Outcome of low back pain in general practice: a prospective study

British Medical Journal May 2, 1998 Vol. 316, pp. 1356-1359

Peter R Croft, Gary J Macfarlane, Ann C Papageorgiou, Elaine Thomas, Alan J Silman

FROM ABSTRACT

Objectives:

To investigate the claim that 90% of episodes of low back pain that present to general practice have resolved within one month.

Design:

Prospective study of all adults consulting in general practice because of low back pain over 12 months with follow up at 1 week, 3 months, and 12 months after consultation.

Setting:

Two general practices in south Manchester.

Subjects:

490 subjects (203 men, 287 women) aged 18-75 years.

Main outcome measures:

Proportion of patients who have ceased to consult with low back pain after 3 months; proportion of patients who are free of pain and back related disability at 3 and 12 months.

Results:

Annual cumulative consultation rate among adults in the practices was 6.4%.

Of the 463 patients who consulted with a new episode of low back pain, 275 (59%) had only a single consultation, and 150 (32%) had repeat consultations confined to the 3 months after initial consultation.

However, of those interviewed at 3 and 12 months follow up, only 39/188 (21%) and 42/170 (25%) respectively had completely recovered in terms of pain and disability.

Conclusions:

The results are consistent with the interpretation that 90% of patients with low back pain in primary care will have stopped consulting with symptoms within three months.

However most will still be experiencing low back pain and related disability one year after consultation.

KEY MESSAGES FROM AUTHORS:

- 1) It is widely believed that 90% of episodes of low back pain seen in general practice resolve within one month.
- 2) In a large population based study we examined the outcome of episodes of low back pain in general practice with respect to both consultation behaviour and self reported pain and disability.
- 3) While 90% of subjects consulting general practice with low back pain ceased to consult about the symptoms within three months, most still had substantial low back pain and related disability.
- 4) Only 25% of the patients who consulted about low back pain had fully recovered 12 months later.

THESE AUTHORS ALSO NOTE:

During any 12-month period, 7% of the adult population will consult a doctor for low back pain. "It is generally believed that most of these episodes will be short lived and that '80-90% of attacks of low back pain recover in about six weeks, irrespective of the administration or type of treatment."

Studies show that 38% of adults have a significant episode of low back pain in one year, and a third of these experienced the symptom for longer than four weeks. Consequently, it is unlikely that most patients with an episode of low back pain "are completely better within a month."

Therefore, these authors "investigated the claim that 90% of episodes [of low back pain] resolve within a month." "The two outcomes evaluated were the proportion of patients who ceased to consult about the problem three months later and the proportion of patients who were free of pain and back related disability after three and 12 months."

The patients were classified into three groups according to the level of pain and disability:

- 1) No pain and no disability.
- 2) Pain or disability (but not both).
- 3) Both pain and disability.

RESULTS

This study looked at 463 patients with a new episode of low back pain, showing:

- 1) The highest rates of low back pain episodes are between ages 45-59.
- 2) 59% of the patients with a new episode of low back pain did not go back to the doctor after the first visit.
- 3) An additional 32% of the patients did not go back to the doctor after 3 months. This means that a total of 91% (59% + 32%) of the patients with a new episode of low back pain did not return to the doctor after 3 months of a new episode of low back pain.
- 4) Only 8% of the patients with a new episode of low back pain had "consultations or sickness certification related to low back pain that extended for more than three months after the index consultation."
- 5) Patients over age 30 were three times more likely to have repeat consultations than younger patients.
- 6) Of the patients who went through the pain and disability interview, only 21% had recovered by three months, and only 25% had recovered by 12 months. [This means that 1 year after experiencing a new episode of low back pain, 75% had ongoing pain and disability a year later.]
- 7) Of the patients with "both pain and disability initially, the proportion who had fully recovered by 12 months was much lower" at only 18%.

DISCUSSION

"By three months after the [initial] consultation with their general practitioner, only a minority of patients with low back pain had recovered." [Important]

"There was little increase in the proportion who reported recovery by 12 months, emphasizing the recurrent and persistent nature of this [low back pain] problem." [Important]

However most patients with low back pain did not return to their doctor about their pain within three months of their initial consultation, and only 8% continued to consult for more than three months.

"The findings of our interview study are in sharp contrast to the frequently repeated assumption that 90% of episodes of low back pain seen in primary care will have resolved within a month." [Very Important]

"However, the results of our consultation figures are consistent with the interpretation that 90% of patients presenting in primary care with an episode of low back pain will have stopped consulting about this problem within three months of their initial visit. The original article to which the statement of '90% recovery' can be traced drew on a record review in one general practice." [Dixon AStJ. Progress and problems in back pain research. Rheumatol Rehabil 1973; 12(4): 165-175.]

"The inference that the patients have completely recovered [because they have stopped going to the doctor] is clearly not supported by our data. **[Very Important]** General practice records cannot be used to draw such conclusions."

CONCLUSIONS

"Our study has shown that consulting a doctor is not a direct measure of the presence of pain and disability." [Important]

Many patients seeing their general practitioner for the first time with an episode of back pain will have had their symptom for a month or more. Although their symptoms will improve, most will still have some pain or disability 12 months later, but they will not be consulting their doctor about it. **[Very Important]**

"We should stop characterising low back pain in terms of a multiplicity of acute problems, most of which get better, and a small number of chronic long term problems. Low back pain should be viewed as a chronic problem with an untidy pattern of grumbling symptoms and periods of relative freedom from pain and disability interspersed with acute episodes, exacerbations, and recurrences. This takes account of two consistent observations about low back pain: firstly, a previous episode of low back pain is the strongest risk factor for a new episode, and, secondly, by the age of 30 years almost half the population will have experienced a substantive episode of low back pain. These figures simply do not fit with claims that 90% of episodes of low back pain end in complete recovery."

KEY POINTS FROM DAN MURPHY:

- 1) This prospective study of 463 patients with an acute episode of low back pain agrees with numerous other studies that indicate that approximately 90% of such patients will stop consulting their doctor about their back within three months. In this study the number was actually 92%.
- 2) However, this study is adamant that NOT seeing a doctor for a back problem does NOT mean that the back problem has resolved. This study showed that 75% of the patients with a new episode of low back pain have continued pain and disability a year later, even though most are not continuing to go to the doctor.
- 3) The belief that "90% of episodes of low back pain seen in general practice resolve within one month" is false, and based primarily upon one flawed study published in 1973.

- 4) It is generally believed that most low back pain episodes will be "short lived and that '80-90% of attacks of low back pain recover in about six weeks, irrespective of the administration or type of treatment." This belief is untrue, false.
- 5) 38% of adults have a significant episode of low back pain in one year.
- 6) The highest rates of low back pain episodes are between ages 45-59.
- 7) The presence of both pain and disability initially has prognostic value, because such patients had the worse outcomes; 82% of such patients had ongoing pain and disability 1 year later.
- 8) "By three months after the index consultation with their general practitioner, only a minority of patients with low back pain had recovered." [Important]
- 9) "There was little increase in the proportion who reported recovery by 12 months, emphasizing the recurrent and persistent nature of this [low back pain] problem." [Important]
- 10) "Our study has shown that consulting a doctor is not a direct measure of the presence of pain and disability." [Important]
- 11) Many patients seeing their general practitioner for the first time in an episode of back pain will still have pain or disability 12 months later but not be consulting their doctor about it. **[Very Important]**
- 12) Low back pain should be viewed as a chronic problem with an untidy pattern of grumbling symptoms and periods of relative freedom from pain and disability interspersed with acute episodes, exacerbations, and recurrences.
- 13) 90% of episodes of low back pain DO NOT end in complete recovery within a few months.