Training the Patients stoma management preoperatively- does it have any effect on how fast they manage postoperatively- and does it reduce the need for follow-up by homecare nurses?

Authors:
Berit Kiesbye, Registered nurse, enterostomal therapist
Kirsten Fisker, Registered nurse Urological department

Aarhus University Hospital Skejby Brendstrupgaardsgade 100 8240 Aarhus N
Phone: +45 89495950
E-mail: berit.kiesbye@webspeed.dk or bki@sks.aaa.dk

Background.
The incidence of bladder cancer is 1700 new cases per year in Denmark. Out of these are half benign polyps. Primary choice of treatment of invasive cancer of the bladder is cystectomy, which leads to about 200 operations per year in Denmark. In urological Department K, Aarhus University Hospital Skejby are about 50 patients per year undergoing cystectomy caused by cancer of the bladder. In 2006 59 patients underwent cystectomy and three fourth of these had an ileal conduit as urinary diversion.

Preparing the patients for cystectomy and urinary diversions is an important issue that takes quite many resources done properly.

Over the past two decades there has been increasing emphasis on providing pre operative and postoperative counseling and support to patients with stomas.

Traditionally, patients undergoing cystectomy followed by ileal conduit are provided information about the stoma preoperatively at which stage they are shown stoma pouching systems. However, the actual stoma management is actually trained postoperatively.

All patients follow a treatment and care description plan worked out by doctors and nurses with the aim to discharge them 10 days after surgery due to principles of accelerated postoperative stay.(1)

An accelerated postoperative stay imply training stoma management as soon as possible after surgery. The patient is visually motivated at start by bedside demonstration using different medias and is gradually involved as much as possible.

Many patients are physically and mentally affected after surgery and the time spent training stoma management is short due to the accelerated postoperative principles. Therefore many
patients wish to have follow-up by homecare nurses after discharge because of lack of proficiency in stoma management.

That led to the idea that maybe we could train the patients stoma management before surgery expecting that it would increase their proficiency in stoma management postoperatively.

A pilot study involving 11 patients, where every second were chosen to be trained stoma care and change of appliance preoperatively indicated, that training preoperatively reduces the need for follow up by homecare nurses after discharge from hospital. The effect though is still connected with some uncertainty which makes this study necessary.

**Purpose of the study.**

To examine and analyze the effect of the nursing intervention training stoma management preoperatively- does it reduce the time spent on training the patients postoperatively and does it reduce the need for follow-up by homecare nurses after discharge.

**Hypothesis.**

- Training patients stoma management preoperatively reduces time spent on training postoperatively.
- Training patients stoma management preoperatively reduces the need for follow-up by homecare nurses after discharge.

**Hypothesized outcome.**

If the study confirms the hypothesis the patients trained in stoma management preoperatively will have less need for counseling measured in time postoperatively. Proficiency in stoma management on an earlier stage postoperative could mean that patients could benefit from earlier discharge from hospital. Time will be saved used on care and treatment and it will also have a cost saving effect for the society.

If the patients have less need for follow-up by homecare nurses after discharge it will give them more independency, save time spent on care in the community and have a cost saving effect.

**References.**

Searched PUB MED and Cinahl.
Key-words: ostomy or stoma, patient experience, preoperative information, preoperative preparation.

Method.
The study is a prospective, randomized controlled study. The randomization will take place by means of a sealed envelope.

Study population.
40 patients will be randomized into the study. 20 will be trained stoma management preoperatively (study group) and 20 will follow the present procedure (control group).

Inclusion.
All patients admitted to cystectomy and urinary diversion according to ileal conduit caused cancer of the bladder. Both women and men will enter regardless of age.

Exclusion.
Patients with a disability, causing lifelong care by others according to stoma care and change of appliance are excluded. Patients who postoperatively experience complications that prolong their admission more than 10 days will be excluded.

Collecting data.
For training patients stoma management preoperatively is used a Dansac training kit, written instruction and photos describing stoma care and change of appliance.

2-3 clinical nursing experts will perform the preoperative training to maintain homogeneity in the preoperative training session.

A registration form will be worked out and used for registrate time spent in minutes, on training the patients stoma management during admission, measured with a stop watch. Also the need of follow-up by homecare nurses after discharge will be registrated as well as other relevant data related to training stoma management.
All data in the registrations forms will be entered into Epidata and analyzed in Stata.

**Statistics.**

Descriptive statistics will be used to describe the study population. Bivariated analyses dereported with a relative risk (RR) with 95% confidence interval will be worked out. Matched t-test will be used for testing significance. The study will be controlled for potential confounders using multivariate analysis where time will be the dependent variable.

**Ethics.**

All patients will be given written information about the study and patient consent will be obtained from all patients.

All patients will be anonymous and all data of personal relevance will be concealed.

Patients can any time withdraw from the study.

Permission to establish a research register at the Danish Data Protection Agency will be applied for and the study will be notified to the Danish National Committee on Biomedical Research Ethics.

**Time table.**

The study is expected to start out March 2008 when all relevant approvals are available.

- **March 2008- September 2009:** Recording data.
- **September 2009- January 2010:** Data processing.
- **February 2010- May 2010** Describing data and empirical analysis-

**Economics.**

Expenses to buy time off for one nurse 6 month wages before taxes according to 2006 terms, University Hospital Aarhus, Skejby: 174.750 dkr./23.300 euro.

Expenses according to data processing: 20.000 d.kr/ 2.666 euro

Stata programme version 10: 1.600 d.kr./213 euro.
Computer to data analyses: 12.000 d.kr/1.600 euro.

All together: 208.350 d.kr/ 27.479 euro.

References.


3. Chaudhri, Sanjay m.fl.; Preoperative, Community-based vs. Traditional Stoma Education: A Randomized, Controlled trial; The American Society of Colon and Rectal Surgeons 2005, 10.1007/s10350-004-0897-0.


6. Metcalf,Chris; Stoma care; Empowering Patients through teaching Practical skills, British Journal of nursing;1999, 8(9).


8. Alstad,Berit m.fl; De præoperative Standarder; Nordisk Stomisamarbejde,1997


10.Kelly, Michael P; A Thirst for practical Knowledge; Professional Nurse 1992, 250-6