

Doctor of Physical Therapy

Using a Behavioral Model to Identify Factors Associated with Choice of Provider for Neck and Low Back Pain: A Systematic Review

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Background

Studies have investigated patient characteristics of care seeking for low back and neck pain, but it remains unclear as to what factors influence a patient's choice to seek care from a specific health care provider.

Purpose

The objective of this review is to use Andersen's Behavioral Model of Health Service Utilization (HSU) as a conceptual framework to identify the predisposing, enabling, and need factors associated with choice of health care provider for back and/or neck pain.

Methods

Inclusion Criteria:

- ☐ Primary complaint was of acute, subacute, or chronic neck or low back pain.
- ☐ At least 18 years of age.
- Reported specific health care provider seen (e.g. medical physician, chiropractor, physical therapy (PT), complementary and alternative (CAM) provider).
- ☐ Factors (predisposing, enabling, and/or need) of the individuals were reported.

Exclusion Criteria:

Pain reported was not musculoskeletal in origin, individual was referred from a healthcare provider, study was not written in English.

Andersen's Behavioral Model of Health Services Utilization¹ was used as framework to evaluate choice factors:

Predisposing

Demographics Social Structure Health Beliefs

Enabling

Access to care Insurance Geography

Need

Perceptions and judgements of own health condition

Results

- ☐ A total of 17 studies were included: 14 quantitative and 3 qualitative studies.
- ☐ Age and sex were the most commonly reported predisposing factors.
- ☐ Financial and personal factors were the most common enabling factors.
- ☐ Patients' experiences of pain and selfreported level of function were the most commonly reported need factors.
- ☐ Medical physicians and chiropractors were the most common providers researched.

Medical Physician

| Category | Factors |
|--------------|---|
| Predisposing | Older age; Female sex, Marital status; Black race; Lower educational attainment; Trust in medical doctors; Job type |
| Enabling | Lower personal gross income; Community size; Geographical location; Insurance type; Payer type |
| Need | Traumatic onset; Duration of back conditions; Need described as constant; Continuous back pain; Typical or worst back pain intensity; Lower general health; Higher ODI score; Lower SF-36 dimensions; Chronic Pain Questionnaire Grade III & IV |

Category Factors Age range 18—29; Older age; Female sex; Practitioner sex being female Speaking with family or relatives on neck pain; Reading a book or magazine on neck pain; Speaking with a doctor, allied health worker, or CAM practitioner on neck pain Need Pain >1 location

| Physical Therapist | | |
|--------------------|--|--|
| Category | Factors | |
| Predisposing | Older age; Higher educational attainment; Having previous use of PT; Practitioner reputation; Practitioner's technical skills | |
| Enabling | History of depression; Previous injection; Previous surgery; Insurance variables; Has taken legal action; Previous use of PT, general practitioner, orthopedic surgeon, physiatrist, or rheumatologist; No previous use of chiropractic; Geographical location | |
| Need | Diagnosis of herniated disk, spondylosis, or pain syndrome; Cervical or Lumbar spine involved; Longer duration of problem; General health is very good or excellent | |

Chiropractor

Factors

Category

| category | ractors |
|--------------|--|
| Predisposing | Age >60; Male sex; Marital status; High school graduate; Currently employed; Job type; Longer job tenure; Satisfaction with care; Trust in Chiropractors; Against taking prescription drugs |
| Enabling | Higher personal gross income; Geographical location |
| Need | Disabling comorbidity status; Doctor visits >9; Restricted activity >0 due to back pain; Elapsed time to baseline interview; Episode did not occur at work of those employed; Higher physical functioning; Higher social functioning; Higher HOS behavior scores |

Conclusions

- ☐ Understanding the factors which influence an individual's choice of healthcare provider is complex, but can be better understood by using Andersen's Behavioral Model of Health Services utilization.
- ☐ Although predisposing factors are important, our review found that both need and enabling factors have an influence on choice of healthcare provider.



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Clinical Relevance

Identifying patient factors that are related to specific providers may allow healthcare professionals to predict and more efficiently facilitate a patient's course of care, influence public health policy, and guide clinical research.

Acknowledgements / References

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¹Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: does it matter? *J Health Soc Behav, 36*(1), 1-10.

²Babitsch, B., Gohl, D., & von Lengerke, T. (2012). Re-revisiting Andersen's Behavioral Model of Health Services Use: a systematic review of studies from 1998-2011. Psychosoc Med, 9, Doc11.