

Health Literacy in Physical Therapy Students: Exploring Changes in Self-Efficacy Following an Active Learning Strategy



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Introduction

The importance of health literacy in today's complex healthcare environment plays a crucial role in the success of our healthcare providers. Health literacy has been defined as "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (Institute of Medicine, 2004). Low health literacy has been shown to contribute to increased costs, decreased quality, and negative health behaviors and has been recommended to be included as a curricular thread in health professional education (Hudson, 2018). While health literacy instruction may be incorporated into existing curriculum based on national recommendations, little published evidence exists for best practice teaching methodologies.

Purpose

The purpose of this study is to investigate changes in self-efficacy in utilizing health literacy practices following an intentional active learning strategy.

Methods

37 second year DPT students were given an anonymous online survey delivered via Qualtrics™ at two-week interval pre-post learning intervention. The survey was developed from 32 prioritized health literacy and clear communication practices established by Coleman et al, with a defined subset of 8 core competencies (Coleman, 2017). Students were asked to rank their confidence on a Likert scale ranging from 1-5 in their ability to utilize set health literacy practices. The active learning strategy consisted of the creation of a patient educational material product on a complex topic related to health insurance.

Results

Active learning strategy increases student's self-efficacy in utilizing clear health communication and patient centered care principles

The changes in the scores for the survey capturing self-efficacy as well as scores for the subscale assessing core competencies were examined using paired t-tests with P values < 0.05 were . Pearson correlation coefficients examined linear relationships between the total scores and subscales scores before and after the duration of interventions, where r values >0.60 suggested high correlations.

Internal Consistency: Cronbach alpha = .75
Response Rate: 70.3%
Bonferroni Correction: alpha level of p=.025

	Pre-learning Mean ± SD	Post-learning Mean ± SD	P Value
Total Score	103.38 ± 16.86	121.15 ± 18.8	<0.001
Core Competencies Score	26 ± 4.95	30.65 ± 4.82	<0.001

Table 1. Changes in Scores Before and After the Intentional Active Learning Strategy (N = 26)

Sample Statistics	N	Mean	Std. Error Mean
Pre-Test	26	103.3846	3.30644
Post-Test	26	121.1538	3.69311
Subscale Pre-Test	26	26.0000	4.94773
Subscale Post-Test	26	30.6538	4.81616

Table 2. Sample Statistics

Core Competencies
Likert Scale: 1-5, 1=not at all confident to 5=extremely confident
Rate your confidence in your ability to....
1 Consistently avoid using medical "jargon" in oral and written communication with patients, and define avoidable jargon in lay terms
2 Routinely use a "teach back" or "show me" technique to check for understanding and correct misunderstandings in a variety of health care settings, including during the informed consent process
3 Consistently elicit questions from patients through a "patient-centered" approach (e.g., "what questions do you have?", rather than "do you have any questions?")
4 Consistently use a "universal precautions" approach to oral and written communication with patients
5 Routinely recommend the use of professional medical interpreter services for patients whose preferred language is other than English
6 Consistently negotiate a mutual agenda with patients at the outset of encounters
7 Routinely emphasize one to three "need-to-know" or "need-to-do" concepts during a given patient encounter
8 Consistently elicit the full list of patient concerns at the outset of encounters

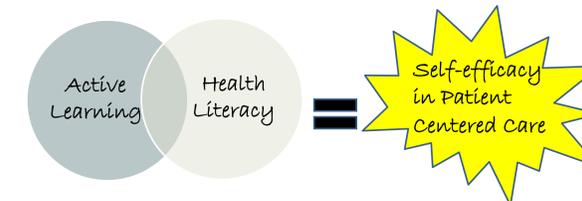
Fig 2. Survey Subscale. (Coleman, 2017).



Fig 1. Student Example

Conclusion

Increased self-efficacy was evident following an intentional active learning strategy targeting awareness of health literacy. These outcomes suggest that an active learning strategy may prove an efficient means to increase utilization of health literacy behaviors in professional practice. Creating learners that not only have the knowledge of health literacy but are confident in utilizing those skills may prove crucial to their effectiveness as patient centered healthcare professionals.



Recommendations

The results of this study suggest intentional active learning strategies may assist students in developing the confidence to apply patient centered care principles of clear health communication and health literacy practices in their future patient interactions. Further research is warranted to identify effective learning strategies as well as outcomes following integration into the clinical environment.

References

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