Reentry to Pediatric Residency After Global Health Experiences

Dorene F. Balmer, PhD, Stephanie Marton, MD, MPH, Susan L. Gillespie, MD, PhD, Gordon E. Schutze, MD, Anne Gill, DrPH

abstract

**BACKGROUND AND OBJECTIVE:** Although nonphysician reentry transitions have been characterized in literature, little is known about the reentry physicians in general, or residents in particular. We conducted a qualitative study to explore pediatric residents’ reentry, using reverse culture shock as a conceptual framework.

**METHODS:** Eighteen pediatric residents who completed global health experiences in Africa (9 categorical residents with 1-month elective, 9 global child health residents with 12-month training) participated in interviews that included a card-sort to solicit emotional responses consistent with the conceptual framework. Data in the form of interview transcripts were coded and analyzed according to principles of grounded theory.

**RESULTS:** All pediatric residents, despite variable time abroad, reported a range of emotional responses on reentry to residency. Global child health residents felt disconnection and frustration more intensely than categorical residents, whereas categorical residents felt invigoration more intensely than global child health residents. Although residents met with program leadership after their return, no resident described these meetings as a formal debriefing, and few described a deliberate strategy for processing emotions on reentry.

**CONCLUSIONS:** Consistent with reverse culture shock, pediatric residents felt a range of emotions as they move toward a steady state of acculturating back into their residency program. Residency programs might consider creating safety nets to help cultivate support for residents when they reenter training.

**WHAT'S KNOWN ON THIS SUBJECT:** Although nonphysician reentry transitions have been characterized in the literature, little is known about the reentry of residents after either short-term (1-month elective) or long-term (12-month training) global health experiences abroad.

**WHAT THIS STUDY ADDS:** Reverse culture shock may be a useful conceptual framework for understanding the range of emotions felt by pediatric residents when they reenter residency after global health experiences, particularly if these experiences were long term.

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Dr Balmer conceptualized and designed the study, collected the data, led data analysis, and drafted the initial manuscript; Dr Marton assisted in conceptualizing and designing the study, critically reviewed preliminary findings, and assisted in drafting the initial manuscript; Dr Gillespie assisted in conceptualizing and designing the study and reviewed preliminary findings and the initial manuscript; Dr Schutze assisted in conceptualizing and designing the study and reviewed preliminary findings and the initial manuscript; Dr Gill conceptualized and designed the study, collected the data, assisted in data analysis, and drafted the initial manuscript; and all authors approved the final manuscript as submitted.

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In response to a growing interest in global child health (GCH) experiences, many North American pediatric residency programs have developed global health electives and/or GCH curricula. Residency programs, in and beyond pediatrics, have reported the educational, clinical, and professional benefits of global health electives and GCH curricula.

The need to prepare residents for global health experiences has been recognized, particularly as it relates to tropical disease management and cultural awareness. More recently, a consortium of GCH educators developed a standardized simulation-based curriculum to prepare residents for emotions resulting from challenging GCH experiences. Although this curriculum allows residents to debrief emotions in a pretravel, simulated setting, it does not address how residents actually process reentry. Existing guidelines recommend that programs solicit feedback from residents on completion of GCH electives. Nonetheless only 30% of respondents to a GCH questionnaire required debriefing on reentry (respondents were primarily chief pediatric residents, GCH faculty, or pediatric program directors).

Reentry is the experience of facing previously familiar surroundings after living in a different environment. Reentry theories often address the affective and psychological well-being of the returning individual, specifically his or her feelings, emotional responses, and mental responses. Oberg’s Reverse Culture Shock provides a reasonable starting point for understanding the reentry transition of pediatric residents. Reverse culture shock is similar to culture shock, but readaptation and readjustment is to one’s home culture after traveling or living abroad. Feelings of excitement about being back home are mixed with bewilderment and detachment from what was previously familiar. A comprehensive review of reentry literature included studies involving corporate repatriates, missionaries, Peace Corps volunteers, and students; however, studies involving physicians in general, and residents in particular, were noticeably missing from this published review. Our own extensive search confirmed a dearth in the literature regarding reentry of either physicians or residents.

In a recent survey of 111 physicians employed by the Baylor College of Medicine (BCM) Pediatric AIDS Corp, 41% (39 of 95) of respondents reported problems transitioning home, commonly because of personal issues or job-related difficulties. On the basis of our observations in the Department of Pediatrics at BCM, pediatric residents also have difficult reentries after GCH experiences. Therefore, we conducted a qualitative study to explore pediatric residents’ reentry, using Oberg’s concept of reverse culture shock as a conceptual framework. Because our pediatric residency program provides both 1-month GCH electives and 12-month GCH training, we were also interested in how the duration of exposure to GCH might affect reentry. For clarity, we use the term “GCH training” to refer to structured activities intended to facilitate learning, and “GCH experience” to refer to the learning experience itself, that is, the social process through which residents make sense of their experiences as trainees living and working abroad.

METHODS

Context

The Baylor International Pediatric AIDS Initiative (BIPAI) at Texas Children’s Hospital (TCH) was developed to address the critical shortage of physicians trained to care for infants and children with HIV/AIDS in Africa and other parts of the world. The Global Child Health Residency at BCM/TCH, established in 2010, builds on BIPAI assets. Each year, 40% to 45% of pediatric residents in the categorical residency program at BCM/TCH do a 1-month elective rotation at BIPAI sites. In addition, 5 or 6 residents per year are selected through a separate match for the 4-year GCH residency program. The first 18 months of clinical rotations are the same for GCH residents and residents in the categorical pediatric residency program. Thereafter, GCH residents are eligible to spend 12 consecutive months or two 6-month blocks abroad in a resource-limited setting, commonly at a BIPAI site in Africa. Their GCH training builds on the categorical pediatric residency curriculum and includes GCH case conferences and journal clubs, as well as GCH-focused noon conferences and grand rounds. GCH residents must also complete a 1-month American Society of Tropical Medicine and Hygiene–approved diploma course in tropical medicine before their travel, and conduct a GCH-related scholarly project before graduation. After returning to BCM/TCH, GCH residents meet with GCH program leaders to discuss their experience abroad and their reentry to residency in the United States.

Sample

After obtaining approval from the BCM institutional review board to conduct this study, we sent e-mail invitations to all of the 25 categorical pediatric residents who completed a 1-month GCH elective at 1 of 4 BIPAI sites in Africa between August 2013 and October 2014. Of these, 9 categorical residents agreed to participate in this study and 16 declined by virtue of their nonresponse. We also invited all 9 GCH residents in the graduating classes of 2014 and 2015 to participate and all agreed. All GCH residents spent 12 months abroad at
a BIPAI site in Africa between January 2012 and October 2014. We obtained verbal informed consent from all residents who agreed to participate.

**Data Collection**

We collected data through one-on-one, semistructured interviews. The number of months between GCH experiences and interviews varied (3.4 ± 1.9 for categorical residents and 6.6 ± 4.3 for GCH residents). Interviews lasted, on average, 26 (±11) minutes.

We began the interviews with open-ended questions designed to solicit general information about residents’ GCH experiences. To focus the interviews on reentry transitions, we included a task to ascertain information about 12 emotions characteristic of reverse culture shock.20 Residents were given 12 cards, each with a uniquely named emotion (eg, inspiration, confusion), and were asked to sort cards into 1 of 3 categories: emotions that were intensely felt on reentry, emotions somewhat felt on reentry, or emotions not felt on reentry. We then prompted residents to think aloud about the judgments they made as they assigned cards to categories and to describe their emotional responses on reentry, as related to the 12 cards. We ended the interview by asking residents how they processed emotions in an effort to resume an emotional steady state.

Two of us (DB and AG) conducted the interviews; all interviews were recorded and rendered anonymous during the transcription process. Data were managed with ATLAS.ti (Scientific Software Development, version 7, GmbH, Berlin, Germany).

**Data Analysis**

Two of the authors (DB and AG) analyzed qualitative data from interview transcripts, using principles of grounded theory and overlapping data collection with data analysis.25 DB and AG began the analysis by inductively creating codes (ie, words that act as labels for important concepts), and applying codes to segments of data. Coding continued in an iterative matter, as patterns and concepts within the data became more apparent and new codes were created to capture these concepts. Consistent with iterative processes of grounded theory, we met as an entire team halfway through the interview process to review and revise the code list. DB and AG then continued the interviews and applied the final code list to the complete set of interviews (n = 18). In the final stages of analysis, we created a histogram to compare the frequency of intensely felt emotions and emotions that were not felt by categorical and GCH residents. Given our qualitative methodology, we did not apply inferential statistics. Rather, as a team, we went back and forth between data in the histogram and qualitative data. We looked for alignment between residents’ responses to emotions that we purposefully solicited via the card sort and unsolicited emotions that emerged during the interview. For example, we specifically asked residents about feeling sad. But residents also expressed a sense of extreme sadness (more like helplessness) when they talked about dealing with the death of children in Africa.

We had multiple checks on the trustworthiness, akin to validity, of our qualitative data. For consistency of data collection and analysis, 2 of us (DB and AG) conducted all the interviews, routinely checked each other’s application of codes, and kept an audit trail of coding decisions. We also conducted follow-up interviews with 4 residents who participated in the study, asking if our insights from data analysis resonated with their experiences.

**Findings**

Table 1 displays characteristics of the 9 categorical and 9 GCH pediatric residents who participated in this study. All residents trained at 1 of 4 BIPAI sites in Africa and had variable exposure to inpatient and outpatient settings. Most (83%) were female, reflecting the gender distribution of the categorical pediatric residency program. All had traveled internationally before their GCH experience at a BIPAI site. Five categorical residents and 9 GCH residents had previous global health experience (eg, an international rotation in medical school). Four GCH residents articulated a clear intention to pursue an international global health career; none of the categorical residents articulated a similar intention.

In the following sections, we present findings from our qualitative analysis of residents’ emotional responses on reentry. Residents’ quotes are followed by their study identification number.

**Reported Emotional Responses**

Residents reported both positive and negative emotions at reentry. In general, the types of emotions were similar for categorical residents, who had 1 month of GCH training at a BIPAI site in Africa, and GCH residents, who had 12 months of GCH training at these same sites. However, the intensity of emotions varied, as evidenced by the number of categorical residents and GCH residents who reported emotions as intensely felt or not felt (see Table 2), and as corroborated by qualitative data.

GCH residents felt disconnection more intensely than categorical residents. They often talked about needing to catch-up with family and friends. As one GCH resident said, “Coming back was hard. People would say, ‘I haven’t seen you in a while; where have you been?’ It was like, if people weren’t paying attention, they didn’t notice you were gone. And if you weren’t paying attention, you didn’t know that things had changed for them. It definitely felt like I was catching up” (#10).
Other GCH residents spoke of “catching up culturally” (#1). For example, one remarked, “It was hard to come back and talk about celebrity culture, and just do normal things without feeling like, ‘This isn’t important. ... There are so many things happening that are more important’” (#5).

More than just feeling disconnected, some GCH residents felt isolated, or, as one said, “Coming back, I just felt like no one could understand” (#17). Of the 3 categorical residents who talked about isolation, 2 recalled GCH colleagues who “cut everybody off … they just put their heads down, did their work, and weren’t the same happy-go-lucky kind of people” (#16).

GCH residents felt confusion more intensely than categorical residents. Confusion most often related to their role as a physician trainee. For example, GCH residents tended to contrast being a relatively independent practitioner in Africa to more limited autonomy in the United States, “having everyone double checking and triple checking your work” (#2). For GCH residents, role confusion tended to co-occur with frustration. One shared this story: I came back [to TCH] after doing hundreds of LPs [lumbar punctures] and the attending here said, “You can’t do this LP by yourself.” It was very frustrating to suddenly switch from being independent, doing things, and feeling confident doing those things to suddenly being placed in a position where we had to be observed. I was doubting my ability, and was nervous because she was watching. Then she sat down with me and said, “I want to give you feedback about the LP.” I thought, “Why is this such a big deal?” She asked, “How do you think the LP went?” I said, “I think it’s very simple. I put in the needle and got out the [cerebrospinal fluid], just like I’ve done lots of times before.” She said, “Well, you didn’t wait for the iodine to dry. I don’t always have a perfect tap, but that one was good, a champagne tap! But she still found fault in it. I was frustrated about that part of coming back, where small things become a big deal.” (#18)

Feelings of frustration among GCH residents, but not categorical residents, sometimes took on a tone of despair, stemming from their limited ability to affect change in a resource-poor health system. For instance, one admitted, “I felt like I didn’t change all that much over there” (#6). Notably, GCH residents who worked primarily in inpatient settings and encountered the death of children on a daily basis felt more despair than their GCH counterparts who worked primarily in outpatient settings. One GCH resident recalled, I mean inpatient-wise, there was nothing I could do. I would look around me and be like, “Have I ever gone to medical school? I have no idea what to do here.” I did a little better over time. I shadowed other residents because I wanted to see why they loved it. Part of the reason they loved it was because they were okay with doing a little bit, helping 1 kid while 5 died. I couldn’t see that kid that survived. That is just the way you experience it differently. (#14)

Although emotions such as disconnection and frustration seemed to weigh heavily for GCH residents, they highly valued their GCH experience. As one said, “No matter how hard, it’s an amazing experience. I wouldn’t trade it for anything else in the world” (#17).

Categorical residents felt invigoration more intensely than GCH residents, perhaps in part because their time abroad was a change of pace from their routine residency rotations. But more often, feelings of invigoration stemmed from categorical residents’ sense of contribution, “being part of good work they are doing over there” (#3). Immerged back in residency, categorical residents talked about “trying to think of little things I could do from here” (#4).

Residents in both the categorical and GCH programs felt appreciation for the resources in the United States. Notably, all categorical residents felt appreciation intensely on reentry. One categorical resident said, “I felt appreciative when I came back here and had my nice amenities. The clinic there was very nice. But here it’s just different: our [electronic medical record] system, the amount of staff we have, all these measures we have to take to care for patients” (#12).

Reported Strategies for Processing Emotions on Reentry

Few residents described deliberate strategies for processing emotions on reentry in an attempt to move toward an emotional steady state. Most relied on talking to friends about their reentry transition. As one GCH resident shared,

I don’t know [how I processed emotions]. I think a lot of it was just letting time take its course and taking a step back. A lot of it was also with my friends and being able to say to them, ‘I’m frustrated.’ I’d particularly talk to other global health residents because they really understood what I had gone through. (#2)
Residents who are exposed to resource-limited, international settings for more than a 1-month elective may be especially vulnerable to identity "crises" due to an abrupt discontinuity of place, autonomy, and role expectations as they move from a resource-rich Western context, to a resource-limited, international context, and back again. Although we studied residents with both 1-month and 12-month GCH training, our sample size was limited. Moreover we studied only residents who had GCH experiences at BIPAI sites in Africa. Comparisons between categorical residents with short-term exposure and GCH residents with long-term exposure fail to account for other important group differences (eg, career intentions). The gap between actual reentry and interviews varied. Because experiences are perceived differently depending on when they are remembered, longer gaps could induce recall bias and affect the saliency of emotional responses. Less than 50% of categorical residents who were invited to participate in this study chose to do so. Our finding that categorical residents felt invigoration more intensely than GCH residents could be due to response bias. Furthermore, by focusing on the affective and psychological aspects of reentry, we necessarily did not attend to cognitive aspects of reentry transitions.

Despite these limitations, we believe our findings may guide future investigations. For example, we did not look extensively at how factors such as previous exposure to global health, specific elements of a global health elective and/or curriculum, or personal resiliency, affect residents’ reentry. Future research might consider how GCH experiences in locations other than Africa affect emotions on reentry. Finally, the impact of GCH exposure on professional identify formation of pediatricians is ripe for investigation.

TABLE 2 Emotional Responses on Reentry to Pediatric Residency by Categorical Pediatric Residents (n = 9) and GCH Residents (n = 9)*

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Intensely Felt</th>
<th>Not Felt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angry</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>GCH</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Categorical</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>GCH</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Confused</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>GCH</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Disconnected</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Categorical</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Frustrated</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>GCH</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Helpless</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>GCH</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Inspired</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>GCH</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Invigorated</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>GCH</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Relieved</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>GCH</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Sad</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>GCH</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Tired</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>GCH</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Worried</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>GCH</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

* Numbers represent how many residents categorized a given emotion as intensely felt on reentry or not felt on reentry. The number of residents who categorized a given emotion as somewhat felt is not shown.

Categorical residents found it helpful to have a peer with whom they could travel and process emotions on their return. Although GCH residents met with program leaders on reentry, none identified these meetings as formal debriefings. Instead, GCH residents seemed to rely on advice that was “passed around.” First, expect reentry to be difficult. Second, do not process the GCH experience for the first 2 months; as one shared, “The advice that I got was just not to put any pressure on yourself to figure it out for 2 months. Just go with the flow and don’t try to make sense of anything” (#14).

GCH residents also described personal support systems that included family, church, spouses, friends, and GCH peers. Only those who spent substantial time in inpatient settings (≥25%) and regularly witnessing the death of children mentioned seeking the assistance of BCM-sponsored mental health providers during reentry.

DISCUSSION

Although pediatric residents may benefit from short-term (1-month) and long-term (12-month) GCH training, reentry to structured residency programs is not without emotional consequences. In line with Oberg’s theory of reverse culture shock, residents in this study reported a tapestry of positive and negative emotion responses as they moved toward a steady state of acculturating back into their residency program. Our qualitative data indicate that length of GCH experience is an important consideration. Categorical residents with 1-month GCH training felt positive excitement and left before mostly negative emotional responses set in. By virtue of their extended time abroad, GCH residents felt disconnection and frustration more intensely than categorical residents. Moreover, GCH residents who worked for extended periods of time in inpatient settings, and therein regularly witnessed children dying, had more challenging reentry transitions than their counterparts in outpatient clinic settings.

This study is among the first to describe the reentry of physician-trainees. As residents seek to determine where they belong in the professional world around them, they actively deconstruct old concepts of self (eg, student, intern, resident) and successively construct new identities as these identities are tested and proven in professional contexts.26,27
On the basis of what we learned from our participants, residency programs should consider how best to support residents' reentry after time abroad. Taking the perspective of her GCH peers, a categorical resident suggested, “We may not have a ‘one size fits all’ reentry program for global health residents, but we need to try to find those who are especially going to need help and make it available to them” (#11). Given the variability of residents’ reentry experiences, and in light of the risk of different mental health problems among individuals who encounter large-scale death in resource-limited areas, a standardized reentry program may not be effective. However, providing some type of safety net, above and beyond residents’ personal support system, is prudent. Moreover, explicitly identifying this safety net as part of residency programs’ commitment to aid reentry transitions seems advisable.

Our research explored the emotional responses of pediatric trainees on reentry into their residency program in the United States. By shedding light on reentry, we hope to prompt residency programs to provide tailored reentry safety nets so that future residents might have more resources with which to process their emotions.

ACKNOWLEDGMENTS

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REFERENCES


ABBREVIATIONS

BCM: Baylor College of Medicine
BIPAI: Baylor International Pediatric AIDS Initiative
GCH: Global Child Health
TCH: Texas Children’s Hospital
WHAT IS IN A NAME?: My wife and I married in the 1970s. After we had become engaged, we had to decide whether or not she would take my name after marriage. Of course, our parents did not think there was anything to discuss, but several of our female friends had kept their maiden names after marrying and one of our male friends had gone so far as to adopt his wife’s name. Moreover, my wife’s maiden name was so much more lyrical than her first name combined with my last name. After some discussion and with a touch of sadness, my wife decided not to keep her maiden name.

Whether to keep one’s maiden name after marrying remains an important issue. As reported in The New York Times (The Upshot: June 27, 2015), the percentage of women keeping their maiden name after marrying has waxed and waned over the past 50 years. Before 1970, fewer than 15% of married women kept their maiden name. In the 1970s, when I married, approximately 17% of women did so. This was often a political statement, particularly as at that time obtaining a driver’s license or passport without the husband’s name was challenging. However, since a nadir of 14% in the 1980s, the percentage of women keeping their maiden name has steadily climbed and is now at 22%. The reasons for the rise are complex, but probably not political. Many want to keep their social media presence and switching names would be too confusing. Others simply like their name and, having used it professionally, do not want to lose that identity. Women who are older, not religious, Jewish rather than Catholic if they are religious, have children from a previous marriage, have a higher income, or have an advanced degree and established career are more likely to keep their maiden name. Certainly we see that in our academic medical center as many physician couples have different last names. As for my wife, she still teases me about the difficulty of pronouncing her married name, but overall I think she seems quite happy indeed.

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