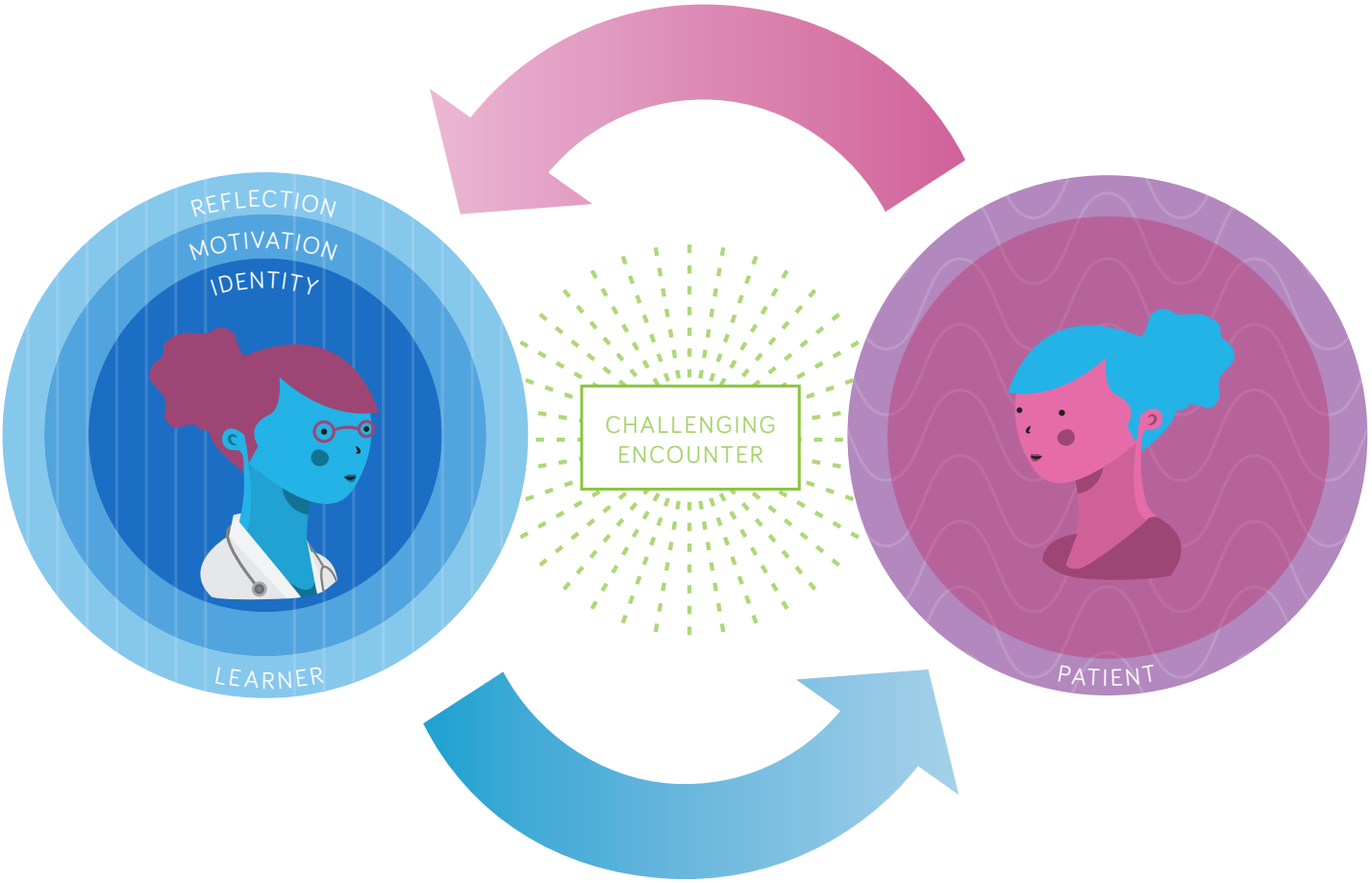
Learning to Care for “Difficult Patients”:

Motivation, Identity, and Reflection in Medical Students and Residents



Jody E. Steinauer

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Leren zorgen voor "moeilijke patiënten":
motivatie, identiteit en reflectie bij studenten geneeskunde en aios

(met een samenvatting in het Nederlands)

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Table of Contents

Preface

For fifteen years, I have taught medical students and residents general obstetrics and gynecology in the academic setting of a large university and in the clinical setting of a public hospital in San Francisco, California, in the United States. While teaching learners to provide patient-centered care, I have noticed many times when learners and I have felt challenged by patient interactions, and these experiences sparked my interest in pursuing a doctorate.

I first noticed these challenges in my subspecialty – family planning, which includes contraception and abortion care. Abortion, a very common part of gynecology care in the US and throughout the world, is considered controversial by many. Physicians often have strong opinions about abortion and the best birth control methods for patients. I noticed learners' judgments of patients who had had unintended pregnancies or abortions. I saw learners' exasperations with patients who had had many children and did not want to use highly effective contraceptive methods. These experiences inspired me to create a workshop in which I facilitated discussions around controversial contraception and abortion patient cases.

As soon as I implemented the workshop with clerkship students at my university, I realized that it needed to change. The students liked talking about the family planning-specific cases, but they wanted to also talk about their own, many and diverse experiences with patients toward whom they felt frustration or other negative emotions. The family planning cases were just a few examples of times when they might have felt frustrated with patients. They wanted to talk about times when patients were not "compliant" with medications, "refused" physicians' recommendations, declined being seen by a learner, behaved in disruptive ways, did not want to engage in care, and many more examples. So we expanded the workshop to include actual cases as well as specific scenarios. We have since run this workshop with our students for more than a decade, and I have facilitated it with residents in a variety of programs throughout and beyond the US. The learners – both medical students and residents – in all of these settings seemed hungry to discuss their strong emotions and strategies for providing high-quality care in these interactions.

I jumped at the opportunity to become a doctoral candidate so I could explore these interactions further. I had participated in the Teaching Scholars Program at the University of California, which helped me develop the original workshop, but I wanted to explore the phenomenon of "difficult patients" in more depth. I wanted to step back and understand why learners feel frustrated with some patients through interviews and analyses of reflection essays. I wanted to query learners about whether and how they want the support of educators in these interactions. I wanted to explore the challenges of training faculty to facilitate verbal reflection exercises among learners. So I matriculated to the UMC Utrecht-UCSF Doctoral Program in Health Professions Education. I have detailed the results of my research in this thesis, which focuses on learning to care for "difficult patients" through lenses of learner identity and motivation. The following introduction will introduce the reader to the concepts of "difficult patients", identity formation, and relevant motivation theories.

Chapter 1

Introduction

Overview

The main goal of this thesis is to understand medical students' and residents' experiences of feeling negative emotions toward "difficult patients" and to explore how to support them to understand and learn from these experiences. This chapter provides a general overview of physicians' experiences with "difficult patients" and what is known about learners' experiences with these patients. We then explore theoretical frameworks that may inform this experience and area of clinical learning as well as relevant curricula. Finally, it introduces the body of work that comprises this thesis and outlines the upcoming chapters.

Note about the term "difficult patient"

When referencing the patient in these interactions the term "difficult patient" is used to be consistent with the literature. The term is placed in quotes, to make it clear that this is a label placed on the patient and not an objective description of the patient. The interactions are also described as challenging or emotionally challenging, but these are always intended to describe the same type of interaction: one in which the learner experiences negative emotions such as anger or frustration toward the patient. The discussion will elaborate further on how our work informs the problematic nature of this term.

"Difficult patients"

Patient-centered care requires clinicians to be empathetic and respectful in their interactions with patients, and greater empathy in these interactions is associated with higher patient satisfaction and adherence.[1-3] Physicians find it challenging to provide high-quality care when interacting with patients whom they consider "difficult," a label given to up to 20% of patients in primary care settings.[4-7] And, patients given this label report lower satisfaction with their care.[5,7,8]

In light of the high prevalence of clinical interactions with patients who receive this label and the impact of this label on patient health care outcomes we need to first understand what kinds of patients clinicians experience as "difficult" and then explore the experiences of learners in more depth. Thus, literature was reviewed, dating back at least sixty years, about "difficult patients," which have commonly been defined as patients who inspire negative feelings in clinicians.

This introduction starts by describing the types of patients and patient behaviors, as well as clinician factors that have been included in or contributed to this designation, over the last sixty years, presented roughly chronologically (Figure 1).

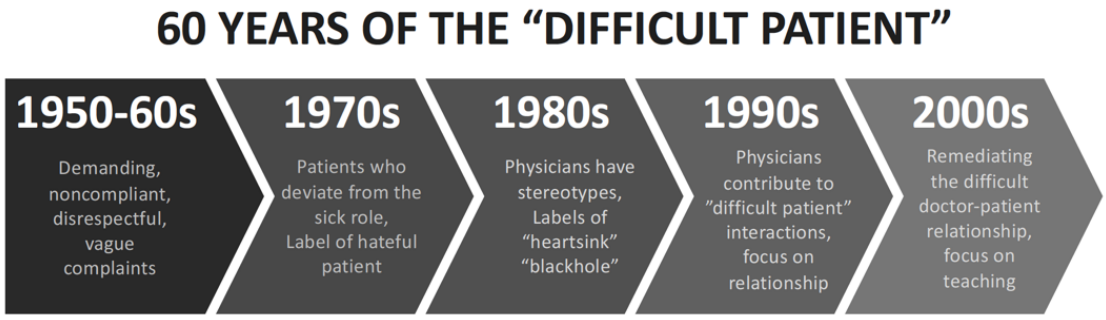

Figure 1. Overview of the evolution of the "Difficult Patient" literature

1950s-60s

In 1957, Highley and Norris published "When a Student Dislikes a Patient".[9] In this study, nursing students identified five types of patients they often disliked: patients who complain after everything has been done for them, who aren't clean, who won't cooperate, who are demanding, and who can help themselves but ask the nurse do everything. The authors theorized the cause of their feelings was that the patients' behaviors made the students feel inadequate due to the inability to fulfill their roles as nurses. They concluded with six key clinical teaching points to help learners manage these interactions, which still apply today (Figure 2).

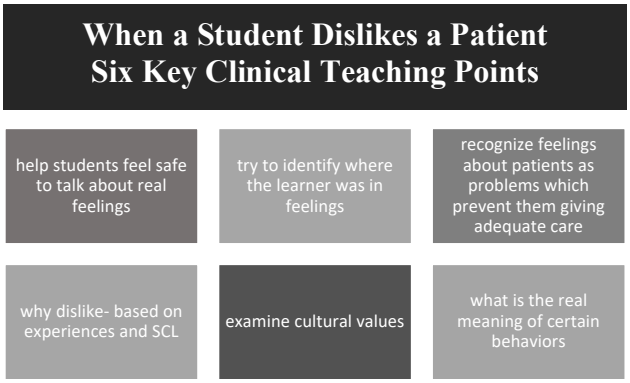

Figure 2. Highley and Norris, "When a Student Dislikes a Patient", A J Nursing, 1957.

Four years later, Boys in White,[10] the results of an ethnography of the development of medical students at Kansas University Medical Center, was published. In the chapter titled, "Students and patients" they described categories of patients whom the students disliked; these included patients who were unfriendly, noncompliant, and disrespectful of the doctor's authority, and whose "immoral" behavior led to their illness. Additionally, students had a nickname for a category of patients designated as causing problems and from whom the medical students learned little. These "crocks" were primarily patients with vague complaints and no clear source of illness but also included patients who could not be cured or who were likely to "create scenes".

1970s

Beginning in the seventies and through the 2010s, many articles described the types of patients toward whom doctors felt frustrated and the dimensions of the interactions that caused or worsened the frustration. These studies commonly used surveys or interviews of physicians to explore which types of patients made physicians feel "negative emotion" or give them the "most trouble". Some of the patient types and themes described by physicians changed over time and others have remained consistent. For example, in the 1970s and 1980s women were commonly listed by physicians as problematic based on gender alone.[11,12] A theme that has been stable over time is when patients "deviate from the sick role",[13-15] which includes when patients don't behave as the physician thinks they should. Examples include when patients express anger toward the physician, do not tell a focused story, are noncompliant, and lack motivation to get well.[12]

In 1978, Groves published, "Taking Care of the Hateful Patient," which was subsequently cited by many other scholars.[16] He wrote, "A few patients kindle aversion, fear, despair or even downright malice in their doctors" and called for physicians to acknowledge that physicians dislike some patients. His categories described types of patients – all considered "hateful" – because of their behaviors toward the physician: Dependent clingers, Entitled demanders, Manipulative help-rejecters and Self-destructive deniers. This paper normalized that doctors sometimes feel negative emotions toward patients, and since then papers on the "difficult patient" have proliferated.

1980s

In the 1980s, a variety of papers were published about the prevalence of "difficult patients" and physicians' stereotypes of patients, and a commentary argued for the importance of teaching about interactions with "difficult patients".

A few researchers in the UK described "difficult patients" in General Practitioners' practices and provided advice on how to cope with them. O'Dowd wrote about "heartsink" patients, meaning – when you look at your schedule and see their name – your heart sinks.[17] Gerrard described "black hole patients" as patients who caused an excessive amount of work by the GPs; these included patients with family complexity or who live in poverty, who display punitive behavior toward, "deskill" the doctor, or who are manipulative, and who have medical complexity. Some described workshops they facilitated in their general practices to support each other.[11,17]

In 1982 Najman and Klein [14,18] introduced evidence that physician's judgments of patients are influenced by factors other than individual patient's actual behaviors and that physicians stereotype patients based on generalities. They conducted a cross-sectional survey of more than 2,000 physicians asking which medical and social characteristics caused a negative reaction in the physician. They grouped these into themes, some of which are summarized in the table below.

Table. Stereotypes of patients that caused negative emotions in the doctor, study conducted in 1982[14]

Theme	Examples
Deviation from middle class values	Low self-discipline, poor hygiene, uses drugs, on welfare, lazy
Deviation from obligations of the sick role	Angry, lacks motivation, obese, uses alcohol or drugs, lies to physician
Medically challenging conditions that defy diagnosis or therapy (varied by specialty)	Vague symptoms such as back problems and gastrointestinal complaints, incurable disease
Behaviors that challenge the doctor	Not grateful, asks too many questions, challenges doctor's values

In 1983 Gorlin argued that each interaction with a difficult patient was a "key teaching moment".[19] Additionally, he suggested that some of the difficulty is due to the physician's emotional response to the patient and that teaching programs should teach about physicians' feelings and how they respond to patients.

1990s

In the 1990's researchers continued to explore and highlight the physician contributions to the "difficult patient" interaction and specifically that physicians experienced negative emotions when the interaction made them feel inadequate.[20,21] In 1994 Hahn, et al. introduced the idea that the source of difficulty was complex, including patient, relationship, and physician components. In 1994, Hahn focused on the doctor-physician relationship rather than on only the patient.[6] They found that physicians classified up to 21% of patient encounters as difficult. They wrote: "There may be 'difficult patients' who are problematic for all physicians and there may be 'difficult doctors' who are problematic for all patients. Difficulties in the doctor-patient relationship may also arise because of the unique juxtaposition of particular provider and patient characteristics."

In 1995 Mather also focused on the physician contributions to the "difficult patient" label and found that among 60 GPs higher workload, lower job satisfaction, no training in counseling, and less postgraduate training were associated with reporting a higher proportion of "heartsink" patients.[22] Also in 1995 Smith wrote: "Rather than the characteristics of the problem patients alone what demands attention is how characteristics of both patient and doctor shape, and are shaped by the doctor-patient interaction."[23] They argued that both parties had a responsibility for the "difficult" or so-called problem patients and that some doctors were more patient-centered and others more doctor-centered. Many others wrote

articles and commentaries along the same lines, for example emphasizing that "Physicians' personalities, histories, family and cultural backgrounds, values, biases, attitudes and emotional "hot buttons" influence[d] their reactions to patients."[24]

21st century

In the 2000s, researchers published qualitative studies and commentaries exploring the topic more deeply. For example, in 2001 Steinmetz conducted a qualitative study of family physicians, probing the kinds of patients they found difficult, their coping mechanisms and the effects of their own character on these interactions.[25] Among the most commonly mentioned behaviors were: patients with unsolved, repeated complaints, and patients seeking secondary gain or with manipulative, demanding, angry and uncooperative behaviors. Physicians also listed patients with psychosomatic disorders, high anxiety, psychiatric disorders, and substance use disorders. Finally, the physicians identified that personal tendencies of being critical and judgmental, defensive, overly nice, and needing to be loved by patients makes these interactions more challenging.

In 2006, Strous, et al. revisited the Groves paper about "hateful patients" and its "relevance for 21st century medicine."[26] They reflected on how the role of the physician has changed in the face of patients having access to more information. They concluded that doctors now have to engage in relationships with patients differently, allowing the patients to have a more active role.

Publications have also recently focused on instructing physicians how to provide care in these circumstances.[27,28] For example, Haas suggested that in order to improve care for these patients, physicians should acknowledge and accept their own emotional response, and work to ensure personal wellbeing and professional support.[28]

Clinical learners' experiences of "difficult patients"

Medical students, like physicians, perceive some patients as "difficult" and in fact are more likely to label patients as "difficult" than clinicians.[7,29] An analysis of reflection essays found that medical students' "difficult patient" experiences, similar to clinicians', included interactions with patients who were angry, uncooperative, or disinterested; talked too much; or who had chronic pain, among other behaviors and circumstances.[30] In workshops about challenging interactions during obstetrics-gynecology clerkships medical students discussed patients with alcohol or substance use disorders, who did not comply with recommendations, and made what they perceived as irresponsible reproductive health decisions.[31]

In 2011, Oliver suggested that educators prioritize "difficult patients" in teaching.[32] They argued that educators should ask learners how they are feeling and support them to understand the visit in the context of the patient's life. While Oliver and others have argued educators should prioritize teaching about challenging interactions in clinical training,[30,32] there are limited reports about students' and residents' perceptions of these experiences to inform such curricular development.[30]

Theoretical frameworks informing this thesis

Several theoretical frameworks may help us understand why learners find some patients "difficult". Five perspectives are briefly reviewed: professional identity formation, theories of motivation, experiential learning, cognitive apprenticeship, and reflection, and how they might help us understand how students experience these interactions.

Professional identity formation theories

Cruess and Cruess propose the definition of a physician's identity to be: "a representation of self, achieved in stages over time during which the characteristics, values and norms of the medical profession are internalized, resulting in an individual thinking, acting and feeling like a physician." Identity formation in medicine is the process by which a layperson is transformed into a physician. The Carnegie Foundation report and educational scholars have recommended that identity formation be a focus of medical education.[33,34]

Identity formation contends that an individual's identity forms through distinct stages, which are defined by one's interpretation of their world and their place in that world. Some developmental psychologists contend that each stage has specific characteristics and that an individual progresses from one to the next in a predictable way. Kegan,[35] for example, described five stages of identity formation, with individuals moving from Stage 1 (in childhood) and into Stages 2 toward 5 as adults.

Kegan's model has been applied to physician identity development;[36,37] in Stage 2 learners "act the role" of physician, in Stage 3 their "socialized mind" is concerned about wanting to be perceived as following the norms and being seen as a physician, and in Stage 4 with their "self-authoring mind" they hold physician values and their own understanding of the world, and they are physicians.[35] Kegan also describes that one's movement from one stage to the next is inspired by "crises," which occur when there are discrepancies in how they see themselves and a challenging experience. This conflict inspires the individual to reflect and develop a new understanding of their world and their identity within it.

Jarvis-Selinger, who bases her work on Kegan's theory, argues that we should not interpret theories of identity formation to mean that one progresses linearly from one stage to the next on a path to a physician role or map these stages to steps in medical education. Instead, she argues that many professional identities can coexist; medical students are not just learning "what it is to become a doctor; they are, at the same time, learning what it is to be a clerk." Each "adopted identit[y] must go through its own process of identity formation. Novice clerks will first try to adopt the behaviors of a clerk, then eventually internalize this role and come to feel like clerks, even if they do not yet feel like doctors."

She argues that the multiple identities are discontinuous and are being constructed and deconstructed at the same time. As medical students become residents, they have to construct the new resident identity and deconstruct the old medical student identity, while they are on their way to constructing a physician identity. This theory of identity formation has implications for the roles of learning in these identities. As students move into clerkships,

"one of the discontinuities that emerges is the discovery that they are 'no longer the center of the institutional universe'… and learning takes on an unfamiliar structure." As they move into residency, "where their role as learners is still a dominant aspect of their identity… it is now more secondary to… their responsibilities for ensuring the safe provision of care."

Finally, she argues that the process of identity formation happens at two levels, the level of the individual, and at the collective level, "which involves the socialization of the person into appropriate roles and forms of participation in the community's work."

Motivation theories

As medical students try to act as physicians but cannot practice independently and must interface with supervisors, they may find particular types of patients especially challenging. Goal orientation theory is a social cognitive theory of motivation that describes an individual's "purpose for achievement."[38] Goal orientation represents one's general purpose for achievement and includes an orientation toward mastery, a focus on learning and gaining competence, and toward performance, a focus on demonstrating competence and comparing themselves to others. Residents, further along in their training and professional development, may experience goal orientations differently from students, and this may result in different patient experiences.

Additionally, learners lack the competence and autonomy of physicians, which may affect their experiences of challenging patient interactions. Competence and autonomy are two of the three psychological needs required to enable intrinsic motivation, as described by self-determination theory.[39,40] The third need, relatedness, may also affect their patient experiences, as they interact with teams, peers, supervisors and patients. When interacting with emotionally challenging patients, such as those who question their authority, the extent to which they lack these needs may affect their motivation to learn from the interactions.

Theoretical frameworks related to clinical learning and teaching

As we consider how to support medical students and residents in these emotionally challenging interactions, we might consider theoretical frameworks of experiential learning, cognitive apprenticeship, and reflection to understand learners' desires for the curriculum in terms of content and teaching strategies.

Experiential learning theories

Experiential learning is "constructing knowledge and meaning from real-life experience" and is relevant to this thesis because our research questions were focused on authentic patient experiences.[41] Relevant theories include cognitive theories in which social experiences cause changes in individual learner's knowledge and skills, and sociocultural theories that focus on learning as a communal experience. Kolb's theory of experiential learning describes experiential learning as a cyclical process that includes 'experience, reflective observation,

conceptualization, and active experimentation'. Relevant to this thesis is his emphasis on the reflective observation component in which one makes sense of the experience, and this reflection requires support by educators.[42] A relevant sociocultural learning theory based on communities of practice theory[43] is experience-based learning theory, proposed for medical education by Dornan, et al.[44] It proposes that students learn through participation in clinical activities, which lead to "real patient learning," proficiencies and affective learning. In order to be effective, ExBL requires supervisors to formally and informally support the learning by providing cognitive and affective support rather than solely on teaching.[41] Our research questions included probing the extent to which learners felt supported in learning from these experiences.

Cognitive apprenticeship

Clinical learning is situated in the environment in which students learn to apply their knowledge[43] and involves an apprenticeship-like model with students participating alongside individual clinicians or within teams. Collins et al.[45] applied apprenticeship teaching methods to teaching cognitive and metacognitive skills involved in reading, writing and mathematics and introduced cognitive apprenticeship methods: modelling, coaching, scaffolding, articulation, reflection and exploration.[45,46] Stalmeijer and colleagues[47] explored whether the cognitive apprenticeship methods fit medical students' experiences during clinical training. In their study medical students reported experiencing all six teaching methods and valued these methods for teaching in clinical settings.[47] As we explored students' experiences of and desires for curricula around these challenging interactions we looked for traditional pedagogical techniques and methods such as those of cognitive apprenticeship.

Reflection

Formal reflection has been increasingly formally incorporated into medical education, both because it is seen as a key component of professional identity formation and in order to create lifelong learners.[48,49] Aronson differentiates the general term "reflection" from "critical reflection"; she argues that in medical education we should focus on the latter and defines it as "the process of analyzing, questioning, and reframing an experience in order to make an assessment of it for the purposes of learning (reflective learning) and/or to improve practice (reflective practice.)"[50] Reflection has been shown to improve learning and performance, such as through better clinical reasoning.[48,51] There has been growing interest in using reflection to assess and develop professionalism, and has more recently been expanded to include professional identity formation.[52,53] Written reflections have been assigned that focus on areas of professionalism such as times when a student's ethical obligations as a health care provider conflicted with his/her personal moral values, experiences that had a significant impact on his/her view of him/herself as a professional, and experience during the clerkship that taught them something about professionalism. [30,52,53]Additionally, educators have emphasized the value of verbal reflection through debriefs or small group discussions about clinical experiences.[24,51,54] As described above, Kolb and Dornan, in their experiential

learning theories, emphasize the role of teachers in supporting learning from experiences.[42,44]

Research questions and overview of studies

To summarize the background, we know that medical students and residents, like practicing physicians, perceive some patients as "difficult" and in fact are more likely to label patients as "difficult" than clinicians.[7,29] It has been argued that educators should prioritize teaching about challenging interactions in clinical training,[30,32] but there are limited reports about students' and residents' experiences to inform such curricular development. We do not understand why learners have negative emotions toward some patients or whether dimensions of their identities or motivations affect these experiences, or how these experiences affect their identity formation. We also do not understand how they would like to be supported in these interactions and the feasibility of providing their desired support. The answers to these questions, through exploring learners' perspectives, would inform clinical learning and curricular development.

This thesis address three main research questions:

1. Who are "difficult patients" and why do medical students and residents find them difficult?
2. What do medical students and residents want from educators to support learning to care for "difficult patients"?
3. Can we train faculty to support reflection about these patients?

In order to answer these questions, we performed five studies.

Three studies addressed *Question 1*. Study 1 was a qualitative interview study of final-year medical students and Study 2 of final-year ob-gyn residents about interactions with patients toward whom they felt negative emotions. In both, constructivist grounded theory analyses addressed why they had negative emotions toward these patients. Study 3 analyzed medical students' written reflections about challenging clinical encounters using content analysis with pre-determined codes identified in Study 1.

Two studies addressed *Question 2*. Study 4 was a content analysis of data collected in Study 1 to reveal medical students' strategies with challenging patients and what support they desired from supervisors. Study 2 assessed these in residents.

Study 5 addressed *Question 3* as an implementation study of a reflection workshop for residents through a train-the-trainer model. Finally, the thesis includes a narrative review of the "difficult patient" as described in the medical literature for the last eighty years.

Note: This thesis is a collection of related articles. Each chapter was written as a stand-alone article. Therefore, repetition and overlap across chapters are expected.

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Chapter 2

What Makes "Difficult Patients" Difficult for Medical Students?

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Abstract

Purpose

Physicians can find it challenging to provide high-quality care to "difficult patients." While studies support that medical students also find some patients "difficult," little is known about why they do or how being a student affects their perceptions. The authors conducted this study to gain a deeper understanding of students' experiences with "difficult patients" to inform clinical teaching about effective patient communication and patient-centered care.

Method

In 2016, the authors conducted interviews with fourth-year medical students, who were asked to describe patient interactions in which they felt negative emotions toward the patient, as well as describe the clinical setting and their feelings. The authors audiorecorded and transcribed the interviews. Then, using a constructivist grounded theory approach, they reviewed the transcripts, coded the data using a codebook they had developed, and grouped the codes into themes.

Results

Twenty-six students (of 44 volunteers and 180 students invited) were interviewed. Students described negative feelings toward patients and patients' behaviors, which were exacerbated by three situations related to their role and expectations as learners: (1) patients' interference with students' ability to "shine"; (2) patients' interference with students' expectations of patient-centered care; and (3) students' lack of the tools or authority to improve patients' health.

Conclusions

Educators should consider these findings, which can be explained by the professional identity formation and goal orientation theory frameworks, as they teach medical students to provide high-quality care for patients they find "difficult."

Introduction

Researchers have concluded that patient-physician communication, a critical component of health care quality,[1] is associated with patient satisfaction and positive health outcomes, including medication adherence, functional status, and lower mortality.[2] High-quality, patient-centered communication requires that physicians establish rapport, communicate respect, consider the patient's perspective, and demonstrate empathy,[3] all of which can be challenging when interacting with patients toward whom physicians feel negative emotions. These patients are often labeled as "difficult."[4-7] Medical students also feel negative emotions, such as frustration, toward patients but little is known about their experiences, so we cannot create strategies to support students' skill development to handle these challenging circumstances.

Primary care physicians label up to 30% of their patients as "difficult."[4-8] These patients include those who are psychiatrically and/or medically ill; have complex social circumstances and lack support; have vague symptoms or conditions with little or no likelihood of a cure; behave in angry, manipulative, or hostile ways; challenge or decline recommendations; are interpersonally difficult; and have high utilization of health care services.[5,6,9-14] Additionally, patients who are considered "difficult" report lower-quality clinical interactions.[4,6]

Medical students, residents, and early-career physicians are more likely than other physicians to label patients as "difficult,"[6,15-17] and they struggle with caring for these patients.[17,18] We must address these challenges because students play a critical role in the communication between patients and teams and because providing training in handling these interactions should prepare students for their future practice. While some have suggested that educators focus on training students to care for "difficult patients,"[11,17,19-21] there are limited studies of students' experiences to inform curricular development.

Reports in the literature provide insight into the types of patients and interactions that medical students consider difficult, but these reports have little information about why students find them challenging. A recent analysis of reflection essays found that medical students' "difficult patient" experiences, similar to practicing physicians' experiences, included interactions with patients who were angry, uncooperative, or disinterested; talked too much; or had chronic pain, among other behaviors.[17] Students described feeling angry and frustrated in many of these interactions but they did not explain what caused these negative emotions. In workshops supporting verbal reflections about challenging interactions during obstetrics-gynecology clerkships, medical students discussed patients who abused drugs or alcohol, did not comply with recommendations, and made what they perceived to be irresponsible reproductive health decisions.[18]

A gap exists in the literature regarding how medical students experience interactions with "difficult patients" within their role as learners and within the clinical learning environment. Professional identity formation, which explores both psychologically and sociologically how students acquire their physician identity, might help us understand how students experience these interactions.[22,23] As medical students try to act like physicians but still cannot practice independently and therefore must interface with their supervisors or teams, they may find

particular types of patients especially challenging and experience interactions with them differently from practicing physicians. The purpose of this study was to explore how students understand their experiences of "difficult patient" interactions, anticipating that these data will inform curricular development and strategies for supporting clinical learning, to teach students to more effectively communicate with patients who challenge them.

Method

Study design

We conducted interviews and based our qualitative analysis of the transcripts on constructivist grounded theory, a methodological orientation in which researchers analyze how individuals develop subjective meanings of their experiences.[24] We considered professional identity formation as a potential framework to explain our findings but did not know if it or another theoretical framework would fully explain students' experiences. This uncertainty justified our use of a grounded theory approach.

Participants and setting

We recruited fourth-year medical students from an urban medical school in the western United States, just before graduation, to participate in our study. This timing increased the chances of the students giving honest answers since there was no risk to their residency placement or evaluation. Students had interacted with patients across all four years of medical school in various settings so we expected that they would be able to reflect back on the spectrum of patients they had encountered during their training.

Interview guide

We derived our interview guide from studies of physicians' interactions with "difficult patients," specifically using this information to guide how we asked students to describe the patient interactions in which they felt "negative emotions" toward the patient.[11] We used two framing questions. First, we asked students to describe in detail two different patients toward whom they felt negative emotions, including the clinical setting and their feelings. Second, we asked whether they had ever noticed patterns in the types of patients and interactions they found to cause negative emotions. We piloted our interview questions with a group of faculty colleagues to ensure that the questions were clear. During the interviews, we included additional probes that captured the themes that had emerged from the previous interviews, as we noticed them during our transcript analyses, consistent with grounded theory.

Procedures

In February 2016, we e-mailed all fourth-year medical students with an invitation to participate in our study. Each student received an information sheet about the study. Thirty-

nine students replied to our initial invitation; of these students, 21 were available during our interview slots and participated in our study. Then we sent a second invitation to the students who had not responded to our initial e-mail; it included a link to sign up for the five remaining available interview slots. Once these slots were filled, we sent no further invitations because we had gathered sufficient data to describe the themes.

From February to April 2016, two authors (J.E.S., F.P.) with prior training in qualitative methods interviewed students using an in-depth, semi-structured methodology. Interviews were conducted either in person or by telephone and lasted between 40 and 75 minutes, and each participant received a $25 gift card. All interviews were audiotaped and professionally transcribed. The transcripts were deidentified. We used Dedoose 7.0.22 (SocioCultural Research Consultants, LLC, Los Angeles, CA) for our analysis of the interview transcripts.

The institutional review board at the University of California, San Francisco, School of Medicine considered our study exempt.

Data analysis

During the interviews, we used a constant comparison approach,[24] identified themes, and explored a few areas in more depth, specifically the aspects of students' experiences that were related to their role as learners and their position within their teams. To improve the quality of the interviews, we reviewed the first six transcripts to explore the extent to which the interviewers were leading the students and solicited feedback from two non-interviewer authors (P.O., A.T.). We stopped conducting interviews when no new patterns emerged from the data and we had adequate evidence to describe the themes, thus achieving theoretical sufficiency.[24]

Three authors (J.E.S., A.T., and F.P.) analyzed two interviews to create our initial codebook. We then applied these codes to a third interview, revised the codebook, and analyzed two additional interviews. We made final codebook revisions, primarily collapsing codes but also adding a few new codes. We used the final codebook for our analyses, coding at the sentence level. Two authors (J.E.S., F.P.) each coded half of the interviews and reviewed the other's codes to make sure they were in agreement. Through frequent discussions, all authors participated in grouping the codes into themes that explained medical students' experiences with "difficult patients." Each author had input on the representative quotes included below.

Researcher reflexivity

The research team consisted of physicians, educational researchers, and a research associate trained in public policy. Most interviews were conducted by the first author (J.E.S.), a professor in the Department of Obstetrics and Gynecology who works with a small number of medical students but does not have an administrative role or assign grades to students. Her experience as a medical student, physician, clinician-educator, and facilitator of small group reflections[18] may have influenced the collection and interpretation of the data; it is possible that students were less comfortable talking with her because of her status or more

comfortable because of her shared history and experience facilitating these discussions. In the iterative analysis, the other members of the team who were not involved in clinical education provided additional perspectives to that of the physician first author. They are experienced qualitative researchers and are familiar with students' experiences in medical education and concepts related to professional identity formation. Collectively these experiences may have influenced their interpretation of the data.

Results

We interviewed 26 of the 44 students who volunteered, from the 180 fourth-year students we invited to participate. Thirteen (50%) were women, and the mean age was 29 (range 25-34). They were entering diverse specialties, with the largest subset (7, 27%) going into internal medicine. Students described between 2 and 8 specific patients toward whom they felt negative emotions.

Students described these patient interactions as challenging and difficult for them and their teams; many patients had complex social circumstances, chronic disease, psychiatric illness, and/or substance use disorders. Students often described patients with "unfixable" problems; who were angry with or mean to care providers; declined the recommended treatments; were thought to have caused or exacerbated their own health problems; could not or would not communicate with the students; and were perceived to be drug-seeking. Students often described their emotions in these interactions as "frustrated" or "annoyed," and frequently their experience was dominated by feeling powerless to help the patient.

We identified three themes related to the tensions that caused or exacerbated students' negative feelings toward patients, all of which pertained to their role and expectations as medical students (see List 1). These themes are: (1) patients' interference with students' ability to "shine"; (2) patients' interference with students' expectations of patient-centered care; and (3) students' lack of the tools or authority to improve patients' health. We elaborate on each of these themes and include representative quotes below.

Patients' interference with students' ability to "shine"

Nearly all students described at least one interaction in which they felt frustrated with patients who lowered their chances of "shining" and receiving a positive evaluation. Students perceived that these patients prevented them from fulfilling the roles that were required to obtain an honors grade. These expected roles within the team included knowing the patient well, efficiently collecting and presenting information, and saving the team work. The roles they expected in interactions with patients included establishing rapport, diffusing anger, and being considered the primary physician. Students also described challenging patients as those who thwarted their ability to contribute to and not be a burden to the team and to care for the patient effortlessly.

As suggested by the quotes in Table 1, students described times when challenging patients made it difficult for them to fulfill these expected roles, therefore threatening their ability to obtain an honors grade. Angry and uncooperative patients impeded their ability to collect information adequately and/or efficiently, which made it difficult for them to present succinctly and demonstrate they were doing "the one job they had." Additionally, students described times during rounds when the patient would "come and surprise them" by saying they did not know the plan or provide additional information the student did not know, making it look like the student had not done "[her or his] job." Students also felt that their preceptors would think they were not doing a "good job" when they did not diffuse situations with angry patients or families, and they were frustrated with patients who required them to burden their residents with extra work.

In general, students' concerns about their grades prevented them from asking the residents or attendings to help. They also described not wanting the residents to find out how hard they were working with their challenging patients. As one student described:

> I want the outcomes to be good but I don't necessarily want them to see what it took me to get there because you want the resident to be like, "He was independent; he got his work done. The patients were happy…He was comfortable with it. He felt natural," and if it's "He was hard working but he stayed way later than everybody else and we're not really sure what took him so long," that's not what I thought they'd actually want.

These types of patients and interactions sometimes made the students feel that they were not able to make the work look effortless.

Additionally, students felt that patients whose problems were considered "social" and not "medical" might affect their evaluation. One student said:

> I feel like obviously the threat of getting evaluation, getting honors, means that I feel like I have to impress people. To impress people - this is my thought process. To impress people I have to solve problems. To solve problems, they have to be problems I can solve. If there's a physical issue I can't solve, I get frustrated. If there is a pneumonia that I can give antibiotics for, and know the course, and know the drug, and know the timeframe, then I feel good about it…I want to fix things. I feel like fixing things gets me honors. If I can't fix them, I can't get honors.

Students were especially frustrated with patients who were considered "social admissions" or who had extended stays for "social" indications for these reasons.

Some students described consciously deciding to not worry about getting an honors grade and to focus on learning from the challenging patient interaction. Occasionally, this decision was in the context of a rotation when the student was no longer concerned about her or his performance. For example, one student said, "It wasn't really about performing or – I'm sure if I did the sub-I earlier, it would have been." Other students made this decision when they had continuity with attendings, specifying that they felt they would have another chance to demonstrate their competence. Occasionally students described patient interactions without mentioning concerns about evaluation.

Patients' interference with students' expectations of patient-centered care

Students described frustration when their experiences countered the patient or physician behaviors they desired or the patient-physician relationships/interactions they expected (see Table 2). For example, students described specific behaviors they expected of or desired in a patient--they wanted patients to be happy and/or appreciative. One student said, "it's much easier to interact with people when they're excited to see you and appreciate you." Students also expected patients to want to be healthy. One said, "I can't do my job if you're not going to participate, or if you don't want to be healthy, why are you here? You shouldn't be in the hospital if you don't want the treatments."

Students described wanting to experience a close emotional connection and rapport with patients. These students experienced frustration when their expectations of the patient-physician relationship or interactions were not met. One student said:

> I felt hopeless because none of the things I was doing was making my rapport with him better. Which was really frustrating because it's like, you know, I've done the [pre-clinical communication course] stuff. You know…I've basically listened to him, I listened to his concerns…but then it was like a one-way road where I was just doing things for him, but there was…no rapport, I believe, from his side. He wasn't trying to build a relationship with me.

Students were also disappointed when they could not easily establish trust with their patients, contrary to their expectations. This trust was bidirectional--they were disappointed when the patient did not trust them and also when they did not trust the patient. For example, students did not want to "question the validity" of their patients' stories when there were "discrepancies." The challenging patient interaction then was one that failed to meet students' expectations of patient-centered care.

Students' lack of the tools or authority to improve patients' health

Students yearned to experience the full ideal of the physician--to have competence, knowledge, skills, power, and authority to independently care for patients. However, as they were in a learner role but practicing to be in a physician role, they were frustrated because they lacked some of these characteristics (see Table 3). Students generally described instances in which they were not equipped or logistically permitted to manage a patient's pain. One student, describing an imagined conversation with a patient, said:

> You're frustrated with me, as a patient, because you're not feeling helped. I'm frustrated because I'm trying to take on the responsibility and be your primary person but I don't have the tools or quite enough power, yet, to be the one that can help you.

In describing another case, the same student said, "My value was an information relayer but not as someone who can do something or cause action to happen."

Students also described times when they lacked knowledge, such as being unable to answer patients' questions, which caused confusion with patients. One student said:

> There's a lot of knowledge I didn't have. A patient would ask me a question, and I could venture a guess, and the team would come and say something entirely different, and that would be confusing to the patient.

Students often conveyed a desire to be in the role of the physician, yet their struggles with not having knowledge, decision-making power, and other authority kept them in the role of "spectator."

Finally, as described above, these patients had a myriad of complex psychiatric and chronic diseases and very complex social circumstances. Overlying all of the above themes, students experienced feelings of powerlessness to help patients improve their health status; this powerlessness was not specifically related to their lack of authority or competence as students but rather stemmed from the complexity of patients' cases.

Discussion

In line with the findings from other studies,[17,18] we found that students were similar to practicing physicians,[10,11,13] in terms of the kinds of patient interactions that evoked negative feelings. In our study, however, students' negative feelings were affected by several factors that were outside the patient interaction but central to their status and role as a medical student, including their concerns about evaluation and their disappointment when they could not provide direct patient care. Additionally, students experienced frustration when their hopes that the patient-physician relationship would be patient centered[3] were not realized. Thus, their identities as medical students and their professional identity formation process affected how they responded to these experiences with "difficult patients."

Professional identity formation, or the process of adopting a professional identity, requires both individual psychological changes and collective socialization processes.[22,23] As Cruess and colleagues described, this socialization process in medicine is complex, requires students to play the role of physician, and is affected by positive and negative emotional experiences.[23] Rather than thinking of professional identity formation as a longitudinal process that spans multiple stages of training, Jarvis-Selinger and colleagues proposed that it involves multiple, successive identities.[22] As students go about their work, their identities are "constructed and co-constructed" as Monrouxe described, and affected by cultural expectations, role modeling, and relationships.[25] Students are simultaneously learning both what it is to become a doctor and what it is to be a medical student and, during their clerkships, they must "come to understand their place in the community of practice and must reposition their learning" relative to patient care.[22] According to our findings, students' interactions with "difficult patients" highlighted the tension between their learner and physician identities; students were very concerned about their learner identity and felt thwarted in their professional identity development when they were faced with "difficult patients."

The professional identity formation process also requires that students feel increasingly competent, which in turn makes them feel more secure both in their role and as they integrate the identity of a physician with their previous identities.[23] In our study, students often did not

feel competent and may even have felt less secure in their role playing as a physician, exacerbating their frustration with challenging patients.[23] In exploring how medical students form their professional identity in relation to discourses of competence and caring, Macleod found that, while both were important and not in opposition, medical students tended to prioritize competence over caring.[26] We found that students wanted to be and be seen as both competent and caring while they acted as the ideal physician and/or medical student, and they perceived that some patients made either or both less possible. Students expressed disappointment, for example, when they could not establish rapport or a close emotional connection with a patient, which made them feel more negatively toward that patient. Similarly, even though they were not surprised that they lacked authority, their disappointment in doing so sometimes exacerbated their negative feelings.

Students found some patients particularly challenging because of their concerns about the impact the patient could have on their evaluation. Goal orientation theory focuses on why students engage in learning exercises, which can be oriented toward either mastery (learning the skills) or performance (demonstrating their abilities to evaluators).[27] We found that many students were performance-oriented and/or responded to a strongly performance-oriented clinical learning environment, and they sometimes attributed the difficult nature of an interaction to the patient. We also found that this performance orientation often prevented students from seeking help from a supervisor, a finding consistent with those of other studies.[28,29] This performance orientation meant that some students preferred patients with "medical" and/or "fixable" problems so they could "shine" in providing care. Students' discomfort with patients with "social" and/or "unfixable" problems and with uncertainty has been well documented,[30,31] and those physicians who are less comfortable with psychosocial challenges are more likely to label patient encounters as difficult.[7] Some students did describe times when they were in a mastery orientation, not concerned about getting an honors grade, and focused on the interaction as a learning opportunity (e.g, in rotations outside their chosen specialty), but these instances were less prevalent.

Considering that students' identity formation, their hopes for patient interactions, and their performance orientation affected their emotions toward patients, how can educators support learning in difficult interactions? We recommend that educational strategies focus on helping students learn from, gain competence in, and develop their professional identity through these interactions.[17,21,32] Educators might promote a mastery orientation and de-emphasize or simply acknowledge a performance orientation in clinical learning environments. Students' focus on earning positive evaluations, instead of mastering the skills in the interaction, supports the recommendation from Bleakly and Bligh and others to "overhaul" the clinical learning environment to "an authentic patient-centered model that shifts the locus of learning from the relationship between doctor as educator and student to the relationship between patient and student, with expert doctor as resource."[33,34]

Our study had a few limitations. First, we interviewed only 26 students at one institution; however, we did reach theoretical sufficiency during those interviews, allowing us to describe themes related to students' experiences. Second, because the students were interviewed at the end of medical school, they may have been subject to recall bias. In

addition, only one-quarter of the invited students responded to our e-mail, and it is possible that the students who felt particularly strongly about their education in patient communication were more likely to respond. However, we had a balance of genders and a distribution of specialties in the participant pool. Next, students' accounts may have been affected by the interviewer, responding differently to a non-physician than to a faculty member. Our cross-sectional study design prevented us from drawing conclusions about whether there were differences in responses by clerkship site or whether students' experiences changed over time. Finally, we found the professional identity formation and goal orientation frameworks to be well aligned with our findings, and we focused on the learning and patient care implications, but other theories, such as impression management, and personal implications, such as student stress and burnout, also may have been relevant and could be explored further.

As we prioritize professional identity formation in medical education, we might consider challenging patient interactions as key teaching moments[17,21,22,32,35] and opportunities to help shape students' professional identity.[23,25,36-38] With support, these experiences, such as when patient interactions challenge learners' expectations or evoke negative emotions, offer opportunities for reflection, awareness, and criticism of students' assumptions, growth, and transformative learning.[39] Additionally, supporting a mastery-oriented learning environment will help students develop competence in communication skills. If educators can better support students in these inevitable interactions with patients who challenge them, students will be better able to provide high-quality care to all patients in the future.

List 1. Themes Describing Medical Students' Experiences with "Difficult Patients" and the Expected Behaviors and Roles that Contributed to their Negative Emotions

Patients' interference with students' ability to "shine"

Students perceived that patients prevented them from fulfilling the roles that were required to obtain an honors grade.

- The student should know the patient well, efficiently collect information and data before presenting, and build rapport with the patient.
- The student should present in a succinct way.
- The student should prevent extra work for the residents.
- The student should communicate clearly with the patient and family, answer all questions, and know everything about the patient.
- The student should diffuse angry feelings in the family and patient.
- The student should be seen by the patient as the primary physician.

Patients' interference with students' expectations of patient-centered care

The patient-physician relationship students expected was negatively affected by patients' behaviors.

Patient dimensions

- The patient should be happy and appreciative.
- The patient should want to get healthy.

Relationship dimensions

- The student should trust the patient.
- The patient should trust the student.
- The student should keep control of the interaction.
- The student should establish an emotional connection and rapport with the patient.

Students' lack of the tools or authority to improve patients' health

Students lacked the characteristics needed to fill the physician role.

- The physician should have competence, knowledge, and skills.
- The physician should have power and authority.

Table 1. Medical Students' Experiences with "Difficult Patients" When Patients Interfered with Students' Ability to "Shine," University of California, San Francisco, School of Medicine, 2016

Theme	Representative quotes
Students perceived that patients prevented them from fulfilling the roles that were required to obtain an honors grade.	
The student should know the patient well, efficiently collect information and data before presenting, and build rapport with the patient.	• As a female medical student, he wouldn't talk to me the first couple days. I would be like, I'm going to examine you, just going to power through this anyway. I'd ask him questions and he'd either not answer or say no, but when my male resident would examine him he would be more talkative, and give him answers. So every morning when I presented on this patient I would be like, subjective, the patient doesn't talk to me. I felt like I wasn't able to do a good job and I felt like it reflected on me poorly because I had an uncooperative/sexist patient. • So, interviewing her, I had to like go through this translator and there was no way to ever redirect her or get her back to the point. Like I would ask a very yes and no question and I'd get back this very long repetition of her entire story so far in terms of coming into the hospital and I can't actually interrupt it. And it's frustrating because I keep thinking, oh, my gosh, like I'm only supposed to be in here for maybe 20 minutes at most before I need to go and talk to my preceptor and I can't get even the most basic information out of her…When you're [in] the ED and there's this big line, a patient's coming in, you want to help the team [through] it and get patients through and you don't want to be the one who kind of slows everything down or is seen as needing more help or not being efficient enough. And when you're on your third year, like, you know, you're on pre-rounding or whatever and you do your presentation, that's your time to shine as a student. And if you haven't gotten the information or you weren't able to finish whatever your task was, then it's like, oh, you didn't do this one job you had.
The student should present in a succinct way.	• That's the role if you're a good med student. What you do is you have a succinct presentation for surgery. There is a succinct presentation and you maybe give a shot at what the plan will be and if that plan includes addressing specific questions of the family because they're not going to sit there for half an hour and talk about all their issues…My toolbox was listen and summarize to the attending. There was nothing to summarize and they didn't want to be listened to.

The student should prevent extra work for the residents.	• Again, it's really the - ultimately, it's just this feeling that I'm not as capable as I could be, right? I think ultimately it is this feeling of admission. Also, worried that I would give my resident more work, right? This feeling like, "Oh, I have this incompetent sub-I. I have to - he's given - you know, he can't step up to it. Now, I have to deal with this." A lot of it was just desire to please the R2 so that I could take care of this really difficult patient and shine, you know?
The student should communicate clearly with the patient and family, answer all questions, and know everything about the patient.	• I think it was, I'd talk to her about why we were doing what we were doing in the plan, and she'd always agree to it and seemed okay with it, and we discussed compromises and how we could best treat her pain, but of course, when we came back in for rounds, she'd be like, "Oh, no one told me anything." And I felt frustrated, because here I was trying to do my best for her, and here she was basically saying, like, I hadn't done what I was supposed to do. And so, that was really hard for me. • Then come out and surprise me, and that's somewhat embarrassing because I'm supposed to know everything about this patient even though that's unrealistic because I'm sure I could have the same conversation with someone tomorrow and say different things, or even in five minutes.
The student should diffuse angry feelings in the family and patient.	• I think I wanted it to go well as a sign of I'm doing a good job, and it felt like this huge thing just blew up, and you know, I think I knew it wasn't a reflection on me, but there was some part that this would have been nice if this would have been a huge success and I could have really worked with her. • I'm not really sure what they're mad about and I don't know what to do. It made me look powerless in front of the attending, which you don't want to do. You want to look like you're together and you want it to look like you know what you're doing. Then, it made me feel powerless because I was but normally I am so that's not hugely new but the fact that it was an issue - you know, normally when a patient has questions or even gets upset, I felt good at talking to them. I felt like I could at least maybe give them someone to listen to in understanding the issues but this family had clearly been either [not] listened to…enough times and didn't understand what was going on that they were upset and being listened to again wasn't helpful.

Table 2. Medical Students' Experiences with "Difficult Patients" When Patients Interfered with Students' Expectations of Patient-Centered Care, University of California, San Francisco, School of Medicine, 2016

Theme	Representative quotes
The patient-physician relationship students expected was negatively affected by patients' behaviors.	
Patient dimensions	
The patient should be happy and appreciative.	• I mean, I think like you just feel more excited to like go see the patient in the morning because like you have good news to give them and you know the family's going to be happy. And like you kind of sell this like hope to them, you know? And it's just, you know, it's much easier to interact with people when they're like excited to see you and like appreciate you and things like that. • And with this guy, I just could not form any type of connection. And maybe it was selfish, but I just felt like usually I was good at connecting with people. And then, with this guy, I just could not reach him at all. And then, I've seen this before with many other patients, that they would just bounce in and out of the emergency room or the hospital, and it felt like - you know, I know people can't just, like, give up alcoholism, like, right away. Some people can, and good for them, but most people can't. That wasn't the issue. It was just, he knew that he had a problem, but he didn't want to address it, despite me, you know, kind of breaking my back when I had, like, four other patients, and I was calling and calling even when he wasn't my patient anymore to try and figure out what was going on with him, and, like, didn't hear anything. It was just a little frustrating.
The patient should want to get healthy.	• I think it's just hopeless and futile. It's like my job here is to try to help you be healthy and reach these goals, especially if it's in the hospital or something. It's like you're here because you're sick and you need help, but you're not - I think it's just really frustrating, like I can't do my job if you're not going to participate, or if you don't want to be healthy, why are you here? You shouldn't be in the hospital if you don't want the treatments. The hospital is the place you come to have people do things to help you be healthier, and if you don't want to do those things, then why are you here? But you can't leave because you're sick. I just feel like frustrated. • He always feels like the care is really good even though we didn't do that much for him medically. He actually said, "I want to go to a treatment program. I don't want to use crack anymore." He was receptive. There were similarities and issues that he shared with the other patients I talked about, but he was more receptive, and I realize it's unfair of me to say that felt better, but it felt better.

Relationship dimensions	
The student should trust the patient.	• That's - so, that's part of the frustration, is when I feel this conflict of - you know, I think, as a provider, I don't want to be suspicious of people when they report things, right? And I think one of the challenges in psychiatry is that it's all subjective. And it's hard sometimes to reconcile maybe discrepancies in the story that make you question the validity. And that just feels crappy. You know, I don't want to be second-guessing - I mean, even…And, you know, I'm - what I always go to - when I confront that - and I did with him - is like, even if this is all narrative that's entirely dramatic and overblown, it doesn't negate the fact that he's in pain. He just has poor coping skills, right? And that's the way I, like, intellectualized it, to try to overcome my own, like, frustration with him.
The patient should trust the student.	• I think sort of losing the patient's trust is like the biggest thing in my mind, at least. And I think, also, as a medical student, we're like, you don't know what you're talking about most of the time anyway. And it's like the more that you feel like you need to like, you know, backtrack on what you said or like not seem like you know what you're talking about, like that I think can be hard in terms of building patient rapport.
The student should keep control of the interaction.	• I think it's just when there's things kind of out my control. I mean, that happens all the time as a med student. And like you get told to do this or that, your schedule is determined by somebody else. But then when I come in with a patient that's like, okay, I'm going to do my thing, like I know that I'm good with talking with patients and doing my exams and thinking about them. And then you walk in and like the patient has another agenda going on, like they're going to yell at me whether or not I want them to.
The student should establish an emotional connection and rapport with the patient.	• But I guess I felt like hopeless because none of the things I was doing was making my rapport with him better. Which was really frustrating because it's like, you know, I've done the [preclinical communication course] stuff. You know, I've - you know, I've basically listened to him, I listened to his concerns, you know, but then it was like a one-way road where I was just doing things for him, but there was no, you know, no rapport, I believe, from his side. He wasn't trying to build a relationship with me. And that was - I felt a bit helpless because I thought, as a doctor, you know, this is what I'm supposed to do, right? Like even if it's just a hospital stay, you know, two, three days, I'm supposed to have some kind of relationship with him where I hopefully can get him not to come back to the hospital in a week or two, right

Table 3. Medical Students' Experiences with "Difficult Patients" When Students Lacked the Tools or Authority to Improve Patients' Health, University of California, San Francisco, School of Medicine, 2016

Theme	Representative quotes
Students lacked the characteristics needed to fill the physician role.	
The physician should have competence, knowledge, power, and authority.	• Like, people are in pain, and then they're like, "Oh, I need something more; this is not helping." And, I mean, like the orders are in for a Q2 or Q4, whatever, and they're like, "I need something stronger or something right now," and you can't put in orders, which won't change, for all the safety reasons. But that's something frustrating. Like, you find the nurse…and then you look through the order meds. "Is there anything else we can give them?" And there's nothing, and then you have to text your resident, and then be like, "Can you put in a pain medication?" And then the patient's kind of screaming in the corner, yelling at you.
The physician should have competence, knowledge, skills, and authority.	• I think that was challenging because I still don't have the prescribing power, yet. So, I can't make promises to your pain and then it was also a lack of experience and understanding of I don't know how much I should offer to treat this pain. If you are a chronic pain person, me giving you more of this maybe isn't a good idea. Then, there's also a lot of people that say, "Treating pain's super important."…So, there was still that frustration of I'm doing the things I've been taught that should help you and it's not helping you. You're frustrated with me, as a patient, because you're not feeling helped. I'm frustrated because I'm trying to take on the responsibility and be your primary person but I don't have the tools or quite enough power, yet, to be the one that can help you. The uncertainty of myself and these are the tools I have and they don't work for you. • But it made me feel incompetent because I couldn't give them like a firm plan or really any guidance about what was coming. I'd just say like, "Oh, maybe this or maybe this or maybe this thing will happen. And I'm not sure. We're going to wait for this or, you know, I have to do this thing before I can tell you for certain about this. But it just made me feel like I - made me feel, I guess, more - I mean, maybe this is appropriate, but more like a spectator than a provider.

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Chapter 3

The intersection of residents' experiences with "difficult patients" and their professional identity

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The intersection of residents' experiences with "difficult patients" and their professional identity

Abstract

Background

Learners are more likely than practicing physicians to experience negative emotions toward patients, and therefore consider the patients “difficult”. Patients who receive this label experience low quality of care. Medical students experience negative emotions related to their motivation and identity as learners; little is known about the experiences of residents, who are further along in their development toward a physician identity, and have greater autonomy and competence, compared with students.

Methods

Final-year obstetrics-gynecology residents from across the United States received invitations for an interview to describe patient interactions in which they felt negative emotions toward the patient, including descriptions of the interactions, their feelings, reasons for these feelings, strategies, and curricular desires. The authors reviewed transcripts, coded data and generated themes using constructivist grounded theory.

Results

Nineteen residents described times when they felt negative emotions toward patients, often because of challenges to their identities as workers, physicians, learners, and teachers. As workers they were frustrated when caring for patients took extra time and effort. They were frustrated when their physician identity was challenged, such as when patients declined their recommendations. They were frustrated when difficult patients threatened their ability to look competent to the attending: a challenge to their learner identity. And as teachers, they tried to modulate their emotions to be role models for students. Finally, residents desired faculty support, specifically brief opportunities for reflection, around these interactions.

Conclusion

Residents felt negative emotions when patient interactions challenged their identities. Educators should provide supported reflection around these interactions, probing the causes for residents’ negative emotions toward patients and whether and how the interaction challenged their identities. Residents desire this support to help them learn to provide high-quality, patient-centered care in challenging interactions.

Background

Physicians find it challenging to provide high-quality care when interacting with patients toward whom they feel negative emotions and therefore consider "difficult." While patients often bear the brunt of blame for the emotions through this labeling, the actual causes of the difficulty include patient, physician, interaction and system factors. Regardless, patients labeled as "difficult" experience lower quality of care.(1) Thus, medical educators should prioritize training doctors to improve the care they provide when experiencing negative emotions toward patients,(2, 3) which requires understanding trainee perceptions.

Learners are more likely consider patients "difficult" than practicing physicians.(4, 5) While there are some data about why medical students perceive some patients as challenging, comparable information about residents is lacking.(2, 6) Medical students experience negative emotions to similar patients as physicians, and they additionally feel negative emotions toward patients uniquely due to their identity and experiences as learners. Previously, we found that students' negative emotions are sometimes triggered when patients' behaviors are perceived as threatening students' abilities to obtain favorable assessment outcomes, when the students lack autonomy to provide direct care or information without assistance, and when they feel insecure or incompetent, reflecting an interaction with their motivations as learners.(6) Additionally, students feel emotions when patient interactions counter their ideals about patient behaviors and their evolving medical student and future physician identities.(6) Students desire support for learning from these interactions through teaching methods such as reflection, modeling and coaching.(7) While these findings give us insights into medical students, we lack information about residents' experiences and desires for support.

Given that residents are further along in their professional identity formation (PIF), their experiences of "difficult patients" are likely different from students yet continuously evolving. The process of adopting a professional identity requires both individual, psychological changes and collective, socialization processes.(8, 9) These processes are complex and affected by positive and negative emotional experiences.(9) Rather than thinking of this as a longitudinal process from one stage to the next, Jarvis-Selinger, et al. propose that it involves multiple, successive and co-existing identities (8) during training, with each stage of training having its own identities. Like students, residents may feel negative emotions toward patients because of the complexities within and challenges to their resident identities.

Residents have greater autonomy and competence than students, thus may not experience negative emotions with patients due to lacking authority or skills to meet patients' needs.(6) Self-determination theory posits that learners need to have three psychological needs met - autonomy, competence, and relatedness - in order to be intrinsically motivated to learn, and it is possible that residents' needs are met to a greater extent than those of students. Additionally, per goal orientation theory, because residents have already attained a residency position their motivation for learning may be less performance-oriented and more mastery-

oriented.(10) Thus, they may differ from students and do not see difficult patients as affecting the way others see them.

Residents are entering specialties, which include specific cultural contexts that might relate to interactions. Although many dimensions of challenging interactions are similar across specialties, specialty-based cultural differences and patient interactions may make challenges context specific. For example, medical students more commonly described disrespectful behavior toward patients among obstetrician-gynecologists and surgeons than non-surgical specialists.(11) Hence exploration of residents' perspectives must take into account the context and culture of individual specialties.

We sought to characterize experiences of final-year obstetrics and gynecology (ob-gyn) residents. Within the ob-gyn context, similar to other procedural specialties,(12) there have been greater reports of disrespectful behavior toward and about patients, therefore a study within ob-gyn provides insights into dimensions of challenging patient interactions that could span specialties.(11) The purpose of this study is to explore and characterize how residents understand their experiences of "difficult patient" interactions. Our results will inform graduate medical education curricular development and strategies for supporting clinical learning so that residents graduate prepared to effectively communicate with and care for patients who challenge them.

Methods

Design

This was a qualitative interview study using constructivist grounded theory, a methodological orientation in which researchers analyze how individuals develop subjective meanings of their experiences. This study builds on our previous work with medical students.(13) We used probes about goal orientation theory, self-determination theory, and professional identity formation, based on findings from a previous study of medical students.(6)

Procedures

After receiving exempt status from the institutional review board, we recruited residents in ob-gyn programs in the US. We sent emails to final-year chief residents in programs affiliated with the United States (US) -based Ryan Program, a program that supports residency training in programs throughout the US and Canada.

In March of 2018 we sent emails to 174 final-year residents in 48 programs and conducted interviews with the first twelve residents who responded to the invitation over the subsequent two months prior to their graduation. After ongoing data analysis we decided to recruit additional residents, as we had not yet reached theoretical sufficiency.(13) We then sent a subsequent email in October of 2018 to 131 final-year residents in 48 programs who had consented. We conducted interviews with the first 7 residents who responded to the initial e-

mail, and we did not send another email invitation as we had reached theoretical sufficiency after interviewing 19 residents.

Interviewees received a $25 gift certificate and participated by phone in interviews lasting between 40-75 minutes. The interview guide paralleled a guide we used in a previous study of medical students.(6) We asked residents to describe two separate times when they encountered patients toward whom they had negative emotions, to describe the circumstances, their feelings, why they felt these emotions, how they behaved and whether the patient noticed. It then asked them whether their identities as learner, teacher and physician affected these feelings in any way, and whether they had noticed a change over time (beginning in medical school) in what kinds of patients evoked negative emotions. Finally, we asked residents what kinds of support they received and would like in these interactions.

Analysis

Throughout the interviews, we identified themes using constant comparison analysis (13). Three authors (JS, AT, and FP) analyzed three interviews to create an initial codebook. They then applied these codes to three additional interviews and revised the codebook. The final codebook was applied to the interviews. FP, CC and JC each coded interviews and reviewed the others' codes to make sure they were in agreement with coding. Through frequent discussions all authors (facilitated by JS) participated in synthesizing the findings and grouping the codes into themes, and each had input on selecting exemplary quotes.

Researcher Characteristics and Reflexivity

The first author has trained many residents and has helped residents navigate challenging patient interactions. She conducted 8 interviews and it is possible that interviewees shared stories differently with her because of her shared experiences. She reflected continually on her own interpretation of the data and worked closely with the co-investigators who were not directly involved in clinical education to provide additional perspective than that of the clinician. In the iterative analysis, non-clinical members of the team (AT, PO'S) provided additional perspective to that of the clinician. They are experienced qualitative researchers and are familiar with student experiences in medical education and concepts related to the theories informing the study including goal orientation, self-determination and professional identity formation. Collectively these experiences may have influenced their interpretation of the data.

Results

We completed interviews with nineteen ob-gyn residents in their final year of residency, from 19 programs in diverse US regions (5 West, 4 Midwest, 5 South, 5 Northeast). Our

themes reflect the types of patients residents described as challenging, what aspects of their identities were challenged in these interactions, the strategies they used to manage the interactions, and what support they would like. In the subsequent sections we describe how residents' responses toward patients were caused or exacerbated by their identities as workers, physicians, learners, and teachers, and finally the residents' insights into how their reactions to patients have changed as their identities have changed.

Patient Characteristics

Residents described feeling strong, negative emotions, including "frustrated", "annoyed" and not infrequently "angry", in a variety of patient interactions. These interactions commonly included patients whom residents perceived were mean to the residents, who yelled at them, called them names, and told one resident she "should be fired," residents described times when patients "refused" recommendations. They told of patients who "decline basically evidence-based care…and that is extremely frustrating for us, especially when we see people putting themselves in danger, or the baby's danger"(S14), "think that they are better than doctors or nurses"(S6), who "despite having every single doctor who talked to her be in agreement,… felt like she knew the best thing,"(S14) and who "think blogs they read are more important than your medical knowledge."(S7) Descriptions of refusal also included patients who were uncooperative in labor and patients who declined blood products due to religious beliefs. They commonly described patients who did not take care of themselves, which included of patients who were obese and patients who used drugs. Residents were especially emotional about patients with substance use disorders during pregnancy, and described patients coming to the hospital high or using drugs while in the hospital. Residents were frustrated when patients took extra effort and time, such as patients who had primarily social problems rather than medical problems.

Intersection of resident identities

Four identities emerged when reporting experience with challenging patients: worker, physician, learner and teacher. Residents were working hard, and often patients were identified as "difficult" because interactions with them took extra time and effort and were worse when the residents were tired. As physicians, residents were frustrated when patients didn't see them as their physicians and when they didn't feel acknowledged as experts. They were learning their specialty, and while their autonomy was increasing, it was not complete. In their identities as teachers, residents were aware of controlling their emotions to model behaviors for students and junior residents when interacting with difficult patients. Residents described changes over time – from medical school and through residency – which include increasing fatigue, experience, and autonomy, that affected their emotional responses to patients in these interactions in complex ways.

Residents as workers

Residents emphasized their service responsibilities, which included tiring workloads and long hours. They articulated that they were more likely to experience negative emotions toward patients depending on factors that made them feel like workers given the amount of work to be accomplished within systems with challenges. One said,

> "Things that aren't medical problems [social problems], I get more irritated by, like if I haven't gotten any sleep, or if I'm coming off of call… sometimes it's depending on the day... So, I think a lot of it just depends on what's going on and what are the other demands that you have at the time. I know that that really influences whether or not I let certain things trigger me."(S9)

Residents emphasized that these interactions were frustrating when they interfered with getting the overall work of the day done. "You're running behind in clinic and you have like four more people to see still… And all you can think of is like okay, how can I get rid of them so I can just move on to the next patient."(S6) And they were especially upset when patients were not respectful of their time. "I'm putting so much time and effort into taking care of you, and the least you could do is not be rude to me… I'm like, so tired, overworked, and I like - I don't need thanks. I don't feel like patients need to thank me at all. It just needs to be …just respectful, the way you would want to treat a stranger on the street."(S10)

Residents as Physicians

This theme describes the way in which interactions challenged how the resident sees themselves as a physician. This identity challenge came from the lack of recognition for expertise by patients and when patients did not behave as residents believed they should as patients. They described a tension between wanting to honor the patients' autonomy but also wanting to keep the patient safe. Regarding a patient who declined blood transfusions, one resident said, "I very much respect that patients have their own autonomy and get to choose what is most important to them in the care that they receive. But it also feels contradictory as a provider to not give a therapy that I know would improve her situation."(S19) They also described times when patients did not take care of themselves, often framed as the patient not holding up their part of the relationship. For example, one resident commented on an obese patient, "We do the [medical care], but they don't lose the weight, you know? That one modifiable risk factor, they don't modify."(S16)

Residents felt frustrated when patients didn't see them as being competent and "capable of providing for them" or consider them to be their doctor.(S1) They described times when patients would say things like "'You're just a resident; I want to see an attending.'(S15) They described it as "feeling belittled by patients for still being in training" and "reinforc[ing] that kind of imposter syndrome for things that [they] certainly have felt at different points" in their career."(S19) This tension with patients who were unwilling to be treated by residents sometimes engendered low morale among residents.

Residents as Learners

Caring for challenging patients was much more difficult when residents were kept in the learner role unable to exhibit autonomy and authority. They felt they were restricted in interacting with "difficult" patients to a role of "messenger" or "go-between" when the attending did not want to interact. Yet, their growing status as a physician was not recognized. One resident said, "She [the patient] was yelling at me, was very upset… she had a whole bunch of complaints about how I managed her care. And it was a very frustrating situation for me. I felt badly for the patient… but also felt like I managed it in a way that wouldn't have been my choice, but I was carrying out the plans of the [attending.]"(S8) Sometimes though, when an interaction with a difficult patient was just "a little too much", this lack of authority came as a relief. One resident said, "in settings where I'm having a more frustrating patient encounter, there are times when… I disengage a bit more and defer to the attending physician."(S19)

Even though some residents were at times frustrated with attendings they also wanted to make a good impression. They expressed wanting the attending to think they were capable of and successful at providing quality patient care on their own, to not see them as a "slacker" or "sounding like an idiot," and to "please [the attending] and do the right thing for the patient."

Residents as Teachers

While they described the importance of peer support in processing these interactions through "venting" (see below in "Strategies"), residents also stressed the importance of being a good role model and not complaining in front of students and interns. One described that "towards your juniors or students…you may be less inclined to admit that a patient can get under your skin or make you feel uncomfortable. And I think that plays to a bigger problem right now in medicine that's also often because of machismo. Like you have to sometimes act stronger than you are, be a certain way to have street cred in medicine."(S4)

Residents also sometimes used these difficult interactions as teaching opportunities. "I think the experience talking with the fellow resident was helpful because it…validated what a crazy experience it was and that I wasn't just imagining that things were crazy. And I also think the other experience of debriefing with the medical student was helpful because it forced me to put myself in a more sympathetic role and, you know, model that a little better."(S6) Residents also commonly described a commitment to "protect" junior residents and students when patients are difficult, but emphasized that they would "not necessarily [aim] to shelter [learners] from the frustration of [providing care to difficult patients]"(S14), but instead would use time outside of the exam room to debrief and discuss their frustrations.

Evolution throughout Training

Residents reflected about changes in their experiences of negative emotions toward patients from medical school and through residency. Some expressed that feeling more overwhelmed

and overworked in residency caused them to spend less time building relationships with patients. One said,

> "As I progressed and realized how much work is expected of residents, and how difficult it is to even…unintentionally have this anger towards these patients because you're so tired, you're consciously deciding I don't have enough time to talk to her. I just have to tell her how it is and keep it moving, see the next patient."(S10)

Others responded to feeling burned out by becoming less annoyed with patients who used to bother them, becoming "just so used to them now."(S6)

A few residents spoke about how during medical school, they were a lot more "wide-eyed and bushy-tailed…[and] went into everything with a really open mind,"(S 6) but over the years have been progressively worn down by multiple negative interactions, making them more cynical and less tolerant. For example, one resident said,

> "You see enough of the negative stuff over and over again. You witness behavior that people don't want to change, and it negatively affects them, or their health, or their baby's health. I think that's the thing I've noticed in myself from when I was a student and I was like, 'I'm going to try not to make judgements about people because I don't like when I see other people do that.' Now, in my own head, I'm like, 'wow, I just made a judgement about someone' because I've seen that behavior before, and I'm assuming it will happen again."(S2)

As they progressed, they assumed more authority and autonomy in deciding patient care plans. For many, this has led to wanting to care for difficult patients on their own. One said, in commenting on this being the final year of residency, "next year… like the buck's going to stop with you…So even more I want to be able to manage these things and manage difficult patients. When you're like a younger resident, like a junior resident, it's nice to [say] someone even more senior is going to come in here and tell you the same thing."(S12)

Consequent of their awareness of their evolution they are better at identifying "what ["difficult patients"] are really asking when they ask for things,"(S15) allowing for better management of patient expectations and communication, understanding that there are "some things that you can impact and some things that you can't"(S11), and for "not let[ting] [their] emotions dictate the way that [they] respond or interact with the ["difficult"] patient."(S19)

Residents' strategies

Residents described a few strategies they used in these interactions such as talking about them with colleagues, "buckling down", and trying to use communication techniques. They frequently discussed the interactions with colleagues, commonly described as "venting" to "let off steam." They struggled with "venting" as a strategy, as they questioned "the line between you're complaining or gossiping, and it's actually therapeutic or helpful for supporting each other as providers."(S4) They also commonly described simply "buckling down" and getting the work done and sometimes a sense of futility and resignation in patient care. One resident said, "It almost feels like there's a point of no return where you have such

a negative interaction or at least where you feel like you're making no progress that you get the sense of well, why am I still trying?".(S6)

Residents attempted communication techniques with patients, such as setting boundaries, accessing compassion and empathy, and calming themselves to modulate their initial reaction. When residents felt themselves becoming angry, they would try to take a step back and understand why a patient may be reacting in a certain way.

> "Yeah, I think that just the patients who are rude are my biggest struggle, and reminding myself [of] the reason they're acting that way… Just remember that that's not the patient personally attacking me. You have to have patience and not take it personally." (S10)

Many residents, however, found it particularly difficult to modulate their emotions with patients who were rude and would mirror the patient's negative emotions as described by this resident.

> "If they were to say something like, well, this other doctor said…like defensively, I would catch myself saying something like, well, is that doctor a gynecologist - kind of coming back with them in the same tone... I was definitely responding back to them in a way that they responded to me."(S1)

Desires for support

Residents described their current learning about these patient interactions primarily as "learning on the job" / "on the fly", and rarely described curricula or time dedicated to debriefing or learning relevant skills. A few described didactic sessions, including wellness topics, social determinants of health, and basic communication skills – the latter often during intern orientation. They were interested in debriefs and small group discussions focused on reflecting about challenging patient interactions, with a few caveats. They emphasized that debriefs should not be during rounds, should be short, include those involved and not be too "weird" or too "touchy feely." Some expressed doubts about engaging residents who are not "open to hearing about it." They were also interested in small group discussions about these patient interactions in their regularly scheduled didactic time, but ideally not too frequently, perhaps quarterly. They also desired training in skills for challenging patients and even a "toolkit" for specific challenging patient behaviors. Finally, residents appreciated when attendings modeled compassionate communication with these patients.

Discussion

Our in-depth exploration uncovered that residents' negative feelings toward "difficult patients" arose from the intersection of those experiences with factors core to their identities of worker, physician, learner and teacher. Residents' experiences were in some ways similar to and different from medical students' experiences of "difficult patients."(2, 6) While medical students report frustration when patients challenged their identity as a learner (6), residents described challenges to their multiple identities in these interactions. Residents

experienced strong emotions when their physician identity was challenged, whereas students(6) were troubled when patient interactions countered their ideals about the physician identity or patient-centered care. In patient interactions, residents were less concerned with evaluation of their performance than medical students,(6) yet both struggled with lacking autonomy. While students experience legitimate lack of autonomy in patient care, residents struggled when patients and attendings highlighted their lack of full autonomy.

Clinical education involves progressive independence,(14) and while the residents had more autonomy than students, their incomplete autonomy meant that they required supervision by attending physicians. Residents wanted the attendings to consider them competent so that they would be allowed to work more independently, therefore making progress toward complete independence, and these "difficult" patients sometimes interfered with this desire. Consistent with prior studies, residents felt significant pressure to attain independence, and ascribed this pressure largely to the "trainees' desire to lay claim to the identity of a doctor."(15, 16) This effort also reflects Lave and Wenger's situated learning theory and the concept of "legitimate peripheral participation"(17) in which the learner becomes increasingly less peripheral in the membership of the profession.

Residents described patient interactions in which their lack of autonomy and desires for competence exacerbated or caused their feelings, findings that were similar to studies of students.(6) Thus, residents experienced challenges with lacking two of the three core psychological needs required for motivation to learn, according to self-determination theory, as well as the third, relatedness.(18) Residents talked about the latter both when they struggled with not experiencing a therapeutic relationship with patients and when they described the need to talk about the patients with peers, which they felt was valuable but also dangerous if done in front of junior residents or students. Physicians of other specialties have also reported complaining about patients, and most consider it unprofessional when occurring in front of others, especially medical students,(11, 19). Additionally, the residents reported that their desire to please the attending sometimes made the interactions more complicated and detracted from learning. Thus, residents, not just students,(6) are performance-oriented,(10) and they perceive some patients threaten their chance of being seen as capable of independence, slightly different from students' focus on earning high grades to be accepted to residency.(6)

As we explored the residents' accounts, we saw evidence of negative emotions when patient interactions were perceived to interfere with the process of moving toward a fully-formed physician identity and when they interfered with other resident identities. Thus, our data support the concept of professional identity formation introduced by Jarvis-Selinger (8) as a process of increasingly adopting the physician identity but at the same time holding the identities of a learner.(8) While "learner" is a dominant aspect of residents' identities, their service role and responsibility to patient care are also prominent.(8) Identity development requires "crises," in which a learner experiences "discrepancies …between her understanding of herself in her professional role and her understanding of the …challenges she is facing,"(8) and these "crises" also contribute to transformative learning.(20) Finally, they describe the dual processes that contribute to identity formation – the individual and the collective, and

the long timeframe of residency training permits socialization into a professional community of practice.(17) They write, “a person becomes a physician in relation to others,” and our data support that patients should be included amongst the people who interact with learners to contribute to identity formation.(8, 21)

Residents described a cycle in which stress and burnout made them more likely to have strong emotional reactions to patients, and these interactions caused more stress and burnout. Key contributors to the reactions include issues related to the workplace climate, organizational culture, and learning environment, such as high educational demands, long working hours, limited autonomy, and unsupportive relationships with supervisors or colleagues.(22-24) Our results suggest that difficult patient interactions exacerbate resident burnout by increasing the amount of effort spent caring for these patients, highlighting their feelings of powerlessness, and accentuating their stressful relationships with attendings. For some, their emotional exhaustion caused them to choose to communicate and engage with patients less or develop a futile attitude towards patient care. Current interventions to mitigate burnout include ones that focus on improving work and learning environments, while others stress cultivate individual coping skills to promote resiliency and wellness.(25, 26)

Residents described wanting more support in and around these interactions, specifically through debriefs and small group discussions for reflection, a “toolkit” of skills, and attending modeling of compassionate communication skills. Medical educators have recommended making professional identity formation more explicit in teaching; we noticed that when invited to express strong, emotional experiences, residents’ stories included dimensions of their identities.(8, 21, 27, 28)

Educators should provide supported reflection around these interactions, probing the causes for residents’ negative emotions toward patients and whether and how the interaction challenged their identities. We suspect that many of the residents’ experiences and desires for support can be extrapolated to other specialties and perhaps some are unique to obstetrics and gynecology.

Our study has limitations. Residents were interviewed at the end of residency and thus may have been subject to recall bias. Also, it is possible that residents who felt particularly strongly about emotionally challenging interactions were more likely to respond. Our sample was limited to obstetrics and gynecology, which may limit the generalizability to other specialties.

Conclusion

Residents hold many identities as they progress to forming a physician identity, and some patient interactions challenge and expose these multiple identities, contributing to their negative emotions toward patients. Faculty should consider these challenging interactions key teaching moments. They should model compassionate behavior with and reflection about “difficult” patients and provide opportunities for supported reflection when residents

feel negative emotions toward these patients, to support the residents' transformative learning and professional identity formation.

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Chapter 4

Characterizations of motivation and identity in medical students' reflections about challenging patient interactions

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Abstract

Purpose

Students' negative emotions in patient interactions can relate to their learning motivation and identity. Educators can support learning from these interactions by advocating for reflection. We explored how students, in reflection essays about emotionally difficult patient interactions that challenged their notions of professionalism, described aspects of motivation and identity.

Materials and Methods

All third-year medical students on the ob-gyn clerkship complete written reflections about a "clinical situation that challenged or affirmed your professionalism." We conducted directed content analysis of essays (academic years 2014-2017) using relevant theories (self-determination, goal orientation and identity formation) based on previous work and organized the data into categories.

Results

In 265 essays (of 396,67%) students described patient interactions that challenged their notions of professionalism, of which 90% included descriptions of their emotions. When reflecting on these interactions students described psychological needs acknowledged in self-determination theory, competence, autonomy in patient care, and connection to the team. Students indicated challenges in identity when advocating for patients due to team hierarchy and evaluation concerns.

Conclusions

Reflection essays about difficult patient interactions allow students to explore emotions, motivation and identity. They help educators understand whether the clinical learning environment is meeting students' needs to support learning in challenging interactions.

Introduction

Medical students, like clinicians, sometimes experience negative emotions, such as anger or frustration, toward patients. Clinicians' negative emotions in clinical interactions are correlated with lower quality of communication, less patient-centered care, lower patient satisfaction and worse patient outcomes (Lorber 1975; Hall et al. 2002; Kim et al. 2004; Thom et al. 2004; Tait et al. 2005; Hinchey and Jackson 2011). In order to educate medical students to provide high-quality care in these interactions, educators need to understand more about students' experiences with negative emotions toward and about patients, their varying experiences in different clinical learning settings, and how to support reflection and experiential learning around these interactions.

As described in a recent study some interactions are uniquely challenging for students due to their identity and motivation as learners (Steinauer JE et al. 2018). In in-depth interviews, fourth-year students described that emotions were triggered when the interactions countered students' ideals about patient-centered care and their roles as medical students and future doctors, suggesting elements of professional identity formation, the processes involved in adopting learner and physician identities (Jarvis-Selinger et al. 2012; Cruess et al. 2015), in these interactions. Students also described times when their focus on earning honors led to frustration with patients, for example, when the patient's behaviors potentially affected their evaluations. This focus on performance is consistent with goal orientation theory, which describes how performance or mastery drives student learning (Chen et al. 2016; Cook and Artino 2016). Additionally, students' lack of competence and autonomy in interactions sometimes exacerbated negative emotions toward patients. Competence and autonomy are two of the psychological needs required for intrinsic motivation, according to self-determination theory (SDT) (Ten Cate et al. 2011).

Medical students identified needing teachers to support their learning from these emotionally difficult patient interactions and specifically emphasized their need for supported reflection (Steinauer J et al. 2018). A key component of experiential learning is engagement in reflection, a deliberate process to understand a situation and to inform future actions (Kolb 1984; Sandars 2009). Critical reflection is the process of deeply reflecting on and analyzing an experience for the purpose of learning (reflective learning) and/or to improve practice (reflective practice) (Sandars 2009; Aronson 2011). In medical education, reflection has been recommended to support students' general learning, patient care skills, and professional identity development (Shapiro et al. 2006; Sandars 2009). Because reflecting on experiences with strong emotions may have the greatest impact on what Mezirow called "transformative learning," it is important for educators to support medical students' reflections about emotionally challenging patient interactions, which may be accomplished through written reflections (Mezirow 2000; Sandars 2009).

A recent analysis of medical students' essays about difficult interactions with patients during a family medicine rotation demonstrated that students were able to write about these experiences (Shapiro et al. 2016). The study explored types of encounters students felt comfortable writing about and how they portrayed the patients and themselves in the interactions (Shapiro et al. 2016). Others have described students' descriptions of challenging

patient interactions and expressions of strong emotions in their narratives about professional dilemmas (Monrouxe and Rees 2012; Rees et al. 2013), However, it is not clear if we can elicit the dimensions of identity and motivation in a short essay format, and if students' experiences are similar at other institutions and in other rotations. The obstetrics and gynecology (ob-gyn) rotation is unique because of clinical experiences that sometimes conflict with students' personal values, challenge their norms about sexuality and motherhood, and pose challenging ethical questions (Cohn et al. 2009).

For this study, we explored how students, in reflection essays about emotionally difficult interactions that challenged their notions of professionalism, described aspects of motivation and identity. Educators can use these insights to support students' learning to care for patients when the students experience negative emotions.

Methods

We conducted a directed content analysis of students' essays about patient interactions on an obstetrics-gynecology clerkship (Hsieh and Shannon 2005). This approach allowed us to explore both predetermined and open codes in text and is described below.

All third-year medical students at our institution complete a written reflection during their obstetrics and gynecology clerkships. These reflection essays are not graded, but completion is required. The clerkship director reads them, and small groups of students read each other's essays and discuss in an informal session at the end of the clerkship. The prompt asks the students to "select a clinical situation during this rotation in obstetrics and gynecology that challenged or affirmed your professionalism, i.e. what it means to be professional in a patient-centered medical center." They then write a reflective essay using the UCSF LEaP (Learning from your experiences as a professional) Guidelines for Critical Reflection, which is a structure for the essay with four components: Subjective, Objective, Assessment, and Plan (O'Sullivan et al. 2010; Aronson 2011). In the section called Subjective, students describe the experience including how they approached it and what they were thinking and feeling. In Objective, they consider others' perspectives in the interactions. In Assessment, they synthesize their own thinking and learning, and identify challenges and strengths. Finally, in the Plan, they write how they will address their challenges.

In our experience and supported within the literature (Monrouxe and Rees 2012; Rees et al. 2013), professionalism challenges often include emotionally challenging experiences with patients. Therefore, we believed the prompt was likely to provide reflections relevant to this study. While professionalism is an important expectation in our curriculum, students had not received formal education about definitions of professionalism in their medical education.

After receiving exempt status from the institutional review board, we chose recent essays from academic years 2014-2017 and de-identified them. Two authors (RM, JC) then read all essays to place the clinical scenarios into four groups: those that described a 1) a patient interaction with no mention of team members, 2) a patient interaction with mention of team members, 3) a team interaction with no mention of a patient, and 4) other. For this analysis,

we restricted essays to groups 1 and 2, those that included a patient interaction, as we were interested in students' reflections about challenging patient interactions.

We then analyzed the de-identified student essays using directed content analysis, in which we looked for both predetermined and open codes. Directed content analysis starts with theory as guidance for identifying the initial codes; informed by our prior study (Steinauer JE et al. 2018) we used goal orientation, self-determination, and professional identity formation (Jarvis-Selinger et al. 2012) to define the categories. Directed content analysis is to "validate or extend… a theoretical framework," and in this case we believed these three theories might apply to reflection essays about challenging patient interactions. Specifically, for goal orientation we proposed codes related to mastery and performance orientations; mastery orientation describes a learner's focus on mastering/learning content as their motivation, and performance describes a learner's focus on being perceived to be competent as the source of motivation. For self-determination theory we proposed codes related to autonomy, competence and relatedness (connection to others). For identity formation we proposed codes for references to students' or physicians' identities and roles. Three authors (RM, JC, JS) read six transcripts and coded all the passages using the predetermined codes and identified new codes (Hsieh and Shannon 2005). These three authors then applied this draft list of codes to 20 additional essays to finalize the codebook, which was then used for two authors to analyze all the essays (RM and JC) with disputes discussed along with author JS. Four authors (RM, JC, JS and PO'S) participated in the synthesis phase; they organized the codes into categories, some into the pre-determined theories of goal orientation, self-determination, and identify formation, and others into the pre-determined categories of types of challenging patient interactions and students' emotions.

The research team members who participated in coding and synthesis of data have diverse training and orientations. JS is an obstetrician-gynecologist educator, who does not hold an administrative role in medical education but teaches medical students in clinical settings. JC is a graduate student in public health, and RM has a master's degree in public health. PO'S, AT and OtC are education researchers.

Results

From 2014 to 2017, 396 essays were collected in electronic format. Of these, 74 (19%) focused on patient stories with no mention of the team, 191 (48%) on patient stories with discussions of team behaviors, 106 (27%) on team behaviors only, and 25 (6%) on other topics. This analysis includes those that have patient stories (n=265). The vast majority (239/265, 90%) of students wrote about professionalism challenges, and 254 explicitly described their emotions. Most (186) described personal emotions involving patients and 86 toward team members primarily because of how the team interacted with the patients. Essays ranged from 250 to 2000 words.

We will first summarize the kinds of patient interactions students described, including their depiction of their emotions. Finally, we will describe elements of self-determination theory,

goal orientation theory, and identity found in students' essays. No new themes emerged from this analysis; all codes aligned with the pre-determined categories.

Challenging Patient Interactions

In the essays, students wrote about a variety of challenging patient interactions. These included communication challenges, times when the students were emotionally overwhelmed, interactions with patients who were antagonistic toward the team and when the students were uncomfortable with patients' behaviors. (Table 1). Communication challenges commonly included language barriers and inadequate use of translation services, which led to poor care. Emotionally overwhelming experiences included both times when students felt overwhelmed by patient circumstances and when they felt disappointed in themselves. Students described a variety of antagonistic patient behaviors, including declining recommendations and displaying aggressive or manipulative behavior. Some students recounted interactions where patients declined medical student involvement in their care. Finally, students sometimes disagreed or felt uncomfortable with patient behaviors, lifestyles, or decisions.

Students often described feeling strong emotions during and after these interactions. Students felt uncomfortable, insecure, frustrated, surprised or shocked, discouraged, afraid, sad, guilty and powerless. Students sometimes described feeling empathy towards the patients.

Wanting competence, connection to patients and teams, and autonomy

In the reflective essays, students often included desires for competence, relatedness, and autonomy, the three psychological needs that support intrinsic motivation in general, including motivation to learn, according to self-determination theory (SDT) (Ryan and Deci 2017).

Students frequently described wanting competence and skills (48% of essays) as motivation for learning in future interactions. Students focused on wanting to practice patient-centered care, patient advocacy, and shared decision-making, aiming to "individualize each encounter to each patient's unique needs, desires and concerns."(017) A number of students described goals to develop self-awareness and reflection skills to identify and manage their own emotions in positive ways and to understand the sentiments and experiences of their patients. One student wrote:

> "In order to address the challenge of maintaining compassion and professionalism with difficult patients, I am going to reflect critically on [future] difficult patient encounters. The next three times I find myself getting frustrated or having a hard time connecting with or empathizing with a patient, I am going to sit down later that day to reflect. I will ask myself what about the situation I found challenging, what could be driving the patient's behavior or decision-making process, whether or not I responded appropriately/acted professionally, and what I wish I had done differently in the encounter."(059)

After reflecting on these experiences, students also wrote about desires to improve their clinical reasoning skills, as well as learn how to cope with stress and be efficient.

Students wrote about relatedness (17% of essays) in two ways: in the context of relationships with patients and of membership in the team to support these interactions. Students wanted to build their communication skills with patients in order to "[establish] good rapport and relationships."(116) One student wrote:

> "I plan to ask open-ended questions to better understand the etiology of their concern and to 'listen generously.' I also intend to use empathetic phrases that convey appreciation that the patient is sharing their concerns and acknowledge their feelings."(178)

Students' desires for a sense of community in the team often centered on their hope to be accepted as an integral part of the team. Many students reflected on the importance of teamwork in these patient interactions and in the future wanted to promote positive team dynamics and to understand the different roles and approaches to care of each team member during challenging interactions.

Students' desire for autonomy in providing patient care (14% of essays) presented itself in two ways. Some described that they wanted to play "a more active role" and as one wrote, "to go from being the observer to playing a part so that I can experience the weight of that responsibility for a patient."(102) Some focused on wanting to form their own principles regarding patient care as they mature as physicians and have their opinions respected by others on the team, indicating a desire for both autonomy and relatedness. One student wrote:

> "Being a new member of a team, and the junior member of the team, presents challenges of many kinds but one in particular is learning to have an independent voice that is respected and heard, especially when it seeks to question a shared group attitude."(054)

Wanting to learn but feeling pressure to perform

Students commonly wrote about their desires to learn, a mastery goal orientation (65% of essays), and less commonly concerns about being perceived to be competent (24%), performance orientation, as defined by goal orientation theory (Chen et al. 2016; Cook and Artino 2016).

Their goals for learning appeared when formulating a specific plan to address challenges, and included strategies aligned with those listed above for competence in SDT. For example, in relationship to self-awareness as a desired skill, one student wrote that it is "important to be aware of biases and then be able to use them [to] promote better patient care. I hope to be able to learn how to do this but think that it is currently a more realistic goal to be able to identify what biases that I have in the first place."(180) Students often wrote about lessons they had learned that they would carry with them into their "next rotation and beyond."(096)

When students wrote about performance orientation, they described frustration with "an inherent tension between our role as learners, with the accompanying cloud of evaluation and judgment that hovers over us."(141) For example, one student wrote, "being a good medical

student is not always in sync with doing good for patients."(056) They felt they sometimes could not contradict superiors, share times when they were uncomfortable with patient care, and advocate for patients. For example, one student said:

> "As a medical student there is this implicit understanding that I am never to contradict or speak out against my superiors, as this could result in significant problems for my future, whether it be in my personal evaluation written by the attending/resident, or the damage that could be done by being labeled a challenging medical student and having this spread throughout the department."(066)

Another said,

> "We talked about stories from our peers and upperclassmen who did not "do as told" when they were uncomfortable with something, and later had to face professional consequences in terms of grades, evaluations, and professional reputation as a result of their actions."(136)

Students' Descriptions of Roles and Identities

Some students reflected about their experiences in relation to their identity. Students operationalized identity in terms of students' roles in patient care, specifically of listener, advocate and observer, and their position in the team hierarchy. These perspectives sometimes overlapped with goal orientation, specifically when their ideal role as patient advocate was thwarted by their position in the hierarchy.

Students' roles in patient care: listener, advocate, educator

Students described challenges they encountered due to their status as learners and explored how their roles as medical students affected their perceptions of and behaviors in difficult patient interactions (31%). Many wrote that as medical students, they had the ability and the responsibility to spend more time with patients to gather information, build rapport, and discuss patient concerns and provide health education. One student wrote, "As a medical student on the team, I can use these opportunities to learn more about a patient's illness as well as spend extra time with a patient with a chronic illness such as diabetes to help them understand the nature and necessary management of their disease."(007) Students felt compelled to provide high-quality care and reflected on times when they felt they could have done better. One wrote, "I feel that as a student one of my roles is to be an advocate for the patient, but I felt I had failed this patient up until the point where I intervened…and translated… Even though the midwife failed to discuss pain management with the patient, I could have done a more thorough job of explaining the options to the patient or to her partner since she was in considerable pain."(111)

Hierarchy and power

Students described that they were expected to abide by the academic hierarchy and to not go against the team due to their "inferior" position, as described by this student, "the challenge here was addressing my feelings about disagreeing with management of care while being in

an inferior position, both in terms of responsibility and knowledge."(064) When feeling unable to address a team member's unprofessional behavior, one student said they had to "accept there is a hierarchy in medicine and that as a student it is not my place to necessarily make a scene and point out unprofessional behavior in the moment."(066) Students wanted to develop the confidence to voice their opinions to both team members and patients, as described by this student, "As I mature into a physician and gain confidence, I am finding it easier to chart my own course. It is my hope that moving forward I will have more confidence to volunteer opinions and information in the name of improved patient care."(146) Their sense of the advocate medical student role overlapped with a desire for autonomy and with an awareness of being evaluated.

Limited participation as observers

Some students wrote about the limitations of their status, sometimes as only observers during patient interactions. Some described this as feeling restricted and uncomfortable in their participation, and others as justified because they did not have the skills to be actively involved. One student wrote, "One of the major obstacles I faced was figuring out what my role was in the medical setting, and how to put myself in uncomfortable situations in order to learn new things, but at the same time not have that affect patient care or safety."(093)

Discussion

In essays about clinical encounters perceived to challenge or affirm professionalism, clerkship students described a variety of challenging patient interactions and incorporated elements of motivation and identity in their perceptions of learning from the experiences. Students described similar difficult interactions to those described by learners and clinicians in other studies (Groves 1978; Klein et al. 1982; Steinmetz and Tabenkin 2001; Shapiro et al. 2016; Steinauer JE et al. 2018), and their depicted interactions reflected patient care and behaviors that contradicted their ideals. Students also included elements of self-determination theory and goal orientation theory. Reflections fill an important gap in how to elicit these dimensions from students and could be used by educators to optimize learning to care for patients toward whom students experience negative emotions.

Students described challenges in patient interactions when they lacked competence, autonomy and relatedness (sense of belonging or connection), the three psychological needs that must be met for intrinsic motivation for learning, according to self-determination theory (Ryan and Deci 2017). Consistent with SDT, students often described these three needs as connected, for example, wanting autonomy to design their own patient care plan so they can then articulate the plan to earn respect by the team. Our findings have implications to support calls to use SDT principles to create clinical learning environments "to support learners' intrinsic desire to care for patients" (Kusurkar et al. 2011; Ten Cate et al. 2011). When supporting learners in emotionally challenging patient interactions, educators could invite reflection about these principles to understand whether they are being met in the learning environment. Educators should identify patient care roles, in which students feel

competent and have autonomy, in these challenging interactions and should invite their participation in team decision making about patient care.

Students struggled with their identity when not able to advocate for patients or articulate disagreement with team members when they thought patient care could be better, which they ascribed to both student roles and because of concerns about evaluation. In these instances, the medical student identity conflicted with the desired professional identity. Medical students have described the impact of an evaluation focus, performance goal orientation, on challenging patient interactions in in-depth interviews, and we were surprised to see it mentioned in short essays. This suggests that inviting reflection, either in discussion or in essays, about challenging interactions might inform educators about the orientation and culture of the learning environment, which then can be used to support a mastery/learning orientation and positive climate. Monrouxe and Rees, in their study of students' narratives about professionalism dilemmas, recommended that students be empowered to speak up about professionalism lapses they see, in order to reduce negative emotional effects and to change culture (Monrouxe and Rees 2012).

Students described strong emotions in experiences that challenged professionalism, which they generally considered to be providing patient-centered care. Many authors have emphasized the importance of supporting students in "understanding, reflecting on, engaging with, and expressing emotion" (McNaughton 2013) in the learning environment and as critical to learning to provide patient-centered care (Satterfield and Hughes 2007). Writing reflective essays offers learners the opportunity to engage in skills that foster professional growth and patient care skills (Shapiro et al. 2006; Sandars 2009; Aronson 2011), and reflections about critical incidents in clinical training have elucidated learners' personal and professional values (Branch et al. 1993; Ackerman et al. 2009; Cohn et al. 2009; Howe et al. 2009; Karnieli-Miller et al. 2010). Our findings suggest that reflective essays may additionally be used to explore students' psychological needs and motivation, perceptions about their and physician identities, and the experience of being a learner in specific learning environments.

Our study was limited by data collection at only one institution and during one specific rotation. Also, the structure of the reflective essay, based on the LEAP format guidelines (Howe et al. 2009; O'Sullivan et al. 2010), require students to make a plan to overcome their challenges. This may have prompted students to emphasize mastery and competence. However, these codes were included in other sections of the essay and the other dimensions of SDT and goal orientation theory were mentioned.

Reflection essays about difficult patient interactions allow students to explore their emotions, motivation and professional identity formation, as they try to understand the complexities of clinical learning. These essays help educators understand students' learning needs and whether the clinical learning environment is meeting these needs to support learning in challenging interactions. Educators should consider using essays to optimize learning to provide high-quality care for patients who evoke strong emotions in students.

Table 1. Dimensions of patient interactions that emotionally challenged medical students, as described in third-year medical students' reflective essays about patient interactions that challenged or affirmed their ideas of professionalism

Communication Challenges in the Interaction • Communication issues between patient, student, and/or team, including language barriers, that led to concerns about consent/counseling, pain control/management, and management of care
Emotionally Overwhelming Experiences • Emotionally intense situation due to patient's medical issue, where student felt overwhelmed, frustrated, shocked, or saddened • Student felt disappointed in themselves because they had made a mistake or hadn't done as much as they could for a patient
Antagonistic Patient Behaviors • Patient or patient's family was aggressive, disrespectful, or visibly frustrated towards student and/or team members • Patient declined being cared for by a medical student • Patient was non-adherent, declined medical recommendation, or engaged in behaviors that are against medical advice • Patient appeared to be drug-seeking or manipulative in some way
Student Disagreement or Discomfort with Patient Behaviors • Patient had medical conditions and did not appear to be taking care of their health • Patient had a complicated social history, such as substance use disorder or housing instability, including during pregnancy • Student disagreed with the patient's lifestyle or health decisions, such as pregnancy decision making and sexual behaviors

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Chapter 5

What do medical students do and want when caring for "difficult patients"?

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Abstract

Phenomenon

Medical students, like physicians, experience negative emotions such as frustration when interacting with some patients, and many of these interactions occur for the first time during clinical clerkships. Students receive preclinical training in the social and behavioral sciences, often including learning about “difficult patient” interactions, yet little is known about their desire for training during clinical education. We explored students’ strategies in these difficult clinical interactions, whether they felt prepared by the curriculum, and what support they would have liked. These data inform proposed strategies for supporting clinical learning.

Approach

We interviewed 4th-year students about interactions with patients toward whom they felt negative emotions and sought to identify strategies and supports needed in these interactions. Interviews ended when theoretical sufficiency was achieved. We used qualitative content analysis to organize strategies into themes about areas benefiting from curricular supports. We mapped students’ desired curricular support examples to cognitive apprenticeship teaching methods – modelling, coaching, reflection, scaffolding, exploration, and articulation - and aligned them with traditional pedagogical techniques.

Findings

We interviewed 26 medical students (44 volunteered/180 invited). Their strategies formed five themes: finding empathy (with a subtheme of focusing on social determinants of health), using learned communication approaches, anticipating challenging interactions, seeking support, and considering it an opportunity for more responsibility. Students described ideal clinical teaching, including post-interaction debriefs with an emphasis on validating their emotional reactions and challenges. Students mentioned all cognitive apprenticeship teaching methods, most prominently modelling (observing supervisors in such interactions) and supported oral reflection. They also identified a need for faculty and resident development to enact these teaching methods.

Insights

Although students use some learned strategies in interactions in which they feel negative emotions toward patients, they desire more preparation and support during their clinical rotations. Their desires map to traditional pedagogical techniques and to methods of cognitive apprenticeship. Our findings point to the need to use these techniques to enhance clinical learning for students who experience emotionally challenging patient interactions.

Introduction

Medical students, like physicians, experience negative emotions such as frustration when interacting with some patients, and many of these interactions occur for the first time during clinical clerkships.[1,2] These patient interactions have been described in the literature for decades;[3-14] the patients involved are often labeled as "difficult," and the clinicians' emotions are often strong, challenging their ability to provide high-quality care. The types of patient behaviors students find upsetting share many similarities to those of practicing clinicians; these include patients who are angry or aggressive, who challenge or decline clinicians' recommendations, and who make what are perceived as irresponsible health decisions, among others.[15,16] Many of the patients have significant psychiatric illness, substance use disorders, and/or complex psychosocial contexts.[15,16] Patients considered to be "difficult" experience their clinical interactions as lower quality and quality is associated with important health outcomes.[17] Thus, the "difficult patient" is a valuable focus for clinicians and in medical education.

The literature focusing on these "difficult patients" and interactions has included thoughtful editorials about strategies and about how best to teach clinical learners to care for these patients. In general, articles have suggested a variety of strategies for clinicians such as kindness, empathetic listening, other patient-centered approaches, reflection, self-awareness, peer support, and boundary setting.[3,18-22] The literature also emphasizes that rather than the patient being the sole source of "difficulty," the interaction is a complex interplay of patient, physician, and situational factors, thus requiring the physician to explore all contributing factors including their own roles.[3,21,23] A few articles have focused specifically on teaching about "difficult patients." In 1957 Highley and Norris outlined a six-step approach for teachers of students who are frustrated with patients.[24] Teachers should create a safe space for students to discuss their feelings "without fear of penalty,"[24(p. 1166)] identify which patients are hard for the student, help the student recognize their feelings about the patients and understand why they dislike certain patients through examination of previous learning, identify the usefulness of certain personal cultural values in caring for the patients, and consider the "real meaning"[24(p. 1166)] of patients' behaviors.[24] A half century later, a psychiatrist emphasized this as an important clinical teaching topic through describing his (informally named) "Difficult Patient rounds" in which he and five students rounded on behaviorally difficult patients.[25] And in this decade, Oliver implored us to teach learners how to better "appreciate the difficult patient" so they can "not only survive these visits, but to thrive in them."[26(p. 506)] Although not always focusing on the "difficult patient" educators have written about the general importance of teaching self-awareness,[27-32] defined by Benbassat and Baumal as "[imparting] to students an insight into their emotional responses to specific clinical situations,"[27(p.157)] encouraging discussion about emotions,[32-34] and teaching the social and behavioral sciences (SBS), which include relevant topics such as communication, managing emotion, and psychosocial and sociocultural issues in patient care, and sometimes include difficult patient behaviors such as anger.[35]

Learners are more likely to consider patients "difficult" than experienced clinicians.[1,2,36] Some interactions are uniquely challenging for students due to their identity and experiences as learners, as we recently described in a study of 4th-year medical students' experiences of negative emotions toward patients.[37] In this study, students acknowledged that emotions were triggered when the interactions countered students' ideals about their roles as medical students and future doctors, suggesting elements of professional identity formation in these interactions. Students also described times when their performance orientation led to frustration with patients, for example, when they thought the patient's behaviors made them look less competent and threatened their ability to obtain a high grade. In addition, students' negative emotions were affected by lacking autonomy and competence to provide direct care for the patients.[37]

Although medical students generally receive pre-clinical training in the social and behavioral sciences, little is known about whether students have or desire targeted support strategies in the clinical rotations when students experience these emotions in an authentic environment.[35,38] Clinical teaching often involves an apprenticeship-like model with students participating with individual clinicians or teams. Collins et al. expanded the apprenticeship model to cognitive apprenticeship that incorporates six teaching methods to support learning: modelling, coaching, scaffolding, articulation, reflection, and exploration.[39,40] Stalmeijer and colleagues[41,42] found that clinical learners reported experiencing all six teaching methods and valued the model for teaching in clinical settings. However, it is not clear if these methods could support strategies students use or want in interactions with patients toward whom they feel negative emotions. Filling the gap will support a lens for selecting teaching strategies that enhance clinical learning.

Although "difficult patients" have been discussed since the 1950s, we still have little to guide us on how best to teach students how to support students in these interactions. We chose to investigate this issue from a new lens – the students' perspectives. We explored what students did and what support they wanted in these interactions. Specifically, we posed two research questions: a) What strategies do students use when interacting with "difficult patients", and b) What support do students receive and want in the curriculum for these interactions?

Methods

We used qualitative content analysis[43] to explore what students specified as strategies and learning experiences helpful in caring for those patients who elicited negative emotions. We chose a qualitative content analysis approach because our intention was to use the students' quotes to describe their strategies and curricular support desires rather than use the data to generate theory.[39]

Participants and Setting

We recruited a sample of 4th-year medical students from an urban, western United States medical school, after submission of their residency rank lists and before graduation, to participate. Fourth-year students were chosen because they could reflect on their entire medical school experience and report honestly without fear of any potential reprisal.

Data Sources

These data were part of an extensive study of students' interactions with patients toward whom they felt negative emotions.[37] The primary study was a grounded theory analysis of students' experiences as learners in these interactions.[37] For this planned second study, we specifically asked questions about students' coping strategies and whether the curriculum had prepared them for the interaction. This analysis was based on these questions:

1. For a given negative patient interaction "describe the strategies you used, including whether and how you sought support from your team."
2. "As you think about all of these questions about challenging patient interactions - Do you think the medical school curriculum has prepared you for such interactions? If so, how? If not, how could it?" and "What would you like to see in a curriculum for medical students?"

Procedures

After receiving exempt status from the local institutional review board, we e-mailed all 4th-year medical students with an invitation. Two authors (JS and FP) conducted in-depth, semistructured interviews. Interviews lasted between 40 and 75 minutes, and each participant received a $25 gift card. All interviews were audiotaped and professionally transcribed. Analysis was facilitated using Dedoose 7.0.22.[44] We stopped interviews when theoretical sufficiency[45,46], the point at which we had "reached a sufficient depth of understanding to theorise"[46,47] (p. 556) from the data, was achieved.

Data Analysis

Three authors (JS, AT, and FP) analyzed two interviews to create our initial codebook. We then applied these codes to a third interview, revised the codebook, and analyzed two additional interviews. We made final codebook revisions based on consensus among the three authors, including the addition of a few new codes, but primarily collapsing codes. The final codebook was used for analyses, in which sentences were coded. JS and FP each coded half of the interviews and reviewed the other's codes to make sure they were in agreement with coding. Through frequent discussions all authors participated in grouping the codes into themes that elucidated medical student experiences with difficult patients. This analysis focused on describing the data within the strategies and curricular support codes. Each had input on the exemplary quotes.

For our qualitative methods we used directed content analysis, a technique that combines predetermined codes and codes identified in the analysis, in this case the codes related to student strategies and curricular support wishes. Because strategies had been unexplored, we identified codes during analysis.[39] We used predetermined codes to described students' experiences with and desires for traditional pedagogical techniques. In our synthesis, we noted students' descriptions of desired curricula that included elements of Stalmeijer, et al.'s interpretation of cognitive apprenticeship clinical teaching methods: modelling, coaching, scaffolding, articulation, reflection, and exploration.[41] We then mapped the students' descriptions to these methods and modified the definitions of cognitive apprenticeship techniques for use in clinical learning about and from difficult clinical interactions. See Table 1 for Stalmeijer's and modified definitions.

Reflexivity

The first author (JS), an obstetrics and gynecology faculty member, conducted 20 of 26 interviews, and FP, a non-clinician researcher conducted the remaining. The first author has done clinical teaching with medical students and brought this experience to the collection and interpretation of the data. In the analysis, the team members not directly involved in clinical education (AT, FP, OtC, PS) provided additional perspectives along with their experience as qualitative researchers.

Results

We interviewed 26 of 44 students who volunteered from the 180 students emailed. Thirteen (50%) students were women, and the mean age was 29 (range 25-34). Students were entering diverse specialties, with the largest subset (27%) having chosen internal medicine.

Students' Strategies used in Challenging Interactions

Students described strategies they used with patients in these interactions and within themselves for dealing with their negative emotions, most commonly frustration. We identified five strategy themes: finding empathy (with a subtheme of considering social or structural determinants of health), using learned communication approaches, seeking support, thinking of the interaction as an opportunity for more responsibility, and anticipating challenging interactions. Each of these themes is identified in italics, described, and supported by exemplary quotes in the text and in Table 1.

Finding empathy or compassion

Students frequently discussed *finding empathy or compassion* for patients, which we define as consciously focusing on having or discovering these capacities. Students described it as a process of "just trying to hold onto the context" of the patient's life (Student 24) and "feeling

the context of the [patient's] emotion." (Student 13) Students often tried to put themselves in their patient's shoes, either intellectually or emotionally, which sometimes included the realization that students' individual experiences and approaches to health care are not universal, as described by Student 4 in Table 1. Additionally, students often at first blamed themselves for the patient's difficult behaviors and as they found empathy they took it less personally. One said, "It wasn't about me or my doing a poor job or doing a fine job… there was other, bigger factors going on that was contributing and I think that helps with a difficult patient, when you can step back and understand why they're doing it." (Student 17) Even though students did not always achieve the goal of finding empathy, they desired it. "It's hard to see somebody make what you think are bad choices… I think that's something I need to work on, and I want to think more about, how to be empathetic towards a patient that isn't ready for the care I think would benefit them." (Student 26)

Finding empathy often included *considering social or structural determinants of health,* which we considered a subtheme. Students described patients' contexts and likely experiences of oppression, such as with racism and classism, in their process of finding empathy or compassion. One student speculated about a patient's "fundamental distrust of the medical system. Maybe because he had some delusions, but maybe also because he was an older black male that had probably been abused by the system a number of times." (Student 2)

Students sometimes took on the role of helping the team find empathy for patients with whom the team was frustrated. One student said, "Sometimes I would say, well, she's gone through a lot. …She's had a hard life… I would just provide more information that the team didn't have about some of her circumstances, because it's very easy to just blame somebody… when you're overworked and tired." (Student 20) Students described why they can act in this role in the team - "not because they know more but because they're less stressed out" (Student 14) and they have more time to spend with the patients.

Communication Approaches

Students described a variety of *communication approaches,* which we defined as use of skills involved in dialogue between the student and patient. They relied on these skills often; one student said, "I don't know the fancy diagnostics, but I know that if I calm down, listen to the patient for a second, and acknowledge that I heard what they are saying, we would be okay." (Student 14) Students tried to ask open-ended questions to elicit the patients' perspectives and concerns, demonstrate caring, help patients prioritize their concerns, and spend extra time with patients. And students sometimes felt frustrated when these communication techniques didn't work. One student said "I used all of kind of the techniques that [university] had taught us in terms of dealing with these situations and telling patients that they're heard…even with kind of the teaching back that I did, that wasn't entirely effective." (Student 22)

Anticipating challenging interactions

Students sometimes used a strategy of *anticipating challenging interactions,* which we define as setting expectations for the interaction. Sometimes this was experienced as helpful; one student said, it "has to do with expectation management," and if she just expected that the interaction would "go badly at some point" she would be more prepared. (Student 24) Sometimes the teams' warnings about patients negatively influenced the student: "It made me have a negative attitude towards her before I even met her or talked to her. And when I did meet her, I…already had those notions of her in my head, and it didn't change, even though she was pleasant in front of me." (Student 19) Finally, they described times when the team would change their care plan when anticipating challenging interactions, which often meant spending less time with patients who had few or no "active problems" or took too much time, and the team instead chose to prioritize time with other patients.

Seeking Support

Although students discussed *seeking support,* which we define as seeking out others with whom to discuss the experience, it was often from peers and people outside of medicine – as students described, "my real life people" (Student 24) because many problems "can't be solved from inside the hospital." (Student 26) Often, they discussed the cases with peers because they have been in the same "boat where we didn't really know exactly what the best thing to do was and we felt like we were stuck in a place where, like it was making the patient more unhappy and it was making us unhappy, too." (Student 23)

Talking to team members did not happen as often as students would have liked, but when it did it was highly valued. In these interactions they primarily sought opportunities to share their experiences and receive validation (as described also below in their wishes for clinical debriefs). One student shared that it was hard to talk about their emotions with the team because they were worried the team would tell them to just "deal with it" and because "the stakes are too high to be like that's one of my three interactions with the attending," (Student 17) implying a concern for evaluation. In general, students described being more comfortable seeking support from residents than attendings due to their being evaluators, busy, and as one student said, "burnt out and lost their empathy over time," (Student 25) but when attendings did support the students it meant a great deal due to their wisdom and experience.

Taking Responsibility

Finally, some students described wanting to use the interaction as an *opportunity to take more responsibility,* which we define as choosing to view the challenge as a chance to be independent and be seen as the patient's physician. This often happened when circumstances allowed them to take more responsibility, such as in one students' case when the rotation shifted to include "brand new interns… I got to be totally - feel independent

and to… try things and do them and then see if I get in trouble about it later." (Student 5) Students framed this more often as responsibility than learning.

What support do students want?

In general, students described feeling that they often did not know how to handle the interaction. One student said, "it's such a lie in medicine that we don't have emotional reactions to things that happen with patients and, so, when we do, we don't know how to deal with them." (Student 21) They desired support to help them in these interactions, as this student described: "I don't feel as though there's been a lot of room in the curriculum, longitudinally, to have structured time to process [the emotions] - which I wish there had been. As your clinical exposure goes up, your opportunity for support needs to parallel that." (Student 13)

Pedagogical Strategies Described as Helpful for Learning from Challenging Interactions

Students described formal and informal educational strategies that could help them learn to navigate these difficult patient interactions. One student said simply, "I think creating a space where you can actually have conversations, you know, to say, it's human that you get frustrated with patients, and it's part of the job, and we want to make a space where we as a team can think about and talk about these things, with the best interest of the patient in mind." (Student 24) Many of these aligned with traditional pedagogical techniques and specific cognitive apprenticeship teaching methods. We used these data to suggest modifications to Stalmeijer's definitions of cognitive apprenticeship methods in clinical learning environments[41] applied to supporting students' learning in and from challenging patient interactions. (Table 2) Each pedagogical technique desired by the student is presented below and summarized in Table 3, referencing the CA techniques and with exemplar quotes.

Didactics

Although students described receiving many clinical "miniature teaching points," (Student 16) short talks or longer didactic lectures about "medical" topics, they wanted more on "social" topics and the "interpersonal dynamics between provider and patients." (Student 14) Whereas students had received many clerkship talks on giving bad news and discussing palliative care, they desired talks on topics that elicited strong emotions from patients such as discussing discharge plans with patients who didn't want to leave the hospital or negotiating pain management plans.

Small group teaching and support groups

Students described wanting opportunities to discuss these interactions in small groups for

reflection. Many talked about participating in a required preclinical course in which they discussed challenging patients and "the fuzzy side of things," (Student 10) that usually set up as small-group, role-playing exercises in front of peers. One described the challenging interactions to which they were introduced said "they paled in comparison to some of the real difficult interactions that I've had. And at the time, as a first year medical student, you think, oh wow, this is so challenging." (Student 22) Although they appreciated this "practice" for anticipating "real" interactions, in clinical training they wanted opportunities to discuss or prepare for these difficult interactions while in the clinical setting. A student said, "I think it is a shame that [the pre- clinical course] doesn't really go through all four years." (Student 26)

They envisioned the small groups to be in many possible forms: "difficult conversations, difficult feelings" sessions, "trigger" discussions, and "values clarifications around working with challenging patients," to list a few. They also valued wanting to hear from residents and faculty about their own challenging experiences. One student, in describing a team reflection about a shared emotionally charged experience said, "We sat down and talked about it. And that was with the attending and the senior resident. And I thought that was really great and helpful and that's who you did want to talk about it, because they experienced that event with you. And it was good to see that they had emotions about [it]" (*modelling*). (Student 17)

Clinical Prebriefs

Students described wanting preparation before anticipated challenging interactions to *scaffold* their learning and to discuss learning goals (*exploration*) and strategies. One student said, "So, I feel like a lot of improvement that can be made would be in the area of preceptors just asking, 'What can I do to support you in this interaction, in your interaction with the patient?' and just asking, like before we go into the room, you know?" (Student 22)

Clinical Debriefs

Students described valuing a debrief, primarily for *reflection*, soon after a challenging interaction. The debrief should be short and it should focus on what went well and what could be improved. In describing desired debriefs they desired the opportunity for a*rticulation*, with the teacher asking probing questions. One student said it would include, "How was that for you? How are you feeling right now about how that went? …What sort of emotional responses are coming up for you? How can we reframe this situation so that we're centered on what the patient needs rather than what's coming up for you without like suppressing what's coming up for you. That's all." (Student 4) Students would also like feedback about their observed interactions with the patients or after their presentations indicating challenges with the patients (*coaching*), but they seemed primarily to want time to talk about their experience and to feel validated. One student said, "It would have been nice to just have validation of my frustration, or at least someone saying, 'Hey, you're

trying really hard; good for you.' Like, 'That's hard. I've done that before too.' And sometimes, despite your best efforts, it doesn't help. But at least you're trying, and you can't forget that." (Student 20)

Other one-on-one interactions

Students also described wanting opportunities to observe the residents or attendings interact with or reflect on difficult patients (*modelling*). Student 4 described how an attending modeled empathy after rounding on a difficult patient, "We came out and the attending said something like, you know, this patient is going through an extremely hard time in her life and everyone has different coping skills around how they do that - how they deal with that sort of stress. And sometimes it can lead to difficult behavior." Students also wanted to meet with attendings or non-evaluating faculty to process the interactions and get feedback if observed (*coaching*). Some described that it would feel better to meet with non-evaluating faculty or to meet only with faculty with whom they had had continuity to discuss these experiences because of worry about poor evaluations if they were having a hard time.

Faculty development

They also articulated a need to train faculty and residents to provide compassionate, patient-centered care as role models, and to support students in their interactions.

Summary of desired teaching methods

In our analysis, we found that cognitive apprenticeship teaching methods mapped to students' desires for clinical teaching and that students primarily emphasized reflection and modelling. They wanted residents and attendings to meet with them individually or as a team to facilitate debriefs (*reflection*) and ask them about (*articulation*) and validate their experiences, and they valued structured didactics and small group interactions to prepare for and discuss these interactions (*reflection*). They wanted to observe residents and attendings interacting with challenging patients (*modelling*). They also mentioned opportunities for supervisors to tailor their learning (*scaffolding*), help set boundaries and learning goals (*exploration*), and observe them and give feedback (*coaching*). In Table 1 we use these data to modify Stalmeijer's[41] definitions of cognitive apprenticeship methods, primarily suggesting a focus on students' emotions in these interactions. We also modified two CA approaches more substantially. We suggest that modelling includes demonstrating awareness of and reflections about one's emotional reactions to patients, and that coaching does not require direct observation of the student with the patient but also includes noticing learners' emotional content on rounds. (Table 1)

Discussion

Our study found that students had a variety of emotionally challenging patient interactions, during which they used many of the same strategies as practicing clinicians, specifically efforts to find empathy and use communication techniques.[48] Despite having strategies, students expressed a strong desire for more pedagogical support in the clinical learning environment before, during, and after these interactions. To obtain this support around emotionally challenging situations the students desired a variety of traditional pedagogical techniques and many of the cognitive apprenticeship model's teaching methods—modelling, coaching, scaffolding, exploration and reflection—to enhance their learning, with the definitions slightly modified to accommodate their desires for emotional support. Our data provide students' perspectives to inform curricular development in clinical rotations.

Students used many effective strategies in their interactions, with empathy and communication skills prevalent in the literature and found to be helpful in patient-physician interactions. Students used basic communication techniques, and it is not surprising that students felt frustrated when these didn't work. Physician empathy correlates with positive patient outcomes, but empathy appears to decline during medical education.[49,50] Empathy, as defined by Halpern, includes both cognitive and affective components including emotional attunement and imagining how another person feels, in contrast to medicine's traditional limited cognitive definition,[51] and when a physician experiences negative emotions toward a patient, requires an understanding of their own emotions.[3] Although many of the students' strategies are considered effective, the strategy of anticipating interactions included some maladaptive behaviors, such as those that included teams avoiding or warning about specific patients. Students openly shared their negative emotions and articulated desires for help in understanding and managing their feelings, as well as support for and teaching about effective strategies to use in the interactions.

Students described a variety of pedagogical techniques that could be included in the clinical rotations to support this training, using actual interactions with patients toward whom the students experience negative emotions as curricular content. They wanted didactics to include the emotional dimensions and complexities of the patient interactions rather than only on the biomedical content. They suggested techniques to support coaching and verbal reflection such as debriefs, small group teaching, and support groups. They also wanted to observe supervisors interact with these patients and suggested faculty/resident development to help supervisors develop empathetic skills and to identify teaching moments. In general, students' wishes were consistent with those who have suggested that in clinical medicine we prioritize teaching about "difficult patients", and more broadly prioritize teaching self-awareness skills and discussing emotion in clinical education. [3,15,18-22,26-33]

Students' desires for supportive teaching methods mapped well to cognitive apprenticeship teaching methods, possibly because these methods are often used in clinical teaching, with an emphasis on the affective components of clinical teaching. Focusing on students' emotions is important as medical students are learning how to experience and express emotion in their clinical training,[52] and their emotions can affect how they "perceive,

interpret and think about their clinical world".[53](p. 274) Other frameworks also reflect and inform our findings. For example, other cognitive perspectives on experiential learning that resonate with our students' desires include reflective learning, particularly learners' needs to be supported in their reflective processes.[54] In addition, sociocultural theories of experiential learning are relevant. For example, experience-based learning (ExBL), a model based in communities of practice theory,[55] proposes that students learn through participation in clinical activities, which lead to "real patient learning" (RPL), proficiencies and affective learning. To be effective, ExBL requires supervisors to formally and informally support the learning by providing cognitive and affective support, labeled "pedagogic support" rather than teaching.[56] These cognitive and affective support techniques are included in our application of Stalmeijer's cognitive apprenticeship methods for clinical teaching (Table 1).

The Institute of Medicine has recommended that medical schools include Social and Behavioral Sciences (SBS) training throughout the 4 years because these skills are associated with positive health outcomes[17] for patients. For example, excellent interviewing and communication skills are associated with higher patient satisfaction, greater adherence to recommended treatments, and improved outcomes.[17] Satterfield, et al.[35] recently identified core SBS curricula for undergraduate medical education which included training in communication, interviewing, doctor's responsibilities to the patient, and professional behaviors such as compassion. They then analyzed one institution's curriculum and found insufficient training in the clinical rotations in which the concepts were "difficult to translate to clinical practice, inconsistently reinforced, and sometimes actively devalued by supervising residents and faculty members."(p. 1200) They concluded that the greatest area of need for SBS training was in the clinical rotations. Our data suggest that these types of interactions with "difficult patients" provide ideal settings for SBS training in the clinical rotations.

Social and Behavioral Science content often includes training in social determinants of health,[57] a strategy that students in our study used to find empathy for the patients. This aligns with recent recommendations to teach social determinants of health in medical education with techniques such as reflection.[58,59] Social and structural determinants of health are the complex, integrated, and overlapping social structures and economic systems that are responsible for most health inequities.

Our study has limitations. We interviewed students from only one institution with a particular pre-clerkship curriculum that could influence the set of strategies found in this study. It is possible that students who felt particularly strongly about difficult patient interactions were more likely to respond. The students' desires for curricular support may have naturally mapped to the cognitive apprenticeship framework because of the prevalence of this pedagogical technique in clinical teaching. It is also possible that the questions about strategies and desires for support may have led students to believe they had either. Students may have also been subject to recall bias. We cannot conclude that these strategies or desired pedagogical techniques are effective in this context and should be assessed in curricular development. Students' accounts may have been affected by their interviewer, responding differently to a non-clinician than a clinical faculty member. This cross-

sectional study does not provide data about students' experiences over time. In addition, this study focused on the learners' perspectives, and additional information from teachers would add to the data.

Challenging patient interactions are very common; physicians label approximately 20% of their patients as "difficult."[1] It is imperative that we help clinical learners develop effective strategies to navigate these interactions and develop emotional self-awareness throughout their training,[32] and thus our students' interactions with "difficult patients" have significant educational value. Our data give insight into the strategies students currently employ and inform educators about how students would like them to support their learning from these interactions. Focusing on these challenging patient interactions as important learning opportunities may require a breadth of supportive teaching strategies to prepare students to provide high-quality care in the future.

Table 1. Illustrative Quotations That Highlight Fourth-year Medical Students' Strategies With Difficult Patients

Specific strategy used in patient interactions	Illustrative quotations from medical students
Finding empathy for the patient	• I would see a patient that wouldn't have taken their medicine, and it would like blow my mind. Like how can you not take your medication? And then I feel like I've learned in these four years that type A medicine people are just different, you know? …In good ways and bad ways. And so I figure that like as I see more and more patients and get even more exposure to kind of the variety of human experience and behavior that I won't be shocked as easily like and I won't be thrown off or take it as personally - or take it as personally when a patient doesn't do what I want them to do. (Student 4)
	• I feel like I had so little understanding of his cultural background, where he came from, his life as somebody who couldn't hear, and like I don't know if there was maybe some mental illness involved….I think I tried to use thinking through those things to kind of be more understanding of why he might be acting this way, or why he's not totally mentally capable of thinking rationally through something like this, or whatever else might be going on in his life, or maybe he's just so annoyed and frustrated every time we come talk to him because he can't communicate well with us, and there's no translator here, and I would be frustrated too, as opposed to being dismissive of like, we're here to help him, why is he not interacting? Why is he not appreciative? (Student 24)
Placing the patient in their social context / considering structural determinants of health	• Why I don't like the term "difficult patient" is because I view it through the lens of, the team somehow doesn't like or is not communicating well with the patient…And I also view it through a lens of, like, race and ethnicity and class and privilege. And so, most, if not all of the patients who I think I got heard called difficult were people of color, and no one on the treatment team was a person of color. And that made it exceedingly hard for me to take that in. I was like, "Poor historian, you mean doesn't speak English." Or, like, "Difficult patient, you mean has a shitty job or, like, no job, or doesn't have papers, or you can't plug them into treatment because of whatever." And it was hard for me to remove that from the lines of someone who our medical system identifies as a difficult person to take care of because of structural barriers. (Student 15)
	• So it's just so obvious that this is somebody who has really been failed by the system early on, learned these maladaptive behaviors. So looking back it's really a frustration with not just hospital systems but our whole Government system and seeing where medicine is trying to pick up the slack for where other parts of society have failed and other parts of social welfare have failed early on. (Student 25)
Using communication tactics/ skills	• I think a strategy was like asking him, being really like frank almost and being like, this is like what I need, the information I need from you each morning. Like is there a way we can do this? And like when is a good

	time to talk to you? If it's better to talk in the afternoon, then like we can do that. If your door is closed, do you want me to knock and see or do you want me to talk to your nurse and see did you have a hard night? (Student 17)
	• I think being able to ask patients their perspective and get at their perspective and in a more direct way. I've seen interactions where the attending or the resident has said, "I hear you. What can we do?" Or like not just I hear you but, "What would you like from us as your team and what's your biggest concern?" And I think talking about that from the beginning and prioritizing, that's really worked wonders in what could have been really frustrating interactions. Kind of like setting the agenda at the very beginning. (Student 22)
	• With a pediatric patient whose parents didn't speak English and needed coordination with three consulting services and then for me to be able to talk to them with a translator, bringing consultants with a translator, keep them in the loop of parents with a young child that were very worried. Nobody else on the team took four hours a day of just this patient but that was my patient so that was really rewarding for me. (Student 5)
Anticipating difficult interactions	• I felt like I was on trial, basically, whenever I talked to them. Like they were asking me questions, but they were kind of like rhetorical questions that I like didn't really have answers and … I just knew that they were going to displace their sort of feelings onto me. And so, I just kind of anticipated that, that that was not going to be a good feeling and so that's kind of what I expected sort of every time I did that interaction with them. (Student 1)
	• But I could see, like he was a classically challenging patient and he was always - you know, we'd like leave him 'til the end of rounds because it was - like you never knew how long it was going to take and he would just start - like had this ranting, sort of circular way of talking about stuff… You would actually say, "I have to go now," and you'd have to shut the door in the guy's face because he actually wouldn't stop talking. He would never stop talking. (Student 9)
Seeking support from team	• That was probably one of the most difficult interactions I've ever had as a medical student. And the fact that [my preceptor] was there and realized in that moment how that felt for me and was so empathetic and attuned to my role in that situation and … he picked up on the fact that it was probably very challenging for me and it make me feel like someone was really attuned to my wellbeing and attuned to my relationship with the patient. Like me being my own provider and not just being a medical student, and someone really looking out for my relationship with the family that I was taking care of. (Student 22)
	• For me some of it is talking with my senior resident. I tend to not feel as close with my attendings. They're a step removed from patient care, so I feel like residents get it a little bit more, and I feel lucky that I've been on teams in that I feel like I can talk to a senior resident about, this is frustrating, why is this happening…Oftentimes they don't have anything super wise or sage to tell you, but they can really affirm

	your - I don't know if affirm is the right word, but acknowledge your feelings and tell you their own similar stories, and just make you feel like, okay, this is not this unique situation. It's a widespread problem and I'm not the only one thinking about it or dealing with it. (Student 25)
Thinking of challenging interaction as an opportunity to take responsibility	• Then, the latter half of his stay we switched to brand new interns… So, I got to be totally - feel independent and to… try things and do them and then see if I get in trouble about it later. It's like a great responsibility thing that I think that's where I started to get better about trying to manage my time and try to - because I was having to take on more patients or do more things on my own for people that were more acutely ill because the senior resident didn't have time to be walking me through it hand in hand. So, I had to say, "Okay, I still need to spend time with this challenging patient but I need to do it in a way that's sustainable." (Student 5)

Table 2. A modification of cognitive apprenticeship definitions in clinical learning environments applied to supporting students' learning in and from emotionally challenging patient interactions

Cognitive Apprenticeship Approach	Definition, according to Stalmeijer[41]	Modified definition in context of challenging patient interactions
Modelling	When teachers actively demonstrate and explain skills and procedures to their students.	When teachers actively demonstrate skills in interacting with patients toward whom they or the team feel negative emotions or find challenging and/or discusses their own experiences or strategies, and/or reflects on their own emotions and/or on ways they could have improved their interactions with the patients.
Coaching	When teachers observe students and provide specific and concrete feedback on their performance.	When teachers observe students interacting with or presenting about patients and meet with them individually to explore their feelings and/or experiences and give feedback/advice/support.
Scaffolding	When teachers support learning by tailoring to students' individual knowledge levels.	When teachers anticipate challenging interactions and prepare the learner before the interaction. This may mean offering specific strategies, co-interacting with the patient and facilitating part of the interaction, or choosing a specific patient based on the students' skills in interacting with challenging patients.
Articulation	When teachers question students and stimulate them to ask questions.	When teachers ask learners about their emotional reactions to patients and explore what was hard for them.
Reflection	When teachers ask students to deliberately consider their strengths and weaknesses.	When teachers invite learners to explore their emotions toward patients, what might be going on with the patient, what the patient needs, the ways the students' feelings might affect the interaction, and the student's strengths and challenges.
Exploration	When teachers encourage students to formulate and pursue personal learning goals.	When teachers help learners formulate specific goals before the interaction.

Table 3. Illustrative quotations that highlight fourth-year medical students' experiences with and desires for educational support in emotionally challenging patient interactions

Pedagogical Strategy	Cognitive Apprenticeship Technique	Representative Quotes
Short didactics on rotation	Scaffolding	• Medicine is the easiest example. You know that over the course of your eight weeks, you are going to have lunch time lectures and teachingrounds, and you are going to talk about hyponatremia. You're going to talk about COPD. . . You're going to talk these things and saying that it's important for us to talk about interpersonal dynamics between provider and patients on the wards. (Student 14)
Clinical small group teaching	Reflection	• I think it'd be also really interesting to have a "difficult conversations, difficult feelings" session…But I think it would be really nice to have some sort of session saying, you know, despite your best efforts… you may not be able to help them as much as you hope you would, and just kind of talking about why it's challenging (Student 20) • I think having small groups that do values clarification around working with challenging patients where people can talk about [experiences], what's okay, and what's not okay, and what are your judgments with different patients. (Student 24)
Support groups	Reflection	• . . . [specific small group] having a safe space to talk about…whatever we wanted to talk about that week. There were a couple times where I felt likeI was really struggling with a patient I was able to talk about it with my classmates and with two facilitators who were not evaluating me and that was great. (Student 18) • It would be nice to have, like, a once-a-month check-in, as a group, with, you know, whoever you're going to your rotation with, and talk about like hard things. (Student 13)
Debriefs	Reflection, modelling, and articulation	• Sometimes as a student you assume that everything is easy for everyone else and that you're the only one struggling. And so hearing from attending like, phew, that was a tough family meeting. Sometimes that's all you need. (Student 4) • How was that for you? How are you feeling right now about how that went? What things are coming - what sort of emotional responses are coming up for you? How can we reframe this situation so that we're centered on what the patient needs rather than, you know, what's coming up for you without like suppressing what's coming up for you? (Student 4)

Preparation before interactions	Scaffolding and exploration	• More preparation before going into the room. Talking about the case before and like giving specific goals for the interaction. (Student 22)
Observation of residents and attendings	Modelling	• Observing attendings who are really good at having these challenging conversations, just see how they deliver this information. (Student 20) • Watching residents make mistakes, it was like, oh, it's okay to make mistakes. You almost learn better because you learn that this is not the course of action I would do. (Student 25)
Meetings with attendings	Coaching and reflection	• I think the most fruitful encounters would be like if I could talk to this attending, that one-on-one attending. Because I could trust her in knowing that she has this experience. (Student 10) • And I just wish there'd be a protected meeting [with an attending]and maybe identify like three issues that we want to review - like, discuss from an emotional perspective. . I just want to be able to like process things, in a way where I feel safe and not being judged. (Student 13) • While working with an attending the student had already known, “it felt like it was completely okay to see patients like this and to have a hard time with them… and then to talk about it with [the attending] later.” (Student 3)
Meetings with non- evaluating faculty	Reflection	• But in terms of me coping with that interaction, I feel like there could have been… better resources at my site, like other confidential people that weren’t on my team that I could go to, like in the moment, to debrief about things…Like, my site director was very open to having these conversations.... she said at the beginning, like, “I’m here if you would like to talk about anything.” But I felt like, as the clerkship director, she wasn’t entirely impartial. (Student 22)
Faculty and resident development	Modelling	• I think there needs to be more training for attendings and residents… [we can work on] trying to build our empathy, and compassion, and professionalism, and all these things, but if we’re then put into situations where the people who we’re working under don’t have that training, then, there’s only so far that our training goes. (Student 21) • And so the faculty training would be to just identify, to be keeping that extra ear out on rounds or during clinic or whatever it is to kind of identify those moments. And then…taking the time to say, okay, pause for a moment, you know, here’s a really short teaching on that…to just be a littler sharper about identifying those times, because they’re clearly happening. (Student 11)

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Chapter 6

A workshop to support reflections about patient scenarios that may make residents feel negative emotions: faculty development and implementation

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A workshop to support reflections about patient scenarios that may make residents feel negative emotions: Faculty development and implementation

Abstract

Background:

Learners experience negative emotions toward some patients, which may lead these patients to feel less satisfied with care. Faculty require expertise to facilitate learning to ensure high-quality care despite negative resident emotions toward patients.

Objective:

In 2016 we trained faculty to facilitate a guided reflection workshop with obstetrics and gynecology (ob-gyn) residents about challenging patients in general and those seeking family planning care, a subset toward whom physicians sometimes feel negative emotions. The Professionalism in Reproductive Healthcare Workshop (PRHW), modified from an existing workshop, was developed because of demand for faculty prepared to address these issues in the US and Canada.

Methods:

In a half-day session, we trained faculty to facilitate the PRHW. We conducted pre- and post-training surveys with faculty, monitored 2016-18 implementation, and surveyed those who participated in the subsequent workshops. Descriptive analyses assessed outcomes including changes in faculty confidence in facilitation and post-workshop resident satisfaction.

Results:

Twenty-seven faculty (maximum allowed) were trained in the faculty development session. Their confidence in facilitating workshops about challenging patients improved (6.7 [SD 1.9] v. 7.8 [SD 1.6], $p<0.05$). Faculty conducted 11 workshops with residents in the US and Canada and collected post-workshop data in 7 workshops with 102 participants, of whom 80 completed surveys (78% reponse rate). The majority of workshop participants (96%) reported feeling comfortable sharing feelings in the workshops, and 91% rated them as worthwhile.

Conclusions:

A faculty development training to conduct a reflection workshop focused on emotionally challenging patient cases led to implementation of workshops, which resident participants found valuable.

Keywords: Faculty development, reflection, graduate medical education

Introduction

Patient-centered care challenges doctors to be empathetic, respectful, and compassionate, even during difficult patient interactions [1]. One type of challenging interaction is when a physician experiences a negative emotion such as frustration toward a patient. This type of interaction has been described in the literature for the last fifty years and longer [2, 3]. Studies have found that primary care physicians experience negative emotions toward up to 20% of their patients and consider them to be "difficult" based on this definition. In turn, the patients report lower levels of satisfaction with their care [4-6]. "Difficult patients" exhibit a variety of behaviors and health issues, which physicians find challenging, such as acting angry, declining recommendations, not following treatment recommendations and making decisions with which physicians disagree, as well as having a variety of medical and social problems [2, 4, 7-10].

Like physicians in practice, undergraduate and graduate medical learners experience some patients as challenging or difficult, and learners may be more likely to experience patients this way [11, 6, 12]. Faculty must consider how to help learners develop strategies for the interactions they find particularly challenging. Faculty and learners have stressed including these interactions in clinical education with the goal of preparing learners for future interactions in practice [13, 12, 14-16]. Research suggests that increased self-awareness facilitates an individual's ability to understand another's personal narrative, a vital skill in complex patient relations [17, 18]. Guided reflection through small group discussion and other methods supports learning self-awareness in medical education [18-20]. Medical students and residents desire support for reflection about patients toward whom they feel negatively, and welcome the opportunities to talk about these patient interactions [15, 21].

Although many dimensions of these patient interactions have similarities across disciplines, some specific patient circumstances, health needs or behaviors are particularly challenging for physicians in each specialty. For example, Kempe et al.[21] found that family physicians and pediatricians felt that parents' disagreement with vaccination recommendations showed lack of respect and made their job less satisfying. Clinicians in obstetrics and gynecology (ob-gyn) sometimes feel frustrated with patients experiencing common family planning scenarios such as facing an undesired pregnancy or desiring an abortion [22-24]. In the Professionalism in Reproductive Healthcare Workshop (PRHW), ob-gyn learners discuss their own experiences with emotionally challenging patient interactions in general, and depending on time, discuss specific cases in the area of family planning. The PRHW (Figure 1) was modified from a previously published workshop[14], based on the value of guided reflection [25-29, 14]. The objective of the workshop is to provide learners the opportunity to reflect, discuss and to identify strategies for providing patient-centered care and maintaining professional obligations to patients when feeling negative emotions toward patients.

To meet requests from obstetrics and gynecology training programs for facilitators to lead the PRHW, a team of experienced educators led a train-the-trainer faculty development session. Train-the-trainer sessions have been shown to improve educators' knowledge, skills and confidence in teaching about topics such as clinical care, cultural competence and

evidence-based practice, and on procedural skill such as neonatal resuscitation [30-34]. In this paper, we describe outcomes of the faculty training session and faculty-led workshops with residents in the subsequent two years.

Methods

PRHW Description

The PRHW provides learners an opportunity to reflect on difficult patient interactions and feelings of discomfort and judgment toward patients based on the value of guided reflection [18, 35]. The workshop's core had been integrated into the third-year obstetrics and gynecology clerkship at our institution beginning in 2008 [14, 29]. Beginning in 2015, because of high demand from universities for speakers to conduct the workshops through the Fellowship in Family Planning Grand Rounds Program[36] and the Kenneth J. Ryan Residency Training Program (Ryan Program),[37, 38] the Ryan Program assembled a team of experienced educators to expand the workshop and to plan and lead a train-the-trainer faculty development session. The expanded workshop includes original core elements, combined with exercises from published values clarification workshops[25-27] focused on family planning cases, and is formatted so that faculty can select exercises and structure the workshop to meet learners' needs.

The workshop includes both participant-introduced challenging patient cases and theoretical patient cases. For each case, participants discuss their (often strong) negative feelings about the patient, normalizing this as a common aspect of human interactions. We then explore the participants' feelings and underlying values about the case, whether their feelings may be (or were) unintentionally communicated to the patient, what may be (or have been) the cause of the patient's behavior or health choices, and how they would ideally communicate with such a patient in the future.

Train-the-trainer Process and Evaluation

We invited faculty affiliated with the Ryan Programs in the US and Canada to participate in a faculty development session to learn to facilitate the workshop (Figure 1). We conducted a five-hour, in-person, train-the-trainer session in October, 2016 for 27 faculty (the maximum allowed). The session consisted of reviewing each workshop component, discussing how to facilitate emotionally laden conversations, and practicing some of the oral exercises in small and large groups, including with simulated challenging learners (Figure 2). We emphasized skills to guide reflection, such as using probing, open-ended questions, and pushing discussions to a deeper and more complex level [35]. We were informed by Steinert et al.'s recommendations for faculty development,[39] specifically to make the content relevant and to include experiential learning for practice.

Train-the-Trainer Evaluation

We evaluated the train-the-trainer session at the second level of the Kirkpatrick model, specifically confidence in and commitment to using taught skills [40]. Faculty trainers completed electronic pre- and post-training surveys, which included information about their experience facilitating similar workshops, and confidence in facilitating workshops in general, workshops on emotionally challenging patients, and specific facilitation skills, using a ten-point Likert scale, with 1 indicating very low confidence and 10 indicating very high confidence. Participants completed open-ended questions about challenges in conducting similar workshops in the past, remaining training needs after the workshop, and interest in facilitating workshops.

Implementation Evaluation

Over the subsequent two years through 2018, the Ryan Program received requests for workshops and scheduled faculty to conduct them. All requests were met. For each workshop scheduled, faculty were asked to invite participants to complete post-workshop surveys electronically or by paper. In order to evaluate their reaction to the workshop (Kirkpatrick level 1),[40] participants were asked how useful the workshop was by indicating extremely useless, somewhat useless, ambivalent, somewhat useful or extremely useful. They were asked how comfortable they felt sharing in the group by indicating very comfortable, somewhat comfortable, somewhat uncomfortable and very uncomfortable. They could provide comments about the workshop.

IRB and Analysis

The UCSF IRB considered this study exempt. This analysis describes the train-the-trainer session outcomes, and the general resident experiences of the workshops. We conducted descriptive analyses of faculty surveys and of resident surveys. Pre- and post-faculty development average confidence scores were compared using paired t-tests with STATA (Version 15.1, Statacorp, College Station, TX). Content analysis [41] was done of the open-ended comments (by JS and KC) describing experiences of faculty in the train-the-trainer session and of residents in the workshops.

Results

Train-the-Trainer Session

Twenty-seven faculty participated in the train-the-trainer (TTT) session in October of 2016, which was conducted by four faculty advisors who developed the workshop. The participants came from geographically diverse settings (9 West, 2 Midwest, 9 Northeast and 4 South). Twenty-four (89%) completed pre- and 22 (82%) completed post-session surveys, and 18 completed both surveys with identifying information, allowing matching.

Before the TTT session, in response to an open-ended question about their past challenges in facilitating group discussion, respondents mentioned time management (n=3) and discomfort with speaking in front of groups (n=3). A common theme was managing the group dynamics, for example, the difficulty of managing certain types of participants (n=7), specifically those who dominate the conversation, and trying to encourage quieter participants to speak up. Similarly, respondents felt challenged when discussion lagged and the room became quiet (n=4); they asked for strategies to handle these "awkward" moments. In contrast, some respondents said that their own desire to talk or share their perspective was a challenge (n=2).

After the TTT session, trainers felt more confident in conducting workshops on challenging patients, speaking and listening as group facilitators, managing talkative, opinionated and quiet participants, discussing professionalism and having compassion for participants with different beliefs from their own. Participants also listed skills in which they would like additional training. (Table 1) All were committed to conducting the workshop at their own institution and 19 (86%) at outside institutions.

Implementation of the Professionalism in Reproductive Healthcare Workshop

From 2016-18, in response to requests from 13 academic centers, 10 trained facilitators led 14 workshops (one site requested two workshops). Of these, three did not include any residents; one was conducted only with ob-gyn faculty, one with nurses, and one with medical students. In the remaining eleven workshops, 7 administered post-workshop surveys with a total of 102 participants (all expected learners attended) who were primarily residents (n=96, 94%).

A total of 80 (78%) participants completed post-workshop surveys. (Table 2) The majority (91%) reported the workshop to be somewhat or extremely useful, and 75% found the general discussion about challenging patients they had personally encountered (strategy of along self-awareness and finding empathy for the patients) useful. The majority felt comfortable sharing their opinions during the session.

In open-ended comments after the workshop, resident participants stated that they appreciated the workshop, felt it was a "safe space" / "judgment-free zone", in which to discuss feelings. One stated that it was the "most useful workshop I've ever had in my life." They appreciated its interactive nature, and being given an opportunity to share personal stories and learn about their peers' beliefs. Responding to the question about aspects they didn't like, the majority commented that there was nothing they didn't like and most left the answer blank. Some expressed a wish for more time for the workshop (n=7). Three commented that they were worried that not everyone felt comfortable sharing their perspectives; one described this as "tension" in the room, another said they "would have liked to hear other perspectives that were against the majority opinion." Just over half (18 of 35) said they had had a recent patient interaction in which they could have used the skills learned in the workshop.

Discussion

Physicians sometimes feel challenged in interactions with patients, and learners desire support in caring for patients toward whom they feel negative emotion. Guided reflection is considered a critical component of experiential learning, and this can be facilitated by faculty in group discussion [42, 19, 43]. Due to demand from ob-gyn departments for faculty to facilitate reflective workshops about challenging patients we designed a workshop, trained faculty and matched them with requesting programs. We found that the faculty training session was effective in increasing facilitator confidence, faculty successfully implemented workshops as needed, and participants valued the workshops.

Small group discussions about difficult patient interactions have been developed in medical education, primarily with an emphasis on fostering self-awareness of learners' emotions around the interactions [18]. Some educators[44-46] have published short descriptions of discussions they hold with learners about their emotions around these interactions, described by Benbassat et al[18] as "direct" (focusing on the emotions directly) self-awareness teaching. Studies have also described integrating regular Balint groups in graduate medical education, most commonly in family medicine but also in ob-gyn training and other specialties, [47, 48] and some have demonstrated improved learners' self-reports of awareness of feelings and biases, confidence, and patient-centered care [18, 48, 49]. Our data support that it is possible to train faculty in the facilitation skills that Benbassat et al.[18] consider the main limitation of direct teaching approaches. In their review they conclude that encouraging learners to share their emotions is "conditional on a supportive atmosphere that ensures confidentiality, flexibility, empathy equality and openness… which requires facilitators skilled in dealing with emotionally loaded situations"[18].

Our TTT session to prepare faculty to facilitate these workshops was successful in increasing confidence in facilitating discussions that may be emotional, as referenced by Benbassat, and in specific facilitation skills. After the workshop we learned that faculty still desired training in managing challenging learners and situations such as when participants make controversial comments, and ensuring that conversations are respectful. We do not know if they continued to have these concerns after facilitating the actual workshops, but overall resident participants evaluated the workshops highly and felt comfortable sharing their perspectives. However, three indicated in open-ended comments that they worried that not all participants felt comfortable.

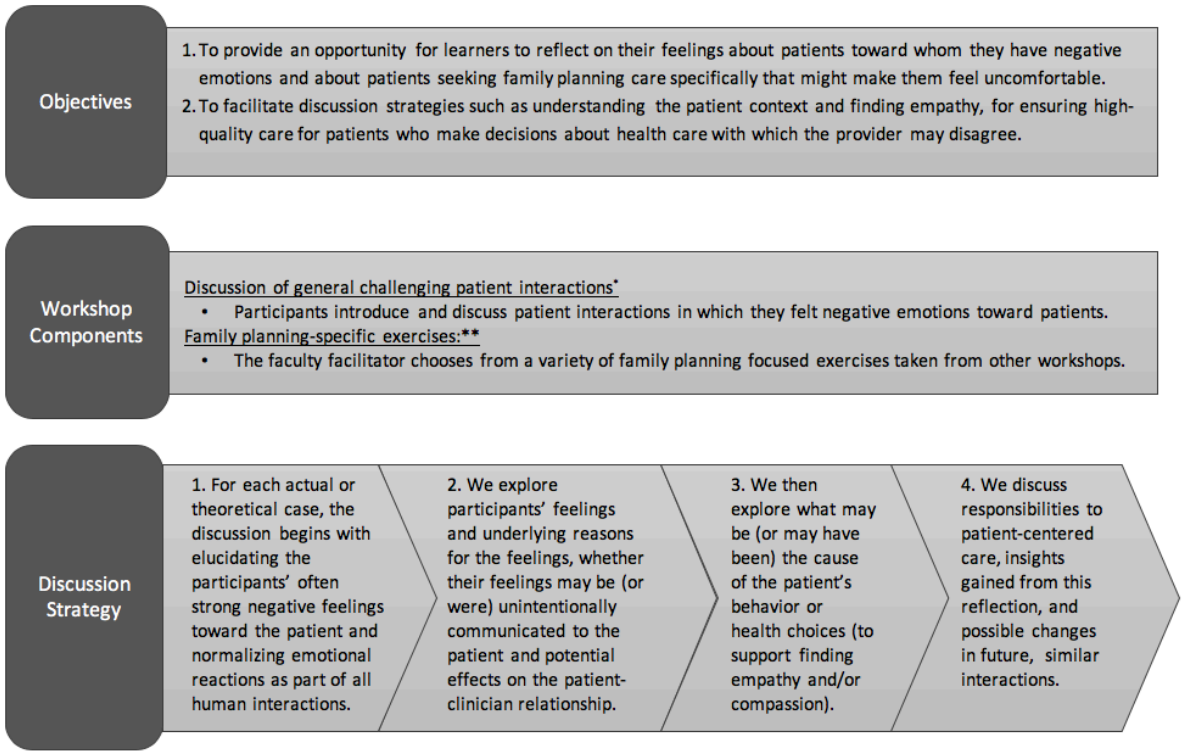
Our evaluation of the TTT session had limitations. First, the faculty volunteered to participate, thus the effects may not be generalizable to faculty in general. Second, the effectiveness data were limited to the outcome of learning through self-reported changes in skills, Kirkpatrick level 2 [40]. This is a common outcome and method of data collection in faculty development sessions [34, 39]. We did not collect data from faculty after conducting workshops with residents. In terms of implementation, we had challenges obtaining evaluation data from individual participants; for example, three workshops did not include any participant evaluations, and our outcomes were limited to Kirkpatrick levels 1 [40]. Additionally, we conducted the TTT session for 27 faculty due to an initial high demand which subsequently stabilized and did not justify additional, in-person trainings. We are

therefore providing resources online and individual faculty coaching as an alternative to dedicated in-person training and will have to monitor the use of these resources and demand for the workshops.

Conclusions

We found that a faculty development training to conduct a reflection workshop about emotionally challenging patient cases led to improved faculty confidence in facilitation and successful implementation of the workshop in the US and Canada. Resident participants valued the workshop. Guided reflection supports learners' experiential learning when encountering patients toward whom they feel negative emotions that might interfere with providing professional, patient-centered care. We encourage graduate medical educators to facilitate discussions with trainees about actual and theoretical cases that evoke emotional responses and may pose challenges with providing patient-centered care.

FIGURE 1
Description of the Professionalism in Reproductive Healthcare Workshop



*Adapted from a workshop that has been conducted at University of California, San Francisco since 2008.[1]
**Adapted from the UCSF workshop and Values Clarification guides.[1, 30-33]

FIGURE 2
Schedule of Train-the-Trainer Faculty Development Session to teach how to facilitate the Professionalism in Reproductive Healthcare Workshop

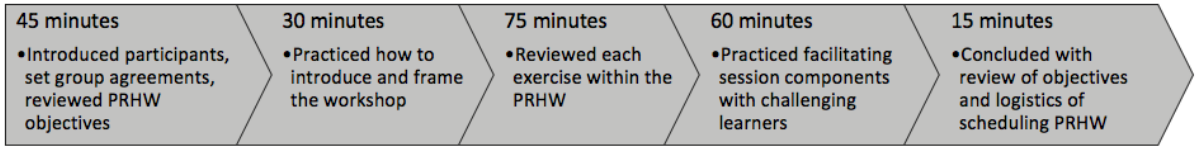


TABLE 1. Faculty confidence in facilitation* before and after the Professionalism in Reproductive Healthcare Workshop faculty development session, as well as comments

	Pre-workshop mean (SD)	**Post-workshop mean (SD)**	**P value**
	n=18**	n=18**	
Confidence in facilitating workshops in general	7.1 (1.7)	7.6 (1.7)	0.15
Confidence in conducting workshops on challenging patients	6.7 (1.9)	7.8 (1.6)	0.02
Confidence in specific skills while facilitating these workshops			
Speaking	7.2 (2.0)	7.6 (1.9)	0.03
Listening	7.4 (1.5)	7.8 (1.2)	0.03
Encouraging participation	7.4 (1.7)	7.3 (1.7)	0.62
Managing time	6.9 (1.9)	7.3 (1.6)	0.31
Managing talkative or quiet participants	5.7 (2.0)	6.9 (1.6)	<0.01
Managing participants who make strong or controversial statements	5.6 (2.0)	6.6 (1.8)	0.01
Discussing professionalism	6.7 (2.3)	8.6 (1.1)	<0.01
Having compassion/empathy for participants with different beliefs	6.9 (1.8)	8.1 (1.3)	0.01
Post-workshop listed skills in which they would like additional training			
Managing challenging learners and controversial comments (12)			
Structuring and time management in the workshop (6)			
Making workshop environment respectful (3)			
Facilitating larger groups (1)			

*Scale was 1 to 10 with 1 indicating very low confidence and 10 indicating very high confidence.

**Only participants with matched pre- and post-workshop surveys were included.

TABLE 2. Participants' experiences of the Professionalism in Reproductive Healthcare Workshop, administered in 7 obstetrics and gynecology departments in the US and Canada

Workshops conducted for obstetrics and gynecology residents with evaluation data	Participant numbers and/or proportions
Participants	**102**
Ob-gyn residents	96
Others	6
Region of program	
Canada – 1 workshop	13
US West – 1 workshop	27
US Midwest – 1 workshop	10
US South – 1 workshop	18
US NE – 3 workshops	34
Results from survey conducted after workshop	**80 (78%)**
Considered the workshop somewhat or extremely useful	91%
Considered the discussion about managing challenging patient interactions in general was somewhat or extremely useful	75%
Felt somewhat or mostly comfortable sharing thoughts with the group	96%

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Chapter 7

Discussion

Background

This thesis intended to explore medical students' and residents' experiences of "difficult patients", as defined by patients toward whom the learners feel negative emotions such as frustration. Like practicing physicians, learners commonly experience patients as difficult, and prior to these studies little was known about their experiences with these patients. Patient-centered care requires physicians to provide high-quality, empathetic care, and this can be challenging when the physician is experiencing negative emotions toward patients.

Several theoretical frameworks informed the work of this thesis. Professional identity formation describes the process through which a layperson becomes a physician and fully adopts the profession's values. This thesis was especially informed by the theoretical work of Jarvis-Selinger, who argued that as one goes through medical school and residency the learner must construct, adopt and then deconstruct the identity of each learning stage, as they develop the identity of a physician. As a result of the studies, two motivation theories, goal orientation theory[1] and self-determination theory,[2,3] were useful in informing this thesis, as learners' lack of or incomplete competence and autonomy, desires to both learn and perform, and connections with others in their learning environments, contributed to their negative emotions in these challenging interactions. Learners strongly desired support for learning from these interactions in their authentic work environments through teaching methods described in cognitive apprenticeship (CA), especially through reflection. Finally, we provided evidence that faculty can learn to implement workshops that support verbal reflection about "difficult patients".

Overview of chapter

This chapter summarizes study findings. Then, the implications of the findings are described in augmenting the "difficult patient" concept and supporting theories of professional identity formation and motivation, including self-determination and goal orientation theories. The implications are discussed for theoretical frameworks relevant to clinical learning and curriculum development. After describing limitations, implications for research and recommendations for educators are made.

This thesis addressed three main research questions:

1. Who are "difficult patients" and why do medical students and residents find them difficult?
2. What strategies do medical students and residents use in these interactions and what do they want from educators to support learning to care for "difficult patients"?
3. Can we train faculty to support verbal reflection about these patients?

Findings from research question 1: Who are "difficult patients" and why do medical students and residents find them difficult?

In three studies, students and residents described a variety of patients and patient behaviors toward whom they felt negative emotions, all of which were consistent with the general "difficult patient" literature. These included patients with "unfixable" problems; who were angry with or mean to care providers; declined recommended, evidence-based treatments; were thought to have caused or exacerbated their own health problems; declined learner participation; appeared to not take responsibility for their health; were perceived to be drug-seeking; and whose health-related behaviors or choices made students uncomfortable. The patients often had complex social circumstances, psychiatric illness, and/or substance use disorders.

Medical students' experiences related to identity and motivation

When looking across studies 1 and 3, we found that medical students' experiences with patients toward whom they had felt negative emotions were related to their identities and motivations as learners. In both interviews and essays, students described times when patient behaviors conflicted with ideals about medical student and physician identities, particularly around the provision of patient-centered care. In essays they emphasized the roles of listener and advocate, and they felt frustrated when their position in the team hierarchy prevented the fulfillment of these roles.

Students' performance goal orientation, as defined in goal orientation theory,[1] emerged especially prominently in our interview study; students articulated frustration when they perceived that patients prevented them from fulfilling roles required to obtain an honors grade. In interviews and essays, they wrote about frustration with their lack of competence in managing these interactions, autonomy in meeting the patients' needs without supervision, and inability to seek support or advocate for patients due to hierarchical and evaluative team relationships, evidence of interference with the three psychological needs that support intrinsic motivation to learn, according to self-determination theory (SDT).[2]

Residents' experiences related to identity and motivation

Final-year residents, in interviews, also described feeling negative emotions when patient behaviors interacted with their identities and motivation, but in slightly different ways. Residents described four identities that, when challenged, caused them to feel frustrated with patients. These included the identities of worker, learner, teacher and physician. As workers, patients who took extra time or effort were especially challenging because they interfered with their priority of getting the immense amount of work done. Patient behaviors that emphasized challenging aspects of their learner identity overlapped with some of our medical student findings. For example, residents were frustrated when patients or supervising attendings reminded them of their incomplete autonomy. As teachers, they struggled with feeling frustrated with patients and wanting to talk about the patients with peers but having to be a professional role model for learners. Finally, when patients declined their

recommendations, their physician identity was challenged, which is similar to what the medical students felt at much earlier stage of their careers. Like the students, residents also described elements of goal orientation theory; although residents were mostly focused on a mastery orientation, they were aware of needing to please attendings in order to be given more autonomy, which was required to develop competence.

Conclusions

For both students and residents, negative emotional reactions to patients partially come from challenges to their identities, exposure of their lack of or incomplete autonomy, competence or relatedness, and threats to their performance. While residents and students differed in their identities and motivations, there were similarities. Educators should us these insights as described later in this chapter.

Findings from research question 2: What strategies do medical students and residents use in these interactions and what do they want from educators to support learning to care for "difficult patients"?

In studies 2 and 4, both students and residents described strategies of using communication techniques and attempting to find empathy while interacting with emotionally challenging patients. Residents often described simply "buckling down" and getting the work done without using other strategies. As an additional coping mechanism, residents frequently discussed the interactions with colleagues and noted this was sometimes viewed as complaining about patients in front of junior learners.

Students desired formal and informal support to prepare and support them in these interactions, which they described as occurring in pre-clinical education but not during clinical training, when they felt they really needed it. Their desires aligned with traditional pedagogical techniques and cognitive apprenticeship teaching methods. We used these data to suggest modifications of cognitive apprenticeship methods in clinical learning environments[4,5] to support students' learning in and from emotionally challenging patient interactions. The cognitive apprenticeship methods include modeling, coaching, scaffolding articulation, reflection, and exploration.

Residents highlighted two of the cognitive apprenticeship methods, reflection and modeling, as valuable teaching methods. They were interested in supported reflection in the forms of short debriefs soon after challenging interactions and as regularly – but not too frequently - scheduled small group discussions about "difficult patient" interactions. Residents also appreciated when attendings modeled compassionate communication with these patients.

Conclusions

Students and residents desired educators' support to learn from patient interactions that make them feel negative emotions toward the patient. We used these data to evolve the cognitive

apprenticeship methods as applied by Stalmeijer for clinical teaching to include affective components of students' experiences.[4] Students described all of the CA methods and residents described fewer, but both emphasized verbal reflection. This inspired us to examine the feasibility of training faculty to facilitate verbal reflections about these topics.

Findings from research question 3: Can we train faculty to support verbal reflection about these patients?

In a pilot implementation study, we found that it is possible to train faculty to conduct a verbal reflection session for residents focused on emotionally challenging patients. After the faculty train-the-trainer workshop, faculty reported feeling more confident in conducting workshops on emotionally challenging patients, speaking and listening as group facilitators, managing talkative, opinionated and quiet participants, discussing prioritizing patient care even when feeling strong emotions about the patient, and having compassion for participants with different beliefs from their own. The faculty went on to conduct workshops with residents, who perceived them to be useful in immediate post-workshop surveys.

Conclusions

Inspired by the desire of students and residents for supported reflections around interactions that evoke negative emotions, we wanted to explore the feasibility of inspiring and training faculty to facilitate these challenging discussions. We found that faculty demonstrated interest in facilitating workshops on this topic, faculty training was feasible, and after training faculty facilitated workshops. We elaborate about the value of supported critical reflection in these interactions later in the chapter.

Concepts and theories augmented and supported by these studies

"Difficult patients"

As we described earlier, we found that students and residents experienced negative emotions toward patients that fell into similar categories as those in the general physician "difficult patient" literature but that the roots of the negative emotions varied slightly because of their identities and motivations as learners. This builds on a growing literature that emphasizes the term "difficult patient" is insufficient to capture these emotionally laden patient interactions. Instead of the difficulty lying solely in the patient, the physician participates in the interaction. The physician is the one who experiences the emotional reaction to the patient due to her/his own temperament, beliefs, values, and experiences, and she/he may also contribute to the difficulty based on communication and other factors.[6-10] Our data suggest that additionally, the clinician's identity and motivation contribute to the experience of feeling negative emotions toward patients.

Let's consider the example of frustration with patients who did not comply with or declined learners' recommendations. These patient stories highlighted conflicts with learners' expectations of the patient role – for students the experiences clashed with their ideals of the patient-physician relationship, and for residents they challenged their identity as physician expert. Additionally, the stories highlighted times when the patients' behaviors made them feel less effective in their identities – for the students this was when they were not being effective medical students and when they were ineffectively playing the role of physician, and with residents when they failed in being seen as the physician.

Both of these dimensions – patients not adhering to the learner's ideal role of patient and patients' behavior threatening the learner's efficacy - have been highlighted in the literature for decades. In 1951, sociologist Talcott Parsons described the patient's "sick role", which is the social role of the sick patient and includes obligations based on social norms.[11] These obligations include complying with health care providers and trying to get well. Judith Lorber, in her 1973 article, "Good patients and problem patients: conformity and deviance in a general hospital" emphasized how patient nonconformity to expected roles caused frustrations directed at the patients by nurses and physicians.[12]

Research in this area has supported the impact of patients violating physicians' expectations of the patient role,[12-14] and our data emphasize that these expectations are adopted early in training. In terms of threatening the physician's sense of efficacy, a nurse named Doris Schwartz in a 1958 article titled, "Uncooperative Patients?" summarized this sentiment with "The difficult patient is the one who makes me feel ineffective."[15] This concept has been highlighted in the "difficult patient" literature since, and in 2010 Dr. Hill wrote, "Patients who fail to validate our sense of ourselves, threaten our control or who create "fruitless work" are at risk of being labeled as 'bad patients.'"[16] Our data support that it starts early in training, and that it is intertwined with student and resident identities.

These and other dimensions of learners' experiences of feeling negative emotions toward patients highlight the need to support learners as they grapple with their expectations of patients' roles and their own identities, to improve patient-centered care. Before moving on to educational support, though, it is useful to discuss our findings explicitly in relation to motivation and identity formation theories.

Professional identity formation

In the introduction of the thesis I described the general concept of professional identity formation and the work of Kegan[17] and Jarvis-Selinger[18] in more detail. As students go about their work their identities are, as Monrouxe writes, "constructed and co-constructed" and affected by cultural expectations, role modeling, and relationships.[19] Students are simultaneously learning both what it is to become a doctor and what it is to be a medical student, and in clerkships they must "come to understand their place in the community of practice and must reposition their learning" relative to patient care."[18]

Kegan and Jarvis-Selinger[17,18] described that in order to move from one stage to the next one experiences "crises", which occur when there are discrepancies in how one sees themselves

and a challenging experience they face. This conflict inspires the individual to reflect on and develop a new understanding of their world and their identity within it. Our data are full of stories of times when learners' experiences with patients challenged their identities as students, residents, or physicians.

Our work supports the notion that identity formation is both an individual and social/collective process. Jarvis-Selinger describes that social interaction is fundamental in identity formation.[18] She writes that "one can know one's "self" only in relation to specific social groups…and the roles one occupies within those groups." [18] As Cruess et al. describe, this socialization process in medicine is complex, requires learners to play the role of physician, and is affected by positive and negative emotional experiences.[20] This came up in many of our studies. Students often felt that they lacked connection to their teams, and they had to perform and work within the team hierarchy, which often meant they couldn't fulfill their ideal roles as physicians. They couldn't ask for support in these interactions because of fear that they would then not be seen as competent, limiting their ability to learn in these interactions. Monrouxe[19] emphasizes that identity formation occurs in everyday "relational settings", which include power relationships, such as those articulated by our subjects.

Our findings also relate to the concept of legitimate peripheral participation.[21] Initially one's participation is peripheral and s/he gradually becomes more competent and accepted in the community. Wenger describes that it is the social groups or "communities of practice" that decide when an individual can claim a legitimate identity.[21] Our resident subjects described frustrations when patients reminded them of their incomplete autonomy, which threatened their desire to "lay claim to the identity of doctor", as Kennedy et al.[22] described in their article about progressive independence and trainees' pressures to work independently. This introduces questions about how and when to bring learners more centrally into the community so they feel connected and legitimate, and relates to our subjects' frustrations regarding their identities and satisfaction of needs for autonomy, competence and relatedness particularly around difficult patients.

The socialization experience in identity formation requires socializing agents; these are people who influence one's self-concept. In general, they are thought to include physicians, peers, and other health providers who allow one to see "how their identity is defined in relation to others."[18] The experiences of our student and resident subjects highlight patient contributions to their identity formation. Scholars have highlighted the importance of patient interactions in the process of identity formation,[18,23-25] and many have recommended a more active role for patients in teaching medical learners in general.[26-29] Bleakley and Bligh[26] wrote a strong argument for restructuring training so that students learn patient-centered care from and with patients. They propose a

> "radical shift in emphasis that inevitably brings with it a shift in power, role, and meaning – from the relationship between doctor (as teacher) and student (as learner) with patients playing a supporting role, to the relationship between patient (as educator) and student (as both learner and co-educator) with the doctor–educator playing a supportive role."

Our data support that this shift to centering the patient as the focus might make the student less focused on performance and more on learning. This is explored below in discussing clinical learning and curricular support, but first is a description of how our findings support two theories of motivation.

Motivation: goal orientation theory

Goal orientation theory is a social cognitive theory that addresses individuals' achievement focus in learning situations. Learners can be mastery- or performance-oriented. Learners with mastery goals want to learn and gain competence, using self-referenced standards. Those with performance goals want to demonstrate competence and outperform others, using normative standards.[1] These general goal orientations have also been further divided by goal theorists into "approach" and "avoidance" forms of each orientation, with performance-avoidant learners wanting to avoid looking incompetent and mastery-avoidant learners wanting to avoid doing something wrong because of their own high standards.[30] A mastery orientation is associated with deeper learning than performance orientation.[1]

Our subjects' emotionally complicated interactions exposed tensions around their goal orientations. Students described frustrations with patients when they were strongly motivated to perform well and achieve high grades on their rotations and when patient behaviors were perceived to interfere with this possibility. Becker, in his 1958 ethnography about medical student development, *Boys in White*, discussed performance orientation and its effect on medical student clinical interactions.[31] Becker wrote that students "view patients as persons who may either help or hinder their attempt to impress the faculty with their knowledge and ability" (page 333). Since then, we have found that little has been written about this particular interaction of goal orientation and learner perception of patients. While students expressed strong desires for faculty and resident support their concerns about evaluation generally kept them from asking for help.

Studies of medical students have found mixed results regarding the extent to which they are performance- or mastery-oriented. Chen et al. found that early clinical medical students were predominantly mastery-oriented,[32] but others have found students to be more performance-oriented.[33] The fourth-year students in our interview study often described frustration with patients who presented with complex psychosocial problems because they were less likely to "shine" in caring for these patients. Additionally, in order to appear the most competent, they preferred "medical" or "fixable" problems, which has been shown in other studies, including in *Boys in White*.[31,34,35] Madjar et al.[33] assessed students' goal orientation and their psychosocial medical abilities, and they found that students with mastery goal orientations had higher self-reported psychosocial medical abilities than those who were performance-oriented. Thus, patients with complex psychosocial needs may be particularly challenging for students who are performance-oriented or bring out performance orientation in students. In order to train all learners to provide patient-centered care to all patients, educators should de-emphasize performance and prioritize mastery in clinical learning environments.[36]

Motivation: self-determination theory

Motivation theorists have focused on the importance of intrinsic motivation, which occurs when one engages in learning because of genuine interest, because this has been associated with deeper learning.[2] According to self-determination theory (SDT),[2] to have intrinsic motivation a learner must have the three psychological needs of autonomy, competence and relatedness met. Autonomy refers to the desire to freely choose what one does in a learning environment and to act independently, competence refers to the desire to feel effective in one's actions, and relatedness refers to the desire to feel connected with others, to feel accepted and valued, and to have a sense of belongingness.

Our data highlighted these needs many times over. Students and residents felt especially frustrated in interactions with "difficult patients" when they lacked autonomy to address patients' needs, when they felt they were not competent to provide the complex care, and especially for students, when they didn't feel a part of their team's community. It also came out when students craved relatedness with patients, articulated as desiring a strong connection or sense of rapport with patients. This also relates to professional identity formation, which requires feeling increasingly competent to feel more secure in roles as they adopt new identities.[20] Students often did not feel competent, and therefore may have felt less secure in playing the physician role, exacerbating their frustration with patients.

Residents' accounts of emotionally challenging interactions also included these psychological needs, as reviewed in the PIF section above. Our data contribute to concerns about negative educational impacts of requiring greater supervision and therefore lessening autonomy in graduate medical education by highlighting potential effects on intrinsic motivation and identity formation.[37,38] Residents in our study also described the unmet need of relatedness when they struggled with not experiencing a therapeutic relationship with patients and when they described the need to talk with peers, which they felt was valuable but recognized that it can be considered unprofessional when occurring in front of others, especially medical students.[39,40]

Implications of findings for clinical learning and curricular development

The introduction to this thesis described select theories that might inform teaching around challenging patient interactions; these included cognitive apprenticeship and reflection. We now introduce an overlying framework of Social and Behavioral Sciences and elaborate on the implications of our findings in professional identity formation, and self-determination and goal orientation theories for teaching.

Social and behavioral sciences

The Institute of Medicine has recommended that medical schools include Social and Behavioral Sciences (SBS) training throughout the four years because these skills are associated with positive health outcomes for patients.[41] Satterfield, et al.[42] identified core SBS curricula which included training in communication, interviewing, doctor's

responsibilities to the patient, and professional behaviors such as compassion. They then analyzed one institution's curriculum and found insufficient training in the clinical rotations where the concepts were "difficult to translate to clinical practice, inconsistently reinforced, and sometimes actively devalued by supervising residents and faculty members." Our data suggest that these types of interactions with "difficult patients" provide ideal settings for communications and ethics skills emphasized in SBS training in clinical clerkships because they pose related challenges for the learners. Another implication from our data is the need to support training in social and structural determinants of health (SDH), defined as the complex social and economic structures responsible for most health inequities. Students in our studies used awareness of this concept to find empathy for challenging patients, because many had complex psychosocial factors affecting their health and healthcare. Scholars[43,44] have developed recommendations and curricula for teaching SDH.

Pedagogy and cognitive apprenticeship

Students and residents in our studies desired more pedagogical support in the clinical learning environment before, during, and after these interactions. Students desired traditional pedagogical techniques and the cognitive apprenticeship model's teaching methods[4,5]—modelling, coaching, scaffolding, exploration and reflection—to enhance their learning in these emotionally challenging interactions. They felt that didactics should include the emotional dimensions and complexities of the patient interactions rather than only the biomedical content. They suggested techniques to support coaching and verbal reflection such as debriefs, small group teaching, and support groups. They also wanted to observe supervisors interact with these patients and suggested faculty/resident development to help supervisors identify teaching moments and model empathetic skills. Residents focused primarily on the CA methods of reflection and modeling, and the pedagogical methods of debriefs and small group discussions. These desires were consistent with many who have suggested that educators should prioritize teaching about "difficult patients," and more broadly prioritize teaching self-awareness skills and discussing emotion in clinical education.[45-57]

Motivation: self-determination and goal orientation theories

Our findings reinforce calls to use SDT principles to create clinical learning environments "to support learners' intrinsic desire to care for patients."[3,58] When supporting learners in emotionally challenging patient interactions, educators could invite reflection about these needs to understand whether they are being met in the learning environment. Educators should identify patient care roles, in which students feel competent and have autonomy, in these challenging interactions and should invite their participation in team decision making about patient care. [26] In general, in order to learn, clinical learners need to be actively engaged in the authentic work of the workplace, which, according to Billet[59] includes two components. One is the learner's agency and the other is the workplace's affordances, defined as its engagement opportunities. The challenge of educators is to find opportunities

for students to legitimately contribute to the workplace.[60] Researchers have demonstrated that this is possible even with early medical students,[60,61] and Hauer has described that this is more likely to occur for students in longitudinal than traditional clerkships.[62]

Students struggled with their identity when not able to advocate for patients or articulate disagreement with team members when they thought patient care could be better, which they ascribed to both student roles and because of concerns about evaluation. Monrouxe and Rees, in their study of students' narratives about professionalism dilemmas, recommend that students be empowered to speak up about professionalism lapses they see, in order to reduce negative emotional effects and to change culture.[63]

In order to support prioritization of learning over performance, educators should consider how to promote a mastery orientation[32] and de-emphasize or simply acknowledge performance orientation in clinical learning environments. This would require different approaches to teaching and assessment. Additionally, they should shift to more authentic patient-centered training models like the one described above by Bleakly and Bligh.[26] Our data also suggest that inviting reflection, either in discussion or in essays, about challenging interactions might inform educators about the orientation and culture of the learning environment, which then can be used to inform culture change.

Professional identity formation and reflection

We found that these patient interactions provide key teaching moments for exploring learners' identities. Medical educators have recommended making professional identity formation more explicit in teaching,[18-20,23,24,64,65] primarily through supporting students' reflection to explore the meaning of their experiences and how they relate to the identities they hold. We noticed that when invited to discuss their emotional experiences, students' and residents' stories included dimensions of their identities. According to Mann[65] "as one's professional identity is developed, there are aspects of learning that require understanding of one's personal beliefs, attitudes and values, in the context of those of the professional culture; reflection offers an explicit approach to their integration."

Many authors have emphasized the importance of supporting students in "understanding, reflecting on, engaging with, and expressing emotion"[66] in the learning environment and as critical to learning to provide patient-centered care.[67] Writing reflective essays offers learners the opportunity to engage in skills that foster professional growth and patient care skills.[68-70] Reflections about critical incidents in clinical training have elucidated learners' personal and professional values, [71-75] and according to Mezirow[76] can lead to "transformative learning" and growth. Our findings suggest that reflective essays may additionally be used to explore students' psychological needs and motivation, perceptions about their and physician identities, and the experience of being a learner in specific learning environments.

Small group discussions about difficult patient interactions have been developed in medical education,[65] primarily with an emphasis on fostering self-awareness of learners' emotions around the interactions.[46] Some educators have published short descriptions of discussions they hold with learners about their emotions around these interactions, described by

Benbassat et al as "direct" (focused directly on the emotions) self-awareness teaching.[46,52,77,78] Studies have also described integrating regular Balint groups, a psychoanalytical-based method of small group discussion about patient interactions, in graduate medical education,[79,80] and some have demonstrated improved learners' awareness of feelings and biases, confidence, and patient-centered care based on self-report.[46,80,81]

Our data support that it is possible to train faculty in the facilitation skills that Benbassat et al.[46] considered the main limitation of direct teaching approaches. In their review they concluded that encouraging learners to share their emotions is "conditional on a supportive atmosphere that ensures confidentiality, flexibility, empathy equality and openness… which requires facilitators skilled in dealing with emotionally loaded situations."[46]

Limitations

This thesis has some limitations. We explored only conscious emotional experiences and did not explore whether unconscious bias affected the learners' negative responses to patients. Physicians' unconscious bias around patients' race, gender, and other characteristics, has been shown to negatively affect patient care,[82,83] and is an important dimension to explore. In exploring how negative emotions toward patients change over time we conducted cross-sectional studies of different learners at two time points. Because we did not do a prospective study, we cannot make conclusions about the evolution of these experiences. Our residency study was limited to the specialty of obstetrics and gynecology, and while we suspect that their experiences are in many ways generalizable to non ob-gyn residents, there are likely also differences. Finally, the evaluation of our pilot implementation study of faculty training in facilitating workshop was limited to the second level of the Kirkpatrick model, self-reported changes in skills.

Implications for future research

While these studies have shed insight into learners' experiences with "difficult patients" there is much more to explore. Learners' experiences with "difficult patients" interact with their identity, but it is not clear how these change over time, which could be explored longitudinally. This would provide more information about how to support learners at different stages. Researchers could explore how learners' emotional reactions to patients relate to their empathy, stress and burnout. Additionally, similar studies should be done at the graduate medical education level with residents outside of obstetrics and gynecology to explore similarities and differences, and inform specialty-specific curricular support. Our studies have elicited learners' perspectives on what support they would like, but it is not known whether teachers think these methods can be implemented or whether they are effective. Researchers should further evaluate training faculty to lead verbal reflections about these challenging interactions and to explore the impacts on learners. Finally, it is important to understand learners' experiences of times when they object so strongly to patients' choices or behaviors that they decline to care for the patient. How do they navigate the conflict between their personal beliefs and patient autonomy? And how should we support them with

these challenges? This will inform ensuring that patient care does not suffer due to physicians' very strong emotions.

Summary and implications for medical educators

Our data suggest that learners, like physicians, commonly experience negative emotions toward patients and would like educators' support in navigating and learning from these interactions.

1. Challenging patient interactions, in which learners feel strong negative emotions toward patients, can represent what scholars have called "crises"[17,18] and "critical incidents"[84] and should be considered key teaching moments because they can lead to what Mezirow called "transformative learning".[76] Learners desire support from educators in these challenging interactions.
    - Educators should prioritize supporting learners in actual challenging patient interactions and in simulations of challenging interactions.
    - Educators can apply the cognitive apprenticeship methods described in the table in chapter 4, to these emotionally challenging experiences.
    - Educators should offer supported reflection, either as short debriefs or longer small group discussions, to help the learners explore their feelings and the roots of their emotions.
    - When noticing their own negative feelings toward patients, educators should articulate their strategies and model compassionate behavior when interacting with and discussing patients.
2. Identity affects experiences with patients and vice versa. Learners, as they navigate their learning environments, are holding their identities as learners as well as their ideals of a future physician identity.[18] Patient behaviors, learners' interactions with patients, and learners' own responses may cause challenges to aspects of their identities and roles.
    - Educators should consider challenging patient interactions as opportunities to support reflection on learners' identities and what it means to be a physician.
3. Students have ideas about what supervisors require to be considered competent or to achieve a strong evaluation and may be strongly performance-oriented. When patients are perceived to interfere with or negatively affect their assessment they may transfer these negative feelings to patients.
    - Educators should consider how the learning environment can better support a mastery-oriented goal orientation.
    - Educators should give clear guidelines about expectations for learners in challenging interactions so that the learner can be primarily focused on learning rather than worried about appearing competent.
4. Learners require the psychological needs of autonomy, competence and relatedness to support their intrinsic motivation to learn.[2,3] When interactions with patients highlight these needs are insufficiently met, they may displace frustration toward patients.

- To the extent possible, educators should support learners' autonomy, sense of competence, and integration into the team.

5. Faculty may lack the skills to provide support for learners' emotionally challenging interactions.
    - Educators should train faculty in cognitive apprenticeship methods such as modeling and reflection and in traditional pedagogic techniques such as small group teaching.

Conclusion

This thesis contributes to the literature on the "difficult patient" by exploring this construct through the perspectives of medical learners. We found that medical students' and residents' experiences were related to their identities and motivations as learners; that they desired educators' support in learning from these interactions; and that faculty are up for the challenge of facilitating discussions about challenging patients. Our work has implications for educators, who are working to train future physicians to provide high-quality, patient-centered care. We hope it inspires educators to see these common, "difficult patient" interactions as complex, largely caused by our learners' identities and motivations, and as key teaching moments. With educators' support these interactions can inspire self-awareness, critical reflection, an exploration of identities and motivation, an inquiry into the pressures of the learning environment, and ultimately transformative learning.

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Summary

This thesis is dedicated to understanding medical students' and residents' experiences of feeling negative emotions toward "difficult patients" and exploring how to support them to understand and learn from these experiences. In this thesis a "difficult patient" is defined as a patient toward whom a clinician feels negative emotions such as frustration. Medical students and residents are more likely to label patients as "difficult" than practicing clinicians, thus when we started this work, we wanted to understand why through exploring the learners' experiences. We additionally wanted to understand their strategies in these interactions and how they would like to be supported and begin to explore the feasibility of providing desired support. We anticipate this thesis will inform clinical learning and curricular development.

Chapter 1 introduces the subject of the "difficult patient", including a commonly used definition, and a brief review of the literature about the "difficult patient" since the 1950's. It then briefly summarizes what little is known about medical learners' experiences with these patients and considers what theoretical frameworks might inform an exploration of their experiences and how to support them. It reviews theories of professional identity formation and motivation, specifically goal orientation and self-determination, experiential learning, cognitive apprenticeship and reflection. The chapter concludes by posing the following research questions and describes what studies were designed to answer them. 1) Who are "difficult patients" and why do medical students and residents find them difficult? 2) What do medical students and residents want from educators to support learning to care for "difficult patients"? 3) Can we train faculty to support reflection about these patients?

Chapter 2 asks why medical students find "difficult patients" challenging through a qualitative study. We interviewed 26 final-year medical students about their experiences with feeling negative emotion toward patients and asked them to describe the scenario, their feelings and the underlying causes of their emotions, and we analyzed these using constructivist grounded theory. Students described patient interactions in which they felt strong, negative emotions toward patients, and the patient circumstances or behaviors were similar to those described in the "difficult patient" literature. The causes, however, of the negative emotions were uniquely due to the students' roles and motivation in the learning environment. We identified a theme related to their motivation for performance, described as "patients' interference with students' ability to 'shine'", when patients interfered with students' abilities to fulfill roles required to obtain a high evaluation. We also identified frustration due to "patients' interference with students' expectations of patient-centered care", which included times when patients did not act or the interaction did not proceed as the student thought they should. Finally, we noticed frustration due to "students' lack of the tools or authority to improve patient's health". These results led to questions about the experiences of learners further along in their education.

Chapter 3 asks why residents experience patients as "difficult" and probes about identity and motivation based on results from chapter 2. In an interview study of 19 obstetrics and gynecology residents from throughout the United States, 19 residents described negative emotions toward patients, again in circumstances similar to those of students' and the larger "difficult patient" literature. However, their emotions were often elicited because of challenges to their identities; these included identities as workers, physicians, learners, and teachers. As workers, they were frustrated when caring for patients who took extra time and effort. They were frustrated when their physician identity was challenged, such as when difficult patients declined their recommendations. They were frustrated when difficult patients threatened their ability to look competent to the attending: a challenge to their learner identity. And as teachers, they tried to modulate their emotions to be role models for students. Finally, residents desired faculty support, specifically brief opportunities for reflection, around these interactions.

Chapter 4 asks how medical students characterize motivation and identity when describing "difficult" patient interactions that challenged their notions of professionalism. These 265 essays were analyzed using content analysis, with predetermined categories related to professional identity formation, goal orientation theory and self-determination theory based on the findings of chapters 2 and 3. In describing emotionally challenging interactions, students reflected on times when these interactions highlighted the three psychological needs of autonomy, competence and relatedness, as described by SDT, that were not met. Sometimes they were additionally frustrated when they could not enact student and future physician identities due to these needs not being met, a focus on performance, as described by goal orientation theory, and hierarchy in the learning environment. We propose that written reflections could be a useful learning tool to make identity formation more explicit, to explore learners' motivation and to understand their experiences in the learning environments.

Chapter 5 describes a secondary analysis of the interview study of medical students described in chapter 2 to explore the strategies students use and how they would like help from educators in these challenging interactions. Using content analysis, we found that students used a variety of strategies such as communication techniques and finding empathy in these interactions. Students desired formal and informal support to prepare and support them in these interactions, which they described as occurring in pre-clinical education but not during clinical training, when they felt they really needed it. Their desires aligned with traditional pedagogical techniques and cognitive apprenticeship teaching methods. We used this data to suggest modifications to cognitive apprenticeship methods in clinical learning environments to support students' learning in and from emotionally challenging patient interactions. The cognitive apprenticeship methods include modeling, coaching, scaffolding articulation, reflection, and exploration.

Chapter 6 explores the feasibility of training faculty to conduct verbal reflection exercises with learners, primarily residents, about patient interactions they have experienced or may find challenging. This was inspired by residents reporting they would find facilitated verbal reflection useful for learning from these interactions. In this pilot implementation study, we trained 27 faculty in an in-person, train-the-trainer session to conduct a workshop about challenging patient interactions. We evaluated faculty's reactions and self-reported learning after the training. We then monitored implementation of the workshops with residents over the subsequent two years. Eleven workshops were conducted with residents in the US and Canada, and the majority (75%) of resident participants who completed post-workshop surveys reported that discussing negative emotions toward patients was useful.

Chapter 7 summarizes the key findings of this thesis. It then describes the implications of our findings in augmenting the "difficult patient" literature and supporting theories of professional identity formation and motivation introduced in chapter 1. We additionally describe the implications for theoretical frameworks relevant to clinical learning and curriculum development. We address some of the limitations of this work. Finally, we close with implications for future research and recommendations for educators.

Samenvatting

Dit proefschrift richt zich op het begrijpen hoe medische studenten en aios negatieve emoties ten opzichte van "moeilijke patiënten" ervaren en onderzoekt hoe lerenden kunnen worden ondersteund bij het verwerken van deze ervaringen om ervan te leren. In dit proefschrift wordt een "moeilijke patiënt" gedefinieerd als een patiënt voor wie een arts negatieve emoties zoals frustratie voelt. Medische studenten en aios zijn eerder geneigd om patiënten als "moeilijk" te bestempelen dan praktiserende artsen, dus toen we aan dit werk begonnen, wilden we dit begrijpen door de ervaringen van de studenten en aios te onderzoeken. We wilden bovendien hun strategieën begrijpen in de interactie met "moeilijke patienten", hoe ze daarin ondersteund zouden willen worden, en de uitvoerbaarheid van dergelijke ondersteuning verkennen. We verwachten dat dit proefschrift het leren in de kliniek en curriculumontwikkeling daarvoor zal bevorderen.

Hoofdstuk 1 introduceert het onderwerp van de "moeilijke patiënt", inclusief een veelgebruikte definitie, en een korte literatuurstudie over de "moeilijke patiënt" sinds de jaren 1950. Vervolgens wordt kort het weinige dat bekend is over de ervaringen van medische studenten met deze patiënten samengevat en wordt nagegaan welke theoretische kaders zinvol zijn bij een verkenning van hun ervaringen en van de wijze waarop ze ondersteund zouden kunnen worden. Het betreft theorieën over professionele identiteitsvorming en motivatie, met name *Goal Orientation Theory* en *Self-Determination Theory*, ervaringsleren, *Cognitive Apprenticeship* en reflectie. Het hoofdstuk eindigt met de volgende onderzoeksvragen en beschrijft welke studies werden ontworpen om deze te beantwoorden. 1) Welke zijn "moeilijke patiënten" en waarom vinden medische studenten en aios ze moeilijk? 2) Welke hulp willen medische studenten en aios van klinische docenten om het leren zorgen voor "moeilijke patiënten" te ondersteunen? 3) Kunnen we de docenten trainen om hun reflectie over dergelijke patiënten te ondersteunen?

In **Hoofdstuk 2** wordt de vraag waarom medische studenten "moeilijke patiënten" uitdagend vinden met kwalitatief onderzoek benaderd. Wij interviewden 26 laatstejaarsstudenten geneeskunde over hun ervaringen met het voelen van negatieve emoties over patiënten en vroegen hen de gebeurtenis, hun gevoelens en de onderliggende oorzaken van hun emoties te beschrijven, en we analyseerden deze met behulp van *Constructivist Grounded Theory*. Studenten beschreven patiënteninteracties waarin ze sterke negatieve emoties voelden tegenover patiënten. Wij vonden dat de context en het gedrag van patiënten vergelijkbaar waren met die beschreven in de literatuur over "moeilijke patiënten". De oorzaken van de negatieve emoties van studenten waren echter geheel toe te schrijven aan hun rol en motivatie in de leeromgeving. Eén thema viel op dat vooral betrekking had op hun prestatiemotivatie, aan te duiden als 'de interferentie van patiënten met hun mogelijkheid om "goed voor de dag te komen" ', Dit gebeurde wanneer patiënten het vermogen van studenten verstoorden om de rol te vervullen die zij als vereist achtten om een positieve beoordeling te krijgen. We identificeerden ook frustratie wanneer 'patiënten studenten belemmerden om de patiëntgerichte zorg te verlenen die van hen verwacht werd', ondermeer als patiënten niet

meewerkten, of de interactie niet verliep zoals de student dacht dat dat zou moeten. Ten slotte merkten we frustratie op als gevolg van 'een gebrek aan hulpmiddelen voor studenten of aan de noodzakelijke autoriteit om bij te dragen aan de gezondheid van de patiënt'. Deze resultaten leidden ons tot vragen over de ervaringen van lerenden later in hun opleiding.

Hoofdstuk 3 behandelt de vraag waarom aios patiënten als "moeilijk" ervaren en gaat dieper in op identiteit en motivatie, voortbouwend op de resultaten van hoofdstuk 2. In een interviewstudie bij 19 aios verloskunde/gynaecologie verspreid over de Verenigde Staten beschrijven allen hun negatieve emoties tegenover patiënten, die opnieuw vergelijkbaar blijken met die van de bredere literatuur over studentinteractie met "moeilijke patiënten". Hun emoties bleken echter vaker uitgelokt vanuit identiteitsontwikkeling; deze omvatten hun verschillende identiteiten als werknemer, arts, lerende en docent. Als werknemers waren ze gefrustreerd als patiënten onnodig extra tijd en moeite vergden. Ze waren gefrustreerd als hun identiteit als arts werd aangevochten, bijvoorbeeld als "moeilijke patiënten" hun adviezen afwezen. Ook zij waren gefrustreerd als "moeilijke patiënten" hun vermogen om een competente indruk the maken op supervisoren in de weg zaten: een uitdaging voor hun identiteit als lerende. En als docent probeerden ze hun emoties te beheersen in hun functie als rolmodel voor co-assistenten. Ten slotte wilden aios graag ondersteuning, met name ruimte voor reflectiemomenten over deze interacties.

Hoofdstuk 4 behandelt de vraag hoe medische studenten motivatie en identiteit karakteriseren bij "moeilijke" patiëntinteracties die hun beeld van professionaliteit ondermijnen. Hier werden 265 essays over geschreven door studenten, die geanalyseerd werden met behulp van een vooraf ontworpen categorieën-raamwerk gebaseerd *Professional Identity Formation*, *Goal Orientation Theory* en *Self-Determination Theory* (SDT) naar aanleiding van de bevindingen van de hoofdstukken 2 en 3. Het viel op dat als studenten schreven over emotioneel beladen interacties, ze reflecteerden ze over momenten waarop een of meer van de drie psychologische behoeften van *autonomy, competence* en *relatedness* voor intrinsieke motivatie, zoals beschreven door SDT, niet werden bevredigd. Soms waren ze ook gefrustreerd omdat ze hun identiteit als student en toekomstig arts niet konden waarmaken doordat niet aan deze behoeften werd voldaan, naast een sterke focus op prestaties, zoals beschreven in de goal orientation theory, en door de hiërarchie in de leeromgeving. Schriftelijke reflecties kunnen een nuttig middel zijn om identiteitsvorming te expliciteren, om de motivatie van lerenden te onderzoeken en om hun ervaringen in de leeromgeving te begrijpen.

Hoofdstuk 5 beschrijft een secundaire analyse van de interviewstudie van medische studenten beschreven in hoofdstuk 2, om de strategieën te onderzoeken die studenten gebruiken en de hulp die zijn zouden willen krijgen van docenten bij dergelijke lastige interacties. Bij inhoudsanalyse vonden we dat studenten verschillende strategieën gebruikten, zoals technieken voor communicatie en voor bevorderen van empathie in deze interacties. De studenten zouden graag formele en informele steun krijgen bij voorbereiding op en tijdens deze interacties; ondersteuning die zij nu vooral in het pre-klinische onderwijs kregen, maar niet tijdens klinische stages, wanneer ze deze juist het meest nodig vonden. Deze wensen

passen bij gevestigde onderwijstechnieken en bij *cognitive apprenticeship* methoden. Op basis van deze bevindingen stellen wij aanpassingen voor in het model van *cognitive apprenticeship* ter ondersteuning van de omgang met emotioneel lastige interacties met patiënten. Deze cognitive apprenticeship aanpak omvat dan *modeling*, *coaching*, *scaffolding*, reflectie en exploratie.

In **Hoofdstuk 6** is de uitvoerbaarheid onderzocht van docententraining in mondelinge reflectieoefeningen met lerenden, vooral met aios, over patiënteninteracties die ze als emotioneel lastig hebben ervaren of waar ze tegenop zien. Dit was geïnspireerd door de eerdere bevinging bij aios dat ze ondersteuning bij verbale reflectie nuttig zouden vinden om ervan te leren. In deze pilot-implementatiestudie hebben we voor 27 klinische docenten een persoonlijke train-the-trainer-sessie verzorgd, om workshops te leren geven over emotioneel uitdagende patiëntinteracties. We maten de reacties en zelf-gerapporteerde ervaringen van de deelnemers na de training. Vervolgens hebben we de implementatie van de workshops met aios in de daaropvolgende twee jaar gevolgd. Elf workshops werden uitgevoerd met aios in de VS en Canada, en de meerderheid (75%) van de aios die de enquêtes na de workshop invulden vonden het bespreken van negatieve emoties naar patiënten nuttig.

Hoofdstuk 7 vat de belangrijkste bevindingen van dit proefschrift samen. Daarna gaat het hoofdstuk in op de bijdrage van de bevindingen aan de literatuur over 'moeilijke patiënten' en het ondersteunen van theorieën over professionele identiteitsvorming en motivatie geïntroduceerd in Hoofdstuk 1. Vervolgens worden de implicaties voor de theorievorming voor klinisch leren en curriculumontwikkeling besproken. De beperkingen van de studies worden besproken. Ten slotte sluiten we af met de betekenis voor toekomstig onderzoek en aanbevelingen voor docenten.

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Curriculum Vitae

Jody Steinauer was born in 1969 in Omaha, Nebraska and moved to California when she started her undergraduate degree program at the University of California, Santa Cruz. She earned her bachelor's degree in biology, then completed medical school and residency training at the University of California, San Francisco (UCSF). After residency, she completed fellowships in family planning and clinical research, during which she completed a Master's Degree in Clinical Research.

After joining faculty at UCSF, while enjoying her role in conducting clinical research, in addition to patient care and teaching, Jody realized her true passion was in education. She began exploring this interest through completing education-focused faculty development programs, including the Association of Professors of Gynecology and Obstetrics Academic Scholars Program and the UCSF Teaching Scholars Program. In 2015 she began her PhD in the UCSF – Utrecht University collaborative doctoral program in health professions education.

Jody has had a faculty appointment at the UCSF School of Medicine for 15 years, during which she has undertaken various roles in medical education and has published educational scholarship. She is currently the Vice Chair of Education in the Department of Obstetrics, Gynecology and Reproductive Sciences. She is the Director of Research for the Kenneth J. Ryan Residency Training Program in Abortion and Family Planning, a program that supports US ob-gyn departments to meet training requirements of the Accreditation Council for Graduate Medication Education. She is the Director of Innovating Education in Reproductive Health (www.innovating-education.org) that creates and curates innovative curricula in sexual and reproductive health. Her work is grounded in direct patient care and in training learners along the training continuum about how to provide high-quality, patient-centered care.

Selected Publications

1. Steinauer J, Baron M, Freedman L, Perrucci A, Dehlendorf C, Cipriano SD. Promoting medical student self-awareness through a challenging patient workshop. Med Educ. 2018 Nov;52(11):1193-1194.
2. Steinauer JE, Turk JK, Pomerantz T, Simonson K, Learman LA, Landy U. Abortion training in US obstetrics and gynecology residency programs. Am J Obstet Gynecol. 2018 Jul;219(1):86.e1-86.e6.
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