

BRIEF

Teaching Pharmacy Students and Residents Patient-Centered Care Through Interviewing Veterans

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Objective. To incorporate the My Life, My Story program into pharmacy learners' training and assess its impact on the learners' self-reported patient-centered care competencies.

Methods. Fourth professional year (P4) pharmacy students and first and second year (PGY-1 and PGY-2) pharmacy residents at a veterans health care facility were instructed to identify a patient to interview during their rotation. Following a guide provided to them, the learners conducted an interview and wrote their patient's story. Learners also completed anonymous, voluntary, pre- and post-activity surveys online intended to assess their patient-centered care competencies and report the impact of and overall perceptions about the experience. The total number of learners and stories were tracked by reviewing patients' medical records.

Results. Between July 2016 and February 2019, 34 pharmacy learners completed 40 veterans' life stories. The participants included 28 P4 pharmacy students and four PGY-1 and two PGY-2 pharmacy residents. Of the 34 learners, 9 (26%) completed the optional, anonymous pre-activity survey and 16 (47%) completed the post-activity survey. On a Likert scale (1=poor to 5=excellent), learners reported a significant improvement in their ability to let the patient tell their story, view the patient as a whole person, and show care and compassion. Overall, participants reported that the learning experience was a good use of their time to a great (56%) or large (28%) extent and helped them to foster a positive relationship with their patients.

Conclusion. Integrating the My Life, My Story program into pharmacy learning experiences may assist in developing patient-centered care skills in the clinical setting.

Keywords: patient-centered care, pharmacy education, storytelling

INTRODUCTION

Pharmacy educators have recognized the need for humanistic approaches in their emphasis on both patient-centered care and affective domain learning. Specifically, in 2016, the Accreditation Council for Pharmacy Education (ACPE) revision of accreditation standards responded to the Institute of Medicine's (IOM) call to provide patient-centered care (PCC). Patient-centered care is defined as care that is respectful of and responsive to individual patient preferences, needs, and values, highlighting the PCC described in Standard 2.1 of ACPE's Standards

2016.^{1,2} The term patient-centered care came to the forefront in health care discussions with the 2001 IOM report that identified PCC as one of six core features of an effective health care system.³ In addition, the revised ACPE accreditation standards call for pharmacy students to participate in curricular activities and experiences related to affective domain learning in growing competence, both in practice and care and in personal and professional development (Standards 3, 4, and 12). Affective domain learning is one of the three learning domains defined in Bloom's Taxonomy and involves emotions, values and attitudes.^{4,5}

Various frameworks exist for incorporating humanistic learning into pharmacy curriculum and have been reported in the literature. Young and Anderson reported

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that incorporating personally oriented cases vs clinically oriented cases in the classroom led to better student learning outcomes.⁶ They showed that pharmacy students performed better when exposed to material formatted with a personal narrative-style patient story interwoven with the clinical information as compared to an impersonal, fact base delivery of the case devoid of the humanizing elements of the case. The students were also better able to empathize with their patients and had an improved understanding of how patient compliance affects clinical outcomes. Courses utilizing case studies, book clubs, and reflective journaling may help develop pharmacy students' emotional intelligence and provide an alternative approach to humanistic learning.^{7,8} While the important role played by humanistic learning in pharmacy education has been recognized, many of these experiences are offered in the pre-clinical years or later in the curriculum as electives. An innovative framework for incorporating this type of learning during advanced pharmacy practice experiences (APPEs) is warranted. The My Life, My Story (MLMS) program is one method to incorporate personally oriented cases into pharmacy education.

The MLMS program was originally developed at the William S. Middleton Memorial Veterans Hospital in Madison, Wisconsin, with staff members performing the life story interviews. The MLMS program connects learners and veterans to elicit a life story that is integrated into care via the electronic medical record. Veterans' reaction to this project has been overwhelmingly favorable, and most providers have agreed that reading the stories was

both a good use of clinical time and ultimately would improve treatment of the veterans who participated.^{9,10}

Implementation of the MLMS program and its reported impact on learners across multiple professions has been described elsewhere.¹¹ This article describes how the MLMS program has been built directly into the practice experiences of pharmacy learners to provide humanistic learning and encourage patient-centered care.

METHODS

The MLMS program team was made up of staff members at VA Boston Healthcare System involved in clinical education or direct learner supervision with academic appointments at several universities. Prior to implementing the MLMS activity, the team developed instructions for the learners and a pre- and post-activity survey to evaluate learners' experiences. To assess PCC competencies, we adapted the Consultation and Relational Empathy (CARE) Measure as we could not find an existing tool to assess learner perceptions of PCC.¹⁴ The CARE measure is a validated instrument to assess patient perceptions of empathy. For this intervention we selected the following five PCC items from the CARE measure that we hypothesized might be most influenced by MLMS: be interested in the whole person, show care and compassion, really listen, let the patient tell their story, and make the patient feel at ease (Table 1). Learners were asked to rate their self-perceived ability in each of five areas on a five-point Likert scale ranging from 1=poor to 5=excellent.

Table 1. Differences in Patient Centered Care Competencies from Baseline to Post-Survey

Item	Definition	Survey	Mean (SD)	t	p value
Be interested in the patient as a whole person	Asking/ knowing relevant details about the patient's life and situation; not treating the patient as "just a number"	Pre	4.4 (1.0)	4.1	<.01
		Post	4.8 (.4)		
Show care and compassion	Seeing genuinely concerned, connecting with the patient on a human level; not being indifferent or detached	Pre	4.5 (.9)	2.3	<.05
		Post	4.8 (.5)		
Really listen	Pay close attention to what the patient is saying, not looking at notes or computer as patient is talking	Pre	4.3 (1.06)	2.1	.053
		Post	4.4 (1.13)		
Let the patient tell their story	Giving time to fully describe their condition in their own words; not interrupting, rushing or diverting	Pre	4.3 (1.06)	3.1	<.01
		Post	4.8 (.58)		
Make the patient feel at ease	Introducing yourself, explaining your position, being friendly and warm towards patients, treating patients with respect; not cold or abrupt	Pre	4.4 (.97)	0.6	.59
		Post	4.5 (.73)		

Note: Baseline survey n=9, post-activity survey n=16. Items rated on Likert scale 1-5.

At the beginning of the learners' APPE or residency rotation, the site director sent out an email containing detailed instructions, including suggested questions, and support documents along with links to the pre- and post-activity survey participant.¹² The site director reminded the trainees to respond to the pre-survey at the beginning and the post-survey at the end of their rotation. The Research and Development Committee of VA Boston Health Care System determined the project to be exempt from review. No funding for this project was obtained. Fourth year pharmacy students and pharmacy residents (referred to collectively as "learners") were required to participate in the MLMS program as part of their training.

On the post-activity survey, in addition to assessing PCC competencies, participants were asked to provide additional program feedback by responding on a five-point Likert scale to the statement, "This was a good use of my time," and by providing data on program participation, including number of stories completed, time spent on each element of the process, and open-ended responses to the following questions: What was most valuable? Why is it important? What would you change? The post-survey also requested information about what profession is the participant in training for and what general level of training (ie, student, resident, fellow, etc.)

The learners completed a life story interview of a veteran at the VA Boston Healthcare System using standardized question prompts. The following are examples of the questions asked: Where did you grow up and what was it like? What prompted you to join the military? What are you proud of in your life? What have you learned along the way that has helped you? Notes taken during the interview were rewritten into a first-person narrative with a target length of roughly 1,000 words. The learner offered the veteran the opportunity to review the story. If the veteran agreed, the learner read the story back to the veteran and made any corrections the veteran suggested in real time. With the veteran's approval, the story was entered into their electronic health record.

After the learners interviewed the veteran and wrote their story, an intervention leader or preceptor debriefed the learners about their experience using the debriefing guide that was provided to them in the facilitator materials.¹³ Clinical concerns that emerged during the interview, if any, were addressed with the preceptor or the appropriate clinical team member.

Descriptive analyses (percent, mean) were used to describe implementation characteristics, learners' self-perceptions of PCC, and whether MLMS was a good use of their time. For comparing baseline and post-activity ratings of PCC competencies, we used one sample t tests (using the baseline mean as a specified constant) as we

were not able to use paired scores because of the anonymous nature of the survey. Analyses were performed in SPSS version 22.

RESULTS

Between July 2016 and February 2019, 34 pharmacy learners (28 fourth professional year (P4) pharmacy students, four first postgraduate year (PGY-1) pharmacy residents, two second postgraduate year (PGY-2) pharmacy residents) participated in the MLMS program and completed 40 veterans' life stories. Participants represented approximately 62% of total pharmacy learners at the medical center over the same time. Of the 34 participants, nine (26%) completed the optional, anonymous pre-activity survey, and 16 (47%) (10 P4 students, four PGY1 residents, and two PGY2 residents) completed the post-activity survey. Twenty-nine stories were written by P4 students, and 11 stories were written by six residents (four PGY-1 and two PGY-2). The largest self-reported time expenditure for the project was for the interview, which took participants an average of 56.7 minutes (SD=27.0), followed by the writing (M=47.3 minutes, SD=32.2), reading the story back to the veteran (M=18.1 minutes, SD=15.0) and editing (M=13.9, SD=17.3).

The following is an excerpt from one of the veteran's stories: "Right now, I can't breathe or walk. I walk with a cane. But I have no regrets. I think I did everything I thought I could accomplish. Tell anyone who reads this to enjoy life every single day, because you don't know what's going to come tomorrow. I didn't realize that until I was here. If you live life by this rule, you'll live a good life."

A significant improvement was seen in learners' self-assessment on three PCC competencies on the post-activity survey: being interested in the patient as a whole person, showing care and compassion, and letting the patient tell their story (Table 1). Overall, participants reported that the learning experience was a good use of their time to a great extent (56%) or large extent (28%) and helped foster a positive relationship with patients. The following are exemplar comments about the experience submitted by pharmacy learners: "I think it allows the patient to express who they are and where they come from. It gives them an identity outside of their health care conditions and helps us as health care providers to understand the patient"; "Interesting insight into what's really important to a patient, particularly important in a palliative care/hospice setting. Helps better meet their needs, as well as informing the families about the patient's real wishes"; "It is amazing to hear stories and life experiences that are different and also similar to my own, separated by decades. Stories about the Vietnam War are so real,

fascinating, and sad. The experiences these veterans had there are remarkable.”

DISCUSSION

Participating in humanistic learning activities in pharmacy education is recognized as important to the development of an effective and empathic clinician. However, many such activities are only offered in the pre-clinical curriculum. With later offerings presented as optional, students already interested in a humanistic approach to care may self-select for participation. The elective nature of these experiences also presents a mixed message to learners, placing humanistic educational experiences on the fringe of rather than central to patient care.

We found it feasible to implement the MLMS program specifically with P4 students and residents. However, this program could be feasible for students earlier in the pharmacy curriculum. This could be introduced as part of the introductory pharmacy practice experience. Pharmacy learners reported that MLMS enhanced their PCC competencies, most notably their ability to see the whole person, and was a good use of their time, consistent with reports of learners and staff members from other professions.^{10,11}

In *The Courage To Teach*, Parker Palmer wrote “... Everything depends on the lenses through which we view the world. By putting on new lenses, we can see things that would otherwise remain invisible.”¹⁵ The MLMS program is a way for learners to see patients through a new lens that will ultimately help learners in their development as clinicians.

There are several limitations to our findings. The pre-post assessment was modified midway through the assessment because some students received the pre-activity test before they even began the experience or rotation. Also, we were not able to match pre- and post-activity responses. Further, we did not ask pharmacy participants to identify their specific training level on the survey; thus, we were unable to compare differing levels of impact on learners at different states of training. Additionally, these findings are based on learner self-report, which may be inflated.¹⁶⁻¹⁸ The sample size and response rate were small. Therefore, there is the potential for non-response bias such that learners who did not like the MLMS program did not answer the voluntary survey. Further, we used the CARE measure (which is designed to assess empathy) to assess PCC because we could not find a validated tool to assess learner perceptions of PCC. Future evaluations should further assess patient satisfaction with the process or include external evaluation by preceptors on various PCC learning domains.

CONCLUSION

In the current setting of the coronavirus pandemic, with social isolation the norm, medical centers limiting visitors, and a significant portion of patient care done virtually, the ability to connect, build therapeutic alliances, and be interested in the whole person takes on even greater relevance than ever before. Incorporating patient story telling is a novel approach to helping pharmacy learners develop important patient care skills. The method described here is easily replicable, and schools of pharmacy may consider adding it to current preceptor toolkits in an effort to prepare students for real-world practice and the practice of patient-centered care.

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REFERENCES

1. Greiner AC, Knegel E, eds. Institute of Medicine Committee on the Health Professions Education Summit, in Health Professions Education: A Bridge to Quality. 2003. Washington, DC: National Academies Press; 2003.
2. Accreditation Council for Pharmacy Education. Accreditation Standards and Key Elements for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree (“Standards 2016”). Published February 2015. <https://www.acpe-accredit.org/pdf/Standards2016FINAL.pdf>. Accessed September 14, 2021.
3. Institute of Medicine Committee on Quality of Health Care in America, in Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: National Academies Press; 2001.
4. Krathwohl DR, Bloom BS, Masia BB. *Taxonomy of Educational Objectives, The Classification of Educational Goals. Handbook II: The Affective Domain*, ed. D. McKay. New York, NY; 1964
5. Clark D. Bloom’s Taxonomy: Affective Domain. 1999. <https://www.honolulu.hawaii.edu/sites/www.honolulu.hawaii.edu/files/assessment-bloom-taxonomy-affective.pdf>. Accessed September 14, 2021.
6. Young LM, Anderson RP. The use of personal narrative in classroom case study analysis to improve long-term knowledge retention and cultivate professional qualities in allied health students. *J Microbiol Biol Educ*. 2010;11(2):107-112.
7. Vogt EM, Finley PR. Heart of pharmacy: a course exploring the psychosocial issues of patient care. *Am J Pharm Educ*. 2009;73(8):149.
8. Plake KS. Book club elective to facilitate student learning of the patient experience with chronic disease. *Am J Pharm Educ*. 2010; 74(3):37.

9. Ringler T, et al. Using life stories to connect veterans and providers. *Fed Pract*. 2015;32(6):8-14.
10. Roberts TJ, Ringler T, Krahn D, et al. The my life, my story program: sustained impact of veterans' personal narratives on healthcare providers 5 years after implementation. *Health Commun*. 2020:1-8.
11. Nathan S, Fiore LL, Saunders S, et al. My life, my story: teaching patient centered care competencies for older adults through life story work. *Gerontol Geriatr Educ*. 2019:1-14.
12. Nathan S, Topor D. VA Boston My Life My Story Implementation Guide: Trainee version. https://www.boston.va.gov/Education/Faculty_Development/My-Life_My-Story/Implementation_Guide-Trainee_version.pdf. Accessed September 14, 2021.
13. Nathan S, Topor D. VA Boston My Life My Story Implementation Guide: Faculty version. https://www.boston.va.gov/Education/Faculty_Development/My-Life_My-Story/VA-Boston_My-Life_My-Story_Implementation_Guide.pdf. Accessed September 14, 2021.
14. Mercer SW, Maxwell M, Heaney D, et al. The consultation and relational empathy (CARE) measure: development and preliminary validation and reliability of an empathy-based consultation process measure. *Fam Pract*. 2004;21(6):699-705.
15. Palmer PJ. *The Courage to Teach: Exploring the Inner Landscape of a Teacher's Life*. San Francisco, CA: Jossey-Bass; 1998.
16. Valdez CA, Thompson D, Ulrich H, et al. A comparison of pharmacy students' confidence and test performance. *Am J Pharm Educ*. 2006;70(4):76.
17. Morgan PJ, Cleave-Hogg D. Comparison between medical students' experience, confidence and competence. *Med Educ*. 2002;36(6):534-539.
18. Barnsley L, Lyon PM, Ralston SJ, et al. Clinical skills in junior medical officers: a comparison of self-reported confidence and observed competence. *Med Educ*. 2004;38(4):358-367.