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Early Intervention for the Management of Acute Low Back Pain

A Single-Blind Randomized Controlled Trial of Biopsychosocial Education, Manual Therapy, and Exercise

Benedict M. Wand, BAppSc, GradDip(ExSpSc), MAppSc, PhD,* Christien Bird, MSc, MCSP,† James H. McAuley, BSc, PgDip, PhD,‡ Caroline J. Doré, BSc,§ Maureen MacDowell, MCSP,† and Professor Lorraine H. De Souza¶

Study Design. A single blind randomized controlled trial comparing two models of care for patients with acute simple low back pain.

Objectives. To compare two research-based models of care for acute low back pain and investigate the effect of the timing of physical intervention.

Summary of Background Data. National guidelines offer conflicting information on the delivery of physical treatment in the management of acute low back pain. The guidelines suggest two different models of care. Direct comparisons between these models are lacking in the literature. The present study aims to compare these approaches to the management of acute low back pain.

Methods. Among 804 referred patients, 102 subjects met the specific admission criteria and were randomly assigned to an "assess/advise/treat" group or an "assess/advise/wait" group. The intervention consisted of biopsychosocial education, manual therapy, and exercise. Assessment of short-term outcome enables comparison to be made between intervention and advice to stay active. Assessment of long-term outcome enables comparison to be made between early and late intervention. Study outcomes of reported pain (Visual Analogue Scale), functional disability (the Roland and Morris Disability Questionnaire), mood (Modified Zung Self Rated Depression Score, Modified Somatic Perception Questionnaire, State-Trait Anxiety Inventory), general health (Euroqol), and quality of life (Short Form 36) were assessed at baseline, 6 weeks, 3 months, and 6 months.

Results. At 6 weeks, the assess/advise/treat group demonstrated greater improvements in disability, mood, general health, and quality of life than patients in the assess/advise/wait group ($P < 0.05$). Disability and pain were not significantly different between the groups at long-term follow up ($P > 0.05$). However, mood, general health, and quality of life remained significantly better in the assess/advise/treat group ($P < 0.05$).

Conclusions. At short-term, intervention is more effective than advice on staying active, leading to more rapid improvement in function, mood, quality of life, and general health. The timing of intervention affects the development of psychosocial features. If treatment is provided later, the same psychosocial benefits are not achieved. Therefore, an assess/advise/treat model of care seems to offer better outcomes than an assess/advise/wait model of care.

Key words: acute low back pain, disability, manual therapy, exercise, biopsychosocial education, early intervention, psychosocial factors. **Spine 2004;29:2350–2356**

Evidence-based guidelines for the management of acute low back pain (ALBP) have been formulated by the Health Authorities of a number of countries.[1] Clear evidence has emerged that "advice on staying active" and appropriate drug therapies are effective interventions for ALBP and that bed rest and general back exercises are not.[2–5]

A major discrepancy between guidelines is in the use of physical therapy, particularly the timing of physical intervention. Based on the inconclusive evidence for physical therapy, the potential negative effect of treatment dependency, the cost, and the sometimes passive nature of the treatment, the Dutch and Australian authorities propose a "wait and see" approach during the first 6 weeks.[1,6] More recent reviews have further strengthened this approach.[3,5] Alternatively, the U.K. Clinical Standards Advisory Committee (CSAG) report,[7] the American guidelines,[2] and the more recent U.K. guidelines[4] recommend various forms of early physical intervention.

The discrepancies between these guidelines represent two different models of care for ALBP. In one system, patients are assessed and advised to stay active and active treatment is commenced early (assess/advise/treat). In the alternative model, active treatment is delayed (assess/advise/wait).

Direct comparisons between these two models are lacking in the literature. The present study aims to compare these two approaches to the management of ALBP.

From the *School of Physiotherapy, University of Notre Dame, Fremantle, WA, Australia; †Central Middlesex Hospital Trust, London, UK; ‡Spinal Research Group, School of Physiotherapy, University of Sydney, NSW Australia; §MRC Clinical Trials Unit, London, UK; and ¶Department of Health Studies, Brunel University, Middlesex, UK.
All the authors took part in the design and analysis of the study and jointly wrote the paper.
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Address correspondence to Christien Bird, Sc, MCSP, White Hart Lane Therapy Centre, 10 White Hart Lane, Barnes, London SW13 OPY, UK; E-mail: Christien.Bird@btopenworld.com

The present study addressed three major research questions:

1. Do patients treated with an active intervention program differ significantly at 6 weeks in outcome from patients who have received advice on staying active only?

2. At long-term follow-up, do patients who received treatment early differ significantly in outcome from patients who were asked to wait 6 weeks for their treatment?

3. Are there any meaningful differences in outcome between an assess/advise/treat model and an assess/advise/wait model of care for ALBP?

■ Materials and Methods

Design. A randomized, controlled, single-blind trial, with the assessor independent and blind to the patient group allocation, was conducted in the Physiotherapy Outpatients Department at Central Middlesex Hospital, London.

Support was provided by the Department of Health Studies at Brunel University. Ethics approval was obtained from the local Health Authority Research Ethics Committee and informed consent was obtained from all study participants.

Recruitment. Subjects were recruited from ALBP patients referred to the Physiotherapy Department by either their General Practitioners or the Hospital Accident and Emergency Department. Patients were screened for eligibility within the Physiotherapy Department based on referral details and telephone screening. All eligible patients were contacted and invited to participate. The first patient was recruited on the March 31, 1998 and the last patient on the December 21, 1999.

Procedure. Following completion of their baseline questionnaires, study participants underwent a full physical examination by a physiotherapist to determine final eligibility for the study.

Each patient entering the trial was randomized to the assess/advise/treat or assess/advise/wait group using random number tables with odd/even number allocation to group and drawn by an independent person not involved in the study. Both groups underwent a physical examination and received information and advice on staying active[4] and a copy of the *Back Book*.[8] The assess/advise/wait group patients were given an appointment to begin physiotherapy treatment at 6 weeks from baseline. Patients in the assess/advise/treat group received immediate physiotherapy treatment. All patients were followed by postal assessment at 6 weeks, 3 months, and 6 months from baseline. Patients who failed to return their questionnaires within 2 weeks were sent a second set. After a further 2 weeks, patients were contacted by phone and encouraged to complete and return their questionnaires.

Outcome Assessment. The primary outcome measure was the Roland and Morris Disability Questionnaire (RMDQ).[9] Secondary outcome measures were: Visual Analogue Scale (VAS),Usual Pain Intensity;[10] 6 Items from the Spielberger State-trait Anxiety Inventory (STAIS);[11] Modified Zung Self Rated Depression Score (MZSRDS);[12] Modified Somatic Perception Questionnaire (MSPQ);[13] EuroQol health transition and health thermometer;[14] and the Short Form 36 (SF-36).[15]

Clinical Interventions. Investigations of physiotherapy have most often focused on individual elements of physiotherapy care and reflect neither the reality of clinical practice nor the philosophical framework of physiotherapy. The current study adopted a pragmatic, evidence-based approach to physiotherapy treatment. Patients were assessed using a locally developed biopsychosocial protocol. From the biopsychosocial assessment, a goal-directed treatment plan was formulated. The treatment protocol was explained to the subjects and short- and long-term functional goals were agreed. All sections of the assessment were documented as well as the clinical reasoning process. Manual therapy,[16] rehabilitative exercises,[17–26] advice on staying active[1,4] and education[8,27] were the major interventions used. Electrotherapy, traction, and general back exercises were not included in the treatment model.[4]

The manual therapy intervention followed the regimen described by Maitland *et al*[16] In this approach, both low-velocity joint mobilization techniques and high-velocity manipulation techniques are used. In keeping with normal clinical practice, the choice of initial and subsequent manual therapy techniques was at the treating therapist's discretion. Treatment decisions were based on the initial and progressive assessment of the patient's joint dysfunction. Patients could receive a combination of low- and high-velocity techniques as indicated as best clinical practice within the Maitland *et al* regimen.[16]

The exercise therapy intervention could include exercises designed to: affect pain distribution and intensity;[22,26] improve spinal motion, alignment, and posture;[17,24,25] enhance spinal stability;[23,24] or improve cardiovascular fitness and lower limb and back strength.[18,27] Therapists were encouraged to ensure that all exercise treatment was delivered in a rehabilitative framework that attempted to increase the feeling of control over pain and increase confidence in the ability to carry out normal activities. All exercises were delivered on an individual basis. As with the manual therapy, the choice of initial and subsequent exercise treatment was at the discretion of the treating therapist.

The educational intervention was based on the information provided in *The Back Book*.[8] The education program attempted to explain the nature of the patients symptoms, disavow the structural basis for simple low back pain, emphasize the self-limiting nature and favorable outcome of the condition, encourage graded return to activity, emphasize the therapeutic benefit of movement and participation in normal work and leisure activities, decrease the focus on pain, explain the principles of sensitization if appropriate, and make clear that hurt does not equal harm.

All of the recently developed clinical guidelines recommend that assessment should address psychologic, occupational, and socioeconomic factors.[1] Evidence indicates that these are more important risk factors for the development of chronicity than biomedical symptoms and signs.[28] Every effort was made to ensure that psychosocial assessment and management strategies were integrated into the physiotherapy treatment model for this study.[27]

Advice to Stay Active. Evidence suggests that advice on staying active is an effective treatment strategy for simple low back pain, leading to faster recovery and less chronic disability.[4] Encouraging patients with simple low back pain to stay active and continue normal activities is included as first-line treatment in most national guidelines.[1] However, whether advice on stay-

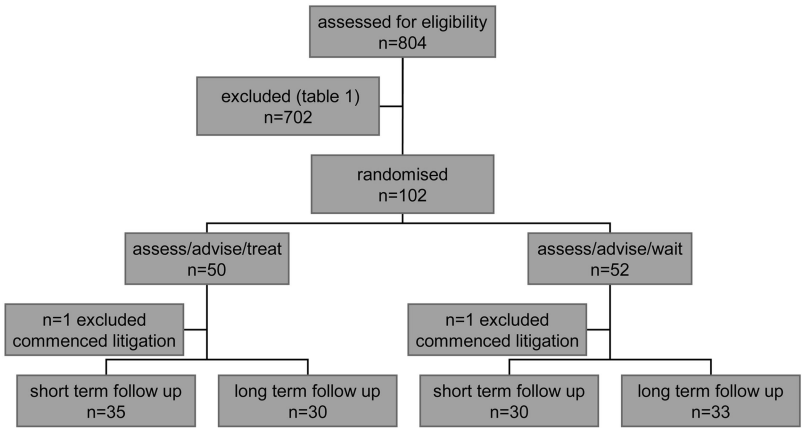

Figure 1. Recruitment and follow-up of study participants.

ing active is the optimal management for acute low back pain is, at present, unclear. Direct comparisons between advice on staying active and more active approaches to managing acute low back pain are lacking in the literature. There is some evidence from studies on subacute low back pain that more intensive treatments produce better outcomes.[29] Furthermore, there would seem to be some discrepancy between the evidence base and the clinical guidelines as far as advice on staying active is concerned. The majority of studies included in the reviews on advice on staying active include more than simply advice.[21,30] This is not always explicit when reviewing the algorithms of care in management guidelines.[1] It is important that more studies investigate advice on staying active in the way that it has been interpreted by clinical guidelines and applied in everyday practice, that is, as a one-off intervention.

Sample Size. Prospective sample size was calculated using the method of Altman.[31] Assuming a standard deviation of 6 points[32] on the primary outcome of the RMDQ,[9] a clinically significant difference of 4 points could be detected with two groups of n = 49 subjects (alpha = 0.05, power = 0.90).

Statistical Methods. The statistical analysis was performed using Stata Release 6 statistical software. Seven baseline covariates (RMDQ,[9] VAS usual pain intensity,[10] MZSRDS,[12] MSPQ,[13] STAIS,[11] QTF classification,[33] acute low back pain screening questionnaire[34]) were used to adjust for baseline characteristics known to influence outcome and the potential confounding effects of missing data at follow-up. Regression models investigated whether there was any interaction between group and follow-up responder status for each baseline characteristic.

After adjustments for baseline covariates, regression coefficients and their associated *P* values were calculated for each outcome variable at 6 weeks and at long-term follow-up. The significance level was set at 0.05. Long-term follow-up estimates were derived from all available data at 3 months and 6 months. The regression models used robust sandwich estimates of the standard errors of the regression coefficients to take account of any correlation between the repeated assessments on the same subject. All statistical analyses were based on an intention-to-treat methodology.

Fisher's exact tests (categorical variables) and *t* tests (continuous variables) were used to compare the baseline characteristics of follow-up responders (those who did and did not complete the follow-up assessments). Sensitivity analyses were performed by repeating the regression analyses using last value carried forward for those patients who did not respond to follow-up assessments.

■ Results

Sample Derivation

A total of 804 patients were considered for inclusion in the study. Following the application of the eligibility criteria, 102 (13%) patients were randomized to either the assess/advise/treat (n = 50) or the assess/advise/wait (n = 52) group (Figure 1). One patient from each group was excluded after randomization because of commencing litigation. Reasons for exclusion are presented in Table 1.

Response Rate

A total of 65 patients (64%) at 6 weeks and 63 patients (62%) at long-term follow-up returned their assessments. There was no significant difference between the groups in the proportion of patients who returned questionnaires at either 6 week ($\chi^2 = 1.75$, $P = 0.19$) or long-term ($\chi^2 = 0.004$, $P = 0.95$) follow-up.

Baseline Characteristics

Following randomization, 6 patients failed to complete their baseline assessments and 2 patients were excluded

Table 1. Reasons for Exclusion From Study

Reason for Exclusion	n	%
LBP >6 weeks	368	52.4
Outside age range (20–55 yr)	168	23.9
Neurologic signs	14	2.0
Significant trauma	3	0.4
Other physically disabling condition	19	2.7
Already receiving physical therapy	15	2.1
Other spinal condition	7	1.0
Pregnancy/within 3 months postpartum	11	1.6
Inflammatory condition	2	0.3
Psychiatric illness	1	0.1
Litigation	6	0.9
Did not attend first appointment	52	7.4
Unable to participate	29	4.1
Refused to participate	7	1.0
Total exclusions	702	100

Values are number and percentage of total exclusions.

Table 2. Baseline Characteristics of Study Participants, by Group and for the Total Sample

	Assess/Advise/Treat Group (n = 43)		Assess/Advise/Wait Group (n = 51)		Total Group (n = 94)	
	n	[mean (SD)]	n	[mean (SD)]	n	[mean (SD)]
Sex (female)	19		28		47	
Age (yr)		34 (9.0)		35 (7.9)		35 (8.5)
Body mass index		26 (3.7)		25 (5.0)		26 (4.4)
Not working due to LBP	21		17		38	
QTF classification		1.8 (0.9)		1.5 (0.8)		1.7 (0.8)
ALBP screening questionnaire		95 (23.1)		89 (32.4)		92 (28.6)
RMDQ		12.7 (6.0)		10.1 (6.2)		11.3 (6.2)
VAS (usual pain intensity)		5.8 (2.1)		5.2 (2.4)		5.4 (2.3)
ZSRDS		19.8 (9.7)		23.7 (11.4)		21.9 (10.8)
MSPQ		6.6 (4.8)		8.0 (5.4)		7.4 (5.2)
STAIS		12.6 (3.4)		13.0 (4)		12.8 (4.0)
EuroQol Total Score		1.4 (0.7)		1.1 (0.7)		1.2 (0.7)
EuroQol Health Thermometer		65 (22.1)		69 (18.7)		67 (20.2)
SF-36 Physical Functioning		59 (25.4)		66 (25.5)		61 (25.8)
SF-36 Role–Physical		17 (34.7)		21.1 (30.2)		19.4 (32.2)
SF-36 Bodily Pain		34 (17.7)		33.1 (15)		33.4 (16.2)
SF-36 General Health		87 (12.1)		81.5 (18.8)		84.0 (16.2)
SF-36 Vitality		49 (13.7)		54.6 (11.4)		52.1 (12.7)
SF-36 Social Functioning		49 (12.4)		49.3 (13.8)		49.1 (13.1)
SF-36 Role–Emotional		71 (40.2)		66 (40.8)		68.4 (40.4)
SF-36 Mental Health		73 (17.6)		61.6 (19.8)		66.6 (19.5)
SF-36 Health Transition		3.1 (0.9)		3.1 (0.8)		3.1 (0.9)

There were no significant differences between groups at baseline.

because of commencing litigation. Baseline characteristics are presented in Table 2 for the 94 patients who provided baseline assessment. No significant differences were detected between groups at baseline ($P > 0.05$).

Six Weeks

There was a significant ($P < 0.05$) effect of treatment on STAIS, RMDQ, MZSRDS, EuroQol Total Score, EuroQol Health Thermometer, SF-36 Vitality, SF-36 Social Functioning, and SF-36 Mental Health (Table 3). Patients randomized to the assess/advise/treat group reported significantly lower disability and fewer symptoms of depression and anxiety and had better quality of life, vitality, social functioning, and mental health at 6 weeks than those patients randomized to the assess/advise/wait group.

Long-term Follow-up

There was a significant ($P < 0.05$) long-term effect of treatment on STAIS MZSRDS, MSPQ, EuroQol Health Thermometer, and SF-36 Role–Emotional, Mental Health, and Health Transition (Table 4). Those patients in the assess/advise/treat group reported fewer symptoms of depression, somatic distress, and anxiety, had better

Table 3. Comparison of Primary and Secondary Outcome Measures at 6 Weeks Follow-up

Outcome Measure	Assess/Advise/Treat 6 Weeks [mean (SD)]	Assess/Advise/Wait 6 Weeks [mean (SD)]	Treat - Wait [regression coefficient (SE)]	*P*
Primary				
RMDQ	4.5 (4.5)	6.3 (5.9)	−2.9 (1.3)	0.02
Secondary				
VAS (usual pain)	2.4 (2.0)	3.3 (2.5)	−0.8 (0.6)	0.22
STAIS	10.8 (4.2)	13.6 (4.5)	−2.7 (1.0)	0.01
MZSRDS	14.4 (9.4)	22.8 (12.2)	−7.0 (2.7)	0.01
MSPQ	3.9 (5.0)	4.9 (4.3)	−0.5 (1.2)	0.67
EuroQol Total Score	0.8 (0.1)	0.7 (0.3)	0.13 (0.06)	0.05
EuroQol Health Thermometer	80 (15)	69 (18)	12 (4)	0.006
SF-36 Physical Function	78 (19)	75 (19)	0.3 (6)	0.96
SF-36 Role–Physical	61 (43)	50 (43)	18 (12)	0.13
SF-36 Bodily Pain	65 (20)	54 (22)	11 (6)	0.06
SF-36 General Health	89 (13)	77 (19)	5 (3)	0.12
SF-36 Vitality	68 (19)	46 (21)	18 (5)	<0.001
SF-36 Social Functioning	79 (21)	63 (25)	16 (5)	0.004
SF-36 Role–Emotional	82 (35)	63 (43)	19 (12)	0.11
SF-36 Mental Health	80 (16)	58 (24)	14 (4)	0.002
SF-36 Health Transition	2.9 (0.7)	3.1 (0.9)	−0.3 (0.2)	0.15

Table 4. Comparison of Primary and Secondary Outcome Measures at Long-term Follow-up (3 Months and 6 Months)

Outcome Measure	3 Months		6 Months		Treat - Wait Regression coefficient (SE)	*P*
	Assess/Advise/Treat [mean (SD)]	Assess/Advise/Wait [mean (SD)]	Assess/Advise/Treat [mean (SD)]	Assess/Advise/Wait [mean (SD)]		
Primary						
RMDQ	4.0 (5.2)	4.9 (5.6)	3.9 (4.5)	4.4 (5.6)	−0.1 (1.1)	0.94
Secondary						
VAS (usual pain)	2.5 (2.5)	2.7 (2.5)	2.1 (2.1)	2.4 (2.3)	−0.2 (0.5)	0.61
STAIS	9.7 (3.8)	14.2 (5.5)	10.3 (3.4)	12.6 (4.9)	−2.4 (0.9)	0.01
MZSRDS	14.2 (10.4)	25.2 (14.9)	12.6 (8.6)	20.5 (13.9)	−7.8 (2.3)	0.001
MSPQ	4.0 (3.5)	7.4 (8.4)	3.1 (3.6)	6.0 (5.1)	−2.6 (0.9)	0.004
EuroQol Total Score	0.82 (0.22)	0.73 (0.26)	0.85 (0.19)	0.75 (0.26)	0.08 (0.05)	0.13
EuroQol Health Thermometer	83 (16)	65 (19)	79 (19)	71 (21)	13 (5)	0.009
SF-36 Physical Function	84 (18)	81 (19)	83 (23)	82 (21)	1 (4)	0.72
SF-36 Role–Physical	72 (43)	68 (40)	76 (36)	70 (39)	5 (10)	0.65
SF-36 Bodily Pain	70 (18)	66 (20)	73 (18)	65 (23)	5 (4)	0.32
SF-36 General Health	90 (14)	79 (22)	90 (13)	76 (24)	6 (4)	0.11
SF-36 Vitality	68 (20)	54 (22)	65 (23)	65 (20)	7 (4)	0.09
SF-36 Social Functioning	85 (20)	72 (28)	86 (21)	72 (28)	10 (5)	0.07
SF-36 Role–Emotional	89 (27)	67 (45)	85 (24)	74 (38)	17 (8)	0.03
SF-36 Mental Health	80 (18)	63 (25)	81 (17)	65 (24)	11 (5)	0.04
SF-36 Health Transition	2.6 (0.9)	2.7 (1.0)	2.3 (0.9)	2.8 (0.9)	−0.4 (0.2)	0.05

Comparison between groups is based on estimates derived from all available data at 3 months and 6 months.

quality of life and mental health, and reported less interference of emotional problems in everyday activities than those patients in the assess/advise/wait group.

Sensitivity Analysis

The potential effects of missing data were explored by refitting the regression models (which assessed short- and long-term effects of treatment) with missing data replaced by the last value carried forward. Apart from VAS for usual pain intensity (short-term follow-up VAS was significantly lower for the assess/advise/treat group; regression coefficient = −1.2, SE = 0.5, $P = 0.02$), there were no other differences between these models and the regression models using all available data. Furthermore, there were no significant interactions between group and responder status for any baseline variable ($P > 0.05$).

■ Discussion

Baseline

This study was undertaken in the physiotherapy department of a U.K. metropolitan National Health Service hospital. Patient baseline characteristics (Table 3) indicated that on average patients fell within the normal range of distress or illness behavior.[35] However, 41% (n = 38) of patients were assessed at baseline as either at Risk for Depression or Distressed–Depressive.[35] Similarly, 31 patients (30%) demonstrated risk of long-term work loss as assessed by the Acute Low Back Pain Screening Questionnaire.[34] These findings indicated that an important proportion of patients with ALBP referred for physiotherapy in a primary care setting exhibited psychosocial features associated with poor outcome.[28,34]

This study was driven largely by the discrepancies that exist in recently published LBP guidelines.[1] In this study, the definition of simple low back pain offered by these reports was used as the inclusion criteria for the study, yet relatively few ALBP patients referred to the department fulfilled these criteria. Based on our data, 74% of ALBP patients referred fell outside the criteria for simple ALBP (Table 1). These findings have clear implications for the utility of these guidelines in primary care, as the population presenting for treatment might not represent the population from which the evidence base is derived. Our first recommendation therefore is that healthcare professionals become aware of the demographics of their client group and interpret and implement guidelines in keeping with these characteristics.

Six-week Follow-up

Analysis at this time point enabled comparison between advice on staying active and active physiotherapy treatment. Our findings suggested that early active physiotherapy treatment led to improved outcomes in disability, general health, social function, anxiety, depressive symptoms, mental health, and vitality. In the short-term, it appears that physiotherapy is a superior intervention to advice on staying active for patients with ALBP. This is in keeping with findings on subacute LBP.[29]

A number of reviews have concluded that the evidence for the use of physical interventions in ALBP is negative, or at best, weak.[3,5,36–38] This is reflected in the Dutch and Australian guidelines where physiotherapy is not recommended in the acute stage.[1] Our findings challenge these recommendations. We have shown that patients obtain significant benefit from being involved in an early active physiotherapy program. Further research is being undertaken to thoroughly analyze the content of treatment and the clinical reasoning process used by the treating therapists so that the aspect or aspects of care that led to such favorable outcomes can be identified. It is our impression, however, that effective intervention needs to

be multimodal and delivered within a rehabilitative framework, with the individual interventions themselves probably of less importance than the philosophical construct in which the treatment is delivered.

Long-term Follow-up

Neither pain nor disability was significantly different between the groups during the course of the long-term follow-up, indicating that these parameters were unaffected by the treatment model. Assess/advise/wait led to a delay in improvement of disability, but with no long-term consequences.

A number of other important outcome variables, however, were adversely affected by an assess/advise/wait approach. Patients seen promptly had significantly less anxiety, depressive symptoms, and distress. They also had better general health, social functioning, and mental and emotional health. Very few studies of physiotherapy intervention for ALBP have assessed psychosocial variables as part of long-term follow-up. This study provides evidence that early active treatment can improve psychosocial outcomes and that the effect on psychosocial function appears to be dependent on the timing of intervention. Delaying the onset of treatment does not provide the opportunity for physiotherapy intervention to have this favorable effect.

Overall, our study supports the hypothesis that assess/advise/treat produces better long-term outcomes than an assess/advise/wait approach. Furthermore, as it is recognized that psychosocial variables are predictive of chronicity in ALBP,[28] early active treatment may have the potential to reduce the risk of chronicity developing.

Sensitivity Analysis

All our sensitivity analyses to examine the consequences of missing follow-up data suggested that, although it comprised approximately one third of the randomized cases, this was unlikely to result in substantial bias to the results of the study.

The amount of missing data were similar for both groups at both 6 weeks and the long-term follow-up. Furthermore, there was no difference between responders or nonresponders in any of the baseline variables. For those patients for whom data were available, nonresponders at 6 weeks did not differ significantly from the rest of the cohort at long-term follow-up. Similarly, nonresponders at long-term follow-up for whom there were 6-week data available are not significantly different from the rest of the cohort at 6 weeks. The results of a sensitivity analysis using last value carried forward indicated little change in the regression coefficients. Finally, the finding that 16 patients (42%) were lost to follow-up due to changes of their address provided further evidence that data were missing at random. However, despite these results and the strenuous efforts made to obtain follow-up information on all randomized patients, bias is always a possibility when follow-up rates are low.

■ Conclusion

In the United Kingdom, the CSAG report[7] called for a change in the health service provided for patients with low back pain. The report concluded that, although there is a high probability that an acute attack will settle, this should not be taken as grounds for complacency, inactivity, or a policy of "wait and see" on the part of the health professionals. The report was criticized for basing recommendations on anecdotal evidence and on making a bold claim that the provision of "services at the acute stage. . . will prevent chronic pain and disability."[39] Our results do not specifically support the CSAG recommendation. Early intervention does not affect long-term pain and disability. However, other important features of the low back pain experience are dependent on the timing of intervention. Further research is needed to fully clarify the role of early intervention.

■ Key Points

- International guidelines for acute low back pain differ in their support for physical therapy and in the suggested timing of physical intervention.
- Patients receiving physiotherapy treatment demonstrate better short-term outcome than those given advice to stay active.
- There was no long-term difference in pain and disability between early and late intervention.
- The timing of intervention affects the progression of psychosocial features. If treatment is provided later, the same psychosocial benefits are not achieved.

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