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there were issues requiring discussion in 46% of patients. Commonly cited issues were related to holidays, sex life, tiredness, mobility, and depression. These issues were either discussed with the nurse immediately in person (65%), or the patient was contacted by telephone (28%) or post (7%). Of those patients who were contacted, 70% were interested in discussing the issues, of whom 3 were referred to andrology clinics and 11 were to be reviewed at a future appointment. CONCLUSION: Measurement of QoL is feasible and useful in the routine clinical nursing practice.

### PRN5

### QUALITY OF LIFE AND HEALTH CARE RESOURCE UTILIZATION IN OVERACTIVE BLADDER PATIENTS WITH URGE INCONTINENCE

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Urge incontinence (UI) significantly affects the physical, psychological, and economic aspects of the lives of affected individuals. OBJECTIVE: This study assessed the impact of UI on patients' health-related quality of life (HR-QoL) and resource utilization. METHODS: A guestionnaire, administered to ambulatory out-patients diagnosed with UI, collected demographic information, micturition and leakage data, HR-QoL and resource use estimates. HR-QoL was measured using the EuroQoL (EQ-5D) and King's Health Questionnaire (KHQ). The KHQ is a disease-specific instrument which explores eight domains (health perceptions, incontinence impact, role, physical and social limitations, personal relationships, emotions, sleep/energy). RESULTS: Patients (n = 60) were 62.5  $\pm$  15.5 years old and 95% female. During a typical 24-hour period, patients experienced a median of 3 leakages and a mean of 13 micturitions, 3 of which occurred nocturnally. Eighty-three percent of patients felt their condition interfered with their usual activities. The average utility value determined using the EQ-5D was 0.68. Of the domains of the KHQ, patients indicated the greatest impairment in the incontinence impact domain. Other domains considerably affected were sleep/energy and role and physical limitations. Patients had 102 visits with healthcare providers and 68 tests/procedures in the 4 weeks preceding the study. Feminine hygiene products, incontinence pads and diapers were used by 43%, 32% and 8% of patients at a median of 16, 12 and 7 units per week, respectively. CONCLUSIONS: UI is a major obstacle to patients' quality of life, specifically impeding their sleep and energy level, in addition to causing role and physical impairments. UI also has considerable impact on resource utilization.

### PRN6

### DEVELOPING A SPECIFIC HRQL INSTRUMENT FOR OVERACTIVE BLADDER

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There are three limitations in the application of current HRQL questionnaires related to overactive bladder (OAB): 1) no OAB-specific questionnaire has been developed in an OAB population with patients experiencing OAB symptoms but not incontinence; 2) the sample populations on which such questionnaires have been tested have been restricted to primarily clinical patients with incontinence; 3) past questionnaires have been developed in female-only populations. OBJECTIVE: To initiate the development of an OAB-specific HRQL questionnaire. METHODS: Participants were recruited via newspaper advertisement and screened to ensure they met the study criteria (predominantly OAB-dry). The groups were gender-specific: Group 1 = 7 men; Group 2 = 9 women. The participants were asked open-ended questions on symptoms (frequency, urgency and leakage), coping behaviors and life impact. Data were analyzed using content analysis. A draft questionnaire was developed and reviewed by 88% (14) of the focus group participants who indicated that the questionnaire captured their thoughts and experiences. RESULTS: Participants reported significant impact in their HRQL due to OAB in a variety of domains. The symptoms of frequency, urgency, and nocturia caused significant alterations in productivity, travel/commuting, sleep, physical activities, social functioning, relationships, and psychological well-being, as well as causing a number of coping behaviors. Most issues were similar between men and women. Men reported interrupted sleep as the greatest area of HRQL impact; women were unable to identify a single prominent issue or domain. CONCLUSION: This instrument reflects numerous concerns and issues identified by OAB focus group participants that were not found in previously developed questionnaires. It is currently in the validation phase for future research.

### PRN7

# RELIABILITY OF REPORTING ON COPING STRATEGIES AND IMPACT OF OVERACTIVE BLADDER

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OBJECTIVE: Overactive bladder (OAB) is a highly prevalent condition that can result in substantial changes to an individual's daily activities. Behavioral changes to cope with OAB symptoms are likely to occur early in the natural history of OAB. In later stages, OAB tends to

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more directly affect activities. As one step in developing an OAB-specific QoL instrument, we conducted a population-based study to determine the reliability of reporting of coping strategies and other aspects of QoL thought to be OAB-related. METHODS: A US population sample of 231 adults completed an interview twice, on average, two weeks apart. Detailed questions were asked about OAB symptoms, coping strategies, and the psychological/ physical impact of symptoms in the past 4 weeks. RE-SULTS: The most common coping strategies were restricting fluid intake (day or night) and defensive voiding. Relatively high kappas (i.e., ≥0.60) were observed for 'concerned about drinking more fluid', 'limiting travel', 'defensive voiding in a new place', and 'drink less fluid at night'. Reports on the level of distress caused by coping and on the use of protective pads were highly reliable (r = 0.81; r = 0.82). The most common terms for reporting feelings about bladder control included 'annoyed', 'concerned', and 'bothered', all of which were reported with high reliability (kappa = 0.60-0.71); few individuals used distressing or 'ashamed'. Interference with activities was associated with ability to travel, attending social events and exercising (kappa>0.60). CONCLUSIONS: Using a 4-week recall period and with a 2-week interval between interviews, we found that individuals are highly reliable in reporting on coping strategies, psychological impact, and the impact of bladder control on activities.

### PRN8

### MEDICAL CARE OF OVERACTIVE BLADDER IN ELDERLY MEDICARE PATIENTS

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Overactive bladder (OAB) is a chronic but treatable problem among older adults. Epidemiological studies suggest that OAB is widespread, largely untreated, and healthcare systems may be incurring substantial costs. OBJECTIVES: We examined older adults who received medical services for OAB, the range of OAB services, their cost to Medicare, and the dynamics of OAB treatment. METHODS: Medicare claims covering 1994 and 1995 for a 5% sample of beneficiaries was analyzed to derive treatment rates and profile OAB services and costs. A Markov model was estimated to examine OAB service utilization over time, and to compare costs among patients receiving OAB services. RESULTS: Annually, 1.4 to 2.9% of Medicare elders receive medical services for OAB; however, this group accounts for only 4 to 5% of elderly with symptoms indicative of OAB. Average annual Medicare costs for OAB services in 1995 was \$298. Although most patients were treated by physicians at modest expense, most Medicare spending was for a small percentage of patients who incurred expensive OAB care. These high cost patients either underwent surgery for OAB, or received OAB home health, or OAB care in a

skilled nursing facility. Annual costs of OAB services varied with treatment setting. Patients treated in the physician's office showed the lowest annual treatment cost. CONCLUSIONS: Although OAB is widespread, most elders avoid medical treatment. Yet, treatment in physician offices is not expensive, particularly compared to the costs of complications when OAB is left untreated. These findings are important in view of the aging population and the prevalence of OAB.

### PRN9

# THE INFLUENCE OF PHARMACEUTICAL CARE SERVICES ON THE BLOOD PRESSURE OF RENAL TRANSPLANT PATIENTS

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OBJECTIVE: This study was conducted to determine the influence of pharmaceutical care services on renal transplant patients' systolic and diastolic blood pressures. METHODS: Renal transplant patients at the Medical College of Georgia Renal Transplant Clinic were prospectively randomized into an intervention or a control group. Patients in the intervention group received pharmaceutical care services at least once monthly which included ongoing medication reviews, with emphasis on preventing or resolving medication-related problems and providing pharmacotherapy recommendations. Patients in the control group received routine clinic services but had no clinical pharmacist interaction. At each clinic visit, all patients underwent a physical exam which included blood pressure measurements. Analysis to detect differences in baseline and quarterly systolic and diastolic blood pressures between the groups was performed. RE-SULTS: There were no differences in baseline systolic blood pressure (SBP) and diastolic blood pressure (DBP) between the groups. Patients in the intervention group (n = 28) had a mean SBP/DBP change of -9 mm Hg/-2mm Hg, -13 mm Hg/-8 mm Hg, -13 mm Hg/-10 mm Hg, and -6 mm Hg/-6 mm Hg for the first through the fourth quarters of the study, respectively. Patients in the control group (n = 23) had a mean SBP/DBP change of -2 mm Hg/+1 mm Hg, +10 mm Hg/+3 mm Hg, +11mm Hg/+1 mm Hg, and +12 mm Hg/+5 mm Hg for the first through the fourth quarters of the study, respectively. Significant differences in change scores from baseline for SBP and DBP between the intervention and control groups were observed at the second, third, and fourth quarters of the study (P < 0.01). **CONCLUSION:** Patients who received a hypertension management program which included pharmaceutical care services had greater reductions in blood pressure than patients who did not receive these services.