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Assessing Student Empathy for Hemodialysis Patients

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STATEMENT OF THE PROBLEM

Hemodialysis

- Used by 95% of kidney failure patients.¹
- Strict treatment regimen, which normally includes visiting a treatment center 3 times a week for 3 to 5 hours each visit.²
- Patients on hemodialysis experience a loss of autonomy, independence, and freedom.^{3,4}
- Estimated 50% of patients on hemodialysis don't fully adhere to their treatment regimen.⁴
- Patients on hemodialysis will be more compliant to treatment if they are satisfied with the level of care they are shown by providers.⁵

Empathy in Healthcare

- Ability of healthcare professionals to empathize influences the patient's quality of care and treatment compliance.⁶
- Lower empathy levels → correlated to more medical errors by physicians.⁶
- Higher empathy levels → associated with more accurate diagnoses, increased patient engagement in their health care, and better adherence to therapy.⁷

Current Empathy for Patients on Hemodialysis

- No current data on the empathy levels of healthcare professionals towards patients on hemodialysis.
- Interventions could be effective in improving the empathy of healthcare professional students towards these patients, as previous interventions have shown positive results.^{8,9}

Significance of the Problem

- Hemodialysis patients should be shown empathy, but are healthcare professionals being trained to be empathetic towards these patients?
 - No current data on empathy levels of healthcare professional students towards patients on hemodialysis.
 - This data is needed to develop appropriate interventions to increase student empathy towards this population.

Why students?

- Attitudes developed during school impact the future of patient-focused healthcare and patient outcomes.

OBJECTIVES

What factors influence student empathy towards patients on hemodialysis?

Objective 1: To determine what factors influence medical, pharmacy, and nursing student empathy toward patients on hemodialysis.

Objective 2: To determine medical, pharmacy, and nursing student empathy levels toward patients on hemodialysis.

Objective 3: To design and implement an intervention based on determined factors to increase student empathy in Cedarville University School of Pharmacy students.

HYPOTHESES

Objective 1:

H₀: There is no difference between factors that influence student empathy toward patients on hemodialysis.

H₁: There will be factors that have a significant impact on student empathy levels.

Objective 2:

H₀: There is no difference in empathy levels between medical, nursing, and pharmacy students toward patients on hemodialysis.

H₁: There will be a difference in empathy levels between medical, nursing and pharmacy students towards patients on hemodialysis.

PROPOSED METHODS

Phase One:

Study Design

- Observational cross-sectional
 - Assessing student empathy at one point in time

Sample

- Convenience sampling method
 - Must be current pharmacy, nursing or medical student studying in Ohio



Data Collection

- Surveys distributed to students via email
- Survey responses recorded by Qualtrics online software

Measurement

- Demographic questionnaire
- Student empathy levels measured by Kiersma-Chen Empathy Scale (KCES)
 - KCES composed of 15 survey questions with 7-point Likert-type responses¹⁰
 - KCES is both reliable and valid in nursing and pharmacy students but has not been validated in medical students¹⁰

Phase Two:

Intervention

- Pre-post survey in Cedarville University pharmacy students
- Intervention during GI/Renal Module (students taking module)

PROPOSED ANALYSES

- IBM SPSS 22 for all statistical analysis
- Descriptive statistics to analyze demographic factors
- T-tests:
 - To determine which factors significantly influence student empathy levels
- One-way ANOVA:
 - To compare students in different healthcare professions and determine different empathy levels

LIMITATIONS

- Student's ability to internally reflect
- Generalizability across students in 3 health professions outside Ohio
- KCES not validated in medical students
- Potential for student to retake survey
- Generalizability of intervention beyond pharmacy students

FUTURE DIRECTIONS

- Future projects could include:
 - Interventions to develop empathy in other medical professional students (ex. Nursing)

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PROJECT TIMELINE

Jan. 2014: Obtain IRB approval

March 2015: Contacts established & survey released

April 2015: Survey closed

Fall 2015: Analysis & conclusions completed

Fall 2016 Pre-survey, implement intervention

December 2016: Post-survey

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