



Grace Peterson Nursing Research Colloquium

Mar 22nd, 10:00 AM - 11:30 AM

Availability and Nursing Implementation of Measurement Tools in the Co-Occurrence of Depression and Chronic Pain: An Integrative Literature Review

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Background

- Chronic pain negatively affects **116 million adults** in the US because of the reduction in quality of life and cost to society
- Depression affects 65% of the population and costs \$83.1 billion
- 43% of depressed patients also had chronic pain
- Muscle, stomach, or headache pain are 2.5 to 10 times more likely to increase anxiety or depression.
- Chronic pain and depression are not only present simultaneously but also respond to similar treatment, exacerbate each other and share overlapping biological mechanism.
- Chronic pain: pain lasting more than 3 months or past normal tissue healing
- **Depression**: depressed mood, loss of interest, insomnia, change in appetite or weight, psychomotor agitation, low energy, poor concentration, thoughts of worthlessness or guilt, recurrent thoughts of death or suicide

Purpose

Provide a comprehensive review of current research concerning the availability of screening tools that measure the co-occurrence of chronic pain and depression. Review how the tools are incorporated in treatment from the nursing perspective.

Research Questions

- 1) What are the most frequently used tools to measure pain and depression in studies that focus on the pain-depression dyad
- 2) How are those screening tools currently being used to influence the nursing role for treating patients with chronic pain and depression.

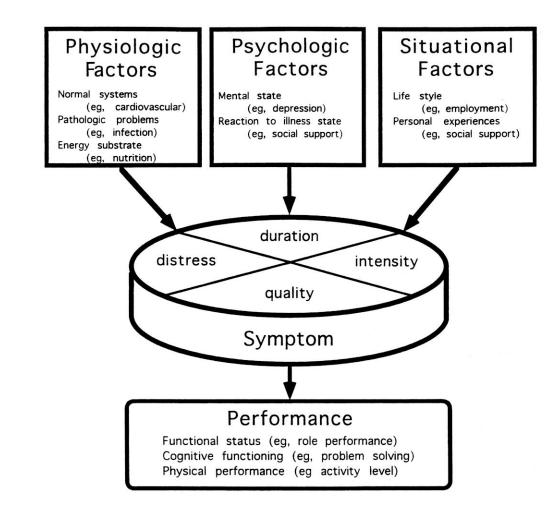
Methods

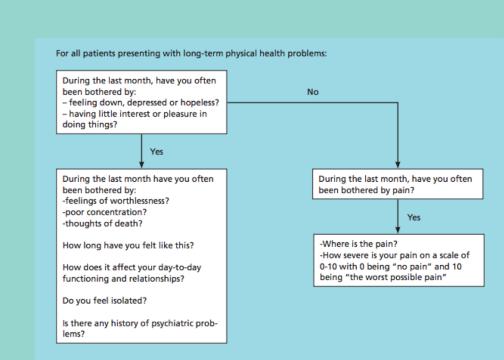
- Integrative review using Psychlnfo, CINAHL, and Pubmed.
- Search Terms:
 - screening, intervention or treatment, co-occurrence or comorbidity AND chronic pain AND depression
 - Clinical setting or clinical, nursing role or nursing AND chronic pain AND depression

Availability and Implementation of Screening Tools measuring the Co-occurrence of Chronic Pain and Depression

Conceptual Framework

- Interventions must be multifaceted because symptoms interact with each other and affect the trend of overall healing.
- Recognizing the factors of this framework enhances symptom assessment by quantifying intensity, duration, distress, and quality
- Symptoms trigger or intensify each other so if screening tools are quantifying distress then primary care providers will have a better predictor of co-morbidity symptom onset.
- This theory recognizes psychological factors such as mental state and reaction to illness as fundamental to affecting symptoms and in turn functional, cognitive, and physical performance.





Character of primary discomfor Basic needs (eat, breathe, slee Sickening Shooting 1 2 3 4 5 6 7 8 9 10 0 1 2 3 4 5 6 7 8 9 19 Least pain in the past week: Recreational activities: Self-doubts Helpless Acceptance Radiation of pain: Timing of Pain (onset, constant/intermitter Scared Angry Stressed Irritable Primary Sources of Stress: Partial, temporary relief What do they do that helps the mos Want to try; think will help: Effect of Pain on Close Relationships Most Upsetting Change in Life

Results

Screening Tool Descriptions

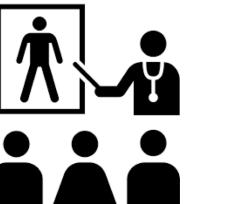
PHQ & PHQ-9 • 16 or 9 item self-administered questionnaire very good sensitivity, specificity and accuracy • 21 item questionnaire • Self-reporting • Contains some somatic symptom questions • Well validated and documented in many populations • Viewal Anatog Scale • Self-reported • 100 mm line ranging from no pain to worst imaginable pain • Numerical Rating Scale • Self-reported scale • 11,21, or 101 rating Pain Disability Index • Profile of Chronic Pain: Screen • 15 item questionnaire • Adequate reliability, low social destrability is an adequate validity Profile of Chronic Pain: Extended • 16 item questionnaire • 86 item questionnaire • 16 item questionnaire • 17 categories: family/home response bias and validity • Rated 0-10 on level of disability Profile of Chronic Pain: Extended • 16 item questionnaire • 16 item questionnaire • 17 categories: family/home response bias and validity • Rated 0-10 on level of disability Profile of Chronic Pain: Extended • 18 item questionnaire • 18 item questionnaire • 19 item questionnaire • 20 of internal consistency, independence from response bias and validity Profile of Chronic Pain: Extended • 18 item questionnaire • 18 item questionnaire • 19 item questionnaire • 20 of control internal, chance, and powerful-others by disagree Quality of Life Scale • 15 item questionnaire • Responses range from delighted to terrible • 15 item questionnaire • Responses range from delighted to terrible • 15 item questionnaire • Responses range from delighted validitions, conjung, positive and beliefs • 16 item questionnaire • 17 categorize participants as having either an internal or external locus of control control internal, chance, and powerful-others by disagree to strongly disagree to strongly disagree in terrible • 17 item questionnaire • 18 item questionnaire • 19 item questionnaire • 19 item questionnaire • 19 item questionnaire • 100 item questi	Zung Self Rating Depression Scale	 20 item self-administered questionnaire positive and negative statements ranked from 1-4 of applicability depression scoring of mild, moderate, severe 	Used to assess psychological, affective, and somatic symptoms of depression
Self-reporting Contains some somatic symptom questions Well validated and documented in many populations Self-reported 100 mm line ranging from no pain to worst imaginable pain Self-reported scale 11,21, or 101 rating 11,21, or 101 rating To categories: family/home responsibilities, recreation, social activity, occupation, sexual behavior, self-care, and life support activities Rated 0-10 on level of disability Profile of Chronic Pain: Extended Assesment Self-reported scale 15 item questionnaire Adequate reliability, low social desirability bias, adequate validity Profile of Chronic Pain: Extended Assesment Self-reported scale 15 item questionnaire Good internal consistency, independence from response bias and validity Profile of Chrolic Pain: Extended Assesment 18 item questionnaire Good internal consistency, independence from response bias and validity Self-reported Describes severity of pain only Impact of pain on a person's ability to participate in essential life activities Measures pain, severity, pain-related interference and emotional burden of pain. Assessing pain location and characteristics, medication use, functional limitations, coping, positive and negative social responses, catastrophizing, and pain attitudes and beliefs Multidimension Health Locus of Strongly agree to strongly disagree Quality of Life Scale 15 item questionnaire Responses range from delighted to terrible Self-reported Ability to detect small changes in pain Most reliable and valid comparison tool among bail tool among bail tool among pain screening tools Ability to detect small changes in pain most reliable and valid comparison tool among bail of pain on a person's ability bail most reliable and valid comparison tool among bail of pain on a person's ability bail pain on a person's ability bail pain tool	PHQ & PHQ-9	questionnaireVery good sensitivity, specificity	Diagnose depression and severity
Numerical Rating Scale Self-reported scale 11,21, or 101 rating Pain Disability Index Self-reported scale 11,21, or 101 rating T categories: family/home responsibilities, recreation, social activity, occupation, sexual behavior, self-care, and life support activities Rated 0-10 on level of disability Profile of Chronic Pain: Screen Sel item questionnaire Adequate reliability, low social desirability bias, adequate validity Profile of Chroic Pain: Extended Sel item questionnaire Good internal consistency, independence from response bias and validity Multidimension Health Locus of Control Public Scale I B item questionnaire Loci of control: internal, chance, and powerful-others Strongly agree to strongly disagree I titlem questionnaire Loci of control: internal, chance, and powerful-others Strongly agree to strongly disagree Profile Scale I titlem questionnaire Loci of control: internal, chance, and powerful-others Strongly agree to strongly disagree Profile Scale I titlem questionnaire Responses range from delighted to terrible Profile of Chroic Pain: Extended Responses range from delighted full file activities Profile of Chroic Pain: Extended Assessing pain location and characteristics, medication use, functional limitations, coping, positive and negative social responses, catastrophizing, and pain attitudes and beliefs Categorize participants as having either an internal or external locus of control Responses range from delighted well-being; relationships with other people; social, community, and civic activities; personal development and fulfillment, recreation and	Beck Depression Inventory	 Self-reporting Contains some somatic symptom questions Well validated and documented 	
Pain Disability Index Brief 7 categories: family/home responsibilities, recreation, social activity, occupation, sexual behavior, self-care, and life support activities Profile of Chronic Pain: Screen 15 item questionnaire Adequate reliability, low social desirability bias, adequate validity Profile of Chroic Pain: Extended Assesment 86 item questionnaire Good internal consistency, independence from response bias and validity Assessing pain location and characteristics, medication use, functional limitations, coping, positive and negative social responses, catastrophizing, and pain attitudes and beliefs Multidimension Health Locus of Control 18 item questionnaire Loci of control: internal, chance, and powerful-others Strongly agree to strongly disagree Quality of Life Scale 15 item questionnaire Responses range from delighted to terrible Measures pain, severity, pain-related interference and emotional burden of pain. Assessing pain location and characteristics, medication use, functional limitations, coping, positive and negative social responses, catastrophizing, and pain attitudes and beliefs Multidimension Health Locus of Control 18 item questionnaire Loci of control: internal, chance, and powerful-others Strongly agree to strongly disagree Quality of Life Scale 15 item questionnaire Responses range from delighted to terrible Responses range from delighted well-being; relationships with other people; social, community, and civic activities; personal development and fulfilliment, recreation and	Visual Analog Scale	 100 mm line ranging from no 	Most reliable and valid comparison
Brief 7 categories: family/home responsibilities, recreation, social activity, occupation, sexual behavior, self-care, and life support activities Rated 0-10 on level of disability Profile of Chronic Pain: Screen 15 item questionnaire Adequate reliability, low social desirability bias, adequate validity Profile of Chroic Pain: Extended Assesment 86 item questionnaire Good internal consistency, independence from response bias and validity Multidimension Health Locus of Control 18 item questionnaire Loci of control: internal, chance, and powerful-others Strongly agree to strongly disagree 15 item questionnaire Loci of control: one cand powerful-others Strongly agree to strongly disagree Measures pain, severity, pain-related interference and emotional burden of pain. Assessing pain location and characteristics, medication use, functional limitations, coping, positive and negative social responses, catastrophizing, and pain attitudes and beliefs Multidimension Health Locus of Control 18 item questionnaire Loci of control: internal, chance, and powerful-others Strongly agree to strongly disagree 15 item questionnaire Responses range from delighted to terrible Measures material and physical well-being; relationships with other people; social, community, and civic activities; personal development and fulfilliment, recreation and	Numerical Rating Scale	·	Describes severity of pain only
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• Responses range from delighted to terrible well-being; relationships with other people; social, community, and civic activities; personal development and fulfillment, recreation and		 Loci of control: internal, chance, and powerful-others Strongly agree to strongly 	either an internal or external locus of
	Quality of Life Scale	Responses range from delighted	well-being; relationships with other people; social, community, and civic activities; personal development and fulfillment, recreation and

Nursing Role

- Empathy
- Education
- Promoting Self Efficacy
- Strengthening & Stretching exercises
- Mind-body approach
- Mindfulness
- Nonpharmacological techniques
- Assessment







DePaul University School of Nursing



Limitations

- Focus of this treatment can be applied to various fields such as physical therapy and chiropractic practice rather than nursing so some reasonable assumptions had to be made to connect to nursing
- Specialization

Nursing Implications

- To apply these changes there would have to be flexibility and schedule availability.
- Understanding the nurses role in this type of treatment will provide better patient outcomes and patient-provider relations
- There is nursing responsibility that can be expanded through these interventions such as broadening education topics and assessment

Future Research

- Assess feasibility and retention of nursing screening tools on the floor
- Create comprehensive screening tool for nurses
- Assess comprehensive testing
- Health Informatics application to EMR documentation of intervention, assessment, and education
- Community health program and materials related to the paindepression dyad.

Conclusion

- A need for a comprehensive screening tool for standardization in treatment and to keep up with cycles of symptom change
- Expanded role for nurses
- Conceptual Framework
- Factors:
- Focus on coping influences, lifestyle change
- PDI, PCP:S & PCP: EA, QOLS, MHLC
- Symptom:
- Screening tools that focus on distress, duration, intensity, and quality
- Somatic symptom report
- Criticism: self-report, overestimation
- Performance:
- Nursing role in treating patients suffering from this dyad
- Focus on activity levels in screening tools as baseline to improvement
 - PDI