Health problems of people with intellectual disabilities: the impact for general practice

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ABSTRACT

This study aimed to analyse the health problems and prescriptions of people with intellectual disabilities registered with GPs. Within the Second Dutch National Survey of General Practice evidence was gathered on the differences in health problems between people with intellectual disabilities and control persons (without intellectual disabilities). In a 1:5 matched sample, people with intellectual disabilities paid 1.7 times more visits to GPs. They presented a different morbidity pattern, and received four times as many repeat prescriptions. People with intellectual disabilities increase a GP's workload.

Key words

consultations; family practice; intellectual disabilities; morbidity; pharmacotherapy.

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INTRODUCTION

Health problems of people with intellectual disabilities frequently remain undetected, and their health needs may remain unmet.[1,2] Most GPs stress the need for more education and training in managing health for people with intellectual disabilities.[3] Studying the health needs of people with intellectual disabilities allows the development of targeted interventions.[4] However, detailed information is rare.[5]

No evidence was found in the consultation rates of people with intellectual disabilities in primary care.

Data about patient contacts, registered within the framework of The Second Dutch National Survey of General Practice,[6] allowed exploration of the healthcare needs of people with intellectual disabilities, their consultation rate, morbidity and medication prescribed in general practice. The research themes of the present study were:

- Consultation and prescription rates among people with intellectual disabilities in general practice and the differences in those for people without intellectual disabilities.
- Type of health problems presented by people with intellectual disabilities and controls (people without intellectual disabilities) to their GP, and prevalence of these health problems in both groups.
- Differences in type of prescriptions for people with intellectual disabilities and for controls.

METHOD

Data collection

Data were collected from the Second Dutch National Survey of General Practice[6] in 2001. This included information about consultations in 104 general practices covering 400 000 registered patients.

GPs' electronic practice information systems were searched for the diagnostic International Classification of Primary Care (ICPC) code P85 (intellectual disabilities) and a computer search program using keywords indicating intellectual disabilities was applied. Furthermore, paper forms containing keywords allowed GPs to identify people with intellectual disabilities, according to the international definition of intellectual disabilities.[7] Each

individual with disabilities was randomly matched, if possible with five people without intellectual disabilities, equal of age, sex and registered within the same practice (control group) to carry out a comparative study with a control group. Data on contacts, diagnoses and prescriptions were derived from the electronic medical records.

Analysis

Data were analysed with SPSS 11.0 and Epistat. Study groups were compared for health problems, consultation and prescription rates (statistical tests: χ^2 test, paired samples *t*-test). Prescriptions during contacts and repeat prescriptions were analysed per ATC code. Health problems were analysed per ICPC code in the 20 most prevalent health problems of people with intellectual disabilities (statistical tests: χ^2 odds ratio, Fisher's Exact test).

RESULTS

Study population

Data from 87 practices revealed an average of 10 people with intellectual disabilities (median = 8; range = 0–70) within a standard size general practice, serving 2350 patients. The present study exploited data from 71 practices, resulting in 868 people with intellectual disabilities and 4305 controls. Four practices were excluded for incomplete data; 12 practices could not identify people with intellectual disabilities. Two more practices were excluded from the prescriptions analysis because of software problems.

Consultation and prescription rates

During 2001, 712 people with intellectual disabilities (82%; 95% CI [confidence interval] = 79 to 84%) and 2975 controls (69%; 95% CI = 67 to 70%) consulted their GP. Prescriptions were given to 645 people with intellectual disabilities (75%; 95% CI = 72 to 78%) and 2505 controls (59%; 95% CI = 57 to 60%). Patients with intellectual disabilities had an average of 5.4 (range = 0–41) contacts, compared with 3.2 (range = 0–53) contacts in control patients (Paired *t*-test, $P<0.001$).

Contact diagnoses

Epilepsy and skin infection were the most common presented health problems. (Table 1). Differences in frequency of diagnoses between both study groups related to mental, dermatological, gastrointestinal, neurological and ear problems. The 10 most frequent diagnoses of people with intellectual disabilities accounted for 18.3% of all contacts registered.

Prevalence

Per 1000 patients, 72 people with intellectual disabilities had epilepsy, compared with two controls.

How this fits in

This is the first study providing evidence on the higher consultation and prescription rates in people with intellectual disabilities when compared to those without intellectual disabilities in general practice. The study highlights the differences in patterns of presented morbidity in relation to prescriptions. The most frequently presented health problem in people with intellectual disabilities was epilepsy. Psycholeptic medications ranked highest in prescriptions.

Constipation was diagnosed in 45 people with intellectual disabilities, compared with nine controls. Dermatomycosis and acute upper respiratory tract infection had the highest prevalence: 87 and 84 per 1000 people with intellectual disabilities, respectively, and 44 and 52 per 1000 controls, respectively (χ^2, $P<0.001$).

Prescriptions

During contacts, 562 people with intellectual disabilities (66%; 95% CI = 63 to 69%) received 3014 prescriptions, psycholeptics, anticonvulsants and laxatives in particular, whereas 2191 controls (52%; 95% CI = 50 to 53%) received 9206 prescriptions (χ^2, $P<0.001$) (Table 2). People with intellectual disabilities received on average 4.3 prescriptions per year, compared with 3.1 prescriptions per year for controls (paired *t*-test $P<0.001$). The proportion of contacts in which GPs prescribed medication for people with intellectual disabilities was smaller than that for controls. There were no significant differences in types of prescriptions per diagnosis between both study groups (χ^2, odds ratio, Fisher's Exact test).

A total of 4608 repeat prescriptions, were provided to 440 people with intellectual disabilities (52%; 95% CI = 48 to 55%), 6771 to 1374 controls (32%; 95% CI

Table 1. Prevalence of top 10 diagnoses, per 1000 people with intellectual disabilities, compared with the control group.

	Per 1000 patients	
ICPC code	With ID (*n* = 868)	Control (*n* = 4305)
Epilepsy	172.8	3.2
Dermatomycosis	123.2	55.5
Diabetes mellitus	111.7	61.5
Acute infection of upper respiratory tract	109.4	62.4
Excess cerumen	95.6	29.5
Eczema by contact/other eczema	86.4	51.3
No illness	76.0	20.6
Insomnia/other sleeping disorder	69.1	20.4
Other infection of skin/subcutis/erysipelas	69.1	9.7
Medication/prescription/injection	67.9	23.0

All diagnoses shown are significantly more frequently diagnosed in people with intellectual disabilities, χ^2 test, P<0.001. ICPC = International Classification of Primary Care. ID = intellectual disability.

Table 2. Number of prescriptions by ATC-group during contacts with GPs and number of repeat prescriptions, per 1000 patients with and without intellectual disabilities.

	Per 1000 patients		
During contact with GPs	With ID (*n* = 701)	Control (*n* = 2936)	*P*-value[a]
Psycholeptics	444	192	<0.001
Antibacterials	256	239	0.013
Anticonvulsants	194	11	<0.001
Anti-inflammatory and antirheumatic products	182	204	0.640
Sex hormones and modulators of the genital system	181	204	0.696
Corticosteroids, dermatological preparations	174	110	<0.001
Anti-asthmatics	174	169	0.078
Antifungals for dermatological	149	86	<0.001
Use laxatives	143	46	<0.001
Opthalmologicals	143	72	<0.001
Repeat prescriptions	With ID (*n* = 440)	Control (*n* = 1374)	
Psycholeptics	1929	391	<0.001
Anticonvulsants	1127	41	<0.001
Psychoanaleptics	504	158	<0.001
Anti-asthmatics	461	365	<0.001
Sex hormones and modulators of the genital system	361	394	0.416
Analgesics	318	191	<0.001
Antacids, drugs for treatment of peptic ulcer	282	211	0.016
Laxatives	257	1	<0.001
Thyroid therapy	234	51	<0.001
Diuretics	216	124	<0.001

[a]χ^2 *test. ID = intellectual disability.*

= 31 to 34%). People with intellectual disabilities (*n* = 853) received 5.4 against 1.6 repeat prescriptions per year compared to those without intellectual disabilities (*n* = 4240) (χ^2 *P*<0.001).

DISCUSSION

People with intellectual disabilities presented a variety of health problems at a rate of 1.7 times more than those without intellectual disabilities. These problems included: epilepsy, dermatological complaints and mental conditions in particular. Morbidity patterns resemble those found in previous studies.[3]

Seventy-five per cent of people with intellectual disabilities received medication, compared to 59% in the control group. The larger number of prescriptions can be explained by the higher consultation rate, since people with intellectual disabilities had more contacts without any prescriptions. Therefore, GPs probably do not prescribe more for people with intellectual disabilities than for people without these disabilities. Medication types per diagnosis did not differ between both groups. People with intellectual disabilities received almost four times as many repeat prescriptions as the control group, particularly chronic psychiatric medication and anticonvulsants.

Focusing on contact frequency and diagnoses provided detailed information on morbidity among people with intellectual disabilities who visit a GP. Prescription rates and the resulting extra workload for GPs however, has not been studied before.

People with intellectual disabilities were selected in three, non-standardised, ways. The 12 practices that found no people with intellectual disabilities in 2001, may provide different data in 2006, given the continuous movement of people with intellectual disabilities into community facilities. Consensus on identifying people with intellectual disabilities in general practices is recommended for appropriate research.

Since data were derived from the Dutch National Survey of General Practice,[6] the external validity of results should be sufficient. Matching procedures strengthened comparability between both groups.

Communication barriers between people with intellectual disabilities and GPs often impede the process of diagnosis,[8] essential in reporting health problems and subsequently for prescribing. Verbatim studies of history taking could provide more insight into the way such barriers interfere with contacts between GPs and people with intellectual disabilities. Further development of training on health problems of people with intellectual disabilities is recommended.

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Ethics committee

Not applicable

Competing interests

The authors have stated that there are none.

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