (e.g. furosemide) in this order if postural blood pressure drop is noted on admission. If there is concern about any medications or if nursing staff feel a drug is inappropriately prescribed, this should be raised to the pharmacist or doctor.

Incontinence

Incontinence is defined as loss of control or inability to contain or retain the natural evacuation of urine or faeces. The prevalence of urinary incontinence (UI) depends on the age and gender. For older women the estimated prevalence of UI ranges from 17 to 55%, in comparison, prevalence for older men ranges from 11 to 34% [18]. There is a strong association of faecal incontinence (FI) with age. FI increases from 2.6% in 20 to 29 year olds up to 15.3% in 70 years or above [19]. Incontinence is not only a burden for older people but also for the caregiver and is associated with fear of odour, social isolation, depression and falls. Incontinence is one of the potential complications of acute illness or hospitalization in older people. Incontinence is a serious issue as it not result in poorer quality of life or sexual dysfunction [20] but also associated with adverse outcomes including pressure sores, long-term increased dependency, institutionalization and death.

Continence assessment and care plan: Lower urinary tract symptoms (LUTS) are the name given to a group of symptoms including storage, voiding and post-micturition symptoms affecting the lower urinary tract [21]. Storage or filling symptoms includes frequency, urgency, dysuria, nocturia, stress incontinence, urge incontinence. Obstructive or voiding problems comprise of hesitancy, weak or poor urinary stream, or overflow incontinence. The post-micturition symptoms present as incomplete emptying often in women or post-void or terminal dribbling, often in men.

The two most important predictors of incontinence in the hospital setting are the severity of cognitive dysfunction and the degree of immobility [22]. Continence problems can be secondary to urinary tract infections, medications (e.g. diuretics or sedatives), arthritic pain, inappropriate clothing or dexterity. Lack of a healthy balanced diet or hydration can lead to constipation or FI. Patients with advanced dementia usually encounter UI initially; followed by FI [23]. They have difficulty in expressing their needs to use the toilet, identifying the bathroom and its appropriate use.

Continence assessment is an essential part of person-centred care plan where care should be equally centred on the cognitive deficits, physical abilities, functional capabilities and its psychological impact [23]. Treatment should begin with non-pharmacological therapy. The most important and initial step in the management of continence is directed at ameliorating the predisposing causes with the ultimate goals of maintaining independence, dignity and self-esteem of the person. Promoting regular toileting, easy accessibility to toilet and use of walking aids can reduce elimination problems [24]. Use

of appropriate continence pads or containment methods should be ensured to avoid skin breakdown or incontinence associated dermatitis.

There is evidence for other measures such as reduced fluid/caffeine intake in the evenings, which may reduce nocturnal incontinence. Bladder training exercises can help strengthen the pelvic floor muscles. Tightening the muscles that control urine flow by holding for a count of 10 when urinating could help with both UI and FI [25]. The general advice is to do 10 repetitions, 3 times a day.

Medical teams often disregard continence issues and leave it to nurses to address. The nursing staff should be encouraged to raise this with all members of the MDT. Drug review, assessments of urinary tract infections, constipation or an enlarged prostate; all contribute to a broad appraisal of continence issues. Drugs are available for overactive bladder but need very careful prescribing after formal assessment [26].

Dementia

Dementia is a syndrome of a chronic and progressive nature in which there is a disturbance of multiple domains of brain functioning [23]. These impairments may include memory loss, mood changes, learning capacity, calculation, language, judgement or problems with communicating and reasoning. Dementia is best described, regardless of the underlying cause, as cognitive deficits having impact on activities of daily living (ADLs) or social interaction, often associated with behavioural and psychological symptoms of dementia (BPSD) [23].

Dementia is much more common in hospitalized patients and 42.4% of acute medical admissions of those aged over 70 years have been reported to have dementia, only half of whom were diagnosed prior to admission [27]. Older people with cognitive impairment are also more likely to die during hospitalization, and increasing severity of cognitive impairment is associated with higher mortality [28].

Mild dementia may not present with obvious functional impairments and cognitive deficits can be hidden by carer support. However, it is not uncommon to see older people with worsening dementia presenting to healthcare services with 'inability to cope' or 'social admission', due to increasing functional dependence after the death of a spouse [23].

Dementia assessment and care plan: The diagnosis of dementia relies on accurate history taking, in conjunction with a relative or carer. The impact of cognitive impairment should be demonstrated to affect ADLs.

The poor performance or low scores on formal cognitive screening e.g. mini-mental state examination (MMSE) in the absence of functional disability is not sufficient to diagnose dementia. The ADLs initially affected are complex or instrumental ADLs, like shopping, handling finances, driving, cooking, or using the telephone, followed by basic ADL including bathing, dressing, toileting, transfer, continence or feeding [23].

Nursing colleagues are encouraged to screen all emergency admissions for cognitive deficits with abbreviated mental tests (AMT). AMT is a simple test to perform and score. It has been very widely used by all levels of healthcare professional in the hospital setting. A further interview with the relative or carer is recommended if AMT score is 7 or less.

Nurses are more likely to observe early signs of the person's abilities or cognition during their direct observation. The clues that may raise concerns for underlying cognitive impairment include: "I m worried about my memory", relatives talking, confabulation, repetitive talk or use of wrong words. The sharing of such information with the MDT will not only improve dementia care but also favour the early diagnoses of dementia.

Dementia is associated with impaired mobility and is an independent risk factor for falling [29]. People with dementia are 2–3 times more likely to fall [13] therefore falls risk factors should be addressed. The people with dementia benefit from integrated assessment for oral and dental hygiene; skin problems; elimination and toileting needs; vision and hearing; pain; nutrition and psychological needs [23]. The agitation in people with dementia can be managed by simple measures like pain control, adequate hydration, orientation or good sleep hygiene.

Delirium

Delirium is as an acute confusional state and can be commonly superimposed on pre-existing dementia. Delirium in the hospital is usually secondary to underlying medical illnesses including infection, pain, dehydration, acute coronary syndrome, bowel ischaemia, constipation, hypoxia or polypharmacy. Delirium is more common in persons with pre-existing dementia and if not recognised, can result in poor outcomes including death [30].

Delirium assessment and care plan: The Confusion Assessment Method (CAM) is commonly used tool to screen delirium. CAM supports a diagnosis of delirium if there is history of acute onset of confusion with fluctuating course and inattention in presence of either disorganized thinking and/or altered level of consciousness [31]. Delirium can be hyperactive, hypoactive or mixed. Collateral history from the family member or carers is helpful to detect a recent change in cognition.

Pain

Nurses and HCSWs are used to recording four vitals: blood pressure, temperature, respiratory rate and pulse. Pain is common in older people, and could be due to several reasons, most common being osteoarthritis. Therefore, pain should be treated as the fifth vital sign in older people and an accurate assessment of pain is essential to provide good nursing and medical care. Nurses play a pivotal role in the assessment of pain, owing to the nature of their relationship with patients.

Pain assessment and care plan: Pain assessment can be challenging in acutely unwell older people particularly in the presence of cognitive impairment or associated acute confusion [23]. It involves holistic evaluation of the person on the first presentation of pain and then following up with regular pain assessment. Pain assessment should include the site of pain, type, precipitating factors and impact of pain on the individual. There are several pain scales available, visual analogue scale (0 to 10) and the numerical rating scales (0 to 10) are the most useful [32]. Older people with cognitive impairment who cannot verbally communicate, observation or collateral history from caregiver or change in person's behaviour often helps in the evaluation of the severity of pain. Nursing staff may notice skin bruise or infection, constipation, reduced range of joint movement, vertebral tenderness or a recent injury and this should be escalated to the medical team for detailed physical assessment.

Nutrition

Poor nutrition is one of the major health problem faced by the care of the elderly teams. Nutrition is often overlooked in favour of other aspects of care in the acute hospitals. There can be a loss of taste, appetite and smell with acute illness making it more challenging to maintain good nutrition. Older people with cognitive impairment cannot always communicate their needs. The national UK dementia audit report in 2013 showed disappointing results overall and a lack of attention to basic care needs [33]. Nutritional assessments were undertaken in fewer than 10% of patients in some hospitals [33].

Nutritional assessment and care plan: The nutritional assessment should start with estimating the degree of malnutrition (weight loss or change of fit in clothing), dietary intake and habits. The nutrition history should explore the type, quantity, and frequency of food eaten. The risk factors that leads to poor nutrition includes dry mouth, poor oral hygiene, presence of any behavioral problems, constipation, pain or simply needs for assistance during meal time due to arthritis, reduced vision or tremors. In older people with dementia,

understanding of their feeding skills could play an important role in maintaining nutrition and wellbeing. Regular nutritional assessments using Malnutrition Universal Screening Tool (MUST) can be helpful to identify those who are malnourished or at risk of malnutrition [34]. It is a five-step screening tool and has been validated to be used both in hospitals and community by all health care workers.

Simple things like offering familiar, well-liked food, different seasoning, protected meal times, involvement of friends and relatives, bright colourful plates/napkins/mats often stimulate appetite and make meal time more enjoyable for older people. The person with dementia may simply forget to eat or drink, therefore, needs regular prompting or assistance at mealtimes. Better interaction between the nurse or carer providing assistance and person with dementia is associated with a better dietary intake [35]. The other members of the MDT, like Speech and Language therapist, Dietician and Psychologist should be involved, depending on the needs of the patients.

Opportunities to Achieve Clinical Competence

Training and development

Regular nursing training is essential in achieving an excellent quality of care for older people. However, it could be challenging for most nursing staff to complete academic programmes such as a certificate or diploma in geriatrics or gerontology. Regular nursing education showed a significant reduction in stress from their routine workload in managing complex and frail older people [5]. Regular support and extra training opportunities for nurses and HCSW could also enhance their knowledge and confidence [36]. Most acute hospitals have regular medical unit meeting and nurses are encouraged to participate actively in such clinical meetings. In addition, senior nurse managers should motivate nurses/HCSW to teach other multidisciplinary members including doctors and collate feedback.

Case-based discussion

A case-based discussion (CBD) is principally a workplace based assessment tool which tests reasoning, generates prompts for discussion and management decisions. CBD could be used by the nursing staff to improve understanding on the normal physiological changes of ageing, associated co-morbidity burden and impact of acute illness and treatment. CBD should be structured to define the key issue and associated challenges. The facilitator encourages discussion of available information and explores advantages and disadvantages of the options considered. The facilitator helps to consider implications of the decisions made in a justified manner. CBD should be recorded and nurses should use such an opportunity to formulate a personal developmental plan.

Apprenticeship

Apprenticeship can be used to gain new skills and build careers. Most of the training is done whilst working in a clinical area, establishing a good foundation for good practice and achieving measurable competencies. Specialist nurses have added values to the health care system by extra training in various specialities like palliative care, stroke, Parkinson's disease etc.

Secondment

Nurses or experienced HCSWs could consider an "allocated period of time" to gain new experience and skills [37]. For example, staff member working in a care of the elderly ward may consider gaining experience on use of restraints and application of mental health and capacity legislation in practice and thus consider secondment in an older person mental health unit. Following secondment, sharing new skills and experience will improve values and beliefs which ultimately lead to actions and thus improved outcome.

National health service knowledge and skills framework

The National Health Service Knowledge and Skills Framework (NHS KSF) defines and describes the knowledge and skills that NHS staff need to apply in their work in order to deliver high-quality services. The purpose of the NHS KSF is to support effective learning and development of teams. It also aims to support the development of individuals in the post they are employed in so that they can be effective at work and deliver good quality patient care. This includes an annual system of appraisal known as the Personal Appraisal Development Review (PADR) and applies to all staff covered by Agenda for Change contracts. There is clear evidence to show that where individuals and teams are undertaking effective PADRs and appraisal is undertaken against clear objectives, effectiveness and efficiency improves [38].

Education and Development

The current employer may also support a pre-registration programme at the university. It is recommended to explore various work-based learning opportunities which a health board is able to fund course fees for access to higher education for nursing and healthcare professionals.

Quality improvement project

Initiating and participating in quality improvement (QI) projects could help nursing staff to learn, develop and embed new skills. QI projects could achieve measurable changes and make a real difference to patients' experience in the hospitals and improve patient care. They also lead to greater patient safety and reduced cost.

Nurses should be encouraged to identify a specific aspect of clinical practice that could be done better and work as a group to plan, implement and evaluate chosen quality improvement intervention.

Use a simple but systematic approach to define what you want to accomplish, changes to be made and measurements to ensure change has led to an improvement. This may then be tested on a small scale using Plan-Do-Study-Act (PDSA) cycles [39]. Once you know what works, share your findings to make it sustainable and deliver over long terms more widely.

Participation in QI projects not only helps to acquire new skills but is also rewarding, boosts CV and enhances management skills.

Critical incident reporting

A patient safety incident is any unintended or unexpected incident which could have or did lead to harm for one or more patients receiving NHS care. The National Patient Safety Agency (NPSA) encourages reporting of all patient safety incidents including that you have been involved in; you may have witnessed; caused no harm or minimal harm; caused a more serious outcome or prevented patient safety incidents (known as 'near misses') [40].

Reporting a clinical incident not only improves patient safety and but also create an opportunity for enhanced learning process into the causation of the incident and implementation of systemic changes which could prevent it from recurring.

Champions

Savings can be made by looking into an opportunity in 95% things rather than 5% gaps. Leadership is a skill to motivate a group of people and mapping out where one needs to go to accomplish a common goal. For example, to develop dementia champion role, one needs to be confident, show commitment and engagement with the team. Nursing staff have a range of qualities including team working, good communication skills and ability to delegate. Nursing staff could be mentored by senior medical consultants or ward managers to further develop leadership skills to become champions.

Implication and Recommendation for The Future

Continued training of Health and Social care staff could enhance the quality of care, ensure patient safety and meet the individual needs of older people. The evaluation of such teaching programs could also identify other training areas to deliver safe, holistic, high-quality and dignified care to this growing and vulnerable population.

The implementation of nurses training could be evaluated by examining adverse clinical incidents like reduction of inpatient falls and consequent injuries. Further research by measuring the impact of nursing training on clinical outcomes including mortality, length of hospital stay, place of discharge or quality of life is recommended. The evaluation of such teaching programmes to measure staff benefit: impact on confidence, competence or work related stress using validated tool is also recommended.

Strength and Weakness

This review article has certain strengths. It covers practical examples to implement training to improve quality of care for older people and to meet current service needs. The evaluation of such continued nursing teaching and areas for future research are discussed. Weaknesses of this article are also acknowledged. It is not a systematic review of nursing training programmes and does not meet the learning needs of most specialist nurses.

Conclusion

Healthcare needs of older people require a multidisciplinary team approach in which team members should have the knowledge about the ageing process and associated complications. Therefore, there is a need not only to implement training programs to generate more geriatricians but also to expand training programs for nurses, healthcare support workers and therapists. Such enhanced training and continuous professional development for nursing staff will develop a lifelong learning process and deep foundation for the good practice of nursing.

Summary Points

- Older people usually have multiple chronic and disabling diseases, which will bring new challenges to healthcare systems.
- Specialized medical knowledge and enhanced understanding of the ageing process and its associated complications is needed
- Continued learning in key areas needed in the routine care of older people such as falls, incontinence, dementia, delirium, pain and nutrition could improve quality of care.
- Opportunities to achieve clinical competence include secondment, case based discussion, quality improvement projects or clinical incident reporting.
- The implementation of nurses training could be evaluated by examining reduction of adverse clinical incidents or measuring impact on confidence, competence or work related stress using validated tool.

Conflict of interest

The author has no financial or any other kind of personal conflicts with this article.

Acknowledgments

The author is grateful to all members of the Department of Geriatric Medicine, Ystrad Mynach (ABUHB) for their continued support for research activities.

References

1. Louria DB (2005) Extraordinary longevity: individual and societal issues. J Am Geriatr Soc 53: S317-319.
2. World Health Organisation (2002) Active Ageing: A Policy Framework. Geneva: World Health Organization.
3. Isaacs B (1992) The challenge of geriatric medicine. Oxford: Oxford University Press.
4. Flacker JM (2003) What is a geriatric syndrome anyway? Geriatr Ageing 6: 58e9.
5. Singh I, Morgan M, Belludi G, Verma A, Aithal S (2015) Does nurses' education reduce their work-related stress in the care of older people? Journal of Clinical Gerontology & Geriatrics 6: 34-37.
6. Singh I, Hubbard RE (2011) Teaching and learning geriatric medicine. Rev Clin Gerontol 21: 180-92.
7. Siegel BS (1994) Developing the interdisciplinary team. The clinical care of the aged person: An interdisciplinary perspective. New York: Oxford University Press, 404-425.
8. Fulmer T, Hyer K, Flaherty E, Mezey M, Whitelaw N, et al. (2005) Geriatric interdisciplinary team training program: evaluation results. J Aging Health 17: 443-470.
9. Lamb SE, Jørstad-Stein EC, Hauer K, Becker C; Prevention of Falls Network Europe and Outcomes Consensus Group (2005) Development of a common outcome data set for fall injury prevention trials: the Prevention of Falls Network Europe consensus. J Am Geriatr Soc 53: 1618-1622.
10. Talbot LA, Musiol RJ, Witham EK, Metter EJ (2005) Falls in young, middle-aged and older community dwelling adults: perceived cause, environmental factors and injury. BMC Public Health 5: 86.
11. Masud T, Morris RO (2001) Epidemiology of falls. Age Ageing 30 Suppl 4: 3-7.
12. Falls in older people: assessment after a fall and preventing further falls. NICE quality standard [QS86] Published date: March 2015.
13. Tinetti ME, Speechley M, Ginter SF (1988) Risk factors for falls among elderly persons living in the community. N Engl J Med 319: 1701-1707.
14. Roche JJW, Wenn RT, Sahota O, et al. (2005) Effect of comorbidities and postoperative complications on mortality after hip fracture in elderly people: prospective observational cohort study. BMJ 331: 1374.
15. Duncan DG, Beck SJ, Hood K, Johansen A (2006) Using dietetic assistants to improve the outcome of hip fracture: a randomised controlled trial of nutritional support in an acute trauma ward. Age Ageing 35: 148-153.
16. Gibson C, Simmons L, Clark G (2011) A multifactorial approach to falls prevention. Nursing Times 107.
17. Kortebein P, Ferrando A, Lombeida J, Wolfe R, Evans WJ (2007) Effect of 10 days of bed rest on skeletal muscle in healthy older adults. JAMA 297: 1772-1774.
18. Thom D (1998) Variation in estimates of urinary incontinence prevalence in the community: effects of differences in definition, population characteristics, and study type. J Am Geriatr Soc 46: 473-480.
19. Whitehead WE, Borrud L, Goode PS, Meikle S, Mueller ER, et al. (2009) Fecal incontinence in US adults: epidemiology and risk factors. Gastroenterology 137: 512-517, 517.
20. Sinclair AJ, Ramsay IN (2011) The psychosocial impact of urinary incontinence in women. Obstet Gynaecologist 13: 143-48.
21. Coyne KS, Sexton CC, Thompson CL, Milsom I, Irwin D, et al. (2009) The prevalence of lower urinary tract symptoms (LUTS) in the USA, the UK and Sweden: results from the Epidemiology of LUTS (EpiLUTS) study. BJU Int. 104: 352-360.
22. Borrie MJ, Davidson HA (1992) Incontinence in institutions: costs and contributing factors. CMAJ 147: 322-328.
23. Singh I, Varanasi A, Williamson K (2014) Assessment and management of dementia in the general hospital setting. Re Clin Gerontol 24: 205-218.
24. Wilkinson K (2009) A guide to assessing bladder function and urinary incontinence in older people. Nurs Times 105: 20-22.
25. Borrie MJ, Bawden M, Speechley M, Kloseck M (2002) Interventions led by nurse continence advisers in the management of urinary incontinence: a randomized controlled trial. CMAJ 166: 1267-1273.
26. Allahdin S, Oo N (2012) An overview of treatment of overactive bladder syndrome in women. J Obstet Gynaecol 32: 217-221.
27. Sampson EL, Blanchard MR, Jones L, Tookman A, King M (2009) Dementia in the acute hospital: prospective cohort study of prevalence and mortality. Br J Psychiatry 195: 61-66.
28. Marengoni A, Nobili A, Romano V et al. (2013) Adverse clinical events and mortality during hospitalization and 3 months after discharge in cognitively impaired elderly patients. J Gerontol A Biol Sci Med Sci 68: 419-425.
29. Ballard CG, Shaw F, Lowery K, McKeith I, Kenny R (1999) The prevalence, assessment and associations of falls in dementia with Lewy bodies and Alzheimer's disease. Dement Geriatr Cogn Disord 10: 97-103.
30. Fong TG, Jones RN, Marcantonio ER, Tommet D, Gross AL, et al. (2012) Adverse outcomes after hospitalization and delirium in persons with Alzheimer disease. Ann Intern Med 156: 848-856, W296.
31. Inouye SK, van Dyck CH, Alessi CA, Balkin S, Siegal AP, et al. (1990) Clarifying confusion: the confusion assessment method. A new method for detection of delirium. Ann Intern Med 113: 941-948.
32. Hawker GA, Mian S, Kendzerska T, French M (2011) Measures of adult pain: Visual Analog Scale for Pain (VAS Pain), Numeric Rating Scale for Pain (NRS Pain), McGill Pain Questionnaire (MPQ), Short-Form McGill Pain Questionnaire (SF-MPQ), Chronic Pain Grade Scale (CPGS), Short Form-36 Bodily Pain Scale (SF-36 BPS), and Measure of Intermittent and Constant Osteoarthritis Pain (ICOAP). Arthritis Care Res (Hoboken) 63: 240-252.

33. Young J, Hood C, Gandesha A and Souza R. Royal College of Psychiatrists (2013). National Audit of Dementia care in general hospitals 2012-13: Second round audit report and update. Editors: London: HQIP.

34. Elia M (2003) Screening for malnutrition: A multidisciplinary responsibility. Development and use of the Malnutrition Universal Screening Tool (MUST) for adults. Malnutrition Advisory Group (MAG), a Standing Committee of BAPEN. Redditch, Worcs: BAPEN.

35. Rivière S, Gillette-Guyonnet S, Andrieu S, Nourhashemi F, Lauque S, et al. (2002) Cognitive function and caregiver burden: predictive factors for eating behaviour disorders in Alzheimer's disease. Int J Geriatr Psychiatry 17: 950-955.

36. Daniel J, Okeke J, Holly C, Jones J, Varanasi A, et al. (2013) Does structured mental capacity assessment training improve the confidence and competence of the multidisciplinary team? Age Ageing 42.

37. Secondment of health care assistants. Congress 2007.

38. Department of Health (2004) The NHS Knowledge and Skills Framework (NHS KSF) and the development review process.

39. Vaux E (2013) Tips for a quality improvement project.

40. Report a patient safety incident. NHS.