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Literature Review

Loneliness and Back Pain

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Abstracts

Introduction: Back pain is a common reason for being absent from work and seeking medical treatment. It can result from injury, activity, and some medical conditions. Back pain consists of lower back pain and upper back pain. Back pain does have a physical cause, but it can also be triggered by precipitating factors, namely loneliness. To explain the mechanism that associates back pain with loneliness. **Methods:** Literature review. **Results:** Loneliness is divided into 2 types, namely social loneliness and emotional loneliness. Social loneliness is associated with the absence of a social network from the same circle, with which they can share the same activities or interests. Emotional loneliness can arise due to the absence of close emotional attachment. Whether or not back pain persists depends on whether the individual chooses problem-solving or problem avoidance. Loneliness in several studies increases the morbidity rate of physical and mental illness and also the mortality rate. Early detection of somatic symptoms and loneliness requires a self-measurement scale. Therapeutic interventions aimed at increasing social connection hold merit in reducing the impact of pain on engagement with activities. The treatments are usually Cognitive Behavioral Therapy (CBT) and Antidepressants. If necessary, consulting a psychiatrist is recommended. The cooperation of orthopedists, rheumatologists, and physical therapists with psychiatrists can be useful in improving the condition of patients. **Conclusions:** Recommendations for management are needed both in terms of general and specific strategies, as well as loneliness interventions.

Keywords: Loneliness, Back Pain, Good Health and Wellbeing

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INTRODUCTION

Back pain is a common reason to be absent from work and seek medical attention. It can result from injury, activity, and some medical conditions. Back pain can affect people of all ages, for different reasons. As you get older, the likelihood of developing low back pain increases, due to factors such as previous employment and degenerative disc disease. Back pain can occur in both the upper and lower back [1, 2]. Physical causes of back pain do exist, such as muscle or ligament tension, bulging or ruptured discs, arthritis, or osteoporosis [3, 4], but back pain as Somatic Symptom Disorder (SSD) in DSM V can also be triggered by precipitating factors (triggers) social stress or changes in social support, such as feelings of loneliness [8]. The prevalence of SSD in the general population is 5-7% and it increases in primary care by 17%, with a female:male ratio = 10:4 [4].

REVIEWS

Back pain in ICD-10 (The International Statistical Classification Of Diseases And Related Health
Problem-10th) is included in Chapter 13 and given the code M54 (10), while back pain is part of
Somatic Symptom Disorder (SSD) in DSM-5 (Diagnostic and Statistical Manual of Mental Disorder 5th edition) replaces the term Somatoform Disorder (Symptoms that may not be explained medically) with Somatic Symptom Disorder [6, 7].
The DSM 5 diagnostic criteria for SSD are: [3, 8].
One or more somatic symptoms that are distressing or result in significant disruption of daily life.
Excessive thoughts, feelings, and behaviors related to the somatic symptoms or associated health concerns as manifested by at least one of the following:
1) Disproportionate and persistent thoughts about the seriousness of one's symptoms.
2) Persistently high level of anxiety about health or symptoms.
3) Excessive time and energy devoted to these symptoms or health concerns.
Although any one somatic symptom may not be continuously present, the state of being symptomatic is persistent - more than 6 months.
The major diagnosis in this diagnostic class, Somatic Symptom Disorder, emphasizes diagnosis made based on positive symptoms and signs (distressing somatic symptoms plus abnormal thoughts, feelings, and behaviors in response to these symptoms) rather than the absence of a medical explanation for somatic symptoms. A distinctive characteristic of many individuals with somatic symptom disorders is not the somatic symptoms per se, but instead the way they present and interpret them [8].
Thus, the DSM-5 replaced somatoform disorders with SSD and made significant changes to the criteria (Table 1). Several DSM-IV disorders, such as somatoform, undifferentiated somatoform, somatization, and pain disorders, have been recategorized in an SSD dimensional scale ranging from mild to severe. This change emphasizes how DSM-V eliminates the mind-body separation implied by DSM-IV and encourages policymakers to make comprehensive assessments and use clinical judgment [4, 9].

DSM-IV	DSM-V
Somatoform disorder Undifferentiated somatoform disorder	Somatic symptom disorder mild, moderate
Somatoform disorder	Somatic symptom disorder heavy, persistent
Hypochondriasis	Illness anxiety disorder
Pain disorder	Somatic symptom disorder Pain is a specifier
Psychological factors affecting a medical condition	Psychological factors affecting a medical condition
Factitious disorder	Factitious disorder

Loneliness, according to Santrock (2002) consists of two:
1. Emotional loneliness (The loneliness of emotional isolation) can arise in the absence

of close emotional attachment and can only be renewed through the union of emotional attachment to others. The concept of emotional attachment comes from attachment style theory which states that parting with an attachment figure (a figure attached to/ close to the individual) will make the individual feel lost, which will lead to feelings of loneliness. Individuals who experience emotional loneliness will feel lonely even though they have interacted and socialized with other people [9 - 13].

2. Social loneliness (The lonely of social isolation)

Social loneliness is associated with an absence of social networks due to a lack of relatives, friends, or people from the same circle, with whom they can share the same activities or interests. Individuals who experience this type of loneliness are characterized by feelings of boredom and feelings of being marginalized. Usually, the individual feels that he is not part of a group or community or that the individual has friends who cannot be relied upon when experiencing difficulties [12, 13].

Social and emotional loneliness is associated as one of the precipitators (triggers) of back pain [14]. Persistent pain is associated with the use of coping strategies [15]. Emotional stability, awareness of experience, motivation, and development as well as existing coping mechanisms play a role in determining the level of loneliness both emotionally and socially, so that they can treat themselves and others well [16].

Assuming that individuals in stressful situations face two tasks-solving problems and managing their emotions, one can distinguish two coping dimensions that are interpreted as orthogonal axes: problem coping and emotional coping. Figure 1 shows the CCM (The Coping Circumplex Model) contains four bipolar dimensions, which consist of eight coping styles. The following coping styles were identified: problem-solving (P+), problem avoidance (P–), positive emotional coping (E+), and negative emotional coping (E–). Said coping efficiency (P+ E+), and on helplessness (P– E–).

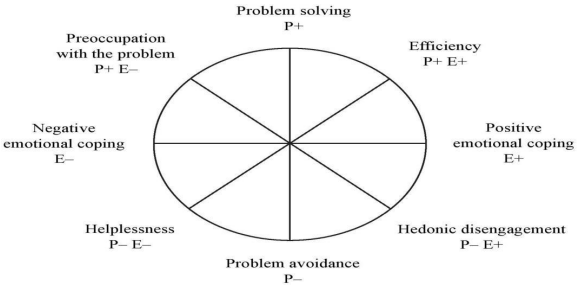

Figure 1. The Coping Circumplex Model [15].

Problem-solving involves active cognitive and behavioral efforts to deal with the problem. Problem-solving consists of acknowledging various thoughts concerning the problem, undertaking efforts to understand the situation, predicting the course of events, choosing the most appropriate solutions, planning to solve the problem, and implementing this plan as well as taking consistent action to solve the problem. Problem avoidance consists of the avoidance of thinking about the problem (e.g., by engaging in substitute activities), reducing efforts to solve the problem, postponing the task, or giving up attempts to attain the goal. Positive emotional coping involves being kind and understanding to oneself as one tries to solve a problem on one's own regardless of success and the use of cognitive transformations that enable the elicitation of positive emotions and calming down (through reinterpretation and humor). Negative emotional coping includes self-criticism when dealing with problems, focusing attention on the negative aspects of stressful situations (e.g., rumination), and on negative emotions (e.g., feelings of tension, pressure, or anger) [15, 17].

Loneliness in a study has been shown to double the prevalence of acute and chronic pain. Loneliness can damage health and increase mortality. Previous research has shown that loneliness is associated with various medical and psychological conditions, such as anxiety, depression, obesity, insom-

nia, heart disease, stroke, lung disease, and pain. Conversely, greater pain may also result in a higher prevalence of loneliness and social exclusion, at least in part because pain makes it more difficult for a person to socialize or work [14, 18]. Screening with the help of supporting tools.

1. Disturbing somatic symptoms with additional abnormal thoughts, feelings, and behaviors in response to somatic symptoms [9].

a. The Patient Health Questionnaire (PHQ-15) is one of the most frequently used instruments to identify people at risk for somatization. It has well-established psychometric properties, is available in multiple languages, and has been recommended for use in large-scale studies. The PHQ-15 assesses the presence and severity of common somatic symptoms in primary care, such as fatigue, gastrointestinal, musculoskeletal, pain, and cardiopulmonary symptoms in the last four weeks using 15 items. The sum of the scores ranges from 0 to 30 and indicates self-assessed symptom burden with higher scores indicating higher burden (0-4 no minimal; 5-9 low; 10-14 moderate; 15-30 high).

b.The Somatic Symptom Scale-8 (SSS-8)

The Somatic Symptom Scale-8 (SSS-8) was developed in the course of the DSM-V field trials as a measure of somatic symptom burden associated with a new diagnosis of somatic symptom disorder. Response option 5 points (0-4) for each SSS-8 item and a 7-day time frame is used. The cut-off score indicates whether the patient has minimal somatic symptom burden (0-3 points), low (4-7), moderate (8-11), high (12-15), or very high (16-32).

2. UCLA Loneliness Scale (University of California, Los Angeles) (Version 3) was evaluated and the results showed that the measure was highly reliable, a 20-item scale designed to measure a person's subjective feelings of loneliness as well as feelings of social isolation. Participants rated each item as O=often (—I often feel this way), S=sometimes (—I sometimes feel this way), R=rarely (—I rarely feel this way), N=none (—I never felt like this). The measure has been revised twice since its first publication; once to create items with reverse scores, and once to simplify wording. Score: Items marked with an asterisk (1,5,6,9,10,15,16,19,20) must be reversed (ie, 1 = 4, 2 = 3, 3 = 2, 4 = 1), and scores for each item are then added together. Higher scores indicate higher levels of loneliness. High loneliness is defined as a score of 44 or higher. Scores of 33 to 39 are moderate, and scores less than 28 are low [12, 19].

Models that include biological, psychological, and social factors with roles as predisposing, perpetuating, or precipitating for symptoms (Table 2) used as a valuable tool for understanding and guiding patient management are the models proposed by Walker and colleagues. Predisposing factors make individuals more vulnerable to disease. Precipitating factors are stressors or elements of a patient's life that have a chronologic relationship with the onset of the symptoms or precipitate a crisis. Perpetuating factors that maintain the patient's current difficulties include medical illness. Katon and colleagues have labeled psychosocial factors that perpetuate illness —illness maintenance systems [5].

Table 2. Predisposing, precipitating, and perpetuating factors [4].

Predisposing	Precipitating Factors	Perpetuating
Chronic childhood illnesses	Medical illness	Chronic stressors
Childhood adversities	Psychiatric disorder	Maladaptive coping skills
Comorbid medical illness	Social and occupational stress	Negative health habits
Lifetime psychiatric diagnosis	Changes in social support	Disability payments
Poor coping ability		

Management recommendations: First, an overview is presented of general strategies, and then, specific recommendations tailored to the severity of the patient's symptoms and comorbidities are made [5, 6].

General principles of management include: a.) engagement and building a sound therapeutic alliance with the patient, b.) biopsychosocial history and physical examination, diagnostic, c.) evaluation to rule out medical illness but avoid the temptation to order unnecessary, repetitive, or invasive investigations, d.) educate patients how psychosocial stressors and symptoms, A useful strategy is to explain how stress and symptoms interact and how physical illness and emotional problems often co-occur, addressing the connection between how the brain and body interact can help restore hope in an individual who is suffering and feels powerless to control them, and e.) educate the patient on how to cope with their symptoms instead of focusing on a cure, and involve and collaborate with the patient in setting treatment goals [5].

Specific management strategies for patients with recurrent somatic symptoms in whom acute anxiety and depression are the likely cause or a major contributor to the somatic presentation, screening for psychiatric comorbidity is recommended as screening for depression and anxiety, and evaluating somatic symptom burden [4 - 6].

Treatment of comorbid psychiatric disorders, given when depression or anxiety disorders are diagnosed, doctors should consider psychopharmacological treatment and psychotherapy as treatment options. The antidepressant option of selective serotonin reuptake inhibitors (SSRIs) or serotonin-norepinephrine reuptake inhibitors (SNRIs) together with CBT is a valuable treatment modality for patients presenting with multiple somatic complaints, whether these symptoms have a medical explanation or not [4 - 6].

Psychiatric consultation and the role of the collaborative care model are recommended for patients with more severe somatization symptoms, back pain that is more severe and persistent and found in a study to be proportional to the degree of severity of depression, anxiety and insomnia, back pain accompanied by pain in the organs of the body others, need a combination of drugs, and experience drug side effects need to be referred to a psychiatrist and treated together with other specialist doctors such as orthopedists, physical medicine doctors, and rheumatologists [5].

Psychoeducation for families provides an explanation to families that family members should spend time with patients, especially when symptoms are not present, to avoid thinking that the symptoms complained of by patients bring special attention from others [4].

CONCLUSION

Loneliness can increase the prevalence of mental and physical health morbidity, including back pain and mortality. The right timing of loneliness intervention is important to prevent the condition. Detection of somatic symptoms and loneliness can use the self-measurement scale PHQ-15, SSS-8, and UCLA version 3. The understanding of the biopsychosocial factors of loneliness that can precipitate back pain is explained by the model of Walker and colleagues with P-P-P. Attempts to solve the problem were carried out by using an efficient coping, general management, as well as specific with screening on mental and physical health, intervention loneliness, and provide psychoeducation to the family. Administration of antidepressant psychopharmacological combination therapy SSRI or SNRI and non-pharmacotherapy CBT are valuable modalities. In certain conditions, referral to a psychiatrist or treatment with other multidisciplinary disciplines is necessary.

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CONFLICT OF INTEREST

I have declared that they have no conflict of interest.

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REFERENCES

[1] DocCharge. ICD-10 Codes for Back Pain. 2020. Available at https://doccharge.com/blog/icd-10-codes-for-backpain/

[2] WHO. Musculoskeletal health. 2022. Available at https://www.who.int/news-room/fact-sheets/detail/musculoskeletal-conditions

[3] Dimsdale, J. E., Creed, F., Escobar, J., Sharpe, M., Wulsin, L., Barsky, A., Lee, S., Irwin, M. R., & Levenson, J. Somatic symptom disorder: An important change in DSM. Journal of Psychosomatic Research. 2013;75(3): 223–228. https://doi.org/10.1016/j.jpsychores.2013.06.033

[4] D'Souza, R. S., & Hooten, W. M. Somatic Syndrome Disorders. In StatPearls. 2023. Available at http://www.ncbi.nlm.nih.gov/pubmed/26760840

[5] Croicu, C., Chwastiak, L., & Katon, W. Approach to the Patient with multiple somatic symptoms. In Medical Clinics of North America. 2014;98(5):1079–1095. https://doi.org/10.1016/j.mcna.2014.06.007

[6] Cosio D. Somatic Symptom Disorder: DSM-5's Removal of Mind-Body Separation. Pract Pain Manag. 2017;17(4). Available at https://www.practicalpainmanagement.com/pain/other/somatic-symptom-disorderdsm-5s-removal-mind-body-separation

[7] Dal'Bosco, E. B., Floriano, L. S. M., Rangel, A. G. S. S., Ribas, M. C., Cavalheiro, A. P. G., Silva, C. L. da, & Cabral, L. P. A. Coping in mental health during social isolation: analysis in light of Hildegard Peplau. Revista Brasileira de Enfermagem, 2021;75(2): e20201207. https://doi.org/10.1590/0034-7167-2020-1207

[8] American Psychiatric Association (APA). Diagnostic and Statistical Manual of Mental Disorders. (5th ed.) Washington, DC: American Psychiatric Association Press. 2013; p. 309–27

[9] Cao, J., Wei, J., Fritzsche, K., Toussaint, A. C., Li, T., Zhang, L., Zhang, Y., Chen, H., Wu, H., Ma, X., Li, W., Ren, J., Lu, W., & Leonhart, R. Detecting DSM-5 somatic symptom disorder in general hospitals in China: B-criteria instrument has better accuracy—A secondary analysis. Frontiers in Psychiatry. 2022;13: 935597. https://doi.org/10.3389/fpsyt.2022.935597

[10] Arumdina, A. F. Pengaruh Kesepian terhadap Pemilihan Pasangan Hidup pada Dewasa Awal yang Masih Lajang. Jurnal Psikologi Pendidikan Dan Perkembangan, 2013;2(3): 160–169

[11] Fardghassemi, S., & Joffe, H. The causes of loneliness: The perspective of young adults in London's most deprived areas. PLoS ONE. 2002;17(4): e0264638. https://doi.org/10.1371/journal.pone.0264638

[12] Febry Nurdiani, A. Uji Validitas Konstruk Alat Ukur UCLA Loneliness Scale Version 3. Jurnal Pengukuran Psikologi dan Pendidikan Indonesia. 2014;2(8). DOI: 10.15408/jp3i.v2i8.10779

[13] Riadi, M. Pengertian, Aspek dan Penyebab Kesepian (Loneliness). 2019. Available at https://www.kajianpustaka.com/2019/08/pengertian-aspek-dan-penyebab-kesepian.html

[14] Van Tilburg, T. G. Social, Emotional, and Existential Loneliness: A Test of the Multidimensional. Conce Gerontologist, 2021;61(7): E335–E344. https://doi.

org/10.1093/geront/gnaa082
[15] Stanisławski, K. The coping circumplex model: An integrative model of the structure of coping with stress. Frontiers in Psychology. 2019;10:694. https://doi.org/10.3389/fpsyg.2019.00694
[16] Nur'aini, M. W., Haryanto, J., & Ulfiana, E. Hubungan Self-Compassion dengan Kesepian pada Lansia yang Kehilangan Pasangan. Indonesian Journal of Community Health Nursing, 2020;5(2): 80. https://doi.org/10.20473/ijchn.v5i2.18734
[17] Independent Age. The Psychology of Loneliness Why it matters and what we can do. 2020. Available at https://www.campaigntoendloneliness.org/wp-content/uploads/Psychology_of_Loneliness_FINAL_REPORT.pdf
[18] Baarck, Julia., Kovac, Matija., & European Commission. Joint Research Centre. The relationship between loneliness and health. 2022. https://doi.org/10.2760/90915
[19] Beller, J., & Wagner, A. Loneliness, social isolation, their synergistic interaction, and mortality. Health Psychology, 2018;37(9): 808–813. https://doi.org/10.1037/hea0000605
[20] Cacioppo, J. T., & Cacioppo, S. The phenotype of loneliness. In European Journal of Developmental Psychology. 2012;9(4):446-452. https://doi.org/10.1080/17405629.2012.690510