Primary care doctors' management of low back pain patients – ten years after

BACKGROUND In 2001, we undertook a survey among general practitioners in Aust-Agder county to describe how patients with low back pain were examined and treated by primary doctors. We have now conducted a new survey among the regular GPs in the same county.

MATERIAL AND METHOD All regular GPs in Aust-Agder county received an invitation to participate in the study. The doctors were asked to continuously register over two weeks all patients who visited the doctor and gave back pain as their main reason, and to describe all measures that were implemented after the consultation.

RESULTS Of the 87 practising regular GPs, 53 % responded. In total, the doctors had received 5 822 patients during the period of study, whereof 3 % had reported back pain. The examination and treatment provided to these patients were on the whole unchanged since 2001. Only 41 % of the doctors reported to cooperate regularly with a physiotherapist, and 11 % with a chiropractor, a reduction from 73 % and 35 % respectively in 2001. The doctors reported comorbidity in 37 % of the patients. Patients were referred for diagnostic imaging with equal frequency as in 2001, although skeletal x-ray and CT had mainly been replaced by MRI.

INTERPRETATION The doctors in this sample treat patients with low back pain in approximately the same way as the doctors in the 2001 survey, but cooperate less frequently with physiotherapists and chiropractors, and MRI has become the primary alternative when diagnostic imaging is requisitioned.

Erik L. Werner
loewern@online.no
Research Unit for General Practice in Bergen, Uni Health, Uni Research
and
Eydehavn GP Practice
Arendal

Camilla Ihlebæk
Health UMB, IHA
Norwegian University of Life Sciences
and
Uni Health, Uni Research

MAIN MESSAGE

The general practitioners in this sample generally treated their patients with low back pain in the same way as the doctors in the sample from ten years ago.

The same number of imaging diagnostics were requisitioned as ten years earlier, but now with a preference for MRI.

The GPs in this sample cooperate less frequently with physiotherapists and chiropractors for patients with low back pain than in the sample from ten years earlier.

«Back pain» is a condition that still «affects the most and costs the most» (1), and one-third of the population reports to have had back pain during the previous few weeks (2). Spinal problems account for 11 % of sickness absence, are the cause of 9 % of disability allowances (3), and have been described as the most costly non-fatal single condition in Norway (1).

From being regarded as a condition requiring quiet and rest, acute back pain is now considered to be normally self-healing within a few weeks, and it is recommended to maintain normal activity (4). No active treatment has been proven to affect the natural course of acute non-specific low back pain (LBP) (5, 6), while exercise combined with a cognitive behavioural approach is recommended for long-term back pain (7).

In 2001 a survey was undertaken among GPs in Aust-Agder county. We described how patients with LBP were assessed and treated by GPs (8). National guidelines for diagnostics and treatment of LBP were issued in 2002 and updated in 2007 (9, 7). In the period 2002–2005 Aust-Agder was one of two intervention counties in the media campaign for good attitudes to back pain, The Active Back campaign (2). We have now undertaken a new survey among GPs in this county. The purpose of this study was to ascertain the degree to which doctors in Aust-Agder county had changed their practice after ten years with the spotlight on the patient group with «back pain».

Material and method

The procedure and survey tool were the same as in 2001 (8). We obtained the names and addresses of all GPs in Aust-Agder county from the Norwegian Medical Association's register of addresses. In January 2011 they received a letter with information about the study together with 25 patient registration forms. Similar forms were also sent to the casualty department in Arendal. The doctors were asked to keep a register of all patients who quoted LBP as their main reason for visiting the doctor in the period from 24 January –?6 February. Each patient was to be registered anonymously on their own form. The Western Regional Ethical Committee assessed that the project did not require approval.

The registration form consisted of questions on background information, information on the spinal problem and any comorbidity, as well as measures suggested/undertaken following the consultation. At the end of the registration period all the forms were to be returned in a pre-paid envelope.

The registration forms were received and processed for statistical analysis at Uni Health, Stress, Health and Rehabilitation Unit in Bergen. SPSS version 18 was used for the analysis.

Results

Of 103 doctors invited, five were not practising in Aust-Agder county, three had retired, two were on leave of absence, one was on

sick-leave and five declined without giving any particular reason. Of the 87 possible respondents, 46 (52.9 %) replied. Four of these had not had patients with LBP in the relevant period, while the remaining 42 GPs had each had 1–11 LBP patients (average 3.5 (SD 2.56)). Altogether, the 46 GPs had seen a total of 5 822 patients in the study period, and of these there were 161 patients with LBP (2.8 %). The material also includes six patients from the casualty department, so the total number of patients is 167.

Only 19 of the doctors (4.3 %) cooperated regularly with a physiotherapist, and five (10.9 %) cooperated with a chiropractor. In 2001 these figures were 35 (72.9 %) and 17 (35.4 %) respectively. In 88 of the GPs' patients with LBP (52.7 %), the problems had lasted for over 12 weeks.

Altogether 62 patients (37.1 %) had comorbidity. Low mood/depression was reported in 35 (21.0 %), fatigue in 22 (13.2 %) and neck problems in 21 (12.6 %), while 14 (8.4 %) reported concurrent irritable bowel syndrome (IBS). For three of the patients all four concomitant illnesses were presented, while five patients had three of these. There was no obvious connection between the prevalence of this type of comorbidity and the duration of the back pain.

Of the 79 with acute back pain (< 12 weeks), 35 (44.3 %) were referred for imaging diagnostics. This proportion was 23.2 % in 2001. Of these, 23 (29.1 %) were referred for MRI in 2011, none in 2001. The frequency of referral to the specialist health service and the percentage who received pharmacological treatment were unchanged from previously, but fewer were recommended for treatment by physiotherapists and chiropractors in 2011 than in 2001 (Table 1). There were also slightly fewer patients on sick leave in 2011 than in 2001, but more without sick leave rights (Table 1).

Table 1 Examination, assessment, treatment and sick notes for patients in 2001 and 2011

	2001		2011	
	Number	(%)	Number	(%)
Patients who were clinically examined	177	(80.8)	120	(71.9)
Patients referred for imaging diagnostics	88	(40.0)	65	(38.9)
X-ray LS spine	59	(26.9)	11	(6.6)
X-ray pelvis	12	(5.5)	1	(0.6)
CT LS spine	50	(22.8)	8	(4.8)
MRI LS spine	2	(0.9)	46	(27.5)
Patients referred for second-line service	67	(31.5)	50	(30.9)
To a physiotherapist	70	(32.0)	39	(24.8)
To a chiropractor	24	(10.9)	5	(3.3)
Patients prescribed drugs	173	(78.6)	130	(77.8)
NSAIDs	114	(51.8)	90	(53.9)
Mild analgesics	49	(22.3)	59	(35.3)
Moderately strong analgesics	59	(26.8)	48	(28.7)
Strong analgesics	4	(1.8)	5	(3.0)
Hypnotics	5	(2.3)	5	(3.0)
Neuroleptics	5	(2.3)	6	(3.6)
Other	21	(9.5)	9	(5.4)
Patients on sick leave	135	(62.2)	84	(51.5)
Patients receiving disability allowance	12	(7.5)	14	(11.3)
Patients without the right to sick pay	20	(12.4)	22	(17.7)

Discussion

The study indicates that in 2011, GPs generally treated their patients with LBP in the same way as the doctors in 2001. The patients were as frequently referred for diagnostic imaging, but MRI was the first choice, also for acute back pain. It appears that the doctors treated LBP patients with milder analgesics than before, in line with the guidelines. They made fewer referrals to physiotherapists and chiropractors, and fewer reported to have a regular cooperation with these groups of professionals.

The clinical guidelines and the general societal debate about «back pain» in the past few years have particularly highlighted an assumed overuse of imaging diagnostics and sick notes (10). The guidelines recommend MRI for «persistent pain with no sign of improvement over 4–6 weeks» (7). The time frame of 4–6 weeks is given because this is the period in which an unspecific LBP normally recovers spontaneously (11). Referral for MRI in the acute phase may be in line with the guidelines if there is no sign of improvement in the patient. However, we saw no significant differences in function or pain level in 2011 compared to 2001 (not shown in the results section). Apart from being an unnecessary use of resources, referral for imaging diagnostics has proven to actually prolong illness (12), most often with no impact on the treatment (13, 14).

More than half of the GPs' LBP patients were chronic patients with long courses of illness, and one-third had comorbidities. It has previously been reported that patients with LBP who visit their GP have a higher degree of comorbidity and reduced function than those treated by other professionals for LBP (15, 16). Depression is particularly common and reported in one- third of all patients with long-lasting back pain (17).

The clinical guidelines also emphasise that patients with LBP should maintain normal activity and they recommend an early return to work. Both the proportion of pa-

tients who were already on sick leave and the proportion who were put on sick leave for the first time had decreased in 2011 compared with 2001. In Norway there has been a decrease in the past 10–15 years in sickness absence caused by LBP (3).

Only 53 % of the doctors responded to our request. We therefore do not know how representative these responses are for GPs in Aust-Agder county and in the country as a whole. Neither do we know how large a proportion of those who responded in 2011 also replied to the survey in 2001, and cannot compare the replies given by individual doctors at the two different points in time. The findings are, however, in line with Norwegian and international literature in most areas, and should therefore be assumed to be valid.

Conclusion

The GPs in this sample treated their patients with spinal problems in approximately the same way as the doctors did ten years earlier. The greatest differences are that MRI appears to have replaced skeletal x-ray in imaging diagnostics and that the doctors report to cooperate with physiotherapists and chiropractors less frequently than before. It was reported that approximately one-third of patients with LBP had concomitant comorbidity.

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Erik L. Werner (born 1957)
is a medical doctor and a specialist in general practice. He is a GP and municipal Senior Consultant in Arendal and holds a part-time position as Senior Researcher in the Research Unit for General Practice, Uni Health in Bergen. The author has completed the ICMJE form and declares no conflicts of interest.

Camilla Ihlebæk (born 1967)
is an MSc. and PhD. She is a Professor of Community Medicine at the Norwegian University of Life Sciences in Ås.
The author has completed the ICMJE form and declares no conflicts of interest.

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