Rendezvous with Death: Preparing Future Pharmacists for Death and Dying Experiences

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BACKGROUND

Encountering End-of-Life Care (EOLC)

- Pharmacists will encounter EOLC in a variety of settings. There is a growing need for student pharmacists to be educated in EOLC due to a growing elderly population[1]; however, pharmacy curricula are often suboptimal in this area.

Gap in the Pharmacy Curriculum

- To determine opportunities for improvement, an internal analysis of Cedarville University School of Pharmacy (CUSoP) faculty, students, and alumni was conducted to assess perceptions of student preparedness for EOLC.
- Results indicated that while individuals felt competent in managing EOLC for themselves, they perceived a deficiency in their ability to support and provide resources for other healthcare providers and families.
- Concern was expressed that students are not prepared to face EOLC in practice based on traditional lecturing alone. Based on these results, an educational intervention for third-year student pharmacists was developed.

OBJECTIVES

1. To assess if an educational intervention can improve student pharmacist preparedness to face EOLC.
2. To assess students' perceived ability to provide support to patients and families in EOLC.

METHODS

Methods

- Population: Third-year pharmacy students (N=33) enrolled in an Advanced Bioethics course
- Intervention:
  - Part One: faculty panel focused on providing pharmacist perspectives on death and dying in practice
  - Part Two: Branched Narrative activity to apply practical communication tools to a patient case
    - Students were divided into groups of 5 to 6, then discussed prompts provided and collectively made selections to advance through the narrative
    - All branched narrative pathways and resources available to pharmacists in EOLC situations were discussed
- Data Collection: Pre- and post-surveys collected demographic information and responses to a modified Lazenby's End of Life Care Survey.[2] Surveys were de-identified and entered into Microsoft Excel.

Data Analysis

- Analyses performed in SPSS 29.0.1
- Alpha was set to 0.05 for statistical significance
- Demographic items were analyzed using descriptive statistics
- Data were analyzed for normality with the Shapiro-Wilk and Kolmogorov-Smirnov tests. The pre-post data were analyzed for differences with the Wilcoxon sign-rank test.

REFERENCES

1. Ivey MF, Vest TA, Zilz DA. The need for increased education and training of pharmacy learners in the care of older, critically ill, and end-of-life patients. *American Journal of Health-System Pharmacy*. 2021;78(14):1336-1340. doi:10.1093/ajhp/zxab177
2. Lazenby M, Ercolano E, Schulman-Green D, McCorkle R. Validity of the end-of-life professional caregiver survey to assess multidisciplinary educational needs. *Journal of Palliative Medicine*. 2012;15(4). doi: 10.1089/jpm.2011.0246

RESULTS

Figure 1. Age Ranges

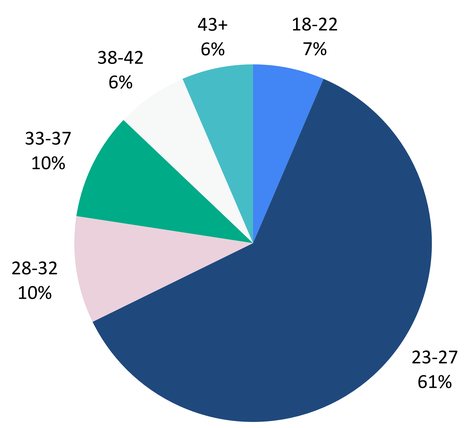

Figure 2. Ethnicity

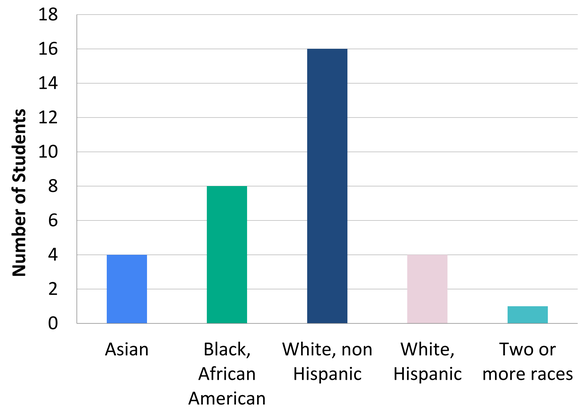

Figure 3. Gender

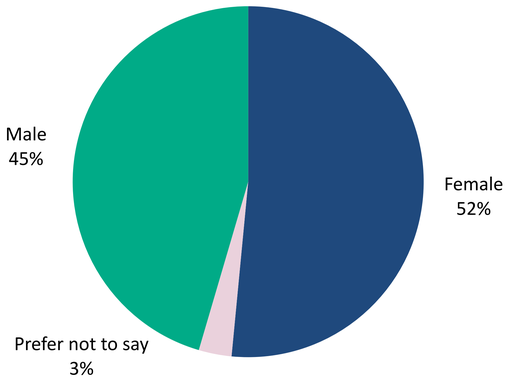

Figure 4. Previous Healthcare EOLC Encounters

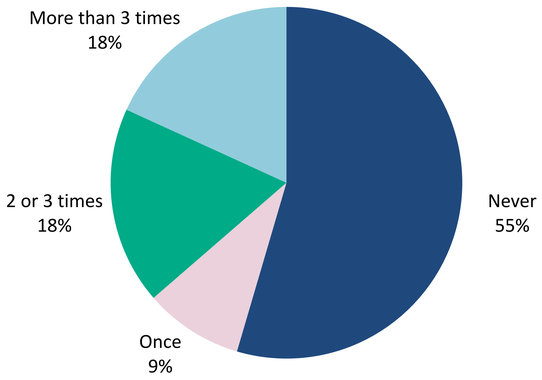

Table 1. Pre- and Post-Modified Lazenby Survey Results

Item	Pre-Survey Median (IQR)	Post-Survey Median (IQR)	p-value
I am comfortable helping families to accept a poor prognosis.	3 (1.5-3)	3 (2-4)	0.001
I am able to set goals for care with patients and families.	3 (2.5-4)	3 (2-4)	0.682
I am comfortable talking to patients and families about personal choice and self-determination.	4 (2-5)	4 (3-5)	0.110
I can assist family members and others through the grieving process.	3 (2-4)	4 (2.5-4)	0.005
I am able to document the needs and interventions of my patients.	4 (3.5-4)	4 (4-4.5)	0.260
I am comfortable talking with other healthcare professionals about the care of dying patients.	4 (3-5)	4 (3-5)	0.157
I am comfortable helping to resolve difficult family conflicts about end-of-life care.	2 (1-3.5)	3 (2-4)	0.016
I can recognize impending death (physiologic changes).	3 (2-4)	3 (2.5-4)	0.158
I know how to use nondrug therapies in management of patients' symptoms.	3 (2.5-4)	4 (3-4)	0.268
I am able to address patients' and family members' fears of getting addicted to pain medications.	3 (2.5-4)	4 (3-4)	0.124
I encourage patients and families to complete advance care planning.	3 (2-4)	4 (3-5)	0.009
I am comfortable dealing with ethical issues related to end-of-life/hospice/palliative care.	3 (2-3.5)	4 (2.5-4)	0.002
I am able to deal with my feelings related to working with dying patients.	3 (2.5-5)	4 (3-5)	0.005
I am able to be present with dying patients.	4 (3-4.5)	4 (3-5)	0.008
I can address spiritual issues with patients and their families.	4 (2.5-4.5)	4 (3-4.5)	0.101
I am comfortable dealing with patients' and families' religious and cultural perspectives.	4 (3-5)	4 (3-5)	0.305
I am comfortable providing grief counseling for families.	2 (2-4)	4 (2-4)	0.004
I am comfortable providing grief counseling for staff.	3 (1.5-3.5)	3 (2-4)	0.034
I am knowledgeable about cultural factors influencing end-of-life care.	2 (2-3.5)	4 (2.5-4)	< 0.001
I am familiar with palliative care principles and national guidelines.	3 (2-4)	3 (3-4)	0.227
I am effective at helping patients and families navigate the healthcare system.	3 (2.5-4)	4 (2-4)	0.260
I am familiar with the services hospice provides.	3 (2-3.5)	3 (3-4)	0.005
I am effective at helping to maintain continuity across care settings.	3 (2-4)	4 (3-4)	0.012
I have personal resources to help meet my needs when working with dying patients and families.	3 (2-4)	4 (2-4)	0.077
I am able to provide support to patients and families in end-of-life situations.	3 (2-4)	4 (3-4)	0.028

DISCUSSION AND CONCLUSIONS

Discussion

- After the intervention, students felt more comfortable being present with dying patients, assisting family members and coworkers through the grieving process, understanding hospice services, providing grief counseling, and maintaining continuity across the healthcare team.
- Students did not feel more prepared to deal with patients' and families' religious and cultural perspectives during EOLC and did not feel prepared to talk with other professionals about the care of dying patients.
- While this educational intervention can introduce students to some concepts, some EOLC experiences may be better understood in experiential settings.

Limitations

- The modified Lazenby Survey that was used for pre- and post-surveys is unvalidated.
- The sample size was limited due to small class size.
- No long-term outcome data are available to assess efficacy of intervention after APPEs or years of pharmacy practice.
- There is a potential for social desirability bias with students responding in a manner that will be viewed favorably.

Conclusion

- The panel and branched narrative is a successful activity to incorporate death and dying topics into a school of pharmacy curriculum. Educators could consider implementing this activity to increase student comfort with EOLC interactions.
- Further research could investigate spiral integration of EOLC interactions within pharmacy curricula, within both classroom and experiential education.