P0855

Reducing 30-days mortality and readmissions after hip fracture – patients from Nursing Homes

Orthogeriatric Unit, Kolding Hospital, Denmark
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Background:

- An audit in 2015 showed a higher 30-days mortality among patients from Nursing Homes
- An audit in 2016 showed that almost every 30-days readmission from Nursing Homes were potentially preventable. The causes were fall, infection, dehydration and malnutrition.

Aim:

- To reduce 30-days mortality after hip fracture in Nursing Home patients
- To reduce 30-days readmission after hip fracture in Nursing Home patients

Intervention:

- A non-randomized intervention study was designed depending on the municipality the Nursing Home patients were discharged to (2 for intervention and 3 for control)
- We developed a 14 days observation program for the Nursing Home staff. The project got support from the managers in the Geriatric and Orthopedic Departments, Kolding Hospital and managers from the municipals of Kolding and Fredericia
- In November 2017 an educational workshop was held for the staff in nursing homes, acute teams, and therapists in the municipality. In all 97 staff personnel participated
- Inclusion is January 2018 to December 2019 with the intervention described in the boxes →

Hospital

- Responsible for the treatment 14 days after discharge
- Reacts on the observations made by the Acute Team: vital signs, pain, blood samples and the general health of patients

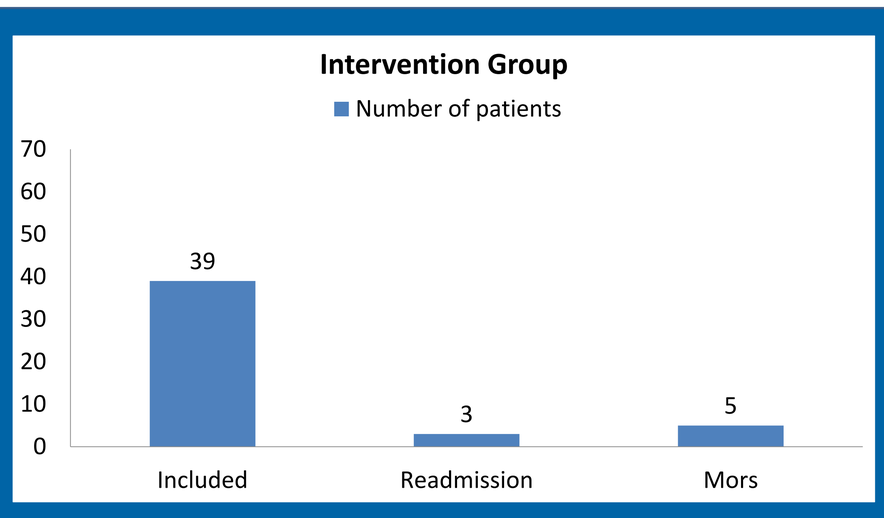
Nursing Home

- Follow d a standard Safety Program 14 days after discharge
- Early warning score
- Algorithm for action
- Mobilization to meals
- Pain score twice a day
- Focus on nutrition, fluids and constipation

Acute Team

- Planned observation and visit on the 3rd day after discharge
- Called for acute visits
- Iv fluids, antibiotics, analgesic and laxatives
- Blood samples
- Supervise Nursing Homes

30 Days readmission after hip fracture is preventable*



Patients aged 65 + with hip fracture discharge from Ortogeriatric Unit

1st of January 2018 to 28th of February 2019

n=116

↓

Excluded n=14

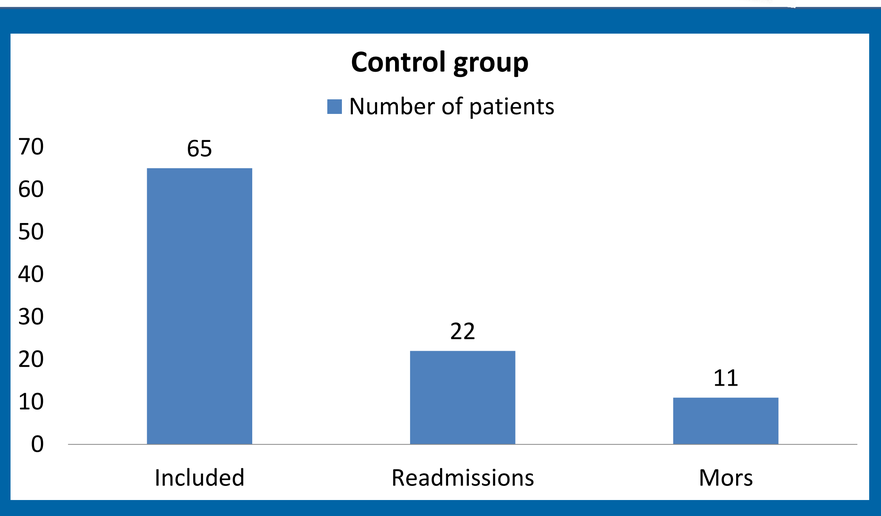
n=10	Discharge to "tender care"
n=2	Discharge to rehabilitation
n=1	Discharge to private nursing home
n=1	Did not want to participate

↓ ↓

Intervention group[1] N=39

Control group[2] N=65

[1] Residents from the municipality of Fredericia and Kolding
[2] Residents from the municipality of Vejle, Vejen and Middelfart



Intervention group - Readmission

Preventable		Non - preventable	
Infections	1		
Delirium	1		
Total	**3**		**0**

Control group -Readmission

Preventable		Non - preventable	
Infections	8	Decompensated	1
Delirium	2	Apoplexy	1
Dehydration	4	Fluid balance	1
Malnutrition	1	Hip dislocation	1
Dyspnea	2		
Fall	1		
Total	**18**		**4**

Intervention group Calls from nurses in Nursing Home

Number of calls	73
Average number of calls per patient	1.9

Results:

- Within 30 days, 7% (3/39) were readmitted in the intervention group. There were 34%
- (22/65) readmission in the control group (p=0.002).
- Mortality within 30 days of discharge in the intervention group was 13% compared to 17% in the control group
- (p=0.780).
- The systematic day-by-day program is essential for early recognition of patients deteriorating
- Early recognition of patients deteriorating is crucial to avoid preventable readmissions
- The systematic use of the 14 days observation program can be applied to other patients in nursing homes
- The systematic collaboration with the acute team in the community can be applied to patients discharged to their own home

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