CLINICAL OUTCOMES OF ACUTELY UNWELL PATIENTS WITH DEMENTIA AND IT RELATIONSHIP TO THE HOSPITAL DESIGN

C Young1, C Edwards2, I Singh3
1Medical student, School of Medicine, Cardiff University, Cardiff UK
2Consultant Clinical Scientist, Academic Dermatologist, Aneurin Bevan University Health Board, UK
3Consultant Geriatrician, Department of Geriatric Medicine, Ysbyty Ystrad Fawr, Aneurin Bevan University Health Board, Wales, UK

Introduction: Hospitalisation is hazardous for frail older people and particularly for those with dementia. Dementia friendly environments have been proposed to promote patient well-being, mobility and engagement with staff/family; however, there has been little emphasis on hospital design. The objective of this study was to profile and compare the clinical outcomes of acutely unwell patients with dementia admitted to two different hospital environments.

Methods: This prospective observation study was conducted for 100 acutely unwell dementia patients admitted at Ysbyty Ystrad Fawr (hospital with 100% single-rooms) and Royal Gwent Hospital (traditional multi-bedded wards - MBW) under the same University Health Board.

Results: A total of 50 patients were observed at each hospital. There was no statistically significant difference in the mean age of patients admitted to single-rooms (83.4 ± 8.4 years) or MBW (82.8 ± 8.4 years, p = 0.73), 60% were females. Most patients (73%, n = 73/100) were admitted from their own homes, the demographic profile and clinical characteristics of the patients was similar in both hospitals. The mean Charlson comorbidity index was similar (single-rooms = 5.0 ± 1.4; MBW = 5.1 ± 1.1). The reasons for acute admission varied widely, though falls were the most common reason for admission to both sites. The mean total length of stay (LoS) was significantly higher for patients discharged from single-rooms (62.23 ± 41.79 days) as compared to those from MBW (42.47 ± 40.50 days, p = 0.027).

Six patients experienced inpatient fall (IF) in each hospital site. There was no significant difference in the incidence of IF (single-rooms = 12, MBW = 8, p = 0.175). There were no significant differences in the number of recurrent fallers (p = 0.629). There was no significant difference in terms of falls-related injury, discharge to a new care home, 30-day readmission or mortality. Advancing age, presence of BPSD and admission to a single room were the only factors found to be associated with increased LoS (p = 0.007, 0.017, 0.027 respectively).

Conclusion: The single room environment appears to influence LoS as previously being reported (Knight S, JCCG 2016, 7(3):87–92), but following the introduction of quality improvement initiatives to prevent inpatient falls (Singh I, BMJQuality). Single-rooms do not appear to be associated with higher inpatient falls incidence. We propose more research to understand the relationship between single rooms and LoS.