

Research project Plan RP10-03

Urinary incontinence among dependent women and men over 80 years in relation to staff attitudes and knowledge.

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Introduction

Urinary incontinence is very common among older people, both men and women, and is often one of the causes of dependency on care in home or at institution (Nuotio et al 2003). Urinary tract symptoms are often mixed among the oldest old with urgency, difficulty in emptying urine or leakage (Stenzelius et al. 2006). However, few studies have identified the symptoms systematically and as a result of this, it is also difficult to have a constructive action plan, which both improves urgency, emptying and reduced leakages. There are signs in Sweden that the oldest and dependent in care are not being investigated or do not receive adequate treatment for their urinary tract symptoms and that women were less often investigated and treated compared to men (Swedish National board of Health and welfare (Socialstyrelsen), 2006). As this group of persons is known by the health care staff, it is also necessary to investigate why older persons do not get essential investigations and treatment. An important start is to gain information of the knowledge and attitudes of the health care staff.

The overall aim: To systematically identify urinary tract symptoms among those 80 years and above dependent on care in home or at institution. Further more the aim is to investigate the knowledge and attitude of urinary tract symptoms among the health care staff working in the investigated settings.

Specific aim of part one:

- amount of urinary leakage of per 24 hour and protective aids used
- percent of 24 hour urinary output which are collected in the protective aids
- urinary tracts symptoms in relation to ADL- and mental function

Specific aim of part two, health care staff knowledge and attitudes of:

- the lower urinary tract and a different urinary symptoms
- normal values of micturation, frequency, volumes
- protective aids
- how to assess a person with leakage problems

Literature review

The prevalence of urinary incontinence in the elderly (over 75 years) varies in different studies and a literature review showed a prevalence rate of 22-62% among women and 9-56% among men (Stenzelius et al., 2004). A population-based study in Southern Sweden showed a prevalence among women from 33.3% among those who were between 75-79 years and up to 55.8% among those who were 90 years and older. For women the corresponding prevalence was 31.2% to 41.9% (Stenzelius et al., 2004). Incontinence is regarded as a natural symptom in the elderly, a part of natural aging but have a big influence on persons lives. Older women

and men do often have a combination of symptoms with both frequent urgency, difficulty controlling the bladder and an inability to empty the bladder completely. Men have more often urgency and difficult to empty the bladder and among women storage problems dominated (Stenzelius et al., 2006). For both men and women in advanced ages there are a lot of other factors outside the urinary tract that contribute to difficulties to control bladder.

There are evidence that several of the urinary symptoms common in older people are treatable. Drug therapy of urge incontinence has been proven effective, bladder training and pelvic floor muscle training (PFMT) with or without combination therapy as well. Surgical treatment of stress incontinence is quite feasible to implement even on older women. However, several reports suggest that the main intervention to older persons with incontinence was to subscribe protective aids (Swedish National board of Health and welfare (Socialstyrelsen), 2006, Du Moulin et al 2009) and that many geriatric patient are untreated (Gibbs et al 2007, Mardon et al 2006). The study of Moulin et al (2009) among older persons living at home with assistance of home care in the Netherlands showed that around 50% of those with incontinence did not have a proper diagnose and most patient used protective aids.

Although PFMT is the generally accepted primary treatment, a study in a nursing home found that it was only prescribed in about 13% of cases (Gnanadesigan et al., 2004). Bladder and toilet training, which means a regularly scheduled toileting at relatively frequent intervals, have shown positive results among older people with cognitive disabilities (Public Over & Bear, 1997; Karon, 2005). However, many older persons have fluid retention, oedema, and use diuretics together with other kind of drugs that have influence on the urinary tract. Toilet training need therefore to be coordinated with the times for these medicines which is one example of that commonly used interventions need special adjustments among those oldest old.

It is known that few elderly do seek any help for their incontinence problems, that they tend to marginalize their problems or feel that other health problems overshadow these (Horrocks et al. 2004). Several studies in England and the USA have shown that further knowledge and awareness of staff to improve incontinence care (Taunton et al 2005). However to our knowledge few studies has focused on those who care for the most fragile persons. According to the Social Welfare Board report (2004) only 10% of staff in the municipal health and social care had special education and about 55% had some form of health care-oriented education. That means that a relatively large group had no education at all.

The cost for incontinence aids is high, for example in the region of south part of Sweden of one million inhabitancies (Region Skåne), the cost was 110 million SKr in 2008 (aprox. 11 milj Euro). A majority of the costs account for the older population. As a many older persons are not investigated for actual amount of urine leakage, it is not known whether consumption is the need or not. With a growing number of older people and particularly oldest old (ie over 85 years) and the high incidence of incontinence in this group the costs will increase if no other measures are done.

Relevance to urology nursing

The group of the oldest old is seldom seen in the urology department unless in acute situations of total urinary retention. However, as urinary symptoms and urinary incontinence are within our speciality, there might be our responsibility to act and react when a group of “patients” in the community do not get evidence-based care. It is the role of a urology nurse to give knowledge and education to colleagues in other fields, as geriatrics in order to improve

quality of incontinence care for in this case those oldest old and most fragile persons in the society.

Methodology

This study is a cross-sectional design as the aim is to state a sort of status of a statistical significant sample of the study group, which captures a description of a problem but it does not allow to test for causality (Shadish, Cook & Campbell 2002), but for relations between variables. In order to collect the data there has to be one person responsible for the data collection in each municipality. Those persons will be trained by the project leader in order to standardize the methods used.

a. Material

Persons to be included in the study will be recruited from different municipalities in Sweden, selected with help of the Swedish National board of Health and welfare and covering samples from the whole country i.e big cities, cities, communities and remote areas. The samples will include all categories of dependent living from housing for dementia to care in own homes. The goal is to include a total of 200 subjects. Exclusion criteria of the elderly persons are those who are sick in cancer, or are in a palliative stage of life.

The staff in the same organisations will be recruited in the same way in total of 200 persons, but will be persons directly involved in the personal care. Exclusion criteria are those who are newly appointed (i.e. less than one year experience), do not speak/understand Swedish language properly.

b. Instruments

Urinary output, leakage is measured by fluid and micturation record together with amount and sort of protective aids in two days and nights. The presence of the residual urine in the bladder after micturation will be performed with a BladderScan. Incidence of infection will be measured by dipstick, and other urinary symptoms will be asked for using the IPSS symptom score questionnaire. As a complement a list of current medications, activity of daily function by Katz ADL index (Katz & Akbom, 1976), diseases noted in their journal according to ICD-classification as well as drugs described. Mental status is measured using a simplified version of the Mini-Mental State Examination MMSE (Folstein et al 1975) as reported by the staff will also be recorded.

c. Statistics

Percent urinary leakage in diapers is calculated in relation to total urinary volume per 24 hours. Diapers are classified into groups according to capacity of obtaining volume of leakage independent of fabricate. Personally dependency will be classified in groups according to Katz ADL- score in the same way as Mini-mental scale in order to classify if there is any relation with ADL/mental score and sort and amount of urinary symptoms.

d. Ethical considerations

Ethical application will be done and ethical considerations are important to consider as this population is frail and vulnerable. Detailed oral and written information to the person himself but also to the next of kin will be given. It has to be stressed the individual's own consent for any form of physical examination and this can not be approved by only the relatives.

For the staff survey it is important to consider whether the staff may feel threatened by a attitude and knowledge test. Therefore, the questionnaire has to be designed in a way that does not give a sense of right or wrong, and attitudes that are neutral.

Feasibility

a. Timetable

Jan – February 2010, Enrolling participating centros/municipalities

March – April 2010, Ethical application

April 2010, application for financial support

May 2010 – enrolling study project leader

August 2010 – informing key-persons

September 2010 – study start

Jan 2011 – closing the study

Feb – April 2011 – analysing and report writing

b. Budget

Ethical approval	500 Euro
Project leader salary	
august 2010 – jan 2011 (6 months)	
Statistic advice	500 Euro
Translation	500 Euro
Statistic programme and secretary help	1000 Euro

Conclusion/relevance

A survey of the oldest problems in terms of both incontinence and also urinary problems are anxious because they are the group with the biggest problems, requires a lot of help and support, and costs society a lot. It is relatively unknown how much knowledge and the attitudes of staff caring for these subjects. With this body of knowledge, it is hopefully easier to see what action needs to be done.

Possible conflicts of interest

None.

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