

Case-finding incontinence in the over-75s

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SUMMARY

Background. The under-reporting of incontinence in older persons is well known. However, the general practitioner's (GP's) knowledge of incontinence in this population is less well documented.

Aim. To examine the knowledge of Irish GPs regarding incontinence in patients aged over 75, and to examine the relationship between incontinence and cognitive function in this age group.

Method. Sixty-four GPs from six faculties of the Irish College of General Practitioners (ICGP), spread geographically over Ireland, administered a questionnaire to 10 of their patients, selected from the General Medical Services list, as part of the ICGP 1993 Care of the Elderly Study. A short test of cognitive function, the AMTS, was administered followed by RCGP (Royal College of General Practitioners) screening questions for incontinence, plus questions with regard to patients' prior reporting of incontinence. GPs were also asked to state their prior knowledge of the incontinence status of the patient and to choose from a list of management options including referral, assigning to a public health nurse, and hospital surgical service.

Results. Data were analysed on 527 patients aged over 75 years. Forty-four per cent of persons over 75 years reported having experienced urinary incontinence; 9% reported having experienced faecal incontinence. GPs reported full knowledge of the incontinence status in only 33% of their patients. The effects of low cognitive function, sex, and age on the probability of wetting were analysed using logistic regression modelling. Female sex and low cognitive score increased the likelihood of ever wetting; increasing age increased the likelihood of daily wetting. Poor sensitivities for these models limit their usefulness in clinical practice.

Conclusion. GPs should have a high index of suspicion for incontinence in persons aged over 75. Thorough history-taking, physical examination, and examinations of therapeutic options for individual cases are recommended.

Keywords: case finding; incontinence; over 75s.

Introduction

INCONTINENCE frequently influences decisions with regard to the institutionalization of older persons.¹ Incontinent persons view their condition as a significant loss of control and self-esteem, discussing it in terms of infantilization; potential benefits of research and intervention in this area include improved well-being of patients, relief of the burden on carers, and improved cost-benefits to society.^{2,3} Figures from Europe and the United States for prevalence of urinary incontinence in the over-70s in the community range from 15% to 37%.^{4,5,6} Urinary

incontinence is associated with cognitive deficit.^{7,8} Berrios has demonstrated in a sample of 100 persons with cognitive failure (mean age 80.5 years) that those who were incontinent of urine were older, had lower memory and information score, and were more disoriented, hyperactive, aphasic, and socially incompetent than their continent counterparts.⁹ Hill and colleagues have shown that cognitively impaired patients who are also functionally impaired, with urinary incontinence or other functional deficit, show continuing increments in cognitive loss.¹⁰ The prevalence of faecal incontinence in the over-75s in the community has been estimated at 1%. This compares with an estimated 25–35% prevalence among the institutionalized elderly.⁹ A reluctance to discuss the problem of incontinence has been shown. Fewer than one third of all regularly incontinent women in the age group 20–60 years have discussed the problem with a GP or nurse.¹⁰

This study forms part of the ICGPs' 1993 Care of the Elderly Study and aims to examine the problem of urinary and faecal incontinence in the population aged over 75 in Irish general practice, to examine the relationship between incontinence and cognitive function in patients aged over 75, and also to look at prior reporting by patients aged over 75 of their incontinence and their GP's knowledge of their problem. It also examines referral patterns by GPs' post reporting of incontinence. Persons aged 75 and over were included in this study because of the increased likelihood of non-reporting of problems of functional decline in this age group.

Method

A pilot study involving 10 GPs and 100 patients took place in the Limerick faculty of the ICGP in March, 1993. The main study was carried out in October, 1993. All GPs who are members of the ICGP in the six faculties of Galway, Kerry, Kilkenny, Laois-Offaly, Limerick, and Louth were asked by letter to participate in the study. Seventy-eight (21%) of the faculty members agreed to participate. Between 1 October and 31 October 1993, all GPs were asked to include from their practice 10 patients aged over 75 years. Doctors were asked to count the total number aged 75 and over on their list and to take, for example, every 17th patient, if they had 171 patients on their list, in order to generate 10 study patients.

Patients could be seen in the surgery or at home. The GPs involved were asked to administer a questionnaire to each patient in the study. The first part of the questionnaire was a short test of cognitive function: the AMTS (Abbreviated Mental Test Score).¹¹ In the case of patients who scored less than 6 on the AMTS, the questionnaire was then delivered to a carer. The second part of the questionnaire involved the RCGP screening questions for urinary and faecal incontinence in the over-75s, as well as questions regarding (a) the prior reporting of incontinence by the patient to his or her GP or other professional, and (b) the GP's knowledge of incontinence in that patient.^{12,13}

Data were collated and analysed using the Epi-info epidemiological and statistical programme. (Data entry was validated by S Prosser.) Further statistical analysis was undertaken using the STATA programme. Probability of wetting was modelled by logistic regression. Main effects and interaction terms associated with relevant explanatory factors were tested and retained in the model if statistically significant. A *P*-value of 0.05 was considered significant.

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Results

The method of selection of GP participants by open invitation to all GPs within the six faculties resulted in 21% of these faculty members volunteering to take part. Of all the volunteer GPs, 64 out of 78 (82%) returned valid questionnaire booklets; 527 patient questionnaires were valid for analysis. Questionnaires were not filled out for 48 out of 640 (7.5%) of the possible study candidates. In 15 of these 48 cases, non-availability of data was due to a stay in hospital, in a nursing home, or with relatives. Of the 592 questionnaires that were filled out, 21 (3.5%) were invalid because they had not been properly completed, 527 were fully completed, and the remainder were partially completed.

Information was obtained from the carer in 23% of cases where the AMTS score was less than 6. The study took place mostly in rural faculties of the ICGP, where extended family and neighbour networks ensure the availability of carers.

Of the 527 fully completed questionnaires, 355 (63%) were for female patients and 195 (37%) for males. Fifty-three per cent of patients were seen on home visits, 47% in the surgery. The mean age of patients was 80.4 years, with a range of 75–99 years. In response to the RCGP screening question, 'Do you ever wet yourself if you are not able to get to the toilet on time, during sleep, or if you cough or sneeze?', 233 (44%) of the 527 patients answered 'yes'. Of persons aged over 75 in the study who experienced urinary incontinence, 79 out of 233 (34%) wet themselves at least once a day (Table 1).

In response to the RCGP screening question, 'Do you ever soil or mess yourself with bowel motion?', 48 (9%) of the 527 patients answered 'yes'. Of those who admitted to ever being incontinent of faeces, 8 out of 48 (16%) experience faecal incontinence daily. Of the total study population, 8 out of 527 (1.5%) admitted daily faecal incontinence (Table 2).

Prior discussion of incontinence by patients and prior knowledge by GPs of incontinence status of patient

Of persons who had ever experienced urinary incontinence, 106 out of 233 (45%) had discussed the problem with a professional. Of those who had daily urinary incontinence, 48 out of 79 (61%) of the patients or their carers had discussed the problem with a health professional. Of those who ever had faecal incontinence, 24 out of 49 (49%) had discussed their problem with a professional, although only one out of the eight patients with daily fae-

cal incontinence, or their carer, had discussed the problem with a professional. Of those who had previously discussed the problem, 82% said they had discussed it with their GP, 30% said they had discussed it with their public health nurse, and 19% said they had discussed it with another professional; these groups were not mutually exclusive.

For 245 (46%) of the 527 study patients, and for 245 (99.6%) of the 246 incontinence patients, GPs answered the question on their previous knowledge of the incontinence status of their patients. GPs reported full incontinence knowledge for 80 (33%) of these patients, partial knowledge for 73 (30%) of the patients, and no previous knowledge for 92 (37%) of the patients.

Actions suggested by GP

Of the 527 study patients, 246 (47%) reported having suffered from either urinary or faecal incontinence at some time. This section was not answered by the GP in one incontinence case. Examination by a GP was recommended in 141 (57%) of the 245 cases of incontinence (either urinary or faecal). Referral to a public health nurse was suggested for 26 (10.6%) of the 245 patients, and referral for surgical assessment for 29 (9.7%) of these patients. GPs suggested treating the problem themselves for 101 (41%) of the 245 patients.

Influence of age, sex, and low cognitive score on wetting

The probability of wetting was modelled by logistic regression. For the probability of ever wetting, only the main effects of low cognitive score (AMTS \leq 6) and sex were significant (AMTS \leq 6: odds ratio (OR) = 4.7, 95% confidence interval (CI) 2.7–8.2; female relative to male: OR = 1.9, 95% CI 1.3–2.8). However, age alone was found to be predictive when the model was examined for daily wetting, given that the patient had acknowledged ever wetting. Patients were categorized by age into three groups: age group 1 (75–79 years), age group 2 (80–89 years), and age group 3 (90–95 years). (Age group 1 was set as the base: OR = 1; age group 2: OR = 1.6, 95% CI 0.8–2.8; age group 3: OR = 4.7, 95% CI 1.5–14.5.) Model sensitivities were low, however: 25% and 12% for ever wetting and wetting daily respectively. Specificities were high in both models (93% and 96% respectively).

Discussion

The finding that 44% of persons aged over 75 report urinary incontinence should be interpreted with care as the RCGP screening question asks, 'Do you ever wet yourself?' and does not delineate a time frame. Diokno, in a population sample of patients over 60, used a definition of 'losing urine for at least six days in the past 12 months', and found that 30% of the population reported incontinence.⁴ McGrother and co-workers, in a study of women in Edinburgh aged 62–90, found a prevalence of 42% suffering from incontinence.¹⁴ With regard to the method of selection of GP participants by open invitation to all members of six College faculties, it is acknowledged that a selection bias exists in that only 22% of GPs responded, although those GPs who did undertake the study responded with an 82% response rate.

However, the RCGP screening questions seem to yield a high response to the initial question, which seems to be quite an acceptable question to older patients.¹⁵ This study shows that, in selected patients over 75 years, 45% of those who had ever experienced urinary incontinence, and 60% of those who experienced daily urinary incontinence had discussed it with a health professional. However, only 33% of GPs reported having full knowledge of the incontinence status of patients over 75, indicating that there is a need to increase awareness among GPs of this problem.

Table 1. Frequency of urinary incontinence ($n = 527$).

	Number (n)	Percentage (%)
Ever feel wet?	233	44
< once a month	64	27
once a month	35	15
once a week	55	24
once a day	41	18
> once a day	38	16

Table 2. Frequency of faecal incontinence.

	Number (n)	Percentage (%)
Ever soil?	48	9
< once a month	20	42
once a month	9	19
once a week	10	21
once a day	6	12
> once a day	3	6

Decisions to examine, treat, or refer patients were, as expected, related to the frequency of the incontinence. The rates of referral to a public health nurse might be considered low (10.6% of cases); however, in Ireland, public health nurses have a responsibility to maintain an 'at risk' register on patients aged over 75, and are attending many of these patients already.

The analysis of the effects of low cognitive function, sex, and age on the probability of wetting using logistic regression modelling shows that being female and having a low cognitive score increases the likelihood of ever wetting, and that increasing age is the most important of these three factors in predicting the likelihood of daily wetting. The usefulness of these models for clinical practice is limited by virtue of their poor sensitivities (25% and 12% for ever wetting and wetting daily, respectively), although specificities were high in both models (93% and 96%, respectively). This emphasizes the need for thorough history-taking and physical examination of older patients presenting with urinary incontinence, as proposed by workers such as Resnick.¹⁶

It has been shown that, even in complex cases, the cause of incontinence in older persons can usually be determined non-invasively.¹⁶ Drug therapy, pelvic floor exercises, and behavioural programmes have been shown to be useful therapeutic options for this age group. However, it has been shown in younger age groups that it is difficult to get sustained interest in attending incontinence clinics in primary care.^{17,18,19,20} The acceptability of therapy for incontinence and the motivation of patients in older age groups to continue therapy is an area requiring further study in the community. The relationship between decreased continence and decreasing cognitive function is also an area for further work.

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