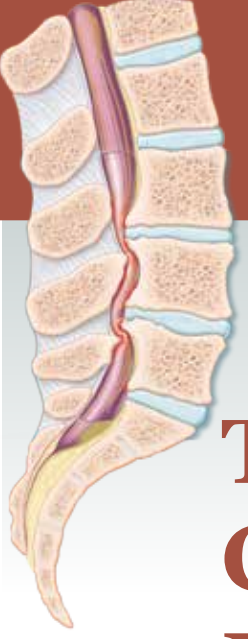

The Impact of Depressive Symptoms: Considerations for Clinicians Treating Patients with Low Back Pain

ABSTRACT

A considerable proportion of patients with low back pain (LBP) experience depressive symptoms. A clinical case is used to highlight potential steps that clinicians can take to help manage depressive symptoms in these patients: 1) Assess for depressive symptoms using a valid and reliable questionnaire; 2) Provide education, reassurance, and self-management strategies to initiate the program of care; 3) Adjust care plans if patients also present with depressive symptoms (e.g., ongoing support and education); and 4) Provide ongoing assessment of depressive symptoms, and consider referrals to a specialist or other health care providers (e.g., counselors, clinical psychologists, or psychiatrists) for further evaluation if symptoms are worsening.

KEYWORDS: Low back pain, depressive symptoms, depression, depressive disorder

CME Pre-test Quiz

BACKGROUND

What is low back pain?

Low back pain (LBP) is defined as pain or discomfort in the region below the costal margin and above the inferior gluteal folds; it may also present with referred leg pain.[1] Most cases of LBP are considered non-specific, since the condition is not attributed to major or serious pathology (e.g., infection, tumour, osteoporosis, inflammatory arthritides, fracture, or cauda equina syndrome). The onset of LBP can

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be traumatic (e.g., work or traffic injuries) or non-traumatic, and its duration can be categorized as acute/subacute (<12 weeks) or chronic (≥12 weeks).

LBP is a common condition, with approximately 80% of people suffering from one or more episodes during their lifetime.[2,3] LBP is also common in school-aged children and adolescents.[4,5] Although most painful episodes resolve, approximately 10-20% of adults with LBP experience chronic or recurrent symptoms and disability.[6,7] Among musculoskeletal conditions, LBP is the most common reason for seeking health care.[8,9] Therefore, health care professionals in various clinical settings, including family physicians, nurse practitioners, physiotherapists, and chiropractors, often see and provide care to patients with LBP.

What is depression?

The World Health Organization defines mental health as a state of well-being that enables individuals to realize their abilities, cope with normal life stresses, work productively and fruitfully, and contribute to the community.[10] Depressive symptoms are common mental health symptoms, and are characterized by feelings of low mood, loss of hope or courage, sadness, or loss of interest in activities that were once considered enjoyable.[11] They can be brief, persistent, or recurrent in nature, and have the potential to impact work, school, or normal daily activities.

Depressive symptomatology includes depression that has not been formally diagnosed and symptoms that do not meet the criteria for depression. When depressive symptoms are more severe or of longer duration (≥2 weeks), they may meet the criteria for a clinical diagnosis. Based on the Diagnostic and Statistical Manual of Mental Disorders (DSM)-5 diagnostic criteria, to be diagnosed with depression, the individual must experience at least five of the listed symptoms during the same two-week period (and at least one symptom should be either 1) depressed mood; or 2) loss of interest of pleasure) (Table 1).[12]

For a diagnosis of clinical depression: 1) the individual must experience distress or impairment in social, occupational, or other important areas of functioning; and 2) symptoms must not be a result of substance abuse or other medical condition.[12]

It is estimated that over 300 million people suffer from depression globally.[13] Evidence suggests that individuals experiencing poverty, unemployment, tragic life events (e.g., death of loved one), substance-use problems, or physical illness are more likely to suffer from depressive symptoms.[14] Although depression

Table 1: Symptoms for the Diagnosis of Depression based on the Diagnostic and Statistical Manual of Mental Disorders (DSM)-5*[12]

Symptom	Description
1	Depressed mood most of the day, nearly every day
2	Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day.
3	Significant weight loss when not dieting or weight gain, or decrease or increase in appetite nearly every day.
4	A slowing down of thought and a reduction of physical movement (observable by others, not merely subjective feelings of restlessness or being slowed down)
5	Fatigue or loss of energy nearly every day
6	Feelings of worthlessness or excessive or inappropriate guilt nearly every day
7	Diminished ability to think or concentrate, or indecisiveness, nearly every day
8	Recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide

*to be diagnosed with depression, the individual must experience at least five of the symptoms during the same two-week period (and at least one symptom should be either 1) depressed mood; or 2) loss of interest of pleasure)

can affect people of all ages, the common age of onset spans from late teens to mid-20's.[11] Approximately 40% to 55% of adolescents and young adults with depressive symptoms experience resolution or only minimal recurrences later in their adolescence and early adulthood.[15] Depression is more likely to affect women, with a lifetime prevalence of 20% to 25% in women and 7% to 12% in men.[16] Depression is also a common reason for seeking health care, as approximately 50% of psychiatric consultations and 12% of all hospital admissions are related to depression.[17]

How common are depressive symptoms among patients with LBP?

LBP and major depressive disorder are both among the top five leading causes of years lived with disability worldwide, and are prevalent in the general population.[18-22] A considerable proportion of individuals with LBP present with co-morbid mental health symptoms.[14,23] In 2002, approximately 20% of Canadians with LBP reported having a concomitant mental disorder that was diagnosed by a health professional, of which major depression was the most prevalent (6.2%, 95% CI 5.4-6.9%).[23] The prevalence of depres-

sive symptoms among those with LBP is higher, at approximately 26%.[24]

Although most people recover from LBP, those with negative prognostic factors including depression, passive coping strategies, job dissatisfaction, high disability levels, disputed compensation claims, and somatization may be at higher risk of poorer recovery.[25] Specifically, patients with mental health symptoms, including feelings of depression, tend to have poorer recovery from LBP than those without depressive symptoms.[26-31] Patients with depressive symptoms are more likely to experience greater disability, higher levels of pain, and poorer work-related outcomes and self-perceived recovery related to LBP.[27] Therefore, it is important that health professionals seeing patients with LBP also assess for and manage depressive symptoms if present throughout their program of care.

Case Study

Ms. Walton is a 38-year-old office worker who presents to your clinic with LBP, which has been bothering her for 2 months. The LBP came on gradually over time, and she does not recall an incident that caused the pain. Ms. Walton describes the pain as achiness that is felt "all over" her low back region, but does not travel into her legs. She feels exhausted from the pain and is frustrated that it is affecting her ability to perform household chores and work tasks efficiently. Ms. Walton does not feel like going out with friends, but then feels like she is letting them down. Ms. Walton tells you that she has given up hope that this pain will ever go away. Her medical and family history is otherwise unremarkable, and this is the first time she has ever experienced LBP.

Based on your history and physical examination, no red flags (i.e., risk factors for serious pathology) were identified and you proceed to discuss the plan of management with Ms. Walton for non-specific LBP. In addition to treatment aimed to resolve the LBP and restore function, you would like to help Ms. Walton with her depressive symptoms.

How can clinicians help manage depressive symptoms in patients with LBP?

Assess depressive symptoms using a valid and reliable questionnaire

If you suspect your patient is presenting with depressive symptoms, assess these symptoms using a valid and reliable questionnaire for depressive symptoms. A number of questionnaires have demonstrated validity and reliability for the assessment of depressive symptoms in individuals with LBP. These include the Patient Health Questionnaire-9,[32,33] Depression

Scale of the Hospital Anxiety and Depression Scale (HADS),[34,35] and Center for Epidemiologic Studies Depression Scale Revised (CESD-R).[36,37] Questionnaire validity and reliability allows you to measure the construct accurately [i.e., what you intend to measure (validity), and to measure it consistently (reliability)].

The Patient Health Questionnaire-9 (PHQ-9)

Given its relatively short length and ease of scoring, we will describe the Patient Health Questionnaire-9. The Patient Health Questionnaire-9 is a 9-item questionnaire designed for screening, assessing, monitoring, and measuring the severity of depressive symptoms (Table 2).[32,33] The patient fills out this questionnaire, which can then be quickly scored out of 27 by the clinician (Table 3). The Patient Health Questionnaire-9 can also be completed by the patient repeatedly over time to assess for improvements or worsening of depressive symptoms.

Table 2: Question and Response Items for the Patient Health Questionnaire-9[32,33]

Over the past 2 weeks, how often have you been bothered by any of the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure doing things	0	1	2	3
2. Feeling down, depressed or hopeless	0	1	2	3
3. Trouble falling asleep, staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself – or that you're a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or, the opposite – being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or hurting yourself in some way	0	1	2	3

Table 3: Scoring System of the Patient Health Questionnaire-9 (PHQ-9) with Suggested Management Strategies[32]

PHQ-9 score	Clinical Impression	Treatment recommendation (patient preferences should be considered)
5-9	Minimal symptoms	• Support, provide education, and monitor if necessary
10-14	Minor depression; *or* Dysthymia; *or* Major depression, mild	• Support, provide education and ongoing assessments; *and* • Consider other evidence-based treatment strategies (e.g., pharmacological treatment or psychotherapy)* • Consider referrals for further evaluation if symptoms are worsening
15-19	Major depression, moderately severe	
>20	Major depression, severe	

*Particularly for major depression or worsening depressive symptoms

Evidence suggests that depressive symptoms, as measured by the Patient Health Questionnaire-9, are associated with higher pain, greater disability, poorer quality of life, and increased health care utilization in patients with chronic LBP.[38,39] Moreover, patients presenting with depressive symptoms at baseline are more likely to experience poorer treatment outcomes, such as reduced function after spinal surgery in patients with back and leg pain,[40] and poorer quality of life in patients receiving non-operative treatment for lumbar spinal stenosis.[41]

Provide education and self-management strategies

The best approach to the management of LBP is for clinicians to work with the patient to develop a patient-centered care plan, using shared decision-making in an evidence-based manner. Shared decision-making involves the sharing of best available evidence between clinicians and patients to guide decisions, and support for patients to consider options to achieve informed preferences.[42] Clinicians, patients with LBP, and their families and carers can refer to evidence-based clinical practice guidelines for the management of LBP to help guide this decision-making process.[43] To initiate the plan of management, it is important for the clinician to reassure the patient that there are no major structural or serious patholo-

gies underlying their LBP. This involves education and reassurance around the benign and self-limited nature of LBP (i.e., it will improve over time), with this message repeated throughout the program of care as needed. Patients who feel anxious may find it difficult to absorb a lot of information in one visit.

The clinician should address any prognostic factors for poor recovery. For example, the patient may present with depressive symptoms, anxiety, or poor expectations of recovery. The clinician can provide reassurance to the patient that it is common to feel some anxiety or distress related to the pain. Utilize active listening to discuss the patient's concerns, identify and discuss any misconceptions that he or she may have, and adjust the care plan accordingly.

The clinician can engage in a shared goal setting exercise with the patient to guide decisions and consider options. The clinician can also provide education on how the patient can actively engage in their recovery through self-management strategies. Together, the clinician and patient can consider clinical interventions that help resolve symptoms and restore function, so that the patient can perform normal daily activities. In addition, the clinician can provide ongoing encouragement throughout the program of care to the patient to remain active by engaging in exercise, continuing to move, and performing normal daily activities within tolerance.

Follow-up, consider referrals, and adjust care accordingly

As clinicians provide ongoing care to patients with LBP, it is important to reassess the patient at every visit to determine whether the condition is improving or worsening, what is working and whether additional care is needed. The reassessments should consider aspects related to LBP as well as depressive symptoms. This ongoing assessment may involve re-administration of the previously used Patient Health Questionnaire-9 to assess depressive symptoms and identify improvement or worsening of symptoms.

At any point during care, patients with worsening symptoms related to LBP and/or depressive symptoms or those who develop new physical or mental health symptoms should be referred for further evaluation. For depressive symptoms, the physician may involve mental health professionals including counselors, clinical psychologists, or psychiatrists to discuss evidence-based interventions for depressive symptoms. For most patients, mild depressive symptoms may be well managed by the primary care provider and resolve over time with support, monitoring, education, and self-management strategies.

SUMMARY OF KEY POINTS

A considerable proportion of patients with low back pain present with depressive symptoms

Depressive symptomatology includes depression that has not been formally diagnosed and symptoms that do not meet the criteria for depression

The presence of depression may indicate poorer recovery from low back pain

Patients experiencing low back pain and concomitant depressive symptoms may benefit from ongoing assessments, education, reassurance, and self-management strategies

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CLINICAL PEARLS

Assess for depressive symptoms in patients with LBP using a valid and reliable questionnaire (e.g., Patient Health Questionnaire-9)

Provide education, reassurance, and self-management strategies to all patients with LBP to initiate the program of care

Adjust the care plan accordingly if patients also present with depressive symptoms, including additional support and education (e.g., addressing misconceptions, encouraging activity) on an ongoing basis

Provide ongoing assessment of depressive symptoms, and consider referrals for further evaluation if symptoms are worsening

CME

Post-test Quiz

Members of the College of Family Physicians of Canada may claim MAINPRO-M2 Credits for this unaccredited educational program.

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