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# Assessing Student Empathy for Hemodialysis Patients

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

### Empathy in Healthcare

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

### 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.<sup>8,9</sup>

### 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:

H<sub>0</sub>: There is no difference between factors that influence student empathy toward patients on hemodialysis.

H<sub>1</sub>: There will be factors that have a significant impact on student empathy levels.

### Objective 2:

H<sub>0</sub>: There is no difference in empathy levels between medical, nursing, and pharmacy students toward patients on hemodialysis.

H<sub>1</sub>: 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 responses<sup>10</sup>
  - KCES is both reliable and valid in nursing and pharmacy students but has not been validated in medical students<sup>10</sup>

### 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)

## ACKNOWLEDGEMENTS

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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

## REFERENCES

1. American Kidney Fund. Kidney Disease Statistics. (2012).
2. National Institutes of Health, National Kidney and Urologic Diseases Information Clearinghouse. Treatment methods for kidney failure: Hemodialysis. 2006;2014.
3. Krespi MR, Bone M, Ahmad R, Worthington B, Salmon P. Hemodialysis patients' evaluation of their lives. Turkish Journal of Psychiatry. 2008;19(4):1-8.
4. Guerra-Guerrero V, del Pilar CP, Cameron BL, Santos Salas AV, Cofre González CG. Understanding the life experience of people on hemodialysis: Adherence to treatment and quality of life. Nephrology Nursing Journal. 2014;41(3):289-298.
5. Kovac JA, Patel SS, Peterson RA, Kimmel PL. Patient satisfaction with care and behavioral compliance in end-stage renal disease patients treated with hemodialysis. American Journal of Kidney Diseases. 2002;39(6):1236-1244.
6. Ogle J, Bushnell JA, Caputi P. Empathy is related to clinical competence in medical care. Med Educ. 2013;47(8):824-831.
7. Nunes P, Williams S, Sa B, Stevenson K. A study of empathy decline in students from five health disciplines during their first year of training. Internal Journal of Medical Education. 2011;2:12-17.
8. Van Winkle LJ, Fjortoft N, Hojat M. Impact of a workshop about aging on the empathy scores of pharmacy and medical students. Am J Pharm Educ. 2012;76(1):1-5.
9. Chen JT, LaLopa J, Dang DK. Impact of patient empathy modeling on pharmacy students caring for the underserved. American Journal of Pharmaceutical Education. 2008;72(2):40.
10. Kiersma ME, Chen AMH, Yehle KS, Plake KS. Validation of an empathy scale in pharmacy and nursing students. Am J Pharm Educ. 2013;77(5):1-6