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Authors

Lie, Desiree
Shapiro, Johanna
Cohn, Felicia
et al.

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Reflective Practice Enriches Clerkship Students' Cross-Cultural Experiences

Desiree Lie, MD, MSED¹, Johanna Shapiro, PhD¹, Felicia Cohn, PhD², and Wadie Najm, MD, MSED¹

¹UCI - Department of Family Medicine, University of California, Irvine, School of Medicine, Orange, CA, USA; ²UCI - Department of Internal Medicine, University of California, Irvine, School of Medicine, Orange, CA, USA.

AIM: To describe a curriculum incorporating written reflection followed by reflective discussion with the goal of enhancing students' recognition and handling of cross-cultural and health disparity issues in different healthcare delivery settings.

PROGRAM AND SETTING: This required curriculum was implemented within a 4-week family medicine clerkship (n=188 students, 6 to 12 per rotation) in 23 successive rotations over 2 years. Electronic submission of a written assignment in response to structured questions was followed by in-class discussion in week 4.

PROGRAM EVALUATION: Outcomes were students' session evaluations, thematic analysis of student responses, and analysis of faculty facilitators' reflections about discussion sessions. Students' cultural knowledge about their patients' health beliefs around diabetes was assessed using multiple choice questions at the beginning and end of the clerkship.

RESULTS: One hundred percent of students submitted narratives. Student evaluations demonstrated high acceptance, appreciation of sessions and faculty. Analyses of written assignments and in-class discussions identified recurring themes. Students achieved greater synthesis and more nuanced understanding of cross-cultural encounters after discussion. Self-rating of confidence in addressing cultural issues after the curriculum was high at 3.17±SD 0.57 (1-4). Cultural knowledge scores improved significantly. Core components for success were clerkship director support, required participation, experienced faculty facilitators without evaluative roles, a structured assignment and formal forum for trigger question discussion.

DISCUSSION: Written reflection followed by facilitated peer discussion adds value to simple 'exposure' to cross-cultural clinical experiences for medical students.

KEY WORDS: reflection; cross-cultural; RP curriculum.
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INTRODUCTION AND AIMS

Training future physicians to work with culturally diverse patients in different communities is essential for the development of good clinical practice and to reduce health disparities¹⁻³. Creative curricular approaches^{4,5} have been described to integrate cultural competency into existing courses. New content^{2,3,6,7} should take into account student attitudes, prior exposure and developmental stage.

One challenging domain to address is 'self-reflection and culture of medicine', described in the Association of American Medical College's revised Tool for Assessing Cultural Competency Training^{8,9}. Students' unconscious or unexplored assumptions about patients from diverse backgrounds may affect the therapeutic relationship^{10,11}; and assumptions about the patient's health literacy and beliefs are a potential source of health disparities¹². Student learning may be influenced by the 'hidden curriculum' of corridor conversations and behaviors (as opposed to verbal injunctions) of role models^{10,13} rather than formal instruction. This learning is not easily captured by traditional evaluations. Focus groups^{13,14} and other qualitative methods provide an additional lens to examine these influences. Reflective practice (RP), variously defined, is at once a method of self-reflection for practitioners, a teaching strategy for engaging learners and a means of assessing teaching and practice¹⁵⁻¹⁷.

We implemented and evaluated a new RP curriculum to complement clerkship activities that addressed cultural diversity, aimed at promoting and fostering critical thinking and behaviors that reduce health disparities. We hypothesized that reflective writing followed by faculty-facilitated peer discussion would be acceptable to students; increase students' awareness of their own values; and help them to identify strategies to recognize and improve outcomes of cross-cultural clinical encounters.

SETTING

The RP curriculum was introduced to two consecutive classes of 188 (n=98 for 2007-2008, n=90 for 2008-2009) third-year medical students (50% male, average age 23 years, 40% white, 40% Asian, 10% Latino, 1% black) from one medical school in 23 successive clerkship rotations (6 to 10 students per rotation). The 4-week family medicine clerkship consisted of apprenticeship to a preceptor supplemented by small group teaching. Students were evaluated by direct observation, end-of-clerkship Objective Structured Clinical Examination (OSCE), attendance and written assignments. In outpatient settings, 25 to 75% of patients were Latino. A half-day group

medical visit (GMV) with Latino diabetic patients and a walking tour of community *botanicas* (shops that sells herbs, charms, and spiritual items, especially marketed to Latinos) were added in the prior year to enhance cultural competency training. Reflective practice was introduced in 2007 to foster reflection as part of a longitudinal teaching theme in medical humanities and bioethics, and to gauge learning from different settings. The goal of reflection was for students to examine and share views of cross-cultural encounters. The university institutional review board approved the study.

PROGRAM DESCRIPTION

The RP assignment was explained on day 1 of the clerkship and instructions sent out by email, with a reminder emailed the week before discussion. The written assignment was due 2 days before the 2-hour face-to-face teaching session conducted by two faculty (JS, FC), directors of the medical humanities and bioethics programs; physician faculty (DL, WN) taught when available. The session took place in the final week, after the OSCE and group medical visit. Faculty read all student assignments, summarized themes and prepared discussion questions.

Written Assignment (Fig. 1). Students were required to write about experiences from two different models of healthcare during the clerkship. Experiences were chosen from the following: a) Outpatient clinic; b) Visit to *botanicas*; c) Home visits; d) The group medical visit. They were asked to reflect on how cultural differences could enhance or complicate the encounter, lessons learned about practicing across cultures, and physician role-models treating diverse patients (Questions 1 to 6). Descriptive responses were expected. In project year 2, two questions (7 and 8) were added asking students to self-rate learning about complementary and alternative medicine (CAM) and cross-cultural medicine (Fig. 1) with Likert scale responses of 1=not, 2=somewhat, 3=moderately and 4=definitely enhanced.

Discussion sessions. Since students did not read each others assignments, the discussion session provided the only formal opportunity to compare and contrast students' views. The facilitators elucidated and guided exploration of such similarities and differences. For example, a session might begin with the faculty probing the students' understanding of 'culture' by stating: 'Some of you wrote about culture as characterized by race and ethnicity. Others wrote about the culture of medicine. How might these differ?' Or "Some of you

Student Name:	Rotation:	Date Submitted:
Instructions: Please answer the following questions (use as much space as you need) for each experience and give specific examples for each of the two different models of healthcare you selected		
1. Select at least 2 different models of healthcare delivery encountered during your Family Medicine clerkship and provide the dates during which you participated, with the type of model you observed.		
Model 1 Type and dates:		Model 2 Type and dates:
2. How can cultural differences ENHANCE the interaction between doctor and patient? Please give examples.		
Model 1		Model 2
3. How can cultural differences IMPEDE the interaction between doctor and patient? Please give examples.		
Model 1		Model 2
4. List three lessons that you learned and will apply in future cross-cultural encounters. Please give examples.		
Model 1		Model 2
5. What are the qualities of physicians who became your "ROLE-MODELS" in terms of how they interacted with patients from different cultural backgrounds?		
Model 1		Model 2
6. What are the qualities of physicians who were "ANTI-ROLE-MODELS" in terms of how they interacted with patients from different cultural backgrounds?		
Model 1		Model 2
7. On a scale of 1-4, how confident are you that the Family Medicine Clerkship experiences enhanced your knowledge and skills of complementary and alternative medicine?		
Model 1		Model 2
8. On a scale of 1-4, how confident are you that the Family Medicine Clerkship experiences enhanced your knowledge and skills of cross-cultural medicine?		
Model 1		Model 2

Figure 1. Student written assignment instructions for reflective practice curriculum, University of California, Irvine School of Medicine, 2009.

want patients to take responsibility for their health; others emphasize the effect of culture on how patients construe illness and health. What are the benefits and pitfalls of each position?" Facilitators ensured that discussions did not merely reiterate assignments, but deepened and extended them. Group discussions emphasized exploring different ways of addressing cross-cultural encounters that students perceived to be frustrating and resulting in barriers to optimal healthcare (language differences, time constraints, stereotyping by faculty or residents).

The faculty facilitators did not receive any special training for conducting the sessions. Their preparation consisted of a careful reading of students' essays. Facilitators followed a question route based on the main topics of the essays, specifically employing the following questions: a) What do we mean by culture? (probe: Is Medicine a culture?) b) What are examples of ways working across culture enhanced your patient encounters? (probe: patient as physician's teacher) c) What were some of the difficulties you encountered working across culture? How did you ameliorate them? d) There is a lot of agreement about examples of negative role-modeling. What do you think are some of the factors that influence physicians to behave in these ways? What will prevent you from behaving in these ways? e) What is the most important lesson about working across cultures that you learned on this clerkship?

In conducting these sessions, facilitators employed basic group facilitation skills, including showing positive regard for all participants; expressing respect for participant opinions; creating an atmosphere of openness and nonjudgmentalness; guiding discussion, but doing more listening than talking; employing a Socratic approach based on asking questions and follow-up probes; encouraging participation of all members, including quiet ones; and emphasizing the value of differences of opinion. Facilitators also tried to challenge conventional thinking, encouraged students to adopt alternative perspectives, and consider assumptions, stereotypes, and biases. Neophyte facilitators can be easily trained in 1–2 hrs.

PROGRAM EVALUATION AND RESULTS

We examined session evaluations to assess the perceived value of the RP sessions. Students were asked to rate the value of the session for reflecting on CAM and culturally-relevant experiences and to prepare for practice in a diverse environment; the importance of cultural competency training; and faculty facilitators' skill, on a scale with 1 = outstanding/high and 5 = poor/low. During year 2, self-ratings of learning in CAM and cross-cultural medicine (questions 7 and 8 of assignment) were also assessed. Descriptive analysis consisted of calculating percentage responses, means and standard deviations (SDs).

We also conducted qualitative thematic analyses of the written assignment and discussion sessions¹⁸. Two levels of analysis occurred for the written assignment (Fig. 2). First, one faculty (JS) reviewed all assignments and compiled verbatim summaries (i.e., using exact student language) from each group's assignments, eliminating only redundancies, repetitions, and extensive examples. Second, these summaries were reviewed by three faculty (JS, FC, DL) who independently extracted themes. Extracted themes were collated and then compared for agreement and disagreement. Through group discussion, consensus was achieved on major recurring themes across all 23 rotations¹⁹.

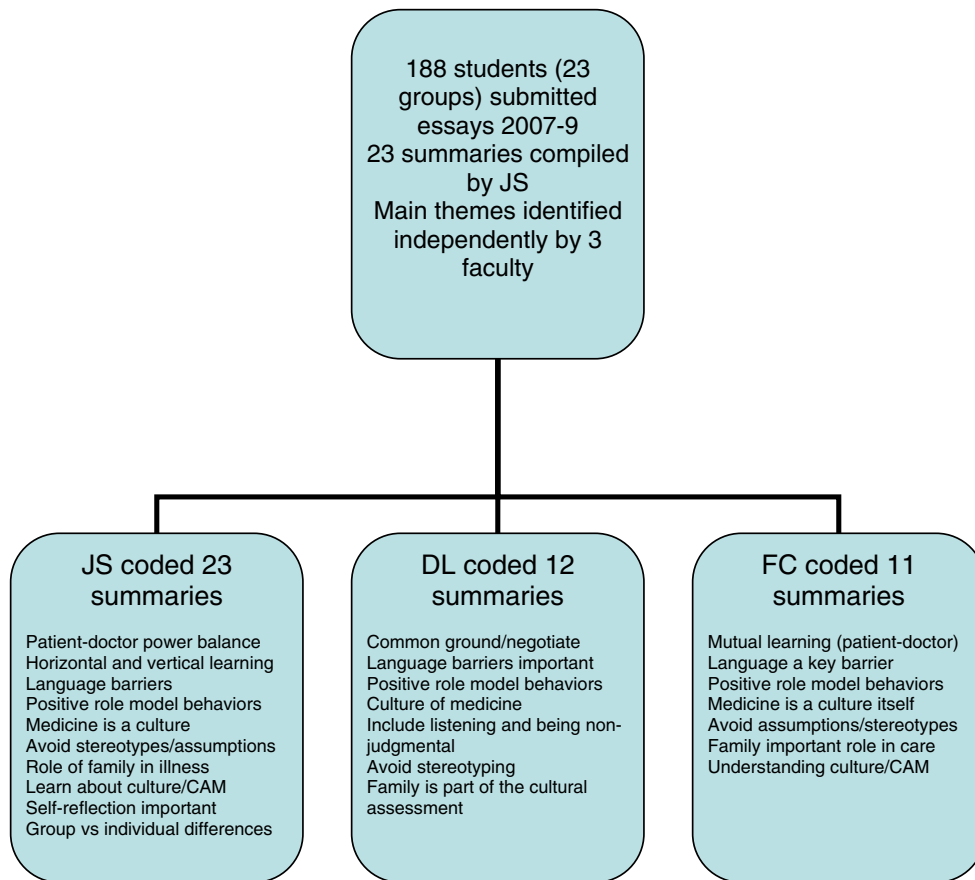
For the discussion sessions, JS, WN and FC independently summarized their impressions of sessions in writing, and common themes were extracted by consensus.

In year 2 of the program, we administered five cultural knowledge questions to evaluate students' knowledge of their Latino patients' health belief and practices. Responses were analyzed based on the number of correct answers given pre- and post-participation in the clerkship.

Results. All students participated and completed assignments. Most students reported spending about 30 minutes on the written assignment. Overall student ratings (response rate 156/188=83%) of sessions showed predominantly positive responses. A rating of 1 or 2 (outstanding or excellent) was given by 80.5% of students for "value for reflecting on CAM and culturally-relevant experiences"; 70.5% for "value to prepare for medical practice in a diverse environment"; 84.9% for "importance of cultural competency training during medical school"; and 87.6% for "teaching skills of facilitators". In particular, students explicitly expressed appreciation in their written comments for faculty summaries of their written assignments. In year 2, student mean rating of self-confidence in addressing CAM was 2.75±SD 0.68 (n=83/90): confidence for addressing cultural issues was greater at 3.17±SD 0.57 (n=83/90) out of 4 for questions 7 and 8 (Fig. 1)

Thematic analysis of student assignments (Table 1) suggested 7 predominant themes: 1) **Cross-cultural encounters provide mutual learning opportunities for physician and patient.** Students shifted from describing the medical encounter as a top-down transmission from doctor to patient to a more horizontal, mutual process of learning about and appreciation for the other. 2) **Medicine is a culture in and of itself.** Students commented on particular ways of thinking (logico-deductive), evaluating evidence (EBM), speaking ("medicalese"), appearing (white coats), and behaving (professional objectivity) that defined Medicine as a culture with specific beliefs and assumptions. 3) **Language barriers significantly complicate the doctor-patient relationship, and strategies for addressing them are essential.** Students repeatedly expressed frustration at not sharing a common language with patients, and felt that this inhibited rapport. They recognized the important role of a well-trained interpreter; and also expressed the intention to learn Spanish and attend to nonverbal cues. 4) **Cultural beliefs can negatively affect patient compliance, while expressing interest in the patient's views builds trust.** Students described penetrating "below the surface" of a patient's noncompliance only to discover culturally-based misunderstandings, fears, or beliefs. They identified a direct link between understanding the patient's perspective, developing trust, and formulating culturally appropriate and acceptable treatment plans. 5) **The family-centric orientation of many cultures means that physicians should be prepared to acknowledge the role of the family in patient care.** This theme included observations about involving family members in treatment plans; and identifying the "real" decision-maker in the family (not necessarily the patient). 6) **A larger number of patients than expected are frequent users of CAM.** Students were often surprised at the prevalence of CAM practices in the community, and at patients' preference to use CAM over western medicine. Students wrote that unless they specifically inquired

Three faculty independently coded summaries from 23 groups, compiled from 188 essays. Every summary was coded by 2 faculty members. Top themes were identified by each faculty. The themes identified by all 3 were collated for a final list of 7 common themes, by group consensus.



7 themes (identified from written reflections on cross-cultural encounters):

1. Physician and patient can find common ground through negotiation and balance of power
2. Practice of medicine is itself a culture that has to be negotiated
3. Language barriers contribute to challenge of cross-cultural encounters
4. Cultural stereotyping and assumptions can adversely affect trust, adherence and treatment plans
5. Family plays important role in health and illness and cross-cultural encounters
6. Importance of showing interest in, developing understanding of culture and use of CAM
7. Positive role models listen, are open, tolerant of CAM use, and nonjudgmental

Abbreviations: CAM = Complementary and Alternative Medicine, GMV = Group Medical Visits

Figure 2. Flow of thematic analysis of student written assignments by faculty, University of California, Irvine School of Medicine, 2009.

about CAM practices, patients would not necessarily disclose them. 7) **Positive physician attitudes and behaviors in cross-cultural encounters are essential**, and include listening, being open-minded and avoiding stereotyping. Students commented on both negative and positive physician role-models and highlighted the importance of positive interactions in a therapeutic relationship.

Analysis of the discussion sessions by 3 faculty suggested added value of these peer interactions. The written exercise allowed students to describe concerns in a secure and candid fashion. The discussion enhanced the written exercise by enabling students to recognize shared concerns, deepen understanding, and problem-solve with peers and faculty. Of note, students also reflected on parallel experiences about cross-cultural encounters from prior clerkships.

Eighty nine of 90 students in year 2 provided answers to the five cultural knowledge questions. Students answered a mean of 2.73 questions correctly on the first day of clerkship and a mean of 4.02 questions correctly at the completion of the clerkship. The paired difference was 1.29 (SD 1.76), 95% confidence interval 0.92, 1.66 ($P < 0.0001$) for a significant improvement.

DISCUSSION

We introduced a reflective practice curriculum within a clerkship to consolidate learning about diverse healthcare settings and patients and to raise consciousness about how health disparities may be associated with provider attitudes

Table 1. Major Themes, Elaborations, and Examples, from Student Essays, University of California, Irvine, 2007–9

Theme	Elaboration	Example
1. Cross-cultural encounters provide mutual learning opportunities for physician and patient	This theme highlights the bidirectional learning between patient and physician that students discovered in cross-cultural interactions	“Cultural differences can provide two different perspectives to the patient-doctor relationship, and given that both parties maintain an open mind, may elucidate new avenues to treatment” Male (M), 3/09
2. Medicine is a culture	Students recognized that medicine was a culture like any other culture that promoted specific beliefs, assumptions, and priorities	“The values of Western medicine are numbers, images and RCTs. These aren’t the same as the values of patients from other cultures” M, 4/09
3. Strategies for addressing language barriers are essential	Language differences emerge as a consistent frustration limiting the quality of the doctor/patient encounter; and students examined various solutions	“Always always always utilize a translator in the case of a language barrier to avoid misunderstandings between the patient and the doctor” Female (F), 12/08
4. Issues of culture can affect patient compliance, while expressing interest in the patient’s culture builds trust and leads to culturally appropriate treatment plans	This theme indicates students’ awareness of the link between communicating interest/understanding of culture; establishing trust; and improving patient buy-in and compliance	“The doctor’s genuine interest and desire to learn about the patient’s culture helps the patient see that the doctor is taking the patient’s culture into consideration when forming a treatment plan.” F, 3/09
5. Because of the family-centric orientation of many cultures, physicians should address the role of the family in patient care	This theme emphasizes the importance of family within various cultures in successfully addressing patient care issues	“Individuals from Latino and other backgrounds may be family-oriented and it is important to involve the entire family in important medical decisions.” M, 2/09
6. Patients frequently use Complementary and Alternative Medicine (CAM)	This theme reflects student lack of awareness of the prevalence of CAM practices in the patient population	“Botanicas are widely used in many cultures; and many patients will not tell you that they use <i>botanicas</i> , unless you ask them.” F, 11/08
7. Positive physician attitudes and behaviors in cross-cultural encounters matter	This theme represents qualities noted in describing positive role-models: listening, open-minded, not judgmental, and avoiding stereotyping	“Listens to patient attentively and addresses them thoroughly; respects patient’s health beliefs and encourages patient to share thoughts.” F, 12/08

and behaviors. We concluded that our program was successful based on multiple outcomes. Our program builds on a similar curriculum for the obstetrics and gynecology clerkship addressing ethical conflicts¹⁹ in which students submitted essays followed by small group discussion. In that study our qualitative analysis of student narratives revealed that development of professional values was tied to personal values and strongly influenced by observed behaviors and dynamics of teaching faculty and residents. In this program our purpose was to discover whether written reflection followed by faculty-facilitated peer discussion led to nuanced approaches to addressing cross-cultural encounters and how unequal treatment or differential outcomes of care may result from physician behaviors. The thematic analysis of assignments led us to conclude that students indeed were learning critical concepts of cultural humility, mutuality and horizontality in the doctor–patient relationship, and about patient use of CAM, the influence of culture and self-awareness of one’s own attitudes, values, and assumptions as members of the “culture of medicine.” The results suggested that students may adopt behavior changes aimed at reducing health disparities in their own future practices.

Based on our analysis of the data, we developed a three-tiered theoretical framework for our RP model. The first essential tier is direct participant *observation or experience*, which occurs through student exposure to cross-cultural settings. Teaching and learning occur, but are limited by student multi-tasking, inattention, and in clinics, variability of the physician role-model as a medical educator. The second tier is *individual reflection* accomplished through the written assignment. This allows the student to better organize and consolidate jumbled impressions. The final tier, *facilitated group reflection*, provides the opportunity to confront other

perspectives, have assumptions and expectations challenged, and deepen and extend learning .

Our study has several strengths. Two consecutive years of data are presented for a significant number of students. Our educational intervention was distinct in its structure and format and instructions to students were clearly presented. The evaluation data was complete with a high student response rate. We evaluated outcomes using multiple methods including written essays, in-class discussions and a pre-post knowledge test. We used a ‘triangulation’ approach to analyze qualitative data, combining interpretation from four different faculty with diverse teaching experiences and from different disciplines to reduce bias.

Our study is limited by the specificity of the patient cultural group (Latinos with diabetes) within our practice setting, and we cannot be certain if findings generalize to other cultural groups. However, there is no reason to believe that the techniques that we shared with students would not be effective in other cross-cultural settings. We did not analyze thematic responses by student demographics because the number of themes identified and class size did not permit such analysis (50% female, ethnic mix approximately 43% white, 40% Asian, 10% Hispanic, 1% African American). There is literature that suggests that providers’ own background and their cultural experiences impact their cross-cultural communication skills and their perceptions of their patients^{20–22}. Our evaluation tool was not validated because no validated tools for this purpose were available. Lastly, in asking students to rate their self-reported knowledge change about CAM and culture (questions 7 and 8, Fig. 1), we did not explicitly define the difference between the two and our questions may not be sufficiently sensitive to differentiate knowledge gain in these two areas. However, the in-class discussions about CAM and culture

suggested that most students were able to identify CAM as alternative approaches to Western medicine, while culture was consistently discussed in the context of differences in values, beliefs, practices and social norms among different groups.

Despite these study limitations, our findings reinforce existing literature about the power of the hidden curriculum^{15-17,23}. For example, although role-modeling was not identified as an explicit clerkship learning objective, it emerged as a powerful influence on learning, both negatively and positively. Similarly, the concept of the culture of medicine was not part of the clerkship's formal objectives, yet it consistently appeared in students' written and discussion comments. Without the addition of the RP components, these and other influential dimensions would have remained submerged.

We note that a few key ingredients are necessary to achieve desired goals. First, students benefit from having interdisciplinary faculty facilitate discussions. While physician faculty may add real-world credibility, "outsider" perspectives of faculty trained in the social sciences and philosophy expands their understanding of clinical issues. Second, the lack of evaluative function of participating faculty creates an environment of safety and openness. Third, we found an incremental approach of pedagogical value. Although our model runs the risk of being perceived as "repetitive" or "redundant", circling back to clinical experiences through different modalities (written, oral) and in different settings (individual vs. facilitated group reflection) reduces the burden of multi-tasking, and encourages Socratic self-discovery. We believe that this approach is essential to stimulating critical thinking as opposed to rote regurgitation and adopting "politically correct" postures. This approach may allow students to develop practice styles that incorporate carefully considered ethical conclusions about interactions across cultures rather than simply imitating faculty or residents. We believe that this model of RP, woven into an existing curriculum, addresses the need for "critical consciousness"² in the continuum of cultural competency training toward the development of self-awareness. However, because faculty themselves do not consistently practice RP at our institution, we are not certain if adoption of RP as a habit by physicians might enhance the effectiveness of our curriculum. Finally, as noted in the Program Description, facilitator skills needed to conduct the reflective practice sessions are easy to acquire and maintain and no specific training is necessary.

In summary, integration of a brief RP curriculum occupying only 2 hours of a required clerkship was feasible and highly acceptable to students, and associated with more complex and nuanced understanding and useful problem-solving of challenges frequently arising in cross-cultural encounters.

We speculate that this integrated model can be easily incorporated into most clerkships to promote critical thinking and consciousness about addressing health disparities through improved quality of cross-cultural encounters. The RP curriculum addresses content that is difficult to teach in stand-alone blocks. What remains to be discovered is what amount and quality of longitudinal exposure across clinical training is needed to foster and maintain the practice of self-reflection for lifelong learning.

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Corresponding Author: Desiree Lie, MD, MSED; UCI - Department of Family Medicine, University of California, Irvine, School of Medicine, 101 The City Dr South, Bldg 200, Rm 512, Orange, CA 92868, USA (e-mail: dalie@uci.edu).

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