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Family Medicine

BRIEF REPORT

Revealing the Hidden Clerkship Curriculum: A Qualitative Analysis

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ABSTRACT

Background and Objectives: Family medicine (FM) clerkships have learning objectives to define what students should learn by the end of their clerkship, but how do we know what larger lessons students are taking away? This study aimed to explore the FM clerkship explicit and hidden curriculum.

Methods: Students were asked to list their top five take-home points at the end of their FM clerkship at two institutions. A total of 668 written reflections were qualitatively analyzed.

Results: Thirteen code categories emerged: scope of practice, health care systems, role of FM in the system, traits of a family doctor, values of FM, cultural competency and social justice, challenges of FM care, evidence-based medicine, clinical skills for a student, personal impact, life skills and tips, patient centeredness, and clinical pearls. Prominent subcategories included prevention, team-based care, doctor-patient relationship, and continuity of care.

Conclusions: When compared to the FM clerkship learning objectives at both institutions, four code categories emerged that were not part of the explicit objectives: traits of a family doctor, challenges in FM care, personal impact, and life skills and tips. Conversely, some nuances of the learning objective of FM in the health care system regarding decreasing cost and improving health outcomes and equity were not represented in the coded categories of student responses. These findings could potentially help FM clerkships nationally define ways to improve messaging around challenges in FM care and help the 25 x 2030 initiative to produce more family physicians in the United States.

INTRODUCTION

What do students think of family medicine (FM)? Existing research describes generally positive effects of the FM rotation on students and preceptors.[1,2] However, this literature does not address students' perceptions of lessons learned from the rotation. We wished to address this research gap by asking students to describe their personal take-home lessons from the FM clerkship.

While we know that students who pass the required FM rotation meet competencies set by the medical school and fulfill the clerkship's explicit learning objectives, student perspectives regarding the discipline of FM are unknown. A hidden or informal curriculum in any learning environment is always at play[3] and can be even more important than the intended explicit curriculum.[4]

To gain insight into this hidden curriculum within the FM clerkship, we asked students to describe their most important learning points from their FM clerkship. We aimed to identify and categorize these take-home lessons to learn which aligned with the explicit curriculum and which belonged to a hidden curriculum.

METHODS

At the end of their required 6-week FM clerkships, students at two private medical schools in Boston, Massachusetts submitted written reflections in response to this prompt: "List your top five FM take home points" (Table 1). At one school, extra credit was offered; at the other, the reflection was included in the mandatory assignments list. Assignments were submitted nonanonymously, although students could opt out of consenting to use their reflections for research.

We used an open coding qualitative approach to identify each reflection's core message, giving each a label, or code, without a preconceived list of codes.[5,6] We then categorized codes into related groups, or categories.

In a pilot phase, two researchers (D.R.E., M.C.O.) independently coded a random sample of 498 reflections from the prior academic year and created a list of 10 initial code categories. In the study phase, all three researchers indepen-

TABLE 1. Assignment Instructions for Family Medicine Clerkships

Assignment at Boston University School of Medicine: As we wrap up the FM clerkship during this final week, take a minute to think about what you have learned over the past 6 weeks. Make a list of your top-five family medicine take home points—the things that you will take with you going forward. Please post this on Blackboard© (online learning management system) by final exam day. This needs to be completed as part of the requirements of your family medicine clerkship. In addition to this, you are being asked to voluntarily participate in a research study. We are doing this study to determine what students are taking away from their family medicine clerkship. If you agree, we will use your top-five family medicine take-home points in our analysis. We will remove all identifiers, the data will be batched, and the analysis will be done on the whole group looking for themes. If you prefer that your take home points not be used for research, please indicate that on your submission. Participation is completely voluntary and is not in any way tied to your clerkship evaluation.
Assignment at Tufts University School of Medicine: As we wrap up the family medicine clerkship during the final week, think about some things you have learned over the past 6 weeks. Make a list of your top five family medicine take-home points (about the discipline of family medicine, not the clerkship mechanics); these are lessons that you will take with you going forward in your career. Email these five to the course administrator. One or two sentences for each should suffice. Your take-home points may be used for clerkship improvement or research about clerkship education but will not be connected with your name in any way. If you prefer that your comments not be used for research, please indicate that on your submission. Reasonable completion will earn you one extra credit point (1% of total final grade). Thank you for sharing your pearls of wisdom! We love reading them.

dently applied the 10 categories to 168 reflections in equal proportion from both schools before meeting to discuss them. We added three additional categories following discussion. We continued to independently read and apply categories in batches of 100 reflections, reconciling by consensus until saturation was reached and no new categories were discovered for two consecutive rounds (668 reflections total).[7]

Both institutional review boards determined that this research was exempt from review.

RESULTS

Of the 415 students enrolled in the clerkships at the two schools in 2018-2019, 376 (90.6%) participated, submitting a total of 1,880 written reflections. Thirty-nine students did not submit reflections and one opted out of the study. We deidentified submissions prior to analysis. At both schools, we identified 13 code categories (see Appendix Table A): Scope of practice included clinical areas, such as geriatrics or addiction, as well as care for a wide range of patients; traits of a family doctor indicated characteristics of individual physicians such as flexibility, patience, and caring; challenges in FM encompassed items such as burnout, time constraints, and diagnostic ambiguity; and clinical skills for a student comprised advanced communication, differential d iagnosis g eneration, physical exam, and agenda setting. Notable subcategories included prevention, team-based care, the doctor-patient relationship, and continuity of care.

We compared these 13 categories to both clerkships' 10 learning objectives (Table 2). To varying extents, students' reflections correlated with all 10 objectives. The least concordant was the learning objective describing FM within the health care system. Although students commented on the value of primary care regarding continuity of care, the doctor-patient relationship, and helping patients navigate the system, there was no student focus on cost reduction or equity, which both schools emphasized.

Nine of the 13 categories from the qualitative analysis mapped to the learning objectives. Four categories did not map and can thus be considered part of an informal or hidden curriculum: traits of a family doctor (empathy, efficiency, flexibility), challenges in FM care (payment issues, time constraints, patient complexity), personal impacts on students' future careers; and life skills and tips to carry throughout their careers.

DISCUSSION

Analysis of hundreds of student reflections on key take-home points after completing the FM clerkship revealed several themes, including the many values of FM, such as the doctor-patient relationship, continuity of care, team-based care, and preventive care; scope of practice of a family physician; and clinical skills that students learned or improved.

Importantly, we identified topics that could be considered part of our hidden curriculum. Three of the four categories of the hidden curriculum were not counter to the overall goals of the rotation, but one signifies a topic that we could more explicitly address: the challenges of FM as a profession. Acknowledgment of the difficulties of primary care practice and solution-focused education could potentially impact how we address why students may not choose FM as a career and help the 25 x 2030 initiative to produce more family physicians in the United States.[8]

Limitations included that reflections were initially submitted nonanonymously (deidentified later for analysis) and before clerkship grading, so we cannot know if students submitted their true thoughts or what they thought we wanted to read. One school offered extra credit, which could have biased which students chose to submit a reflection at that school. Finally, these data come from two private medical schools in the same city without a primary care mission and with average or below average FM Match rates (6.3%-8.8% in 2020). It is unknown whether similar data would emerge from medical schools nationwide, which may limit the generalizability of these results. Perhaps most importantly, we cannot establish a causal relationship between the students' written reflections and the clerkship itself; students may have reported their preexisting perceptions of FM unchanged by the clerkship.

TABLE 2. Learning Objectives From 2018-2019 Family Medicine Clerkship

Boston University School of Medicine

1. Discuss the principles of family medicine care, including comprehensive and contextual care, continuity of care, coordination/complexity of care, and the biopsychosocial approach to care.
2. Gather information, formulate differential diagnoses, and propose plans for the initial evaluation and management of patients with common presentations in family medicine.
3. Manage follow-up visits with patients having one or more common chronic diseases.
4. Develop evidence-based health promotion/disease prevention plans for patients of any age or gender.
5. Discuss the impact of psychosocial and cultural influences on health, disease, care seeking, care compliance, and barriers to and attitudes toward care.
6. Utilize advanced, patient-centered communication techniques to discuss unanticipated or bad news, assist patients in making health behavior changes, provide patient-centered education and counseling, and to effectively use a medical interpreter.
7. Discuss the critical role of family physicians within any health care system.
8. Discuss the concepts of Information Mastery and utilize point-of-care resources to find and integrate the best available evidence into clinical decision-making.
9. Consistently demonstrate professional behavior consistent with the values of the medical profession.
10. Display skills of lifelong learning, including generating clinical questions, identifying one's own learning needs, using appropriate resources to answer questions or close learning gaps, engaging in self-assessment and goal setting, and demonstrating growth in response to feedback.

Tufts University School of Medicine.

1. The Role of Primary Care in an Effective Health Care System

- Identifies the connection between a health care system with a strong primary care base and better outcomes for lower costs on a population level
- Identifies the connection between a health care system with a strong primary care base and a decrease in health disparities
- Demonstrates the importance of team-based care by collaborating with nonphysician health members of the health care team

2. Enhanced Role of the Medical Student

- Exercises autonomy with patients and is involved in care for a high volume of patients
- Distinguishes between normal and abnormal findings
- Demonstrates level-appropriate confidence in patient communication and care management

3. The Patient-Physician Relationship

- Collaborates with patients and families to establish a therapeutic partnership by exploring the patient's perspective, identifying a mutual agenda, and establishing common ground for treatment
- Demonstrates insight as to how one's personal biases impact the care of patients
- Identifies the connection between continuity in patient care and improved care via enhanced trust and skill at behavioral change strategies

4. History and Physical Exam: Advancing Skills From the Foundation Years

- Elicits a focused history appropriate for the ambulatory setting
- Performs a focused exam appropriate for the ambulatory setting
- Presents the history and physical to the attending in an organized and succinct fashion

5. Common Illness and Presentations Across the Life Span

- Demonstrates competence with the diagnosis and management of common medical problems (pertaining to all age groups)

6. Information Mastery

- Efficiently finds high-quality evidence at the point of care
- Demonstrates academic curiosity necessary for life-long learning

7. Counseling: Utilizing Advanced Communication Skills, Motivational Interviewing, and Empowerment to Bring About Positive Change for Patients

- Uses Stages of Change model and counsels patients in areas including tobacco, substance abuse, medication/immunization adherence, and high-risk sexual behaviors
- Demonstrates appropriate counseling techniques about nutrition for a variety of common illnesses, such as obesity, diabetes mellitus, hyperlipidemia, and hypertension

8. Patient-Centered Care

- Applies understanding of patients' life circumstances, such as family, community, finances, work, education, spirituality, and culture, when establishing an assessment and plan
- Screens patients for interpersonal violence
- Performs a home assessment on a patient

9. Ambulatory Procedures

- Develops basic competency in at least five procedures

10. Documentation and the Electronic Medical Record

- Effectively uses the electronic health record to document patient encounters and to extract data
- Documents appropriately and in an organized fashion for episodic visits, chronic disease management, and health maintenance

Despite these limitations, this study serves as an early step in answering the question of what students report learning after the FM clerkship. Future research could anonymize submissions, separate submissions from grades, include more medical schools throughout the country or internationally, and analyze reflections from students at schools with longitudinal integrated clerkships.

Our results identify key impacts of the hidden curriculum of FM. For schools nationwide, an analysis of reflections at the end of the clerkship could help identify unintended teaching and learning within a rotation. To successfully train and assess physicians, we must not only know what we set out to teach but also identify and address what students actually learn—including a hidden curriculum.

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