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Perceived Healthcare Provider Reactions to Patient and Caregiver Use of Online Health Communities

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Abstract

Objective: Many Internet users seek health information through online health communities (OHCs) and other social media. Yet few studies assess how individuals use peer-generated health information, and many healthcare providers (HCPs) believe OHCs interfere with patient-provider relationships. This study explored how individuals use OHC content in clinical discussions and how HCPs react to it.

Methods: We conducted in-person and virtual focus groups with patients/caregivers who visited OHCs (n=89). A trained moderator asked about reasons for membership, sharing OHC content with providers, HCP reactions, and preferred roles for HCPs. Two researchers independently coded verbatim transcripts (NVivo 9.2) and conducted thematic response analysis.

Results: Participants described OHCs as supplementing information from HCPs, whom they perceived as too busy for detailed discussions. Almost all participants shared OHC content with HCPs, although only half cited OHCs as the source. Most HCPs reacted negatively to OHC content, making participants feel disempowered. Despite these reactions, participants continued to use OHCs, and most desired HCP feedback on the accuracy of OHC content.

Conclusions: Individuals do not use OHCs to circumvent HCPs but instead to gather more in-depth information.

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Statement of Authorship / Contributions

All authors meet the requirements for authorship and submission. DR conceptualized the study, moderated focus groups, oversaw data collection and analysis, and led the writing of the manuscript. RM, JGR, and JA recruited participants, collected data, analyzed results, and wrote sections of the manuscript. JGR also moderated focus groups. AB wrote sections of the manuscript. AO and HS helped refine the study design, oversaw data collection and analysis, and provided substantial input on the manuscript. All authors have read and approved the final manuscript.

Conflicts of Interest

The authors have no conflicts of interest to report.

Patient Identifying Information

We confirm all patient/personal identifiers have been removed or disguised so the patient/person(s) described are not identifiable and cannot be identified through the details of the article.

Practice Implications: HCPs should discuss OHC content with patients to help them avoid misinformation and make more informed decisions.

Keywords

Online communities; social media; patient-provider communication; shared decision making

1. Introduction

Research has demonstrated that the Internet is an increasingly popular source of health information for U.S. adults, with 70–80% of Internet users seeking information online about symptoms, treatments, medications, and medical costs for themselves or loved ones.[1–4] Individuals report that such information improves their understanding of health issues, influences their treatment decisions, and leads them to share new information with their healthcare providers (HCPs).[5–8] Although search engines and medical Websites are the most popular starting points for online health information, approximately 25% of individuals also turn to social media sites.[1,3,9]

Online health communities (OHCs)—Internet-based discussion forums where individuals converse with one another about health topics—are the most robust social media sources for peer-generated health information.[9–12] Almost 20% of Internet users have participated in OHCs, and individuals with chronic conditions or who serve as caregivers are even more likely to visit OHCs.[3] Although treatments and medications are the most common OHC discussion topics, individuals also share experiences related to health insurance, HCP satisfaction, and self-care activities.[9, 13]

Despite the popularity of online health information seeking, there is conflicting evidence on how it affects patient-provider relationships. On one hand, some studies suggest that patients frequently share online information with HCPs and that HCPs view online health seekers positively, believing that these patients are more informed and engaged and that online information seeking has more benefits than harms.[14–16] Conversely, other research suggests that patients are sharing online information with HCPs less often and that most providers have negative attitudes toward online research.[5,17–18] These latter studies indicate that HCPs are often unaware of their patients' online activities, perceive patients who seek online information as misinformed and anxious, find it challenging to evaluate the credibility of online content, and fear that patients may act on online recommendations without first consulting their doctor.[5,14,16–19]

The evidence on how social media affects patient-provider relationships is even more limited. Very few studies have examined how individuals use peer-generated health information or how HCPs perceive this content, and the research in this area is limited by small sample sizes, poor response rates, and a lack of detail.[20–22] The existing research suggests that half of HCPs believe social media interferes with patient-provider communication and that many providers are concerned that OHCs spread misinformation or are forums for complaining about providers.[20–21]

Given the popularity of seeking health information through social media and the limited evidence on how OHCs affect patient-provider relationships, the purpose of our study was to explore how patients and caregivers use peer-generated health information from OHCs in clinical discussions and how they perceive HCPs as reacting to this information. (The study also examined other aspects of OHC membership—such as privacy, credibility, and how OHCs influence individuals' health decisions—and these findings are reported in a separate paper.) Specifically, we examined four research questions:

1. *OHC Membership.* To what extent do interactions with HCPs affect patient/caregiver participation in OHCs?
2. *Sharing OHC Content.* How often do patients/caregivers share OHC content with providers and how do they frame this information?
3. *Provider Reactions.* How do HCPs react to OHC content and how do patients/caregivers interpret these reactions?
4. *Preferred Provider Role.* What role do patients/caregivers want HCPs to play in their health decisions given the increasing availability of peer-generated health information?

2. Methods

We conducted ten in-person and virtual focus groups with OHC members to examine these research questions (Figure 1). Study participants included general OHC users (Groups 1–3); active/heavy OHC users (Groups 4–5); passive/light OHC users (Groups 6–7); OHC users recently diagnosed with fibromyalgia (Group 8); OHC users who recently made a major treatment decision related to clinical depression (Group 9); and users who all participated in the same multiple sclerosis OHC (Group 10). The first seven groups were conducted in person. The remaining three groups were conducted virtually on a live chat platform.

Focus groups are ideal for rapidly examining individuals' perceptions and behaviors in depth, which would be difficult using quantitative methods.[23] Although virtual focus groups are a relatively new methodology, some studies have documented their advantages and the comparability of in-person and virtual focus group data.[24–28]

We selected this ten-group design to reach a geographically diverse sample of OHC members, including individuals who may not have been able to participate in person, and to examine specific sub-groups (e.g., passive users). We held the groups from September to December 2011 in Washington, DC; Raleigh, NC; Chicago, IL; and online. The study was approved by ethics boards at RTI International and the U.S. Food and Drug Administration.

2.1 Eligibility Criteria

Eligible individuals had to be ages 18 or older, speak English, and have read or posted content in at least one active OHC for themselves (patients) or a child/parent (caregivers) within the last month. We included caregivers because half of online health research is conducted for someone else.[1] We visited OHC URLs provided by potential participants to confirm that site content was mostly or exclusively member-generated, posted within the last

week, and focused on a medical condition rather than general health and wellness. We excluded individuals who belonged to ineligible or inactive communities, who participated in OHCs as part of their job, and who worked in the healthcare or pharmaceutical industries.

In addition to these core eligibility criteria, we developed group-specific eligibility criteria in order to allocate participants according to our study design (Table 1).

2.2 Recruitment and Screening

We worked with three recruitment firms and one OHC to recruit a non-probability purposive sample for the study. The recruitment firms identified potential participants for Groups 1–9 using contact databases and advertisements. The firms contacted potentially eligible individuals by telephone, screened them for eligibility using an 11-item questionnaire, and scheduled eligible individuals for focus groups on preselected days.

For Group 10, the community host ([PatientsLikeMe.com](https://www.patientslikeme.com)) posted an advertisement within its multiple sclerosis OHC. Interested individuals contacted the community administrator, who administered a preliminary screening and referred potentially eligible individuals to the research team. A research team member then contacted these individuals by telephone, screened them for eligibility using the 11-item questionnaire, and scheduled eligible individuals for the focus group on a preselected day.

2.3 Data Collection

We developed a semi-structured moderator guide containing questions and probes on the topics of OHC membership, sharing OHC content with providers, provider reactions to OHC content, and individuals' preferred role for providers in using OHCs. We tailored this moderator guide into six versions for each of the study's sub-populations (e.g., active/heavy users). Although the tailored moderator guides were slightly different, most questions were asked in all groups.

For Groups 1–7, we conducted 2-hour in-person focus groups in market research facilities. We administered a written informed consent to participants upon arrival, and a trained moderator conducted each group using the tailored guide by asking questions, probing for details, and leading participants in an open discussion. One or two note takers documented major themes during the sessions. We also audio recorded the sessions and produced verbatim transcripts. Participants received a \$75 incentive after each session.

For Groups 8–10, we conducted 1-hour virtual focus groups on a real-time chat platform hosted by an online research vendor. We e-mailed consent forms and confirmation letters with login credentials to participants in advance. Upon login, participants acknowledged an electronic consent form. A trained moderator posted questions and probes from the guide, and participants typed responses visible to the entire group. Three note takers documented major themes during the sessions, and transcripts captured verbatim responses. Participants were mailed a \$50 incentive after each session.

2.4 Data Analysis

Once all focus groups were complete, we compiled the verbatim transcripts and the session notes. We then began the concurrent and iterative process of reviewing the transcripts/notes and developing a three-tiered coding scheme based on both the study's research questions and participant responses. The first level of the coding scheme organized participant responses into pre-determined topics that mapped to the research questions (e.g., first level code = provider reactions to OHC content). The second and third levels of the coding scheme were inductive and contained emergent codes based on participant responses (e.g., second level code = providers react positively/negatively to OHC info; third level code = providers encourage OHC participation/claim OHCs are an unreliable source).

We used these three tiers in order to create a hierarchy of coded responses. The first, second, and third levels of the coding scheme differed in their hierarchical location and in their specificity. (For example, a second level code would be broader and less detailed than a third level code, and it would encompass multiple third level codes.) This coding strategy allowed us to organize participant responses by topic while still ensuring that the data—not research team assumptions—drove the coding. This mix of concept-driven codes and data-driven codes has been documented as a rigorous and effective way to balance a study's conceptual framework with its raw data.[29–31]

During this process, two study team members independently reviewed and coded all transcripts in NVivo 9.2 qualitative analysis software. Team members examined participant responses, developed second- and third-level codes based on the raw data, and coded responses accordingly. Initial inter-coder reliability was 0.85 (percentage agreement). The research team then reviewed all coding discrepancies and came to consensus on coding those passages. Once coding was complete, we conducted thematic analysis by identifying consistencies in second- and third-level codes across the focus groups and, when applicable, within the sub-populations.[32] This analytic approach enabled us to identify patterns in participant responses, which we summarize in the study's findings.

3. Results

3.1 Participant Characteristics

A total of 89 individuals participated in the study (Table 2). The majority were female (65%), Caucasian (70%), and had a college degree (70%). However, minority races (30%) and individuals without college degrees (29%) were also represented. These demographics are consistent with previous research showing that females, Caucasians, and college graduates are more likely to seek health information online than other demographic groups. [1]

Participants reported visiting 77 distinct OHCs representing 50 different medical conditions. These conditions ranged from acute (Achilles tendon) to chronic (depression), symptomatic (Crohn's disease) to asymptomatic (high blood pressure), and non-life-threatening (club foot) to life-threatening (breast cancer). On average, participants belonged to two OHCs (range 1–6) and visited those OHCs 11 times per month (range 1–40 times per month).

Participants were most likely to visit OHCs hosted by Websites with multiple illness-specific forums (e.g., WebMD.com) and OHCs hosted by nonprofit organizations (e.g., Crohn's and Colitis Foundation of America). However, others reported visiting unaffiliated OHCs (e.g., LivingWithFibro.org), OHCs hosted by insurance companies (e.g., BlueCross BlueShield), and OHCs hosted by community forums (e.g., MDJunction.com).

3.2 Reasons for OHC Membership

Participants reported two primary reasons for joining OHCs. First, most participants described a desire to learn about their (or a loved one's) health condition and the treatment options. In many cases, participants reported wanting to read about others' experiences managing the condition, especially if participants had been recently diagnosed. Second, other participants joined OHCs to seek emotional support from individuals dealing with similar diagnoses. In these cases, participants described wanting to communicate with "like-minded people" who understood their emotional and clinical challenges.

In particular, several participants reported that dissatisfaction with their HCP's ability to meet these information and emotional needs influenced their decision to join OHCs. In some cases, participants reported that their providers' limited availability and brief clinical appointments made it difficult to get answers, especially about non-clinical treatments, illness self-management, and emotional support. Consequently, these participants reported visiting OHCs to ask peers about these topics.

Group 3: "Doctors don't have the time or aren't able or willing to give the time to really sit down and explain things."

Group 9: "My psychiatrists were not answering the questions about how I felt."

Group 3: "We can't necessarily rely on a doctor who has got, you know, hundreds, if not thousands, of patients to really take the time to look at our specific profile."

Other participants described their HCPs as being unsupportive of alternative treatments and unwilling to spend time explaining the advantages and disadvantages of different treatment options. These participants described feeling uncertain that the providers' recommended treatment was best, and they stated that they visited OHCs to learn more about the treatment options available.

Group 2: "When I was diagnosed in August, it was by a surgeon. His only solution is surgery. When I asked him for alternatives, he didn't offer any."

No participants reported having a HCP who referred them to an OHC or recommended that they join one.

3.3 Sharing OHC Content with Providers

Almost all participants reported using the information they learned in OHCs to guide discussions with HCPs, especially discussions about diagnosis and treatment. However, participants described sharing OHC content with providers in two different ways. Approximately half of participants reported explicitly sharing OHC content with HCPs by

citing specific posts, sharing printouts of OHC discussions, and requesting provider feedback on peer experiences.

Group 1: “Sometimes I will ask the doctor and say ‘Well, this is what I’ve heard’ or ‘This is what I saw on the sites’ ...and get their opinion on it.”

Group 10: “I try to bring a printout from the community every time I go to the doc.”

Conversely, the other half of participants reported integrating OHC information into HCP discussions without explicitly citing OHCs as the source. Participants explained that they used OHC content to identify discussion topics, inform questions, and inquire about alternative treatments in conversations with providers. Interestingly, passive/light OHC users were no more likely to describe using this indirect strategy than active/heavy users.

Group 10: “I usually just use the information to develop questions for [my doctor]. I will also share other people’s experiences with him.”

Group 6: “I don’t really phrase it as ‘I read this online’ because that’s just not going to go over well. I just go in with some information all ready, and it triggers me to ask questions based off of that information.”

Some participants reported using this second approach because they encountered HCPs who reacted negatively to explicit OHC citations in the past. Others reported they did not mention the information source because they did not think it was relevant to the discussion.

Group 5: “I kind of watch the way you say it because you don’t want to offend [doctors]. I would just kind of say ‘I didn’t know whether it could be this’ ...and introduce it like that.”

Group 9: “I don’t let them know where I got the info per se. I just bring it up.”

3.4 Provider Reactions to OHC Content

When participants explicitly shared OHC content with HCPs, many reported that their providers reacted negatively. Specifically, participants reported that HCPs often discounted OHC information because participants found it online or because those posting the information did not have clinical training. Participants reported that some HCPs also discouraged future online research, implying that the Internet was an unreliable source.

Group 9: “Doctors, in my opinion, often invalidate my use of the Internet.”

Group 3: “Mainly he felt that, you know, it was from the Web, therefore it was not necessarily all that [valuable].”

Group 4: “I’ve actually had one tell me ‘You don’t know what you’re talking about.’”

When HCPs reacted negatively, participants often inferred that the providers felt professionally challenged and marginalized by OHC content and by participants’ online research. Other participants described feeling disempowered and chastised by HCPs’ negative reactions, and some reported seeking second opinions or changing providers after

the encounter. However, no participants reported altering their OHC behavior because of negative HCP reactions.

Group 5: “It’s like [sharing OHC content] is discrediting their credentials.”

Group 5: “[My doctor] is always saying ‘If there was something out there that I think you would need, don’t you think I would tell you?’”

Group 10: “I hope doctors understand we need second op[inion]s...They are a part of our team, not the boss.”

Nevertheless, some participants reported that their HCPs reacted positively to OHC content and were supportive of participants’ outside research. These participants explained that their HCPs discussed OHC information with them and, in some cases, used it to inform treatment decisions. According to participants, some HCPs even encouraged participants to continue seeking online resources. Group 10 participants dealing with multiple sclerosis were more likely to report positive provider reactions than other participants.

Group 10: “Mine have all been open and impressed with knowledge obtained by me via the site.”

Group 3: “I brought this up to the specialists, and we discussed it over the phone, by e-mail, and they responded ‘Okay, let’s try this new drug’...I found them very responsive.”

Group 3: “I read the publication beforehand, and I dog-eared it and tabbed the places... where I had questions and wanted to share information with the doctor. He was very impressed with it. He said ‘Where did you get this?’ And I told him, and he said, you know, ‘Can I just look through it for a couple of minutes?’”

When HCPs reacted positively, participants reported feeling good about their OHC participation and online research. Many of these participants stated that HCPs expect patients to be proactive and seek additional information online. Other participants reported that their HCPs interpret their outside research as an investment in their healthcare.

Group 9: “That is why I like him...Others have not been [willing to consider community info], which is one of the reasons I stopped going to them.”

Group 3: “I think they welcome [OHC research]...because it means that they’re not solely responsible for what goes on...You’re taking your part, responsibility, too.”

Group 10: “My neuro greatly respects [the OHC] and what I am doing...Sometimes I bring things to her that she hasn’t seen.”

3.5 Preferred Role for Providers

Despite many HCPs’ negative reactions, almost all participants reported that providers are a valued information source and that they desire HCP feedback on the accuracy of OHC content. Participants often described their preferred role for HCPs as being open-minded

about the OHC content that participants share, offering feedback on the validity of OHC-based recommendations, and engaging in shared decision making with participants.

Group 1: “It’s just helped me have...more of a conversation with my doctor rather than just being, you know, have a one-sided, just listening. I feel like I can be more active in that interaction.”

Group 6: “...to go in feeling like you at least know maybe what to expect...and you know what questions to ask. Because sometimes going to the doctor is intimidating and then they...use the medical talk and you’re like, ‘I don’t really know what that means,’ so at least if you’ve read a little bit, you feel more prepared and can say, ‘Well, what about this?’”

Group 4: “For me it’s kind of a building block thing... You pull together, and you start building a decision out of the information that you can...It’s not going to make 100% of your decision. It’s just a part of it based on all your different sources of information and your doctor.”

4. Discussion and Conclusion

4.1 Discussion

This study contributes new evidence into how patients and caregivers share peer-generated health information with HCPs, how providers react to this information, and what role patients/caregivers envision for providers in an age of readily accessible peer health experiences. Previous research suggests that patients frequently misjudge the quality of online health information, and many HCPs fear that social media sites spread misinformation and eclipse provider input into individuals’ health decisions.[20–21,33] Yet most individuals in our study joined OHCs to seek emotional support or to learn about their (or a loved one’s) illness, and nearly all individuals shared OHC information with their HCPs with the goal of obtaining feedback on the information’s accuracy and relevance. Even when individuals joined OHCs because providers were not meeting their informational needs, these individuals still expressed a desire for provider feedback on OHC content.

As with traditional online sources, participants reported that HCPs had mixed reactions to information from OHCs and social media sites.[14,16–19] Although some were supportive, many HCPs reacted negatively to OHC content by discounting its accuracy, discouraging online research, and positioning themselves as the primary information source. These reactions often frustrated patients/caregivers, who occasionally responded by seeking second opinions or new HCPs. Perhaps more importantly, negative HCP reactions did not discourage these patients/caregivers from participating in OHCs. Instead, individuals seemed to react by not citing OHCs as a source in subsequent HCP discussions.

From a theoretical perspective, this study suggests that OHCs can be a facilitator of, rather than a barrier to, shared decision making between patients/caregivers and HCPs.[34–35] The shared decision making model suggests that HCPs can facilitate shared decisions by presenting treatment options, outlining the benefits and risks, and helping patients/caregivers to evaluate these options against their own goals and preferences.[36–37] However, HCPs

often cite limited time as a barrier to this process,[38–39] and patients/caregivers in this study expressed a desire to learn about not only the medical aspects of their illness and treatment options but also the emotional and logistical aspects. Consequently, OHCs may enable patients/caregivers to learn more about their options than they would in a clinical consultation alone while still serving as a springboard for patient-provider discussion and shared decision making.

Given its design and methodology, this study has several limitations. First, the findings represent individuals' self-reported attitudes and behaviors and their reports of HCP reactions. Focus groups with HCPs or observation of patient-provider interactions might yield different results. Second, we conducted the study with a purposive sample of active OHC members that was limited in size, demographics, and geography. This restricts the generalizability of the findings, which may not represent the attitudes and experiences of all OHC participants (e.g., individuals who visit infrequently or become inactive) or other social media users. Third, our study covered other OHC-related topics (e.g., privacy and credibility), which limited our ability to explore participant responses more deeply with probing questions. Fourth, we collected data in focus group settings, and participant responses may have been influenced by group dynamics. Finally, the virtual sessions were shorter than the in-person sessions, and virtual group participants' typing skills likely affected response speed and volume.

Additional research in this topic area could add to the growing evidence base on “e-patients” and should examine three aspects.[35,40] First, this study's qualitative findings should be confirmed through quantitative research with a representative sample and should investigate potential differences by age, race, education, health condition, and role (patient versus caregiver). Second, qualitative studies with HCPs should assess their attitudes and reactions to OHC content directly and identify barriers/facilitators to reviewing OHC content with patients. Finally, the field would benefit from observational and longitudinal studies that observe patient-provider interactions when social media content is shared and track how these discussions affect the patient-provider relationship in terms of trust, satisfaction, and decision making.

4.2 Conclusion

Patients and caregivers participate in OHCs to learn more about health conditions and to seek emotional support. They do not use OHCs to circumvent HCPs but instead to gather more in-depth information than HCPs typically provide. Although patients/caregivers value OHC input, they often share this information with providers to determine if it is accurate and relevant. Negative HCP reactions may jeopardize patient-provider relationships by obscuring where individuals find health information, discouraging discussion of OHC content, and in some cases, prompting individuals to seek other providers.

4.3 Practice Implications

This study has two primary implications for HCPs. First, providers should acknowledge and discuss social media information with patients/caregivers. Individuals understand that not all social media content is accurate, and they desire providers' feedback on the credibility and

relevance of information they encounter. By discussing the content that patients/caregivers share, providers can help them to avoid misinformation. In contrast, negative reactions may not deter patients/caregivers from using OHCs but may jeopardize open communication with providers.

Second, providers should acknowledge their limited availability and consider referring individuals to trusted online resources. Providers are increasingly prescribing “information therapy” to their patients,[8] and connecting individuals with these resources may educate them about available treatment options and promote more informed decisions.

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Figure 1.
Focus Group Populations, Locations, and Sample Sizes

Table 1.**Participant Eligibility Criteria by Group**

Groups	Population	Eligibility Criteria
All	All Participants	Aged 18 or older English speaking Visit at least one active online health community focused on an illness or medical condition [*] Not employed in healthcare or pharmaceutical industries Community participation is not part of job
1–3	General Users	Visit community at least once per month
4–5	Active / Heavy Users	More likely to post information on site than read it Visit community at least once per week
6–7	Passive / Light Users	More likely to read information on site than post it Visit community at least once per month but less than once per week
8	Recent Diagnosis (Fibromyalgia)	Diagnosed with fibromyalgia within last 12 months (or family member diagnosed in last 12 months) Visit a community focused on fibromyalgia at least once per month
9	Recent Treatment Decision (Depression)	Diagnosed with clinical depression (or family member diagnosed) Made a major treatment decision related to depression within last 12 months Visit a community focused on depression at least once per month
10	Single Community (Multiple Sclerosis)	Diagnosed with multiple sclerosis (or family member diagnosed) Visit the PatientsLikeMe MS community at least once per week

^{*} We verified that OHCs were active and eligible by visiting OHC URLs provided by potential participants. We confirmed that site content was mostly or exclusively member-generated, posted within the last week, and focused on a specific medical condition.

Table 2.**Participant Demographics**

Characteristic	In-Person Groups (n=65)	Virtual Groups (n=24)	Total (n=89)
Sex			
Male	24 (37%)	7 (29%)	31 (35%)
Female	41 (63%)	17 (71%)	58 (65%)
Age (years)			
18–24	6 (9%)	0 (0%)	6 (7%)
25–34	12 (18%)	4 (17%)	16 (18%)
35–44	12 (18%)	8 (33%)	20 (22%)
45–54	19 (29%)	8 (33%)	27 (30%)
55–64	13 (20%)	3 (12%)	16 (18%)
65–74	3 (5%)	1 (4%)	4 (4%)
Ethnic Background			
Caucasian	43 (66%)	19 (79%)	62 (70%)
African American	15 (23%)	2 (8%)	17 (19%)
American Indian or Alaska Native	0 (0%)	0 (0%)	0 (0%)
Hispanic	1 (2%)	1 (4%)	2 (2%)
Asian	1 (2%)	1 (4%)	2 (2%)
Hawaiian or Pacific Islander	2 (3%)	0 (0%)	2 (2%)
Other	3 (5%)	1 (4%)	4 (4%)
Education *			
Less than High School	1 (2%)	0 (0%)	1 (1%)
High School	0 (0%)	3 (13%)	3 (3%)
Some College or Technical School	12 (19%)	10 (42%)	22 (25%)
College Graduate	33 (52%)	6 (24%)	39 (44%)
Some Graduate School	5 (8%)	1 (4%)	6 (7%)
Graduate School Degree	13 (20%)	4 (17%)	17 (19%)

* Data missing for one participant