Empathy Development In Second Year Pharmacy Students through Patient Storytelling

Claire Jahnke, Amanda Stallings, Pharm.D., Tyler Marie Kiles, Pharm.D., BC-ADM, Ashley Castleberry, Pharm.D., M.Ed.
College of Pharmacy, University of Texas at Austin, Ausitn, Texas, USA

TEXAS Pharmacy
The University of Texas at Austin
College of Pharmacy

Background

Provision of person-centered care is one of the Educational Outcomes mandated by the Center for Advancement of Pharmacy Education (CAPE).[1] However, the affective skills required for comprehensive patient-centered care are often taught through limited medication adherence simulations.
Studies have shown the ability of personal narratives to positively impact healthcare students' ability to empathize with patients' perspectives.[2]
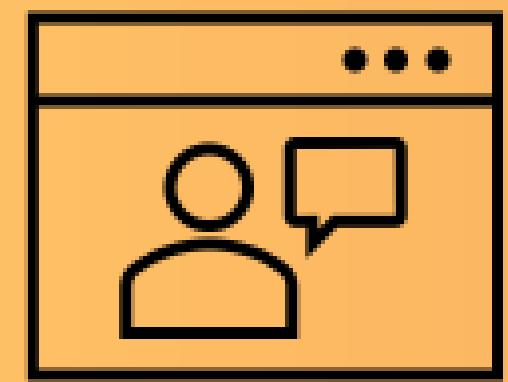
Objective

Examine the effects of using patient storytelling in Pharm.D. didactic classwork, through large group discussions over patient essays and/or videos

Methodology
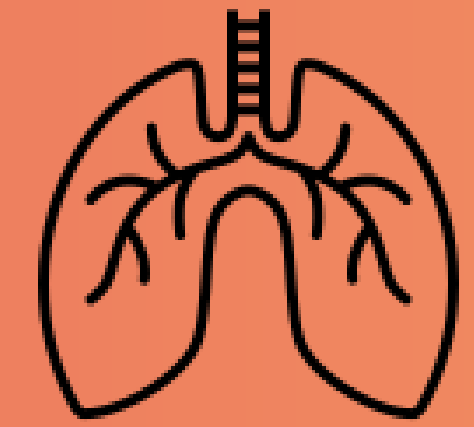
Identified 5 topics from the P2 Pharmacotherapy Sequence: Chronic Kidney Disease (CKD), Cystic Fibrosis (CF) and Heart Failure (HF), Type 1 Diabetes (DM), and Meningitis (ID)

Created, adapted, or identified essays and videos focused on patient experiences. Shared material to 2nd-year students at University of Texas at Austin College of Pharmacy

Held small group discussions during in-class Pharmacy Practice Pre-Lab sessions, supported by large group facilitation
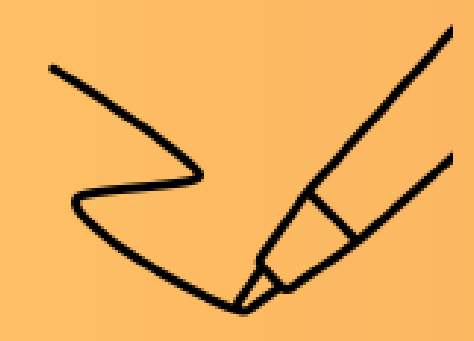
Directed students to complete a 3-5 sentence reflection with critical reflections model: "What? So What? What Now?"[3]

Used Generative Artificial Intelligence (AI) and Large Language Model (ChatGPT)[4] to conduct qualitative thematic analysis using the "5R Framework for Reflection"[5]

Table 1: Reflection Categories from 5R Framework

Category	Defined as	Key Phrases
Reporting	Descriptions or summaries of what the student saw or read in the patient story.	"I noticed...they said..."
Responding	Personal observations, feelings, questions and thoughts related to the narrative.	"I felt...I was surprised...I think"
Relating	References to prior knowledge, experience, or enncounters	"Reminds me of ... like/unlike..."
Reasoning	Connection of narration to important concepts, recognition of how perspective affect understanding, and references to theoretical applications	"the most significant part...imply...critically...i understand that"
Reconstructing	Plans for future practice pr evidence of change of perspective	"I will now...I realize...future practice..."

Results/Findings

COLLECTED 421 REFLECTIONS FROM 5 SESSIONS

AN AVERAGE OF 80 OUT OF 102 SECOND-YEAR PHARMACY STUDENTS SUBMITTED REFLECTIONS PER SESSION

RANDOMLY SAMPLED 10 REFLECTIONS FROM EACH SESSION

Analysis

ChatPGT identified 25 primary topics from the initial review of the submitted reflections and then consolidated into 5 themes, which were revised by researchers.

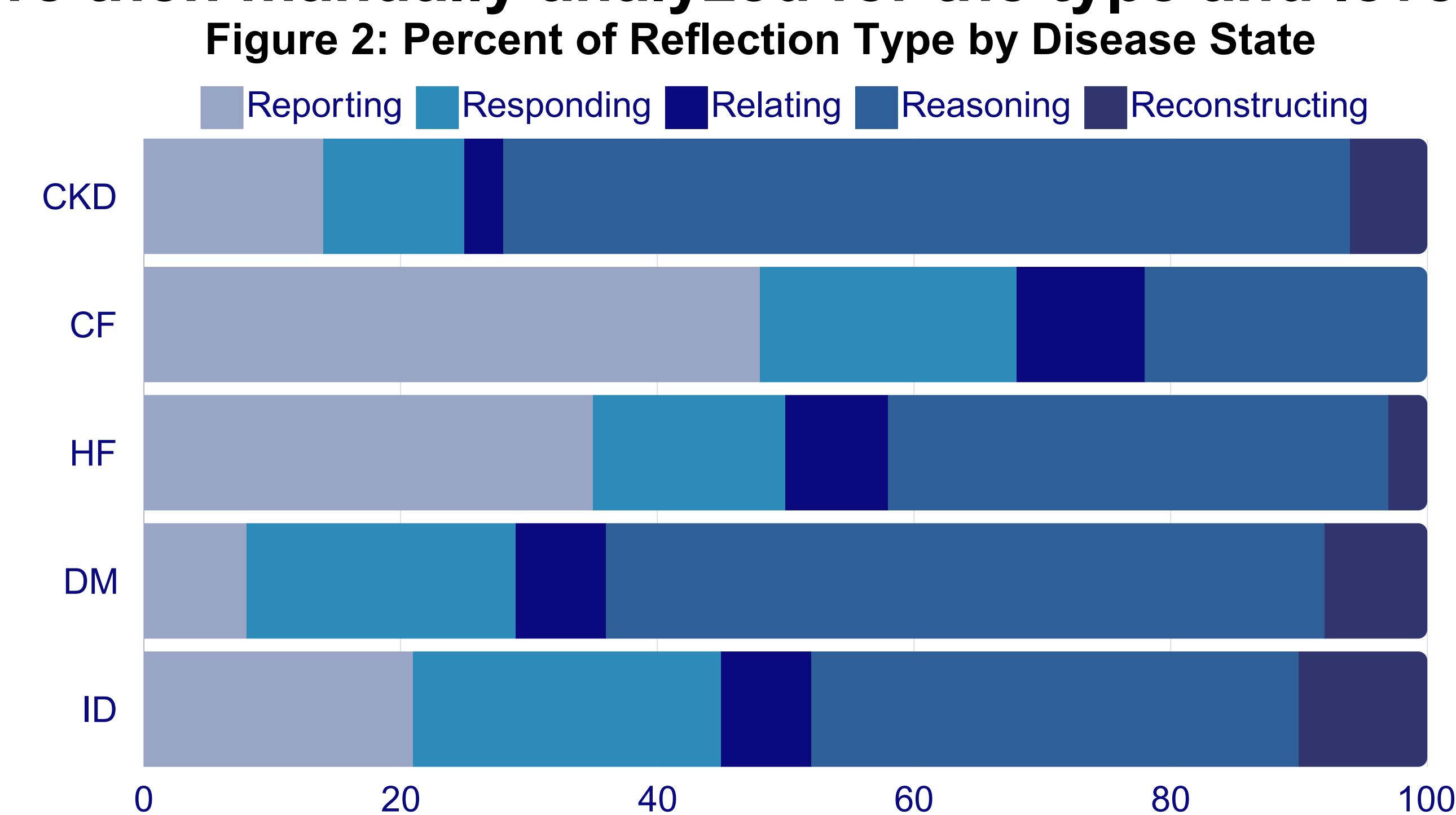- Empathy and Understanding in Patient Care
- Provision of Education and Patient-Centered Care
- Resilience and Postive Mindset
- Social Support and Family Involvement
- Health Conditions Awareness and Preparedness

Samples were then manually analyzed for the type and level of reflection

Figure 2: Percent of Reflection Type by Disease State

Legend: Reporting, Responding, Relating, Reasoning, Reconstructing

The themes present in each set of reflections as well as the level of reflection varied by disease state material provided

Figure 1: Number of Reflections by Session (N=241)

ID (69), CKD (106), CF (89), HF (83), DM (76)
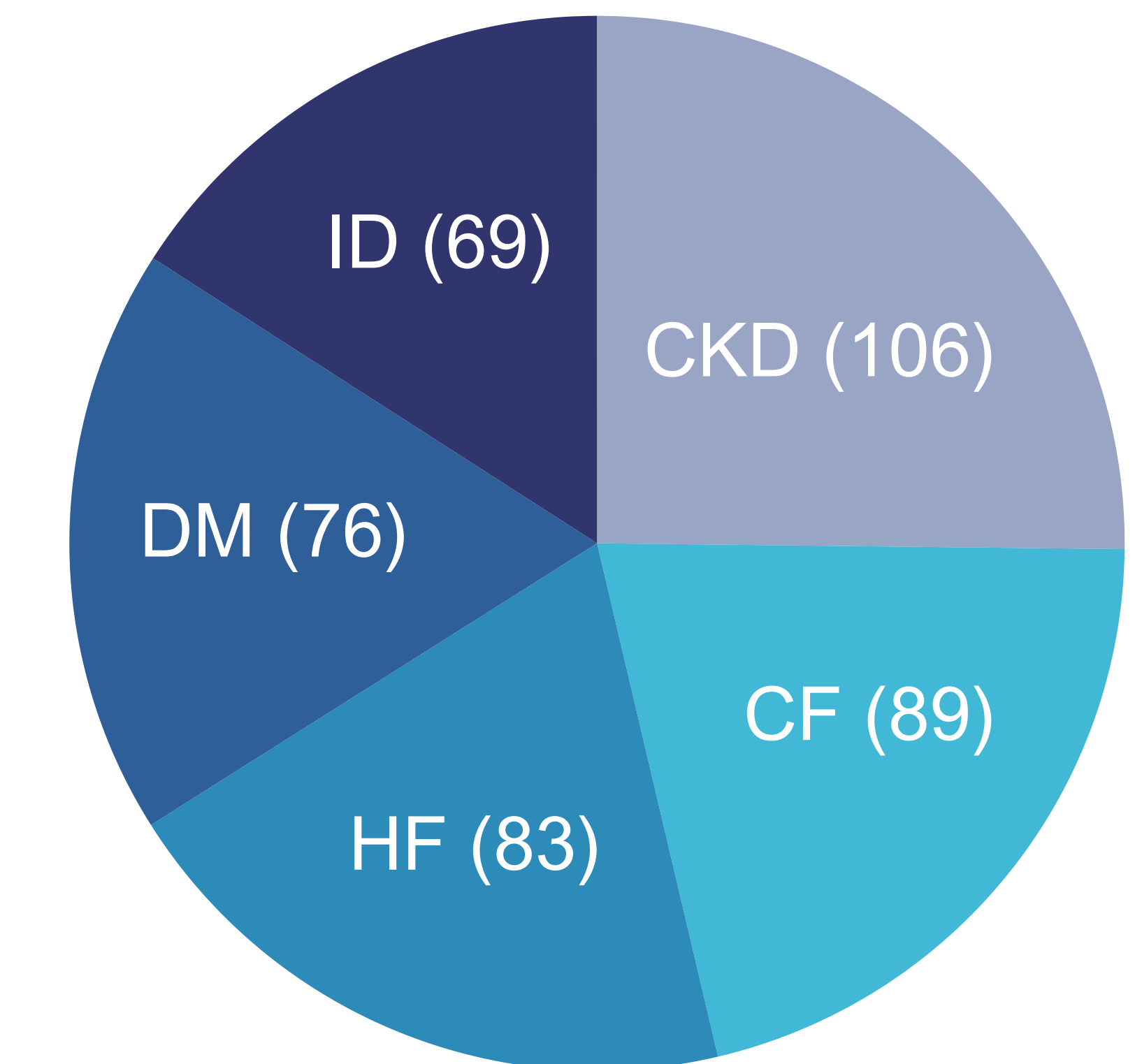
Student Impact

"It's always helpful to see the life experiences of patients because it helps us see the human aspect of disease."

"This helped me remember that the patient is trying to maintain a life outside of their condition ... [their] condition does not define who they are."

"Sometimes going through PT, it can be hard to see how this will impact an actual patient. This really [showed] how important PT information is to patients being affected."

"It's important to consider a patient's mindset regarding disease states. If it is something that causes them stress, it needs to be addressed ... beyond just treating the disease."

"You should always have empathy when encountering any patient, especially those with chronic illnesses."

Limitations

- Single investigator conducted thematic analysis
- Invalidated AI responses and session variability
- Limited direction about the purpose of reflection
- Variability in content, focus, and format
- Participation tied to extra credit for completion

Conclusion

Student reflections show meaningful engagement with the didactic course material, with increased empathy for patients, valuation of patient-centered care. understanding of patients' reliance and mindsets, the social dynamics involved in lifestyle management, and awareness of the health conditions themselves.

Future Work

- Expand patient storytelling to the P3 pharmacotherapy sequence
- Provide specific instructions on reflection best practices before sessions
- Increase rigor of thematic analysis and specificity of reflection
- Consider application in support of didactic material in addition to affective skills

Acknowledgements

References

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