Factors affecting employment after whiplash injury


Gozzard, C.; Bannister, G.; Langkamer, G.; Khan, S.; Gargan, M.; Foy, C.

FROM ABSTRACT

Of 586 employed patients with a whiplash injury 40 (7%) did not return to work.

The risk was increased by three times in heavy manual workers, two and a half times in patients with prior psychological symptoms and doubled for each increase of grade of disability.

The length of time off work doubled in patients with a psychological history and trebled for each increase in grade of disability.

The self-employed were half as likely to take time off work, but recovered significantly more slowly than employees.

THESE AUTHORS ALSO NOTE:

These patient’s grade of disability was evaluated according to Gargan and Bannister in 1990 (Long-term prognosis of soft-tissue injuries of the neck, The Journal of Bone and Joint Surgery, Vol. 72-B, No. 5, September 1990, 901-3):

(A) Free from discomfort and complete recovery.
(B) Mild symptoms which do not interfere with work or leisure.
(C) Intrusive symptoms which handicapped work and leisure and causes them to seek relief by frequent intermittent analgesia, orthoses, or physiotherapy.
(D) Severe symptoms and problems, had lost their jobs, relied continually on orthoses or analgesics, and frequent medical consultations.

In the UK in 1988, the mean time off work after a whiplash injury was 39 days. This disability was related to:
(1) age
(2) gender
(3) previous psychological disease
(4) the direction of the impact
(5) the presence of neurological symptoms or signs

The aim of this study was to examine whether time off work and the ability to return to full working activity were related to social class, degree of manual activity, the employed status and the grade of disability.
The occupation of each patient was graded as clerical, light manual, or heavy manual.

RESULTS

Of the 586 who were in work at the time of the injury (262 men, 324 women), 546 (241 men, 305 women) had resumed their occupation and 40 (21 men, 19 women) had not returned to work.

“Neither age, gender nor direction of impact was associated with time off work or its duration.”

“There was a trend to a slower return to full work in women.”

Of those who did not return to work, 10 (25%) had had a previous psychological illness or anxiety.

Of those who did return to work, 59 (11%) had had a previous psychological illness or anxiety.

Women with a history of psychological illness took significantly longer off work (median, 21 days) than those without a history of psychological illness (median, 8 days). There was no similar effect in men.

“Psychological vulnerability almost doubled the time off work.”

“There was no significant effect of social class on time off work or return to full activity.”

“Of the heavy manual workers, 6 (13.3%) did not return to work compared with 17 (9.2%) of light manual workers and 17 (4.8%) of clerical workers."

“Manual workers took significantly longer time off work than clerical workers, but there was no significant difference in return to full activity.”

“Of the 546 patients who returned to work, 93 were self-employed and they were half as likely to take time off work as employees.”

Self-employed workers took significantly longer to return to full activity (median 153 days) than employees (median 30).

Of patients who did not return to work, 24 (60%) had neurological symptoms or signs.
The presence of neurological symptoms or signs was associated with a longer time off work (median, 14 days) in women and a return to full activity (median, 160 days) in both men and women.

All patients who did not return to work were Gargan and Bannister grades C and D, which means that time off work and to return to full activity were associated with increasing severity of disability.

“The likelihood of taking time off work doubled and its duration trebled for each rise in grade of disability.”

<table>
<thead>
<tr>
<th>GRADE</th>
<th>MEDIAN DAYS OFF WORK</th>
<th>MEDIAN DAYS RETURN TO FULL ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>C</td>
<td>18</td>
<td>253</td>
</tr>
<tr>
<td>D</td>
<td>336</td>
<td>456</td>
</tr>
</tbody>
</table>

DISCUSSION

“Many patients with a whiplash injury do not complain of symptoms immediately after the accident, but develop them later.”

“Road-traffic accidents are known to cause psychological symptoms, which are a component of the response to a whiplash injury,” and the chronic pain suffered by patients after a whiplash injury may be due to psychological factors.

This study confirms that patients with known psychological illness are susceptible to the psychological consequences of road-traffic accidents which contribute to delayed return to work.

“It has been suggested that the symptoms of a whiplash injury are purely psychological and biosocial. If this were the case, physical demands would have no effect on work after injury. Our study indicates, however, that the greater the physical component, the greater the time off work.”

“The self-employed do not earn if they do not work. Having returned to work their income is dependent on their output. If the time off work after a whiplash injury was purely a function of motivation, the self-employed would be expected both to return to work and full activity sooner than employees. In fact, having returned early they seem to have greater difficulty in regaining full activity, suggesting that other physical or psychological factors are involved.”

In this study, social class exerted no effect on time off work or time to recovery of functional employment.
In this study, direction of impact was not a factor of prognostic importance in relation to final recovery from whiplash injury.

“Several authors have associated the presence of neurological symptoms or signs after whiplash injury with a poor prognosis.”

In this study, “patients with neurological symptoms or signs took significantly longer time off work, and return to full working activity was more than four months longer.”

This study confirms that the number of working days lost after a whiplash injury increased with increasing severity of the injury.

“The Gargan and Bannister grade, which reflects the severity of symptoms, was the strongest predictor of the likelihood of taking time off work.”

“In summary, increasing severity of disability, employed (rather than self-employed) status, heavy manual occupation and a previous history of psychological disease are the factors associated with disruption of work after whiplash injury.

“No benefits in any form have been received or will be received from a commercial party related directly or indirectly to the subject of this article.”

FROM DAN MURPHY

(1) Going back to work more quickly, as the self-employed people did in this study, resulted in a significant longer time to return to full usual activity.

(2) Women are slower returning to full work than men.

(3) The presence of neurological symptoms or signs was results in a longer time off work and a longer time in return to full activity.

(4) Whiplash causes psychological symptoms and the chronic pain suffered by patients after a whiplash injury may be due to psychological factors, especially in patients with known psychological illness.

(5) Heavier physical work is associated with a poor prognosis for recovery.

(6) Whiplash injury symptoms are not purely psychological and biosocial.