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The chaotic journey: Recovering from hip fracture in a nursing home

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ABSTRACT

Purpose of the study: To understand the journey experienced by nursing home residents following hip fracture and impressions of an outreach rehabilitation program offered after their return home.
Design and methods: A qualitative investigation was undertaken in parallel with a randomised controlled trial investigating the efficacy and cost utility of providing a hospital outreach rehabilitation program for older nursing home residents who have recently returned from hospital following hip fracture. Family members and nursing home staff of 28 (out of the first 30) participants (14 from intervention and 14 from control) agreed to participate in interviews and focus groups to provide information and perceptions of each person's journey. NVivo 10 qualitative data analysis software package was used to identify major themes (via open, then axial and finally selective coding).
Results: Both family members and staff described nursing home residents with dementia as receiving poor post-operative care from hospital staff who seemed unfamiliar with dementia and delirium. Discharge from hospital soon after surgery (median 4.5 days) occurred with poor transfer of information. Difficulties with residents' emotions, pain management and commencing mobilisation seemed more prevalent within usual care group, whereas fewer overall problems were encountered by those with access to a geriatrician and additional therapy.
Implications: This research suggests that an integrated care pathway including the hospital stay and first weeks back at nursing homes should be developed. Performance indicators should include carer measures on the quality of the transfer, pain management measures in the first month and return to walking.

1. Introduction

Hip fractures are a common and important cause of morbidity in nursing homes. There is a 10 fold increase in the risk of hip fractures amongst residents of nursing homes compared to age matched community dwelling older people (Choong, Langford, Dowsey, & Santamaria, 2000). Guidelines for the management of hip fracture promote provision of prompt surgery, early mobilisation, organised multidisciplinary health care teams and a team based rehabilitation approach to restoring function and mobility (NICE, 2011). While audits show that the timing of surgery and choice of orthopaedic fixation is unaffected by admission accommodation (Kerse et al., 2008; NICE, 2011) nursing home residents are often excluded from rehabilitation programs (Kirchbaum, 2008). Patients frequently discharge from orthopaedic wards directly back to the nursing home on day 2 to day 7 post-surgery.

More than half of residents residing at Australian aged care facilities have a recorded diagnosis of dementia (AIHW, 2012). Studies report people with cognitive impairment, in particular, receive less support from clinicians (including physiotherapists) in the hip fracture recovery period, compared to other older people who suffer hip fractures (Hedman, Stromberg, Grafstrom, & Heikkila, 2011). This practice may be due to the belief that people with dementia do not have the potential to improve with rehabilitation. However there is evidence that people with dementia who fracture their hips can engage in rehabilitation (Uy, Kurrle, & Cameron, 2008).

As many people from nursing homes who fracture a hip are very frail and receiving end of life care, there is uncertainty about the cost effectiveness of rehabilitation models in this setting.

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Furthermore it is not clear how acceptable the approach is and so qualitative research is needed to provide a patient and family perspective on barriers to recovery and treatments (Mays & Pope, 2000). In this study, we sought formal and informal carers' perceptions about the experiences of patients from nursing homes following hip fracture repair to determine whether they perceived any shortcomings in the services provided and whether they had suggestions for improvement.

This qualitative sub-study was conducted in parallel to a randomised controlled trial (RCT) which was evaluating the efficacy and cost effectiveness of providing a 4 week rehabilitation program into nursing homes following residents' discharge from hospital post-surgery to repair a fractured neck of femur (SACRED – Southern Adelaide Co-ordinated Regional Hip and Debility Rehabilitation Programme ACTRN12612000112864). We recruited 240 older people in 3 hospitals in metropolitan Adelaide, South Australia who were admitted from nursing homes and were recovering from hip fracture surgery. Post operatively they were randomly allocated to receive a 4 week geriatric rehabilitation program (minimum 3 visits per week) or usual care. The primary and secondary outcome measures collected at 4 weeks and 12 months included quality of life, mobility, nutritional status and burden of care measures. Triangulation of data was supported with the addition of qualitative data collected in this current study to allow for a more comprehensive understanding of the research phenomena under investigation (Mays & Pope, 2000).

1.1. Purpose of study

To understand the journey experienced by nursing home residents following hip fracture and impressions of an outreach rehabilitation program offered after their return home.

2. Design and methods

This qualitative aspect of the study assumed that when attempting to understand the experience for nursing home residents following hip fracture, it was important to seek accounts from individuals who could reflect and verbalise their feelings and opinions. As most of the residents had significant cognitive impairment and were unable to engage in the interview process, their next of kin and nursing home staff were invited to provide information and perceptions of each person's journey. We attempted to understand the experience for residents who returned to "usual care" within the nursing home as well as those who received outreach rehabilitation within the nursing home.

2.1. Data collection

Prior to beginning data collection, approval to undertake this study was received from the Southern Adelaide Human Research Ethics Committee, South Australia.

We approached the next of kin and nursing home staff for the first 30 participants recruited to the RCT. Interviews with consenting family and focus groups with consenting staff were conducted on average 5 weeks after the resident returned to the nursing home from hospital. The twenty eight participants whose family and nursing home staff consented to be interviewed had suffered a recent hip fracture but had been walking and a resident in a nursing home prior to the fracture. They were discharged from hospital soon after surgery (median 4.5 days and range 2–19 days) and fourteen residents received usual care which included physiotherapy provided by the nursing home's staff and medical care provided by their usual general practitioner (GP). The remaining fourteen residents received outreach rehabilitation in

Table 1
Characteristics of all participants (n = 28).

	Allocation[b]	Pseudonym[a]	Gender[c]	Family interviewed[d]	Caring Staff interviewed[d]	Age	MMSE (out of 30)[e]
1	R	Mrs Gill	F	y	Y	86	2
2	U	Mrs Ireland	F	y	Y	93	7
3	U	Mrs Moyle	F	y	Y	89	0
4	U	Mrs Vickers	F	y	Y	84	1
5	R	Mrs Maxwell	F	y	y	93	15
6	U	Mrs Davids	F	y	y	89	1
7	R	Mr Williams	M	y	y	89	0
8	U	Mrs Allen	F	N	y	93	7
9	R	Mrs Gaffrey	F	y	y	84	25
10	U	Mr Ickley	M	y	y	70	20
11	R	Miss Rush	F	N	y	87	1
12	R	Mrs Carter	F	y	y	84	13
13	U	Mrs Engel	F	N	y	92	12
14	R	Mrs Harry	F	y	y	91	27
15	U	Mrs Gerrard	F	y	y	88	19
16	R	Mrs Roberts	F	y	y	93	14
17	R	Mrs Leigh	F	y	y	73	0
18	U	Mrs Lamb	F	y	y	88	9
19	R	Mrs Dodd	F	y	y	86	14
20	U	Mrs Smith	F	y	y	84	6
21	R	Mrs Edwards	F	y	y	81	13
22	U	Mrs Sunderland	F	y	y	94	16
23	U	Mr Jackson	M	y	y	82	16
24	U	Mr Roach	M	y	y	81	15
25	R	Mrs Night	F	y	y	89	20
26	R	Mrs Harrison	F	y	y	87	0
27	U	Mrs Edgecombe	F	y	y	97	3
28	R	Mrs Black	F	Y	Y	87	0

[a] Pseudonyms provided to maintain confidentiality.
[b] Allocation (R = rehabilitation, U = usual care).
[c] Gender (F = female, M = male).
[d] Family interviewed/Caring Staff interviewed (Y = yes, N = no).
[e] MMSE: Severe cognitive impairment (0–17) n = 23; Mild-moderate cognitive impairment (18–23) n = 3; no cognitive impairment (24–30) n = 2 (Folstein et al., 1975).