## Sigma Theta Tau International's 29th International Nursing Research Congress

## Family Involvement in Hospital Care After Major Surgery: Is It Feasible?

A. M. Eskes, PhD, MSc, RN1

A. M. Schreuder, MD<sup>2</sup>

R. G. M. van Langen, MPA<sup>3</sup>

Ejm Nieveen van Dijkum, MD, PhD<sup>3</sup>

(1)Department of Surgery, Academic Medical Center, University of Amsterdam and Amsterdam School of Health Professions, Amsterdam, Netherlands

(2) Surgery, AMC, Amsterdam, Netherlands

(3) Surgery, Academic Medical Center, Amsterdam, Netherlands

### Purpose:

Patients at home are often cared for by family caregivers, but once admitted these family caregivers are often sidetracked. It is shown that many hospitals do not actively stimulate family participation (Herrin et al., 2016), while nursing wards can be seen as a unique place to support participation and to learn family caregivers new skills and knowledge related to the patients' care needs (Li, 2005). Although family involvement is known to enhance the quality of patient care (Mackie, Marshall, & Mitchell, 2017), the effectiveness of family involvement in fundamental care activities after major surgery is lacking. Therefore, we developed a program comprising evidence-based fundamental care activities in which informal caregivers can be actively involved in care during hospitalization after major surgery.

#### Methods:

We undertook a pragmatic controlled study on two surgical wards in a Dutch university hospital to investigate the feasibility of our program. Patients were included if they required pancreatic or esophageal surgery, and had a suitable family caregiver who was willing and able to undergo training and participate in care. Components of the intervention package included (1) information about fundamental care activities; (2) goal setting with the patients, family caregiver and nurse; (3) task-oriented training; (4) hands-on participation in (early) mobilization, breathing exercises, dental hygiene, orientation in time and place (5) presence of family caregivers during ward rounds; and (6) optional rooming-in. The intervention was added on top of usual care. Patients in the control group received usual care. Patients were placed in the intervention or control group according to their preference and willingness to participate. Key feasibility measures were acceptance and satisfaction of the program valued by patients, family caregivers and hospital staff, and the adherence to the program. Furthermore, we also assessed potential effects of our program on the incidence of complications and unplanned hospital readmissions within 30 days of discharge.

# Results:

Between March and October 2017, 63 patients were approached for the study. Out of these, 23 patients and their informal caregivers (37%) were willing to participate in the intervention group. Three patients from the intervention group did not receive the intervention due to prolonged admission to the ICU directly after surgery. The first 20 patients who refused the intervention were asked to act as controls. Main reasons for declining the intervention were (1) no suitable family caregiver available (N=12); (2) family caregivers did not want to participate (N=10) and (3) patients' worry about family caregiver burden (N=11). Overall, patient and informal caregiver satisfaction with care was better in the intervention group compared to the control group. No family caregiver dropped out of the program; the burden of the program was rated as acceptable. Notably, over 90% of the patients in the intervention group felt better prepared for discharge, and would recommend the program to others. Furthermore, health care professionals, including nurses and surgeons rated the program as acceptable. Over 50% of the surgeons experienced family involvement as more time-consuming compared to approximately 20% of

the nurses. Regarding clinical outcomes, our results indicated a reduction of hospital readmissions. We also found that the incidence of postoperative pneumonia was slightly higher in the control group compared to the intervention group. The other complications measured, i.e. delirium and postoperative wound infections, had similar outcomes in both groups.

### Conclusion:

Based on the results of our pilot study, this program is feasible for family caregivers, patients and health care professionals. Furthermore, our innovative program shows 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 to assess the effectiveness of informal caregivers' involvement in adult in-hospital care after major surgery.

### Title:

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## **Keywords:**

family-centered care, fundamentals of care and surgery

### References:

Herrin, J., Harris, K. G., Kenward, K., Hines, S., Joshi, M. S., & Frosch, D. L. (2016). Patient and family engagement: a survey of US hospital practices. *BMJ Qual Saf, 25*(3), 182-189. doi:10.1136/bmjqs-2015-004006

Li, H. (2005). Identifying family care process themes in caring for their hospitalized elders. *Applied Nursing Research*, *18*(2), 97-101. doi:10.1016/j.apnr.2004.06.015

Mackie, B. R., Marshall, A., & Mitchell, M. (2017). Acute care nurses' views on family participation and collaboration in fundamental care. *Journal of Clinical Nursing*. doi:10.1111/jocn.14185

## **Abstract Summary:**

We will present facilitators and barriers as well as some promising results of our innovative program comprising evidence-based fundamental care activities to enhance active family involvement during hospitalization after major surgery.

## **Content Outline:**

### Introduction:

A. Definition of family participation and the value of their involvement on health care outcomes

B. Evidence regarding active family involvement in a hospital setting

## Body:

Methods:

- including information about (1) development of the program (2) design of the study (3) type of patients, intervention, comparison, and outcome measurements.

Main point 1: feasibility of the study - focusing on facilitators and barriers

Main point 2: satisfaction of patients, caregivers and health care professionals

Main point 3: promising results on clinical outcomes

### Conclusion:

- Feasibility of the program, satisfied patients, caregivers and health care professionals, promising results and future steps.

First Primary Presenting Author

## **Primary Presenting Author**

A. M. Eskes, PhD, MSc, RN
Academic Medical Center, University of Amsterdam and Amsterdam School of Health Professions
Department of Surgery
Senior-researcher
Amsterdam
Netherlands

**Professional Experience:** 2017 – present Senior researcher, department of Surgery, Academic Medical Center, University of Amsterdam, Amsterdam, the Netherlands. 2014 – present Lecturer and senior researcher, School of Nursing, Faculty of Health, Amsterdam University of Applied Sciences, Amsterdam. 2013 – 2015 Staff advisor and project leader implementation of Evidence Based Practice, Research Center Linnaeus Institute, Spaarne Gasthuis, Haarlem. 2009 – 2012 PhD-student (evidence based wound care), Academic Medical Center, University of Amsterdam, Amsterdam 2007 – 2009 Registered nurse working at different departments.

**Author Summary:** Anne Eskes is working as senior-researcher within the department of Surgery at the Academic Medical Center in the Netherlands. Her research is focusing on optimizing care for surgical patients with special attention for nursing care.

Second Author

A. M. Schreuder, MD AMC Surgery PhD student Amsterdam Netherlands

Professional Experience: PhD candidate at the department of Surgery, AMC Amsterdam Focusing on

research on (treatment of) bile duct injurys after laparoscopic cholecystectomy, choledochal cysts, inhospital family caregiving. AMC - Academic Medical Center University of Amsterdam Amsterdam Area, Netherlands

**Author Summary:** PhD candidate at the department of Surgery, AMC Amsterdam Focusing on research on (treatment of) bile duct injurys after laparoscopic cholecystectomy, choledochal cysts, in-hospital family caregiving. AMC - Academic Medical Center University of Amsterdam Amsterdam Area, Netherlands

Third Author

R. G. M. van Langen, MPA Academic Medical Center Surgery Physician Assistant Amsterdam Netherlands

**Professional Experience:** Physician Assistant - department of surgery 2013 - present Involved in research in family centered care as research assistant Academic Medical Center, department of Surgery, Amsterdam, the Netherlands

**Author Summary:** Physician Assistant - department of surgery 2013 - present Involved in research in family centered care as research assistant Academic Medical Center, department of Surgery, Amsterdam, the Netherlands

Fourth Author

Ejm Nieveen van Dijkum, MD, PhD Academic Medical Center Surgery Endocrine, Gastrointestinal and Oncologic Surgeon Amsterdam Netherlands

Professional Experience: Endocrine, Gastrointestinal and Oncologic Surgeon Fellow of the European Board of Endocrine Surgeons Head of ENETS Center of Excellence for Neuroendocrine Tumors Academic Medical Center, department of Surgery, Amsterdam, the Netherlands

Author Summary: Endocrine, Gastrointestinal and Oncologic Surgeon Fellow of the European Board of Endocrine Surgeons Head of ENETS Center of Excellence for Neuroendocrine Tumors Academic Medical Center, department of Surgery, Amsterdam, the Netherlands