Family involvement in hospital care after major surgery – Is it feasible?

Anne M Eskes RN PhD, Anne M. Schreuder MD, Rosanna van Langen MPA, Els JM Nieveen van Dijkum MD PhD

Dept. of Surgery, Academic Medical Center, Amsterdam, The Netherlands

a.m.eskes@amc.nl  Twitter: Anne_Eskes
DISCLOSURE SLIDE / LEARNER GOALS

Authors:
Anne M Eskes RN PhD,
Anne M. Schreuder MD,
Rosanna van Langen MPA,
Els JM Nieveen van Dijkum MD PhD

Employer: Academic Medical Center, Amsterdam, the Netherlands
Conflict of interest: all authors have no conflict of interest
Funding: We received an unrestricted innovation grant of the Academic Medical Center for this work

Learning objective:
1. The learner will be able get insight in how our hospital made an attempt toward a patient- and family centered environment

2. The learner will be able to get insight in the experiences (i.e. satisfaction) of patients, family caregivers and healthcare professionals regarding the active involvement of FCs in postoperative care.
“Patients at home receive care by their loved ones, patients in hospitals are surrendered to strangers”
Unplanned readmission rate after abdominal surgery: 30%\(^1\)

- Potentially preventable by optimizing patient and caregiver education, communication and transition of care\(^2\)

The active involvement of family caregivers in postoperative care

- FCs deliver adequate fundamental care

Improved family’s discharge preparedness
- Lower risk of unplanned readmissions

Contributes to routinely execution of fundamental care activities during hospitalization and after discharge
- Lower risk of postoperative complications sensible for fundamental care activities
FAMILY PROGRAM

Shared goal setting
Task-oriented training
Hands-on participation
Presence of family caregivers during ward rounds
Rooming-in [optional]

Focusing on: mobilization, breathing exercises, dental hygiene, orientation in time and place
AIM

1. Is the program feasible for family caregivers, patients and health care professionals?
2. Does the program lead to a difference in “delivered care”?
3. Does the program influence clinical outcomes?
METHODS

Pilot study: pragmatic controlled study (March – October 2017)

Two surgical wards

Patients:
• Adult patients with pancreatic or esophageal cancer who undergo major surgery
• Expected hospital stay ≥ 5 days
• Suitable family caregiver

Outcomes:
• Satisfaction of the program valued by patients, family caregivers and healthcare professionals
• Adherence to the program
• Caregiver burden
• Clinical outcomes (e.g. incidence of complications and unplanned hospital readmissions within 30 days of discharge)
METHODS

01 Recording daily frequency of intervention completion

02 Questionnaires (pre)admission, and after discharge

03 Survey among doctors and nurses
PATIENTFLOW

63 patients

No family caregiver available (n=12)

Wish to participate (n=23)

Refused to participate (n=28)

Family program
N= 20 patients
N= 26 family caregivers

Written informed consent to act as control (n=22)

Control group:
N= 20 patients

Did not receive family program due to prolonged admission to the ICU directly after surgery or tumor unresectable (n=3)

Not able to act as control due to prolonged admission to the ICU directly after surgery or tumor unresectable (n=2)
RESULTS

Feasibility
• No drop-outs of family caregivers
• 96% would act again as family caregiver
• 96% would recommend the program to others
• 92% felt better prepared for discharge

Mean rating quality hospital care (1-10)
• With family caregiver: 9,1
• Without family caregiver: 7,1
ACTIVITIES

Walking distance (in meters)

Minutes sitting in chair

Control
Intervention
ACTIVITIES

Breathing exercises

- % execution according to protocol
- Day 1, Day 2, Day 3, Day 4, Day 5, Day 6, Day 7

Tooth brushing

- % execution according to protocol
- Day 1, Day 2, Day 3, Day 4, Day 5, Day 6, Day 7
ACTIVITIES

Activities to support orientation in time and place

% executed at least once a day

- Control
- Intervention

day 1  day 2  day 3  day 4  day 5  day 6  day 7
A patient with a family carer generally costs me:

- Much more time: 11%
- Some more time: 17%
- Equal time: 55%
- Less time: 17%
- Much less time: 7%

I experience the care for a patient with a family carer during the entire admission period as:

- Much heavier: 7%
- Heavier: 38%
- Neutral: 55%
- Less heavy: 7%
- Much less heavy: 11%

Survey, response rate 42/65 (65%)
& SATISFACTION DOCTORS

Family presence on medical rounds generally costs me:

- Much more time: 5%
- Some more time: 47%
- Equal time: 48%
- Less time: 5%
- Much less time: 5%

The presence of a family carer at the medical round is generally:

- No opinion: 21%
- Not of added value and obstructive: 79%
- Not of added value but also not obstructive: 79%
- Of added value: 79%

Survey, response rate 23/45 (51%)
<table>
<thead>
<tr>
<th>OUTCOME</th>
<th>FAMILY PROGRAM (N=20)</th>
<th>CONTROL GROUP (N=20)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readmissions</td>
<td>4 (20%)</td>
<td>7 (35%)</td>
<td>0.48</td>
</tr>
<tr>
<td>Length of hospital stay (mean)</td>
<td>11,45 (SD 6.1)</td>
<td>13,25 (SD 11.4)</td>
<td>0.65</td>
</tr>
<tr>
<td>Complications (overall)</td>
<td>11 (55%)</td>
<td>11 (55%)</td>
<td>&gt;0.99</td>
</tr>
<tr>
<td>Complications sensible for fundamental care activities</td>
<td>3 (15%)</td>
<td>4 (20%)</td>
<td>&gt;0.99</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>0 (0%)</td>
<td>4 (20%)</td>
<td>0.11</td>
</tr>
<tr>
<td>Delirium</td>
<td>1 (5%)</td>
<td>1 (5%)</td>
<td>&gt;0.99</td>
</tr>
<tr>
<td>Pressure ulcers</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Poor food intake/ malnutrition</td>
<td>2 (10%)</td>
<td>1 (5%)</td>
<td>&gt;0.99</td>
</tr>
</tbody>
</table>
• The family program is feasible for family caregivers, patients and health care professionals

• Some promising results regarding the effectiveness of active involvement of family caregivers during hospitalization after surgery

• A large scale study with a rigorous design is needed