Aims of study
To explore the prevalence of overactive bladder (OAB) symptoms and urinary incontinence (UI) and associated factors among the middle and elderly people in southern Taiwan.

Study design, materials and methods
A cross-sectional design using participant-reported questionnaires was adopted in this study. In Taiwan, the voluntary health examinations free of charge for adults aged 40 years are regular implement. A convenience sample visiting four public health centers for health examinations in Pingtung county, southern Taiwan were recruited during March to July of 2010. The inclusion criteria were people who aged 40 years or older, and who were willing to participate in this study. A total of 1190 participants were contacted, whereas 136 subjects without complete the survey and 44 subjects who complained of the presence of urinary symptoms occurred in the past four weeks, which was suspected as a current urinary tract infection (UTI), were excluded from this study. Overall, 1010 participants (480 males and 530 females) completed the survey of urinary symptoms. Each interview was approximately 15-20 minutes to complete. No urodynamic studies or urinary diaries were performed. All participants were asked about a standard questionnaire, which includes specific urinary symptoms, demographics and comorbid illnesses. In the present study, OAB was defined that total overactive bladder symptom score was more than 3 points and urgency was at least one episode per week. UI were defined as at least one episode a week.

Results
OAB were reported by 17.5% of participants (16.8% of females and 18.3% of male). UI was reported by 19.0% of participants (22.6% of females and 25% of males). Using conditional logistic regression analyses, age, heart diseases, stroke, chronic constipation and the history of UTI in the past year were independent factors for OAB, while gender, age, diabetes, chronic constipation and the history of UTI in the past year were independent factors for UI. Most (67.4%) participants with 68.7% of females and 65.7% of males perceived mild to severe symptom bother, however, only 34.1% of participants with OAB or/and UI have ever sought a physician for their bladder symptoms.

Interpretation of results
Our study reported higher prevalence of OAB and UI compared with previous community-based epidemiological surveys. This is understandable, the present study had less restrictive definition of OAB, and survey sample come from the public health centers for free physical examination were more older individuals. Anyway, the results of this study imply that a substantial burden of OAB and UI in the communities. In addition, the chronic illnesses showed the complex link with OAB and UI. We cannot clarify whether the chronic illnesses may arouse OAB or UI in this cross-sectional study, however, this study indicated that OAB and UI co-existed with several chronic illnesses.

Concluding message
OAB and UI affect a substantial people in southern Taiwan. Excepting for females and elderly people, health providers should increase the awareness that people with some specific comorbid illnesses are susceptible groups for OAB and UI, and thereby provide the appropriate continence prevention or management.