Urinary Incontinence in Thai Elderly Living in Klong Toey Slum

SUTTHICHAI JITAPUNKUL, M.D., M.Sc.*,
WEERAPAN KHOVIDHUNKIT, M.D.**

Abstract

Seven hundred and three non-institutionalized Thai elderly living in Klong Toey slum were interviewed at home about their urinary symptoms and 114 cases of established urinary incontinence were identified. The prevalence of established urinary incontinence was 16.2 per cent. The commonest type is pure urge incontinence (58.8%). 24.4 per cent of male subjects with established incontinence had symptoms of outlet obstruction. 54.4 per cent of subjects were classified as severely incontinent. More than 50 per cent had at least one psychological impact and 7.9 per cent reported that their social lives were severely affected. Only 8.8 per cent had sought medical help before and only 30 per cent were willing to attend a specialist at a university hospital. The attitude of the elderly, the carers and medical doctors toward urinary incontinence has to be corrected. Urinary incontinence should be a public health issue in Thailand and there may be considerable scope for the provision of incontinence service at the primary health care level.

The elderly population in developing countries including Thailand is increasing rapidly. In 1990 there were 3.5 million elderly (6.3% of the population) in Thailand. The number is expected to be 8.3 million (11% of the population) in 2015[1]. Urinary incontinence, a geriatric giant, is a troublesome and probably under reported disorder[2]. Its prevalence among the elderly living in the community reported in western countries varies from 9.5 per cent to 49 per cent depending on the criteria of diagnosis[3-14]. However, the prevalence reported in a recent study in Singapore[15] is low compared to other studies. At present, there is no report on urinary incontinence among the non institutionalized elderly in Thailand. Thus, a study of urinary incontinence was conducted in order to determine its prevalence, severity and socio-psychological impact among Thai elderly living in Klong Toey district in central Bangkok, Thailand.

* Department of Medicine,
** Department of Physiology, Faculty of Medicine, Chulalongkorn University, Bangkok 10330, Thailand.

SUBJECTS AND METHOD

From all the elderly aged 60 and over (n = 703; 232 male; 471 female) living in Klong Toey district, Bangkok, Thailand who had been interviewed in the first survey[16], 157 elderly (39 male; 118 female) said they had problems of urinary incontinence by answering "yes" to the question, "During the last 12 months, does urine ever drip unexpectedly without your being able to stop it, and you get wet?". They were revisited six months later and their incontinence status was reviewed. The question used to ascertain incontinence status was "In the past 6 months, did you pass any urine, even a small amount, beyond your control?" If the answer was "yes", symptoms of cystitis such as dysuria, fever or history of cystitis diagnosed by doctors which related to the incontinence events were reviewed. Subjects who reported having urinary incontinence during the past six months and having no evidence of cystitis were classified as having established urinary incontinence. Then all of them were interviewed by a trained interviewer. Before interviewing, respondents were informed about the nature of subsequent questions and about the importance of providing accurate information. Negative responses by elderly subjects were corroborated with other household member's replies as far as possible.

General information including age, sex, marital status, literacy and working status were collected. Perceived health status was evaluated by self-rating on an interval scale from 0 (the worst, death) to 5 (the best, healthy). Life satisfaction was rated by using the Delighted-Terrible Faces (D-T) Scale (scores range from 1 to 7)[17].

The type of incontinence was operationalized by the respondent's description of how urine loss occurred. A symptom-based classification [18,19] was used. Stress incontinence was defined by involuntary loss of urine when exerting physically such as laughing, coughing, sneezing, lifting or bending over. Urge incontinence was defined by involuntary urine loss associated with a strong desire to urinate or uncontrollable urinating with little or no warning. Symptoms associated with urine loss of both urge and stress types defined "mixed" incontinence. Overflow incontinence was defined by having small leakage of urine for most of the time without a desire to void and could not be categorized as "stress incontinence". Subjects unable to make use of a toilet because of severe cognitively impairment and/or severe immobility and/or environmental barriers were categorized as having functional incontinence. Questions referring to hesitancy, poor stream or a need to strain were classified as having outlet obstruction.

Severity of urinary incontinence was categorized by amount and frequency of urine loss. Those passing urine daily or passing more than half a glass of urine (approximately 100 ml) were categorized as 'severe'. Those possing urine two or more times per month or passing more than one tablespoonful of urine (10 ml) and were not categorized as 'severe' were categorized as 'moderate'. The rest were classified as 'mild'.

The psychological and social impact of urinary incontinence; including feeling ashamed, worried, inconvenienced, loss of confidence to meet or talk with other people, the feeling that their incontinence problems disturbed other family members, fear of going out, wanting to stay alone and the feeling that their incontinence affected their social life; was assessed and graded as 'no', 'moderate' or 'severe'.

Medical attendance for the problem of urinary incontinence was assessed. If they had never attended doctors for this problem, their reasons were asked. If they had attended doctors, type of management and response to management were reviewed. Subjects who stopped attending their doctors for incontinence problems were asked for their reasons. All subjects were finally asked whether they were agreeable to attending a consultation with specialists (a geriatrician and/or a urologist and/or a gynecologist) at Chulalongkorn University Hospital.

The primary carers were contacted and interviewed about their recognition of the subjects' urinary incontinence. Attitude toward urinary incontinence of the elderly was also assessed.

Prevalence of urinary incontinence and its 95 per cent confidence interval[20] were computed. Statistical differences between the subjects with and without established urinary incontinence were calculated by using chi-square test, Fisher's exact test or student *t*-test.

RESULT

One hundred and fifty seven elderly (39 male; 118 female) from the previous survey reported that they had urinary incontinence during the past year (prevalence 22.2%) were revisited six

months later. Four of them had died. Five could not be contacted. Two refused to participate in the study. Thirty two reported having no urinary incontinence during the past six months. Thus, one hundred and fourteen subjects were recruited in the study (prevalence of established urinary incontinence is 16.2%; 95% confidence interval is 14.35-19.26%). Mean and standard deviation (min - max) of age were 69.3 and 8.8 (60-95) years respectively. Twenty five subjects (21.9%) were male. Most of the subjects were widows (57%) or married (39.5%). None were single. Fifty nine subjects (51.8%) were illiterate. Twenty six (22.8%) had jobs during the survey period. Fifty subjects (43.9%) did housework. Thirty eight subjects (33.3%) reported that they had no responsible work. Duration of urinary incontinence varied from six months to thirteen years. Mean and standard deviation of duration were 27.4 and 32.4 months respectively. (Table 1)

Thirty subjects (26.4%) had urine loss daily or more often. Twenty five (21.9%) had accidents at least twice a month but less than once daily. Fifty nine (51.8%) had incontinence once a month or less. Fifty seven subjects (50%) passed half a glass of urine (100 ml) or more when they had accidents. Fifty three subjects (46.5%) passed at least a tablespoonful of urine (10 ml) but less than half a glass. Only 4 elderly (3.5%) reported that they passed less than one tablespoonful of

Table 1. Characteristics of Thai elderly with and without established urinary incontinence.

		with incontinence	without incontinence
Age [mean (SD)]		69.3 (3.8) years	68.8 (7.7) years
Sex [% male]		21.9	33.1
Marital status [n (%)]			
	married	45 (39.5)	281 (47.7)
	widowed	65 (57.0)	271 (46.0)
	divorced	4 (3.5)	32 (5.4)
	single	-	5 (1.3)
Literacy [n (%)]			
	illiterate	59 (51.8)	213 (36.2)
	literate	55 (48.2)	376 (63.8)
Work status [n (%)]			
	had a job	26 (22.8)	190 (32.3)
	housework	50 (43.9)	146 (24.8)
	none	38 (33.3)	253 (42.9)
Perceived health status [mean (SD)]		3.1 (1.2)	3.2 (1.1)
Life satisfaction [mean (SD)]		4.8 (1.3)	4.9 (1.5)
Duration of urinary incontinence problem [mean (SD)]		27.4 (32.4) months	-

Table 2. Severity of urinary incontinence categorized by amount and frequency of urine leak (detail of criteria see text).

Frequency	Amount		
	Mild (<10 ml)	Moderate (10 - 100 ml)	Severe (=> 100 ml)
Mild (< 2 per month)	2	36	21
Moderate (2 per month - < 1 per day)	2	12	11
Severe (at least once a day)	-	5	25

Mildly severe urinary incontinence : 2 elderly (1.7%)
Moderately severe urinary incontinence : 50 elderly (43.9%)
Severe urinary incontinence : 62 elderly (54.4%)

urine in each accident. Therefore, by the criteria mentioned in 'subjects and methods', 62 subjects (54.4%) were categorized as severe, 50 subjects (43.9%) were categorized as moderately severe, and 2 subjects (1.7%) were categorized as mildly severe. (Table 2)

Twenty of the subjects (17.5%) were classified as having pure stress incontinence, Sixty seven subjects (58.8%) had pure urge incontinence. Fifteen subjects (13.2%) had mixed type incontinence (stress and urge incontinence). One subject (0.9%) had overflow incontinence. Eleven subjects

Table 3. Number and percentage of elderly subjects by type of urinary incontinence and sex.

Type of urinary incontinence	Number (per cent in column)					
	Male		Female		Total	
Pure stress incontinence	1	(4%)	19	(21.3%)	20	(17.5%)
Pure urge incontinence	17	(68%)	50	(56.2%)	67	(58.8%)
Mixed stress-urge incontinence	4	(16%)	11	(12.4%)	15	(13.2%)
Overflow incontinence	-		1	(1.1%)	1	(0.9%)
Functional incontinence	3	(12%)	8	(9.0%)	11	(9.6%)
Total	25	(100.0%)*	89	(100.0%)	114	(100.0%)

* Seven male subjects (24.4%) had symptoms of outlet obstruction

Table 4. Prevalence and 95 per cent confidence intervals of urinary incontinence among Thai elderly population in Klong Toey slum.

		Prevalence	95% confidence interval
Total urinary incontinence			
(the first survey)		22.33	19.25 - 25.41
	male	16.81	14.35 - 19.26
	female	25.05	23.06 - 27.05
Established urinary incontinence			
(the second survey)		16.21	14.82 - 17.61
	male	10.77	9.35 - 12.20
	female	18.90	17.09 - 20.70
Stress incontinence		2.84	2.22 - 3.47
	male	0.43	0.00 - 0.86
	female	4.03	3.13 - 4.94
Urge incontinence		9.53	8.42 - 10.64
	male	7.33	5.62 - 9.04
	female	10.62	9.20 - 12.03
Mixed incontinence		2.13	1.59 - 2.68
	male	1.72	0.87 - 2.58
	female	2.33	1.64 - 3.03
Overflow incontinence		0.14	0.00 - 0.28
	male	-	-
	female	0.21	0.00 - 0.42
Functional incontinence		1.56	1.10 - 2.03
	male	1.29	0.55 - 2.03
	female	1.70	1.10 - 2.29
Evidence of obstruction		1.00	0.62 - 1.37
	male	3.02	1.89 - 4.14
	female	-	-
Regular urinary incontinence		7.82	6.81 - 8.84
	male	5.60	4.09 - 7.11
	female	8.92	7.60 - 10.23

(9.6%) had functional incontinence. (Table 3) Seven male subjects (6.1% of all subjects with persistent urinary incontinence) had symptoms of outlet obstruction. None were catheterized. Prevalence and its 95 per cent confidence interval of persistent incontinence incontinence and specific type urinary incontinence are shown in Table 4.

Sixty four per cent of the elderly with established urinary incontinence reported that they had at least one of psychosocial impact (moderate or severe). (Table 5 and 6) Common coping mechanisms used for their problems were dressing with minimum pieces of clothing (98.2%), Changing their clothes when they were wet (45.6%), and avoiding going outside (20.0%). Only 3 subjects (2.6%) reported that they used pads or pants.

Ten subjects (8.8%) had attended doctors before the interviewing. None of them received advice of incontinent aids, behavioral training or pelvic floor exercise. Three subjects were told by their doctors that their problems were part of the aging process. Only three subjects had been investigated for the cause of incontinence. Five subjects received medication and one received an operation. Four of these six subjects who received treatment reported that their condition had improved but not cured. One subject did not improve. One subject found her condition getting worse. Four subjects continued attending their doctors for their incontinence problems. One was discharged from the service. The rest stopped attending because of a lack of satisfaction with the results of the treatment. Seventy three elderly (64%) had not attended any doctors because they thought that their problems were caused by "the aging process". Other reasons were "not a serious problem", "ashamed", "don't want to attend" and "nobody took me to see doctors". (Table 7) Sixty two elderly (54.4%) refused to attend a consultation at Chulalongkorn University Hospital. Thirty four subjects (29.8%)

Table 5. Social and psychological impact of urinary incontinence on the elderly subjects classified by sex.

		Number (per cent in column)		
		Male n = 25	Female n = 89	Total n = 114
Ashamed	No	10 (40)	39 (43.8)	49 (43.0)
	Moderate	15 (60)	39 (43.8)	54 (47.4)
	Severe	-	11 (12.4)	11 (9.6)
Worried	No	8 (32)	36 (40.4)	44 (38.6)
	Moderate	12 (48)	38 (42.7)	50 (43.9)
	Severe	5 (20)	15 (16.8)	20 (17.5)
Inconvenient	No	7 (28)	36 (40.4)	43 (37.7)
	Moderate	13 (52)	37 (41.6)	50 (43.9)
	Severe	5 (20)	16 (18.0)	21 (18.4)
Loss of confidence to meet or talk with other people	No	8 (32)	36 (40.4)	44 (38.6)
	Moderate	13 (52)	44 (49.4)	57 (50.0)
	Severe	4 (16)	9 (10.1)	13 (11.4)
Disturbed other family members	No	9 (36)	46 (51.7)	55 (48.2)
	Moderate	13 (52)	32 (35.9)	45 (39.8)
	Severe	3 (12)	11 (12.4)	14 (12.3)
Afraid of going out	No	14 (56)	53 (59.5)	67 (58.8)
	Moderate	18 (40)	29 (32.6)	39 (34.2)
	Severe	1 (4)	7 (7.9)	8 (7.0)
Want to stay alone	No	16 (64)	57 (64.0)	73 (64.0)
	Moderate	8 (32)	20 (22.5)	28 (24.6)
	Severe	1 (4)	12 (13.5)	13 (11.4)
Affect on social life	No	11 (44)	44 (49.4)	55 (48.2)
	Moderate	13 (52)	37 (41.6)	50 (43.9)
	Severe	1 (4)	8 (9.0)	9 (7.9)
Subjects with at least one impact of the above		18 (72)	55 (61.8)	73 (64.0)

Table 6. Social and psychological impact of urinary incontinence on the elderly subjects classified by severity of incontinence.

		Number (per cent in column) Mild n = 2	Moderate n = 50	Severe n = 62
Ashamed	No	2 (100.0)	25 (50.0)	22 (35.5)
	Moderate	-	22 (44.0)	32 (51.6)
	Severe	-	3 (6.0)	8 (12.9)
Worried	No	2 (100.0)	22 (44.0)	20 (32.3)
	Moderate	-	22 (44.0)	28 (45.2)
	Severe	-	6 (12.0)	14 (22.6)
Inconvenient	No	2 (100.0)	21 (42.0)	20 (32.3)
	Moderate	-	22 (44.0)	28 (45.2)
	Severe	-	7 (14.0)	14 (22.6)
Loss of confidence to meet or talk with other people	No	2 (100.0)	23 (46.0)	19 (30.6)
	Moderate	-	24 (48.0)	33 (53.2)
	Severe	-	3 (6.0)	10 (16.1)
Disturbed other family members	No	2 (100.0)	28 (56.0)	25 (40.3)
	Moderate	-	19 (38.0)	26 (41.9)
	Severe	-	3 (6.0)	11 (17.7)
Afraid of going out	No	2 (100.0)	32 (64.0)	33 (53.2)
	Moderate	-	17 (34.0)	22 (35.5)
	Severe	-	1 (2.0)	7 (11.3)
Want to stay alone	No	2 (100.0)	32 (64.0)	39 (62.9)
	Moderate	-	15 (30.0)	13 (21.0)
	Severe	-	3 (6.0)	10 (16.1)
Affect on social life	No	2 (100.0)	28 (56.0)	25 (40.3)
	Moderate	-	21 (42.0)	29 (46.8)
	Severe	-	1 (2.0)	8 (12.9)
Subjects with at least one impact of the above		0 (0.0)	29 (58.0)	44 (71.0)

Table 7. Reasons for not attending doctor among 104 elderly subjects who had never attended doctors for problems of urinary incontinence.

Reasons	Sex		Severity			Total (%)	
	Male	Female	Mild	Moderate	Severe		
Aging process	13	60	1	31	41	73	(70.2)
Not a serious problem	1	4	-	5	-	5	(4.8)
Ashamed	2	1	-	-	3	3	(2.9)
Don't want to attend	-	2	-	1	1	2	(1.9)
Financial problem	1	2	-	-	3	3	(2.9)
Nobody took them to see doctors	1	3	-	2	2	4	(3.8)
Other reasons	5	9	-	10	4	14	(13.5)
Total	23	81	1	49	54	104	(100)

were willing to attend a specialist. Eighteen elderly (15.8%) said that they would go to the hospital if it was a free service.

One hundred and fourteen primary carers were also interviewed. Mean and standard deviation (min - max) of their age were 39.2 and 15.7 (12 - 79) years respectively. 36.8 per cent were male. One hundred and eleven primary carers stayed with the subjects. Only three carers did not stay with the subjects but were in the same area. Common relationship of carers with the subjects were "daughter" (35.1%), "son" (24.6%), "spouse"

(20.2%), "nieces" (9.6%) and "daughter in law" (4.4%). Six carers (5.3%) reported that the elderly subjects needed their help in activities of daily living. Fifty eight carers (49.1%) had not recognized the urinary incontinence of the subjects before this survey. 91.2 per cent of the carers stated that they were moderately concerned with the incontinence problems of the subjects. Three point five per cent were very concerned. Five point three per cent reported that they were not concerned at all.

DISCUSSION

The response rate from the first survey was 100 per cent because every house in Klong Toey was visited by our interviewers. However, the response rate was 93 per cent in the second survey due mainly to death or migration. This high figure of response rate and a systematic interviewing by a well trained interviewer made the result very reliable.

Urinary incontinence is a common problem among the elderly. A wide range of prevalence was reported due to inconsistencies in the definition of urinary incontinence, biases in patient selection from different settings, and differences in sampling methods and data collection[2-15]. Herzog et al[21] reported a change pattern from urinary incontinence to continence among non institutionalized elderly (particularly from mildly incontinent to continent) which may be explained in part that these cases of reversible urinary incontinence were in fact transient urinary incontinence[18]. Previous community surveys of urinary incontinence did not exclude transient urinary incontinence from established urinary incontinence[2-5,7-14], although some used restricted criteria called "regular incontinence"[6,15]. This study aims to measure prevalence, type, severity and psychosocial impact of established urinary incontinence among Thai elderly. We defined established urinary incontinence as "having urinary incontinence for more than six months without evidence of urinary tract infection". The prevalence of total urinary incontinence from the first survey is 22.3 per cent which is not different from figures reported from other studies in Western countries[2-5,7-14]. Only 72.6 per cent of Thai elderly with urinary incontinence from the first survey were classified as having established urinary incontinence (prevalence = 16.2%). When the strict criteria is used (regular incontinence)[6,15], the prevalence (7.8%) is higher than that reported from Singapore[15].

Characteristics of the elderly with and without established incontinence were similar. Although perceived health status and life satisfaction of the elderly with established incontinence was lower than those without established incontinence, there is no statistical difference.

Although a symptom-based classification of urinary incontinence does not always agree with urodynamic evidence, the urodynamic evaluation may not be the best validating criteria and only a symptom-based classification is possible for the interview assessments conducted in the community.

The most common type of urinary incontinence among this population study is pure urge incontinence (58.8%) which supports the finding of Ju et al[15]. However, no pure stress incontinence was reported from Singapore while 17.5 per cent of our incontinence subjects were which may possibly be explained by too restrictive criteria used by Ju et al. This was also supported by a high percentage of functional incontinence reported by Ju (20%) compared to our study (10%). Pure stress incontinence is dominant in female elderly but only men had evidence of obstruction. Functional incontinence in this population study is rather high (prevalence is 1.6%) which was caused mainly by severe physical disability from stroke and/or severe cognitively impairment.

There is no consensus of severity classification at present. Many classifications have been used. Thus our criteria for severity is derived from those used in previous studies by considering the psychological impact, need of incontinence aid and need of health or social services[6,8,10,15,21]. Validity of our severity classification is demonstrated by the evidence of a relationship between the severity of urinary incontinence and the severity of psychosocial impact.

The findings from this study and many others clearly demonstrate that urinary incontinence can be a distressing condition, emotionally disturbing, and can cause social isolation[2,15, 21-24] but the threshold of elderly subjects' tolerance of symptoms is wide. Although 64 per cent of the subjects with established incontinence had one or more psychosocial impact, only a small pro-

portion (8.8%) of those affected sought medical help. This may reflect wrong attitude toward urinary incontinence, reluctance to discuss the condition and a low expectation of the benefits of treatment. Most of the elderly who did not seek medical help thought that their problem was part of the aging process and only 30 per cent were willing to attend a specialist in a university hospital. Correction of this attitude should be a priority strategy if any services will be provided. None the less, a correction of attitude toward urinary incontinence by doctors is also essential as three subjects who had attended medical doctors were told by their doctors that their problem was part of the ageing process.

We were surprised by the finding that nearly 50 per cent of the carers had not recognised the incontinence problem of the elderly before this survey and only 3.5 per cent reported that they felt very concerned about this problem. Therefore, not only the attitude of the elderly and doctors has to be corrected but also the attitude of the carers. In 1993 there were 4.02 million elderly people in Thailand(1). Thus, around 622,440 to 739,620 Thai elderly may have established urinary incontinence at present. Urinary incontinence should be one of the main public health issues in Thailand. The curriculum for health personnel education including medical students has to emphasize this problem. There is scope for the provision of incontinence services at the primary health care level in Thailand.

SUMMARY

High prevalence of established urinary incontinence was found among Thai elderly living in Klong Toey slum. The commonest type was pure urge incontinence (58.8%). Nearly one-fourth of male subjects with established incontinence had symptoms of outlet obstruction. Over half of the elderly with established urinary incontinence were classified as severely incontinent. More than 50 per cent had at least one psychological impact and 7.9 per cent reported that their social lives were severely affected. Most of the elderly with established urinary incontinence had never sought medical help before and only 30 per cent were willing to attend a specialist at a university hospital. The attitude of the elderly, the carers and medical doctors toward urinary incontinence has to be corrected. Urinary incontinence should be a main public health issue in Thailand and there may be considerable scope for the provision of incontinence service at the primary health care level. The curriculum for health personnel education including medical students has to emphasize this problem.

(Received for publication on January 23, 1997)

REFERENCES

1. National Economic and Social Development Board. Population Projections for Thailand 1980-2015. Bangkok, National Economic and Social Development Board, 1991.
2. Norton PA, Mac Donald LM, Sedgwick PM, Stanton SL. Distress and delay associated with urinary incontinence, frequency and urgency in women. Br Med J 1988; 297: 1187-9.
3. Milne JS, Williamson J, Maule MM, Wallace ET. Urinary symptoms in older people. Mod Geriatr 1978; 2: 198-213.
4. Yarnell JWG, St leger AS. The prevalence, severity, and factors associated with urinary incontinence in a random sample of the elderly. Age Ageing 1979; 8: 81-5.
5. Brocklehurst JC, Fry J, Griffiths LL, Kalton G. Dysuria in old age. J Am Geriatr Soc 1971; 197: 582-92.
6. Thomas TM, Flymat KR, Blannin J, Meade TW. Prevalence of urinary incontinence. Br Med J 1980; 281: 1243-5.
7. Vetter NJ, Jones DA, Victor CR. Urinary incontinence in the elderly at home. Lancet 1981; ii: 1275-7.
8. Yarnell JWG, Voyle GJ, Richards CJ, et al. The prevalence and severity of urinary incontinence in women. Journal of Epidemiology and Community Health 1981; 35: 71-4.
9. Diokno AC, Brock BM, Brown MB, Herzog AR. Prevalence of urinary incontinence and other urological symptoms in the non institutionalized elderly. J Urol 1986; 136: 1022-5.
10. Campbell AJ, Reinken J, McCosh L. Incontinence in the elderly: prevalence and prognosis. Age

Ageing 1985; 14: 65-70.
11. McGrother CW, Castleden CM, Duffin H, Clarke M. A profile of disordered micturation in the elderly at home. Age Ageing 1987; 16: 105-10.
12. Teasdale TA, Taffet GE, Luchi RJ, Adam E. Urinary incontinence in a community-residing elderly population. J Am Geriatr Soc 1988; 36: 600-6.
13. Molander U, Milsom I, Ekelund P, Mellstrom D. An epidemiological study of urinary incontinence and related urogenital symptoms in elderly women. Maturitas 1990; 12: 51-60.
14. Rubin CD. Urinary incontinence in the elderly. Am J Med Sci 1990; 299: 131-47.
15. Ju CC, Swan LK, Merriman A, Choon TE, Viegas O. Urinary incontinence among the elderly people of Singapore. Age Ageing 1991; 20: 262-6.
16. Jitapunkul S, Kamolratanakul P, Ebrahim S. The meaning of activities of daily living in a Thai elderly population: development of a new index. Age Ageing 1994; 23: 97-101.
17. Andrews FM, Withey SB. Social indicators of well-being: Americans' perception of life quality. New York, Plenum Press 1976.
18. Ouslander JG. Commentary: basic types and causes of geriatric incontinence. Clinics in Geriatric Medicine 1986; 2: 711-3.
19. Ouslander JG, Bruskewitz R. Urinary incontinence. Adv Intern Med 1989; 34: 177-90.
20. Gardner MJ, Altman DG. Calculating confidence intervals for proportions and their differences. In Gardner MJ, Altman DG (eds). Statistics with confidence - confidence intervals and statistical guidelines. London, British Medical Journal, 1990.
21. Herzog AR, Diokno AC, Brown MB, Normolle DP, Brock BM. Two-year incidence, remission, and change patterns of urinary incontinence in noninstitutionalized older adults. Journal of Gerontology: Medical Sciences 1990; 45: M67-74.
22. MacAulay AJ, Stern RS, Holmes DM, Stanton SL. Micturition and the mind: psychological factors in the aetiology and treatment of urinary symptoms in women. Br Med J 1987; 294: 540-3.
24. Wyman JF, Harkins SW, Choi SC, Taylor JR, Fantl JA. Psychological impact of urinary incontinence in women. Obstet Gynecol 1987; 70: 378-81.
25. Grimby A, Milson I, Molander U, Wiklund J, Ekelund. The influence of urinary incontinence on the quality of life of elderly women. Age Ageing 1993; 22: 82-9.

การกลั้นปัสสาวะไม่ได้ในผู้สูงอายุไทยในชุมชนแออัดคลองเตย

สุทธิชัย จิตะพันธ์กุล, พ.บ., วท.ม., วีรพันธุ์ โชวิฑูรกิจ, พ.บ.***

ผู้สูงอายุไทยในชุมชนแออัดคลองเตยจำนวน 703 คนได้รับการสัมภาษณ์เกี่ยวกับอาการกลั้นปัสสาวะไม่ได้และพบผู้สูงอายุจำนวน 114 คนที่มีอาการกลั้นปัสสาวะไม่ได้อย่างชัดเจนคิดเป็นความชุกร้อยละ 16.2 ชนิดของความผิดปกติที่พบบ่อยที่สุดคือ urge incontinence (ร้อยละ 58.8) ร้อยละ 24.4 ของผู้สูงอายุชายที่มีอาการกลั้นปัสสาวะไม่ได้ชัดเจนมีอาการของทางเดินปัสสาวะอุดกั้น ร้อยละ 54.4 ของผู้สูงอายุที่มีอาการกลั้นปัสสาวะไม่ได้อย่างชัดเจนถูกจัดอยู่ในขั้นรุนแรง มากกว่าร้อยละ 50 เกิดผลกระทบด้านจิตใจอย่างน้อยหนึ่งอย่างและร้อยละ 7.9 รายงานว่าการดำเนินชีวิตในสังคมได้รับผลกระทบรุนแรง มีผู้สูงอายุที่มีอาการกลั้นปัสสาวะไม่ได้เพียงร้อยละ 8.8 เท่านั้นที่เคยปรึกษาแพทย์และมีเพียงร้อยละ 30 ของทั้งหมดที่มีความต้องการพบแพทย์เฉพาะทางในโรงพยาบาลมหาวิทยาลัย ทัศนคติต่อปัญหากลั้นปัสสาวะไม่ได้ทั้งของผู้สูงอายุของผู้ดูแลและของแพทย์จำเป็นจะต้องได้รับการแก้ไข ปัญหากลั้นปัสสาวะไม่ได้ควรได้รับการจัดเป็นปัญหาสาธารณสุขของประเทศไทยและควรพิจารณาการบริการจัดการตั้งแต่ในระดับสาธารณสุขมูลฐาน

* ภาควิชาอายุรศาสตร์
** ภาควิชาสรีรวิทยา, คณะแพทยศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย, กรุงเทพฯ 10330