

## ความชุกของภาวะกลั้นปัสสาวะไม่อยู่ในผู้สูงอายุในชุมชนเทศบาลเมืองบ้านพรุ อำเภอหาดใหญ่ จังหวัดสงขลา

## Prevalence of Urinary Incontinence in the Elderly in Banpru Municipality, Hat Yai District, Songkhla Province, Thailand

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### บทคัดย่อ:

**วัตถุประสงค์:** เพื่อศึกษาความชุกของภาวะกลั้นปัสสาวะไม่อยู่ของผู้สูงอายุ ผลกระทบ สาเหตุของผู้สูงอายุที่มีภาวะกลั้นปัสสาวะ ไม่อยู่ไม่เข้ารับการรักษา และการจัดการตนเองเมื่อเกิดภาวะกลั้นปัสสาวะไม่อยู่ในผู้สูงอายุ

**วัสดุและวิธีการ:** การศึกษาเซิงพรรณนาภาคตัดขวาง สัมภาษณ์ผู้สูงอายุที่มีอายุตั้งแต่ 60 ปีขึ้นไป อาศัยในเขต 1, 3, 5, 7 และ 9 เทศบาลเมืองบ้านพรุ อำเภอหาดใหญ่ จังหวัดสงขลา จำนวน 300 ราย โดยใช้แบบสอบถามที่ดัดแปลงมากจากแบบสอบถามของ International Consultation on Incontinence Modular Questionnaire วิเคราะห์ข้อมูลโดยใช้สถิติพรรณนาและ chi–square test, Fisher's exact test

**ผลการศึกษา:** พบความชุกของภาวะกลั้นปัสสาวะไม่อยู่ 23 ราย (ร้อยละ 8.0) ในจำนวนนี้เป็นเพศหญิง 15 ราย (ร้อยละ 65.0) เพศซาย 8 ราย (ร้อยละ 35.0) พบภาวะนี้มากที่สุดในกลุ่มอายุ 70–79 ปี จำนวน 11 ราย (ร้อยละ 48.0) พบชนิดภาวะกลั้นปัสสาวะไม่อยู่ มากที่สุด คือ ปัสสาวะเล็ดเมื่อมีแรงดันในช่องท้อง (stress incontinence) จำนวน 13 ราย (ร้อยละ 57.0) ผลกระทบที่พบมากสุดคือ ผู้สูงอายุรู้สึกเบื่อ จำนวน 20 ราย (ร้อยละ 87.0) มีผู้สูงอายุที่เกิดภาวะนี้และเข้ารับการรักษากับแพทย์เพียง 2 ราย (ร้อยละ 8.0) ที่เหลือไม่เข้ารับการรักษากับแพทย์เพราะคิดว่าเป็นอาการปกติที่เกิดขึ้นในวัยสูงอายุมากที่สุด 21 ราย (ร้อยละ 91.0) และไม่ทำอะไร เพิ่มเติมอีกด้วย

**สรุป:** ความชุกของภาวะกลั้นปัสสาวะไม่อยู่ในกลุ่มผู้สูงอายุที่มีอายุ 60 ปีขึ้นไป พบร้อยละ 8.0 และส่งผลกระทบทั้งด้านร่างกาย

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จิตใจและสังคม ผู้สูงอายุที่มีอาการเข้ามาพบแพทย์เพียงร้อยละ 8.0 เนื่องจากคิดว่าเป็นลักษณะปกติเมื่ออายุมากขึ้น ดังนั้น การให้ความรู้ที่ถูกต้องของภาวะนี้จะทำให้เห็นความสำคัญของปัญหานี้มากขึ้น

คำสำคัญ: กลั้นปัสสาวะไม่อยู่, ความชุก, ผู้สูงอายุ

#### Abstract:

**Objective:** To study the prevalence of urinary incontinence in the elderly, the impacts of urinary incontinence, and the reasons why elderly people with urinary incontinence do not seek treatment from a doctors, and to study self-management when urinary incontinence occurs.

**Material and Method:** This was a cross-sectional descriptive study. Interviews were performed with 300 residents aged 60 and above residing in subdistricts 1, 3, 5, 7, and 9 of Banpru municipality, Hat Yai district, Songkhla province. The questionnaire was modified from the International Consultation on Incontinence Modular Questionnaire and tested for content validity and reliability. The data were analyzed using descriptive statistics, chi–square test and Fisher's exact test. **Results:** It was found that 23 of the 300 subjects interviewed (8.0%) had urinary incontinence. Fifteen female (65.0%) and 8 male (35.0%). Almost half of the patients (48.0%) were between 70 and 79 years old. The most common type of urinary incontinence was stress incontinence (13 persons: 57.0%). The most common impact of their urinary incontinence was given as boredom (20 persons: 87.0%). Only 2 had seen a doctor (8.0%). Twenty–one said they were afraid to go out to see their doctor because they thought this symptom was an effect of aging (91.0%) and took no action when urinary incontinence occurred.

**Conclusions:** The prevalence of urinary in continence in people aged 60 and above was 8.0%. Just eight percent of those suffering from incontinence had consulted a doctor, while the rest did not because they thought that urinary incontinence was a characteristic of aging. Therefore, the dissemination of knowledge about urinary incontinence will increase awareness and understanding of this symptom in the elderly.

Keywords: elderly, prevalence, urinary incontinence

#### Introduction

Urinary incontinence in the elderly is now an increasing health care problem.<sup>1</sup> Even though this issue is not an emergency condition, urinary incontinence involves chronic physical, mental and social consequences to patients and caregivers.<sup>2</sup> It also incurs unnecessary expense. Although urinary incontinence can significantly affect an elderly citizen's quality of life, they mostly avoid consulting a physician about this symptom. The elderly prefer not to tell others about this problem, even including

their own physicians, because they feel ashamed.<sup>3</sup> Most elderly citizens with urinary incontinence deal with their condition by frequently changing their clothes, and using toilet paper or a napkin to clean up the urine. Though these methods are simple and efficient, they address only the symptom not the root causes of the problem. Therefore, urinary incontinence is a prolonged trouble in elderly care.<sup>2</sup> This study investigated the prevalence of urinary incontinence among elderly citizens living in Banpru municipality, Songkhla province, Thailand. The impact of urinary incontinence among this population, how they manage their condition and why most chose not to tell their physicians about their condition were studied. The results of this study will be helpful for elderly care planning for urinary incontinence, as family physicians and health care providers could detect relevant conditions in their elderly patients early and properly instruct caregivers concerning urinary incontinence.

#### **Material and Method**

This study was descriptive cross-sectional research. The target population was sampled from areas in area 1, 3, 5, 7 and 9 of Banpru municipality, Hat Yai district, Songkhla province, Thailand. A total of 300 participants aged over 60 years, both male and female were randomly selected. Potential subjected who were bed ridden or who had a retained Foley's catheter were excluded. The randomization was performed through cluster sampling and probability proportional to size. The researchers and five village health volunteer assistants collected the data by face-to-face interviews between 1<sup>st</sup> April and 30<sup>th</sup> June 2012. All research assistants were trained in using the questionnaires and in the care of urinary incontinence.

The questionnaire was divided into 3 parts. The first part covered demographic data and urinary incontinence questions, modified from the International Consultation on Incontinence Modular Questionnaire translated into Thai using the translation and back translation method. The second part comprised questions about the consequences of urinary incontinence. The last part was composed of questions about visiting a physician and self-management of urinary incontinence. This questionnaire was contentvalidated with a Cronbach's reliability of 0.97.

#### Data analysis

The data were analyzed using the R program version 2.13.0. The results were presented as frequency

and percentages, and associations among underlying diseases, living area and urinary incontinence were expressed using chi-square and Fisher's exact tests.

#### **Results**

Of the 300 elderly enrolled in the study 123 (43.0%) were male and 171 (57.0%) were female. Fifty five percent indicated that they had some underlying disease. However, only 43.0% of those who reported any diseases were taking medication regularly.

Twenty-three participants (8.0%) reported urinary incontinence, 8 (35.0%) male and 15 (65.0%) female. Most were aged between 70 and 79 years old. Among the urinary incontinence group, 13 (57.0%) reported underlying diseases and all were taking medication routinely (Table 1).

# Table 1 Demographic data of the urinary incontinence group (n=23)

Data	Urinary incontinence (%)	P-value
Gender		0.100*
Male	8 (35.0)	
Female	15 (65.0)	
Age (year)		0.110**
60–69	8 (35.0)	
70–79	11 (48.0)	
80 and above	4 (17.0)	
Underlying disease		0.160*
Claimed	13 (57.0)	
Unclaimed	10 (43.0)	
Regular medication		0.250*
Claimed	13 (57.0)	
Unclaimed	10 (43.0)	

\*Pearson's chi-square test, \*\*Fisher's exact

Regarding the type of urinary incontinence, 6 males (27.0%) reported stress incontinence and two males (9.0%) reported urge incontinence, while 7 females (30.0%) reported stress and mixed incontinence, and only one (4.0%) female reported urge incontinence (Table 2).

According to the physical consequences of urinary incontinence in these elderly participants, most complained about itching (39.0%) and erythematous rash at both inner thighs (9.0%). Regarding the mental effects of incontinence, 87.0% reported frustration and six (26.0%) reported anxiety. In regard to social issues, 16 (70.0%) said they always stayed at their own houses and 4 (17.0%) said they did not like to meet any strangers due to their urinary incontinence.

Only 2 participants (9.0%) who reported urinary incontinence had visited a physician for their symptom, while the rest said they had never sought medical advice because they thought urinary incontinence was a natural feature of aging. Thirteen participants (62.0%) indicated that they did not know that urinary incontinence was treatable (Table 3).

Most of those who had urinary incontinence (91.0%) reported that they did nothing about their condition (91.0%), with only one elderly citizen reporting changing clothes when feeling uncomfortable and replacing bed sheets after wetting the bed (Table 4).

 Table 2 Type of urinary incontinence presented by gender (n=23)

Male (%)	Female (%)
6 (27.0)	7 (30.0)
2 (9.0) 0 (0.0)	1 (4.0) 7 (30.0)
	6 (27.0) 2 (9.0)

 Table 3
 Reasons given for not seeking urinary incontinence

 treatment (n=21)
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Explanation	Male (%)	Female (%)
Nature of being aged	8 (38.0)	13 (62.0)
Unconcerned attitude	6 (29.0)	6 (29.0)
Feeling ashamed	0 (0.0)	0 (0.0)
Untreatable disease	5 (24.0)	8 (38.0)
Operation phobia	0 (0.0)	0 (0.0)
Financial difficulties	0 (0.0)	0 (0.0)
No relative assistance	0 (0.0)	0 (0.0)
Unknown health care resource	0 (0.0)	0 (0.0)

 
 Table 4
 Self-management regarding urinary incontinence (n=21)

Self-management approach	Male (%)	Female (%)
Did not do anything	8 (38.0)	13 (62.0)
Immediately change clothes	0 (0.0)	1 (5.0)
Paper pads	0 (0.0)	0 (0.0)
Adult diapers	0 (0.0)	0 (0.0)
Sanitary napkin	0 (0.0)	0 (0.0)
Mop pads	0 (0.0)	1 (5.0)

#### Discussion

The study found that the prevalence of urinary incontinence in elderly citizens in Hat Yai aged 60 and above living Banpru municipality, Songkhla province, was 8.0%. This was a lower prevalence than various other studies<sup>1,6</sup> which reported prevalences between 9.0–30.0%, These higher finding may have been because the target population in our study was non bed-ridden. Additionally, underlying diseases and regular medication use were lower in our study than in other studies. However, a study of urinary

incontinence among aged people in Selangor, Malaysia, reported a similar prevalence as this study, and that study also had exclusion criteria of bed-ridden status and declaration of no underlying disease.<sup>5</sup> Therefore, it could be assumed that these factors may be associated with the results. In addition, a study in Japan in 2001 revealed that urinary incontinence was statistically related to chronic diseases such as diabetes mellitus, cerebral vascular disease and bed ridden status.<sup>6</sup>

It is found that the most common age group of seniors with urinary incontinence is males between 70-79 years old and 75.0% reported the mixed type. A study from Japan, howerver, reported that most elderly males reported urge incontinence.<sup>6</sup> Representation regarding type of stress incontinence in Thai male, illustrated history of resection of the prostate which has been the most common procedure of prostate cancer. Thus, further studies of urinary incontinence in males should focus on prostate cancer. In our study females showed the highest prevalences of stress and mixed type urinary incontinence at the age of 60-69 years old (47.0%), a finding which corresponded to a study from Japan that found stress incontinence was the most common type in females, usually resulting from Urogenital Estrogen Deficiency Syndrome in menopausal period. Decreased estrogen levels have associated with mixed types of urinary incontinence.7

The most commonly reported physical effects associated with urinary incontinence were itching (39.0%) and erythematous rash (7.0%), due to the aging processes which are associated with drier skin and urine acidity (pH 8), which irritate the groin and nearby areas.<sup>8</sup> In term of mental reactions, most participants declared getting frustrated (87.0%) and feeling uncomfortable (26.0%), complaints which were also noted in a study by Praduj–kanchana in 2006<sup>9</sup>, which reported that patients would

get frustrated, and feel stressed and embarrassed due to urinary incontinence which disrupted their daily activities. Moreover, they also reported some symptoms of social phobia such as always staying at home (70.0%) and feeling intense nervousness in front of strangers (17.0%). A study by Godfrey in 2007 similarly described that their elderly subjects avoided going outside and feared being close to others. They said that they were afraid of disturbing others due to urine odor.<sup>10</sup>

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A study by Jittipunkul found only 9.0% of the participants had urinary incontinence<sup>12</sup>, similar to our findings. These studies also found that most elderly people thought that urinary incontinence was common with aging and not a big problem.<sup>12</sup> However, most of the participants in these studies declared that they did not do anything when they accidentally urinated (91.0%), whilst Dugan<sup>13</sup> reported that most elderly subjects would immediately change their clothes because they thought that urine inconsistency was a disruptive condition to their daily activities. However, our participants did not do anything since they did not think that urinary incontinence disturbed their daily activities.

#### Conclusion

Urinary incontinence is a common problem found in the elderly and has effects on physical, mental and social conditions. However, this study indicated that this problem was neglected by most from elderly people due to misunderstanding. Most of them thought that urinary incontinence was a usual feature of aging. Thus, health promotion by adequate education should assist these elderly citizens to realize the importance of proper prevention and treatment regarding urinary incontinence. Moreover, health care providers should also emphasize early screening, whereby urinary incontinence in Thai– land could be more properly detected and treated.

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