

Is there a curriculum gap?: Assessing future pharmacists' preparedness to face end-of-life situations in practice

Robert Bechtol^{1,4}; Emily Laswell^{2,4}; Stephanie Tubb^{1,4}; Kayleigh Conaway^{3,4}; Rachel Massey^{3,4}; Tyler Wisse^{3,4}
¹Assistant Professor of Pharmacy Practice; ²Associate Professor of Pharmacy Practice; ³PharmD Candidate 2025; ⁴Cedarville University School of Pharmacy



BACKGROUND

- Rising need for end-of-life care (EOLC) training for pharmacists due to the growing elderly population
- Several educational strategies have shown some benefit, but an ideal method has not yet been determined¹
- Must examine the existing curriculum to determine appropriate changes or improvements

OBJECTIVE

To assess student, alumni, and clinical faculty perceptions on the:

- Preparedness of future pharmacists to face EOLC situations in practice;
- Efficacy of the curriculum in equipping student pharmacists to navigate EOLC

METHODS

Used a mixed-methods design



Faculty Interviews	Surveys
Development Interview questions were based on: <ul style="list-style-type: none">• Literature review• Investigators' perspectives	Development Survey questions were developed from: <ul style="list-style-type: none">• Lazenby's End of Life Care Survey²
Participants <ul style="list-style-type: none">• 50% (7/14) of clinical faculty participated in semi-structured interviews• Questions focused on the quality of the current EOLC curriculum	Participants <ul style="list-style-type: none">• 28% (72/257) of alumni completed the surveys to self-assess their preparedness to face EOLC situations• 35% (15/43) of fourth-year PharmD students completed the surveys
Data Collection & Analysis <ul style="list-style-type: none">• Interviews conducted in-person or via Microsoft Teams• Data coded manually using in-vivo and pattern coding prior to categorization and theme development	Data Collection & Analysis <ul style="list-style-type: none">• Qualtrics surveys were administered via email to alumni and 4th-year PharmD students• Data was analyzed using descriptive statistics through SPSS v 28

Categories and Themes Identified in Faculty Interviews

Category 1. EOLC in the Current Curriculum

Theme 1. EOLC is taught in:

- Infectious Disease
- ACLS Training
- Pain and Palliative Care
- Quality of Life Issues in GI
- Respiratory
- Empathy Projects in Renal
- Dying Process in Cardiology
- Women's Health

Theme 2. Current Educational Methods Utilized

- Lectures
- Simulations
- Reflections/Reflective Writing
- Guest Speakers
- Article Review with Questions
- Interprofessional Education

Theme 3. Perceptions on Students' Preparedness

- Most students **are not** prepared to handle EOLC situations in practice based on only school
- Students need to experience EOLC in real life to truly be prepared (need direct experience)
- Always room for curricular improvement

Category 2. Faculty Experiences with EOLC

Theme 4. Clinical Experience

- Infectious disease and heart failure in ICU; oncology; ACLS; critical care units; neurology end of life units and pediatric neurology

Theme 5. Teaching Experience

- Five out of seven practice faculty felt prepared to teach EOLC content based on their personal or professional experiences

Category 3. EOLC in the Curriculum Moving Forward (Future)

Theme 6. Foundational Knowledge Needed for EOLC

- Empathy/Handling Emotions
- Death and Dying Process
- Biblical worldview: physical and spiritual death

Theme 7. Courses in which to Incorporate EOLC

- Oncology
- ACLS
- Critical Care
- Saline Process Training
- Pain and Palliative Care Elective

Theme 8. Suggestions for Educational Methods

- Simulations
- Short lecture followed by a panel
- Guest speakers
- OSCE with practical scenarios
- Case studies
- Interprofessional activities

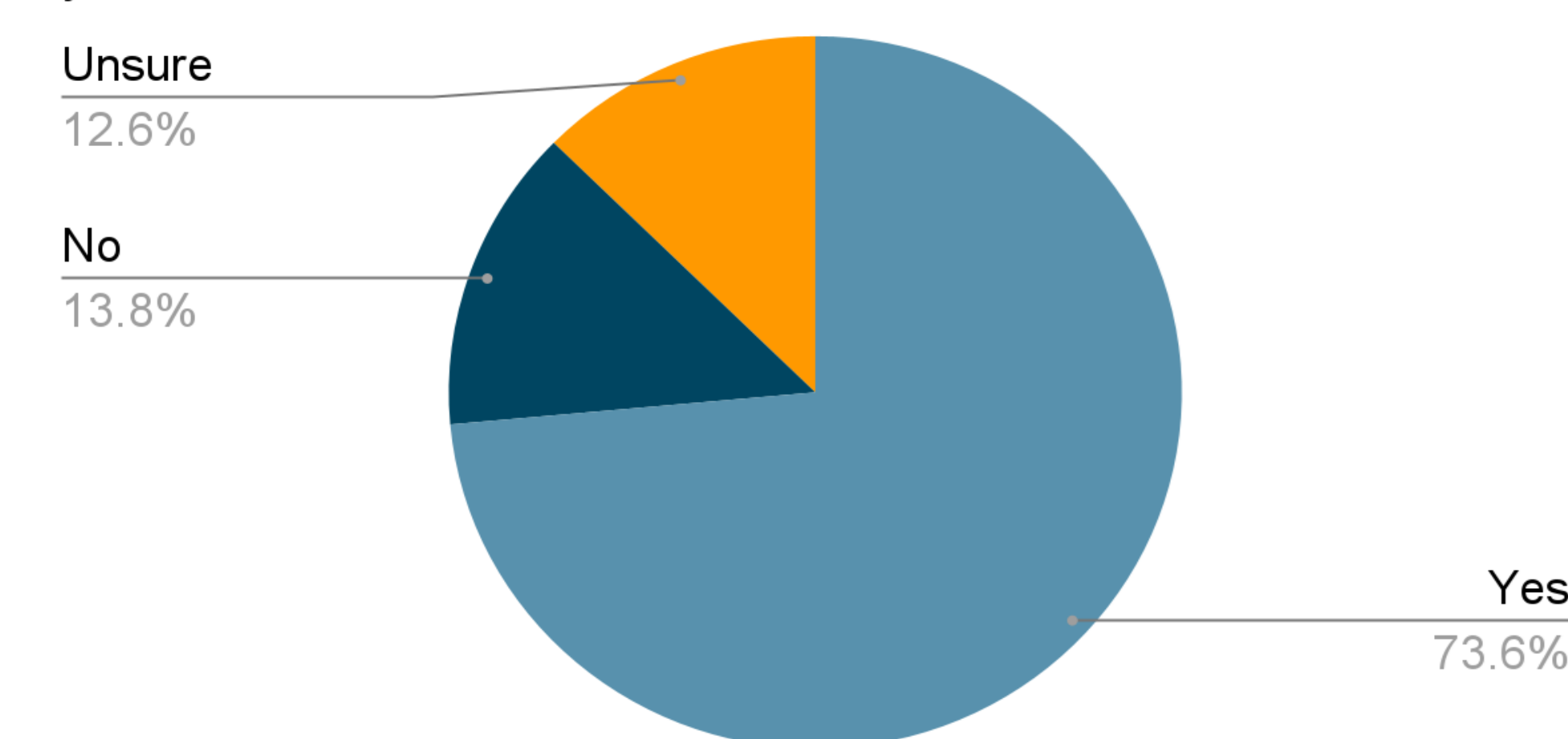
Theme 9. Instructors' Qualifications

- Practice experience with EOLC
- Ability to integrate a biblical worldview
- Ability to collaborate with EOLC instructors not in pharmacy

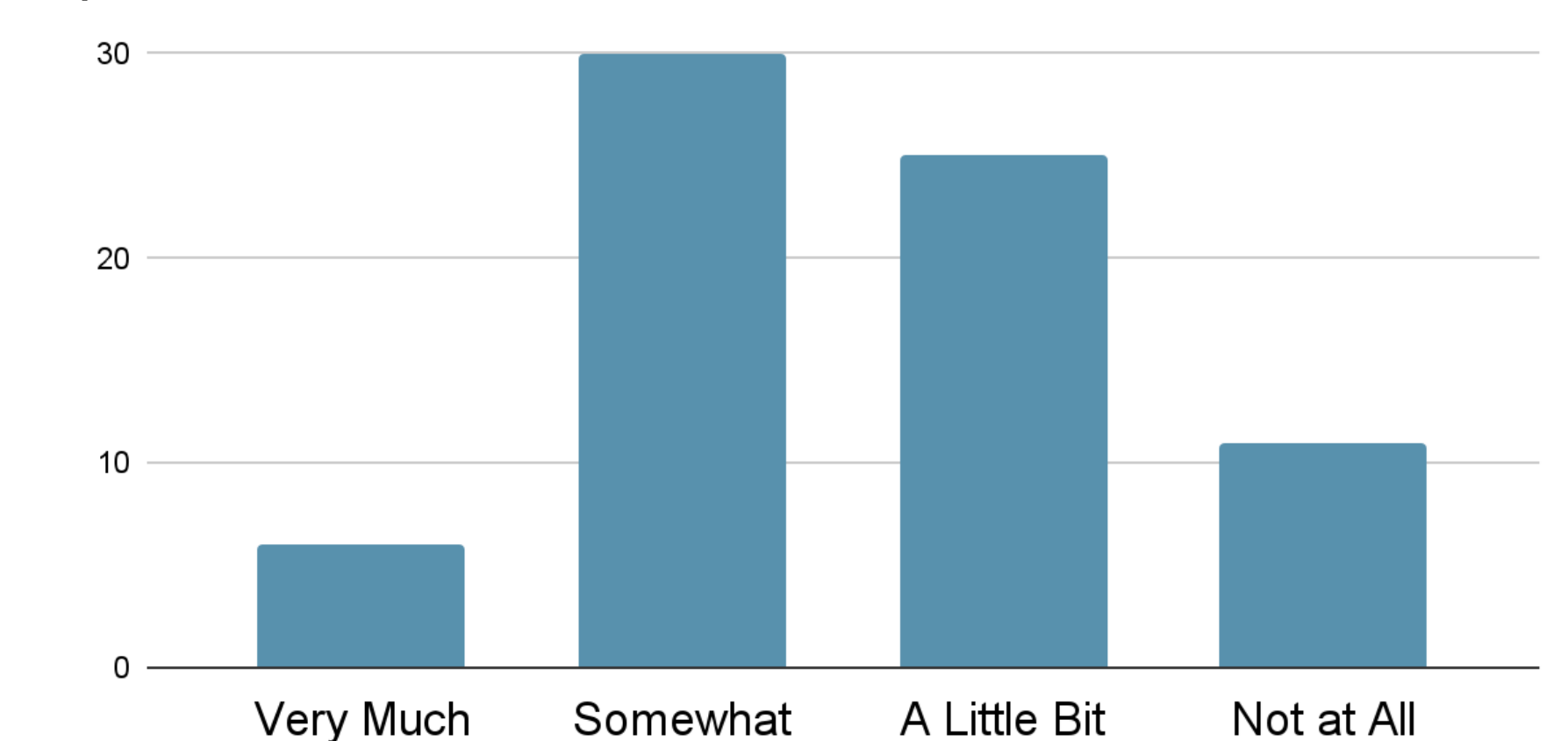
RESULTS

Survey Responses from Alumni and Fourth-Year PharmD Students

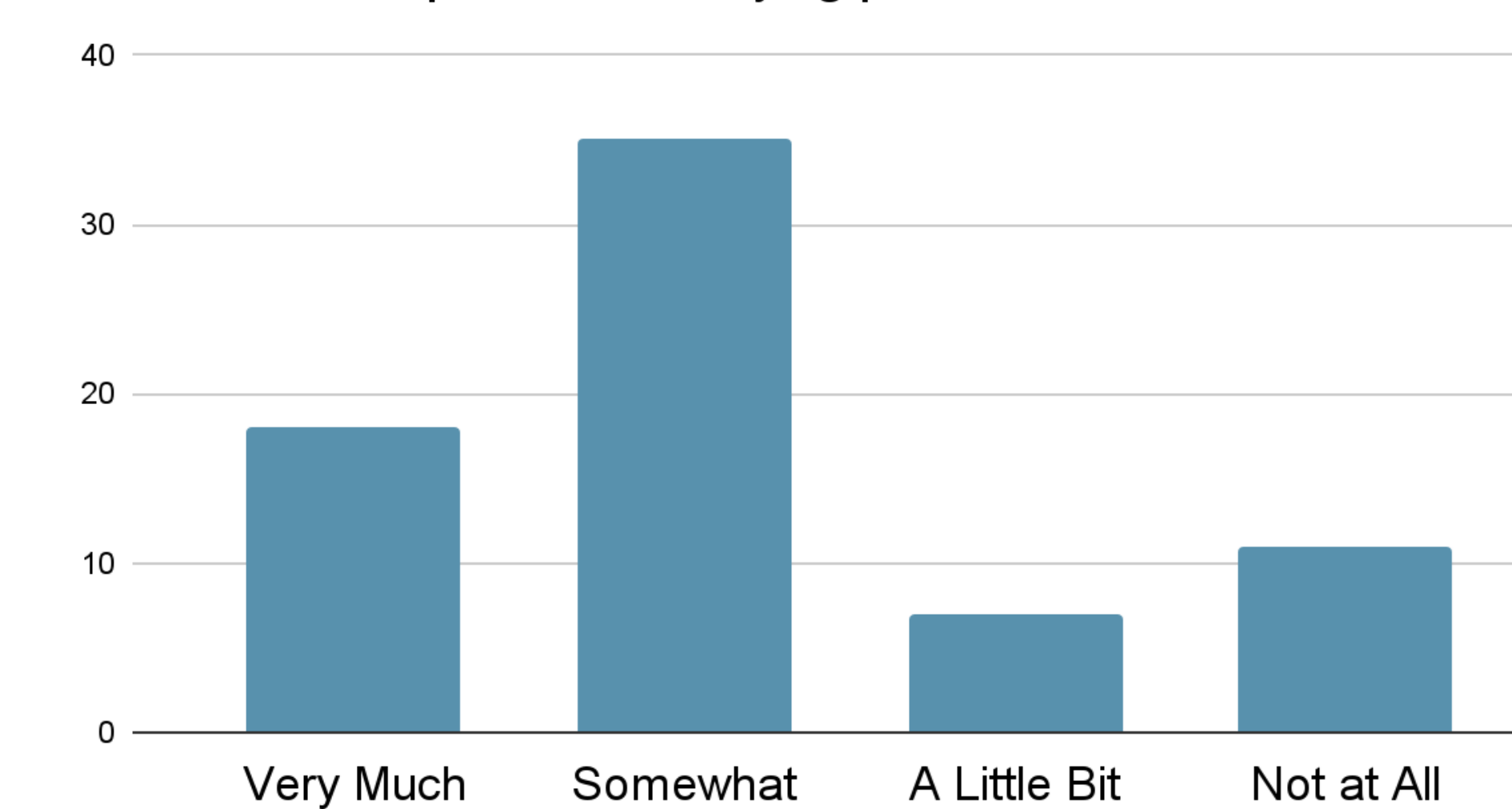
Did you receive any training concerning end-of-life care during your education?



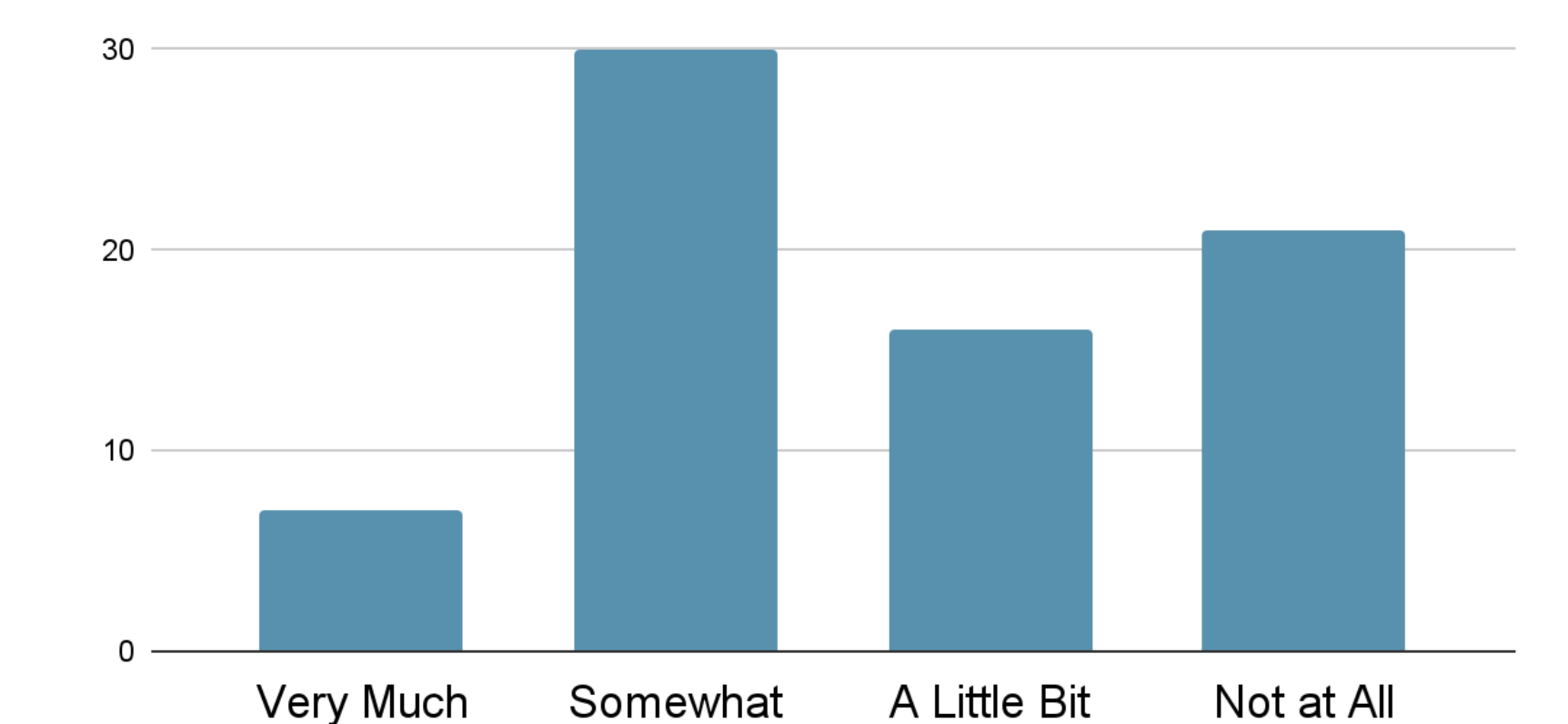
I can assist family members and others through the grieving process.



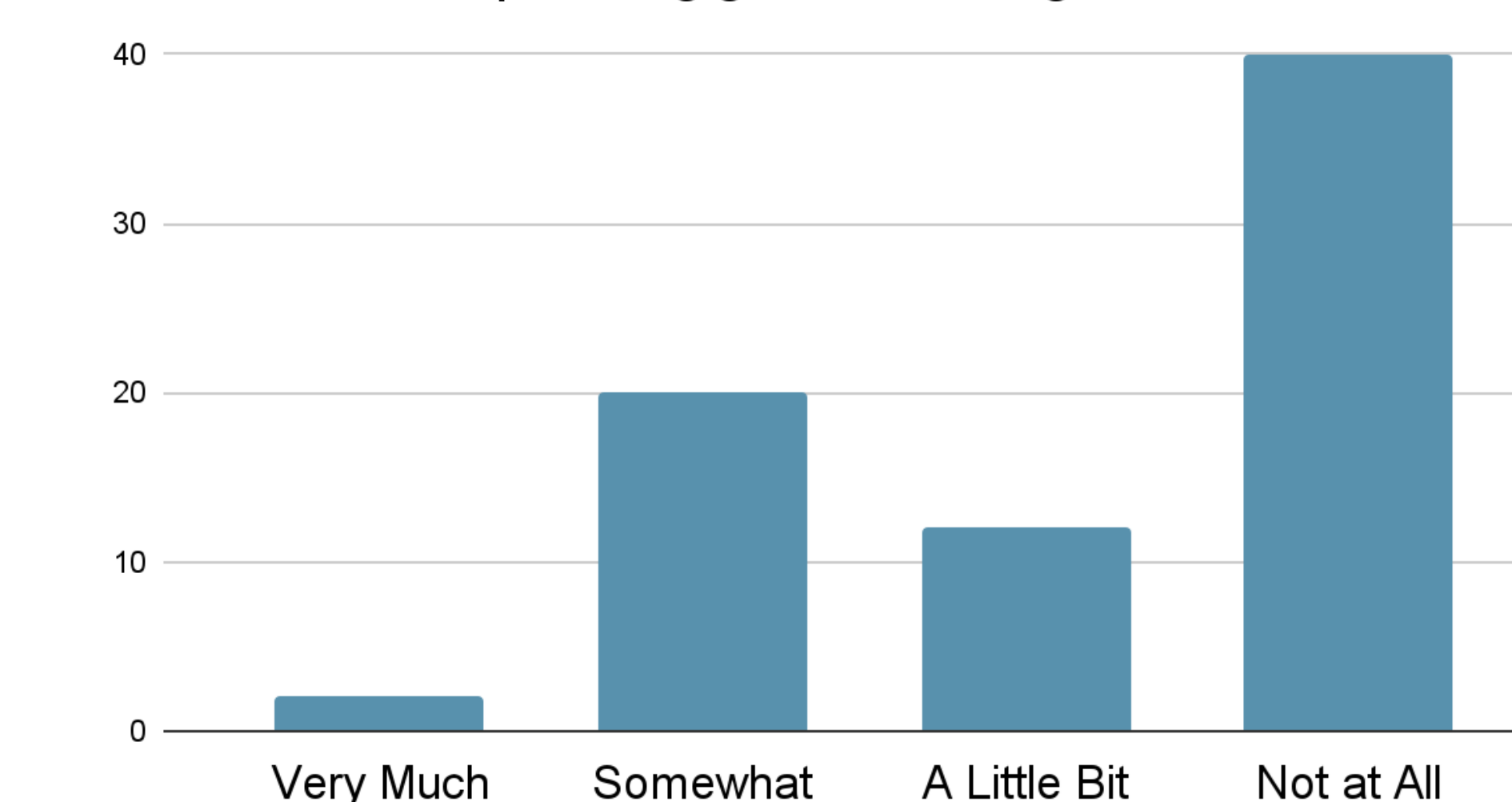
I am able to be present with dying patients.



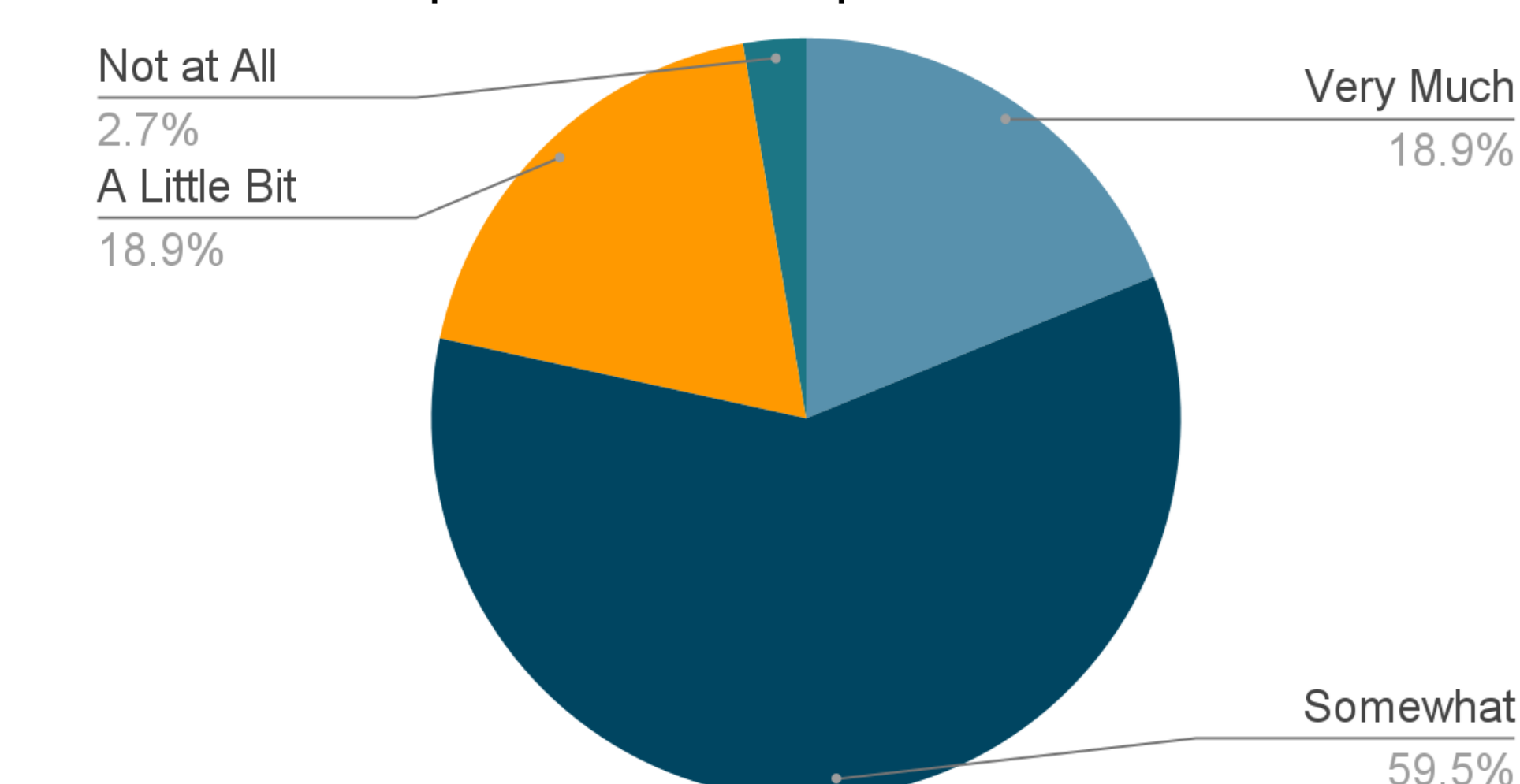
I have personal resources to help meet my needs when working with dying patients and families.



I am comfortable providing grief counseling for families.



I can address spiritual issues with patients and their families.



DISCUSSION AND CONCLUSIONS

- Faculty perceptions and suggestions on improving the didactic curriculum includes using a panel of experts to share their lived experiences, incorporating practical EOLC scenarios and encounters, and using interprofessional simulations
- Alumni and students expressed they were comfortable with their own emotions during EOLC situations and scenarios, but felt a lack of training and resources for helping others
- Students may benefit from interactive educational experiences that improve their knowledge of EOLC resources available to patients, families, and healthcare professionals

Limitations:

- Small sample size limits generalizability
- A single, rural institution

REFERENCES

1. Howard, ML, Atanda, A, Gaviola, ML. A multipronged approach to teaching end-of-life care to student pharmacists. *J Am Coll Clin Pharm*. 2021;4:498–506. <https://doi.org/10.1002/jac5.1399>
2. Lazenby M, Ercolano E, Schulman-Green D, McCorkle R. Validity of the end-of-life professional caregiver survey to assess for multidisciplinary educational needs. *Journal of Palliative Medicine*. 2012;15(4). doi:10.1089/jpm.2011.0246