Patient-Centered Care Challenges and Surprises: Through the Clerkship Students’ Eyes

Victoria L. Boggiano; Yufan Wu; Janine S. Bruce, DrPH; Sylvia Bereknyei Merrell, DrPH; Erika Schillinger, MD

BACKGROUND AND OBJECTIVES: The patient-centered care model for health care delivery encourages medical providers to respect patients’ preferences and give patients more autonomy over their health care decisions. This approach has gained importance within US medical school curricula. Yet, little is known about student perspectives on both patient-centered care and the benefits and challenges that lie therein. This manuscript explores the greatest impediments to, as well as the benefits from, student engagement in patient-centered care from the perspectives of students participating in their family medicine outpatient clerkship.

METHODS: Clerkship students on their core family medicine clerkship at Stanford University School of Medicine were provided the following open-ended prompt: “Describe a patient-centered care challenge or surprise in the family medicine core clerkship.” Free-text responses were collected and analyzed using content and thematic analysis.

RESULTS: A total of 326 responses from 216 students were analyzed for frequency and patient-centered themes. Nine final themes emerged and were grouped into three domains: student definitions of patient-centered care, patient-centered care impact on patients, and patient-centered care impact on medical professionals.

CONCLUSIONS: Our study suggests that students find the patient-centered care model for health care delivery to be challenging but worthwhile. We highlight that students find communication with patients in a patient-centered manner challenging and discuss the need for improved medical education about patient-centered care in order to better prepare students to implement the model in a variety of psychosocial and medical contexts.

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The patient-centered care (PCC) model for health care delivery encourages medical providers to give patients more autonomy over their health care decisions. The Institute of Medicine defines PCC as “care that is respectful of and responsive to individual patient preferences, needs, and values.” PCC leads to more consistent adherence to treatment plans, higher satisfaction, and better overall health. The alternative to PCC is a dogmatic health care system where patients are talked at, rather than listened to, which often leads to worse health outcomes.

The teaching of PCC has increased in importance within medical schools. Some authors have examined how medical students’ understanding of PCC impacts patient care and found that when students view PCC more positively, patient satisfaction improves. Others have measured student patient-centeredness or asked students to describe encounters where PCC was used. Yet none have asked students to describe their perceptions of PCC.

This study is a qualitative investigation of medical students’ perceived challenges and surprises related to PCC. We hypothesized that students would find PCC to be useful in interactions with patients and that their responses would provide guidance regarding ways to improve PCC teaching.

**Methods**

**Participants**

Study participants were third- and fourth-year medical students from Stanford participating in their required 4-week family medicine clerkship. Clerkship sites included urban, suburban, and rural family medicine outpatient clinics in Northern California.

**Data Collection**

During their family medicine clerkship, students were assigned 12 patient log queries that align with the...
Accreditation Council for Graduate Medical Education (ACGME) Core Competencies. All clerkship students were required to fill out patient logs on E-Value, a web-based administrative tool for health educators. One log query read: “Describe a patient-centered care challenge or surprise in the family medicine core clerkship.” Students’ free-form written responses comprise the transcripts analyzed for this study. Because we used pre-existing data without human subject identifiable information, Stanford University’s Institutional Review Board determined that IRB approval was not required.

Analysis
The data analysis team included two medical students (VB, YW) and a family medicine faculty member (ES). The analysis team inductively coded transcripts over four adjudication rounds, coding responses with a finalized stable codebook. Codes were clustered into sub-themes. Sub-themes were grouped into a total of nine themes, organized into three domains. Excerpts were divided into three clusters. The primary researcher (VB) coded each cluster; next, the secondary researchers (YW, ES) performed inter-rater reliability tests to identify coding discrepancies. The initial inter-rater reliability pooled Cohen’s Kappa score was 0.5 for each phase’s test. Through negotiated agreement at each stage, we ultimately reached 100% inter-rater agreement for all coded excerpts among the coders. The team then conducted a thematic analysis on the coded excerpts, where the entire research team iteratively refined representative themes until consensus was achieved. Dedoose™ (Dedoose Version 5.2.1. Los Angeles, CA, SocioCultural Research Consultants, LLC. http://www.dedoose.com/resources#) qualitative web-based data analysis software was used to facilitate data analysis.

Results
A total of 216 students generated 326 free-text responses (see Table 1) from 2010 to 2012. Twenty-two students submitted blank responses, leading to an overall response rate of 90%.

Content Analysis
The most frequently cited PCC challenge was “communication issues,” which appeared in 145 responses (45%). Nearly one-fourth of the responses (24%) mentioned discrepant encounters in which the patient’s agenda did not match the physician’s agenda for the visit. Many responses (28%) highlighted the importance of the patient’s psychosocial context, including family, friends, financial situation, and employment status.

Thematic Analysis
Nine themes emerged from the codes and were grouped into three domains: student definitions of PCC, PCC impact on patients, and PCC impact on medical professionals (Table 2).

Student Definitions of Patient-Centered Care
Many students reflected that PCC provides a starting framework for doctor-patient interactions and allows the patient to have control over the direction of the medical encounter. From the students’ perspective, providing PCC is an aspirational goal that prompts physicians to focus on the patient in his/her life context. Thinking about who the patient is outside the clinic helps students think more deeply about ways to engage with patients inside the clinic.

Patient-Centered Care Impact on Patients
Students described a variety of discussions they had with patients, ranging from improving nutrition, to smoking cessation, to behavioral health care. Students recognized that PCC creates a shared responsibility for health care between the patient and provider, yet noted challenges during more complex sociobehavioral conversations. Moreover, students noted that PCC exposes areas of disagreement between patient and provider when discussing topics such as diet and willingness (or lack thereof) to quit smoking.

Patient-Centered Care Impact on Medical Professionals
Students highlighted that providing PCC requires doctors to be both flexible and humble. For example, students indicated that while physicians were not always supportive of

Table 1: Demographics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sample n (%)</th>
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<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>117 (54%)</td>
</tr>
<tr>
<td>Female</td>
<td>99 (46%)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>21–25</td>
<td>34 (16%)</td>
</tr>
<tr>
<td>26–30</td>
<td>151 (70%)</td>
</tr>
<tr>
<td>31–35</td>
<td>26 (12%)</td>
</tr>
<tr>
<td>36 and older</td>
<td>5 (2%)</td>
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<tr>
<td>Number of previous rotations</td>
<td></td>
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<tr>
<td>0–3</td>
<td>55 (25%)</td>
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<tr>
<td>4–9</td>
<td>45 (21%)</td>
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<tr>
<td>10 or greater</td>
<td>116 (54%)</td>
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</table>

Table 1 includes demographic information about the medical students included in this study.
Table 2: Quotations Highlighting Main Domains and Themes About Patient-Centered Care From Student Reflections

<table>
<thead>
<tr>
<th>Domain/Theme</th>
<th>Representative Quote</th>
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<tbody>
<tr>
<td>Domain 1: Applications of PCC</td>
<td>“The encounter focused mainly on brainstorming with the patient on ways for him to alter his training regimen so that he could still run the marathon.”</td>
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<tr>
<td>Theme 1: PCC provides a framework for doctors to engage with patients</td>
<td>“Patient was a previously healthy man in his 20s coming to clinic with congestion, sore throat, and cough. He was new to the Bay Area. He explained that he’d had similar symptoms twice yearly and that his old physician gave him a Z-pack each time, which seemed to help. He was afebrile, his lungs were clear, his nose was running, and his conjunctivae were injected. His oropharynx revealed cobblestoning, and his nares were inflamed and erythematous. Based on my assessment, patient was suffering from a viral URI or allergies or both. There were no signs of a bacterial infection. However, when asking the patient’s perspective, he was convinced it was bacterial because that’s what his previous physician had told him when he had similar symptoms, and he insisted on a Z-pack because he did not want to continue to be sick on his upcoming hiking trip. Patient education was key. My attending and I explained how his symptoms were consistent with viral or allergic etiologies and not bacterial. We also explained the risks of overprescribing antibiotics using examples like c diff, creating resistance, etc. After a few minutes of discussion, we instructed patient to try OTC antihistamines, get plenty of rest and hydration, and to wait 3–4 days. If his symptoms didn’t improve, we did provide a Z-pack prescription (because he continued to insist) but told him not to fill it unless he saw no improvement. It is likely that his similar previous sxls cleared ‘with antibiotics’ as his viruses were self-limiting in the past, but in the attempt to make our care ‘patient-centered,’ we provided a prescription accompanied with lots of education.”</td>
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<td>Theme 2: PCC takes into account the patient’s psychosocial context</td>
<td>“Female with 2-month history of right flank pain. Determined during interview was due to stress from recently losing father to cancer and splitting with husband because he was having an affair.”</td>
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<td>Theme 3: PCC promotes discussion around behavior change</td>
<td>“This patient was a [middle-aged] man with a history of CVA who refused to take medications for his hyperlipidemia. It was a good exercise in respecting his desires and coming up with a patient-centered plan for how he can better control his cholesterol with diet and exercise.”</td>
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<tr>
<td>Domain 2: PCC impact on patients</td>
<td>“Patient was a healthy young man at the clinic for a pre-college physical. He did not have any concerns, and we quickly updated his history, medications, and immunization list. In beginning to discuss his social history, it became clear that this was going to be a different conversation from what I had expected. Patient drank 3x/week and when he did so he drank at least five drinks. In addition, he had tried most drugs, though he assured me that he had done this to experiment and was not interested in trying them again. We spent a significant portion of the next half hour talking about his attitude toward alcohol and how he planned to handle this when he went to college. Though I was reassured by patient’s maturity and plans for college, I was still somewhat concerned about his substance use and discussed this with the patient. He listened to this and seemed to appreciate the concern. I wasn’t sure at the end of his visit whether his behavior would change, but I was comforted by his engagement and the discussion we had and very glad we had the opportunity to do so.”</td>
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<tr>
<td>Theme 1: PCC requires patient autonomy</td>
<td>“I realized that physical therapy will only help the patient if the patient is motivated and is interested in getting better. This particular patient, though he was very active in sports, was not trying very hard during his PT session.”</td>
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</table>
contemporary and alternative medicine (CAM), they often incorporated CAM into a patient’s health care plan upon request. Students noted that being patient centered is challenging during complex medical visits where time is limited. Finally, embedded within student responses were signs that the act of reflecting on PCC experiences promoted students’ professional development.

### Discussion

This qualitative study analyzing medical student reflections on PCC suggests that students can discern the challenges to, and results of, providing PCC. In general, student perspectives of PCC complement what is found in the literature among practicing physicians. Many students acknowledged that providing PCC improves patient satisfaction and leads to discussions about behavior change. Yet our data show that students find communication challenges—from language and cultural barriers to instances where patient and physician perspectives differ—as being major impediments to patient centeredness.

Our study had several limitations. Students were sampled using self-reported logs. Some students may...
not have taken the time to fully answer the question. In addition, our results are taken from students at only one medical school. However, these data provide insight into how students perceive PCC and can guide future studies.

We are at a critical point in medicine where there has been a call for patient centeredness by the Institute of Medicine. Now is the time to enact curricula that provide students with more opportunities to gain skills engaging with patients in a patient-centered way.

ACKNOWLEDGMENTS: Our findings were presented in poster format at the 2014 Association of American Medical Colleges Western Regional Conference in Honolulu, HI, and at the 2015 Society of Teachers of Family Medicine Conference on Medical Student Education in Atlanta, GA. Our findings were also presented during a talk given at the 2014 Generalists in Medical Education conference in Chicago, IL.

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References