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Promoting Optimal Native Outcomes (PONO) by Understanding Women's Stress Experiences

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Abstract A growing body of evidence links stress with mental illness and chronic disease. Existing scales of women's stress fail to capture the daily stressors of lowincome, rural women. We explored the psychosocial stressors of local women residing in a rural Hawaii community with a large Native Hawaiian and Other Pacific Islander population. We recruited women, aged 18–35 years, at a community health center. We convened four focus groups to elicit information about women's stress. We identified key themes from the focus group data to generate questions that target concerns raised by participants. These were corroborated by additional focus groups. Thirty-six women participated in the study. Seven stressor themes emerged: intimate relationships—limited partner assistance, gender stereotype; family and home life—feeling like an outsider, lack of respect; childrearing—quality and affordable childcare, conflicting discipline styles; time for self—never-ending duties, being too tired to relax; neighborhood environment—safety concerns, not feeling part of the community; workplace—workload and transportation obstacles; and finances—making ends meet and arguments about money. Women in this study articulated a broad range of daily stressors. Sociocultural factors leading to feeling like an outsider within their own family, intercultural marriage conflicts, and perceptions of community discrimination are not included in other published scales. Our focus group investigations thus provided critical knowledge for developing a community-relevant scale. This is a prerequisite for developing and testing innovative intervention strategies designed to reduce stress in this population. We believe that reducing stress is necessary to mitigate the negative effects of stressors on physical and mental health among women in this rural community.



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Introduction

Chronic stress is associated with chronic diseases such as coronary heart disease, diabetes, and major depression (Cohen, Janicki-Deverts, & Miller, 2007; Nabi et al., 2013). In women, stress during pregnancy is linked to birth-related morbidity and unfavorable infant and child health outcomes (Kingston, Heaman, Fell, Dzakpasu, & Chalmers, 2012a; Schetter, 2011). The concept of "stress" has several meanings. We believe that it is important to draw clear distinctions between (a) stressors, which are events and conditions which require adaptation, such as divorce or job loss (Meyer, 2003; Wichers et al., 2012); (b) perceived stress, the subjective experience associated with a stressor reflecting one's capacity to cope (Chou, Avant, Kuo, & Fetzer, 2008; Cohen, Kamarck & Mermelstein, 1983); and (c) stress symptoms, which are the negative physiological and mental health manifestations of prolonged stress (Wei et al., 2010). Based on the transactional theory of stress, psychosocial stress develops when an individual is exposed to a stressor; perceives the stressor as threatening; assesses their personal, social, and cultural resources; and utilizes coping mechanisms to mitigate the stressor (Lazarus & Folkman, 1984). In addition to assessing exposure to stress, appraising its intensity is also important (Cohen et al., 1983).

Stress among minority populations, which has been extensively studied, has generated inconsistent and conflicting conclusions (Goebert, Morland, Frattarelli, Onoye, & Matsu, 2007; Hobel, Goldstein, & Barrett, 2008; Troxel, Matthews, Bromberger, & Sutton-Tyrrell, 2003). While the vast majority of previous studies demonstrate that minority, rural, and economically disadvantaged women report a high number of stressful life events, this does not always translate to higher levels of perceived stress (Kingston et al., 2012a). Some investigators report higher rates of psychological distress among minority populations when compared to non-minority populations, while others report rates that are similar (Cutrona et al., 2005; Evans, 2004).

For example, compared with non-Hispanic Whites, low-income minority women experience a greater number and frequency of stressors (Cutrona et al., 2005; Evans, 2004; Glazier, Elgar, Goel, & Holzapfel, 2004). In addition, their lives are more chaotic and crisis-oriented, they possess narrower social networks, and they endure more fragmented relationships (Evans, Gonnella, Marcynyszyn, Gentile, & Salpekar, 2005). In contrast, Kingston, Tough and Whitfield (2012b) found that less than one-third of women with three or more stressful life events report any stress despite their circumstances. They also found that minority women who experience multiple negative life events were less likely to report being affected by the stressors if they resided in rural neighborhoods.

An explanation for these divergent results remains speculative. It may be that some women with frequent stressful life events did not perceive these events as



stressful because they successfully adapted to their circumstances and environment. Alternately, existing instruments may not adequately identify or measure the array of stressors and stress experienced by diverse minority populations, since most published instruments were developed and validated on Caucasian and other majority populations.

Studies of stress in Hawaii's women have shown that relatively few pregnant Pacific Islander women exhibit higher levels of stress, in contrast to convincing clinical observations to the contrary (Goebert et al., 2007; Onoye et al., 2013). Researchers believe that these clinical observations were not effectively captured using existing generic scales. Bigbee (1987) found that the level of stress among rural and urban women is comparable, although the stressors to which they were exposed varied considerably. This further complicates the assessment of stress in diverse populations. Clearly, surveys and other investigative tools involving distinct minority populations must be culturally sensitive and contextually appropriate for their development and delivery in order to accurately identify both the unique stressors and perceived stresses that are affecting these communities.

This study is the first step in a larger effort, utilizing a multi-disciplinary, collaborative partnership of community and academic researchers, to ascertain the full breadth of women's experiences in order to promote optimal native outcomes (PONO) in the community. From a Native Hawaiian perspective, being *PONO* means doing the right thing and taking care of yourself, your family, friends, community, and environment, all of which are interrelated (Kim, Withy, Jackson, & Sekaguchi, 2007; Withy, Lee, & Renger, 2007). We developed Project PONO to gain a greater understanding of the causes and impact of women's stress on maternal mental and physical health, as well as infant and child health. This was done in order to develop effective interventions. The purpose of this preliminary study is to explore the attitudes, beliefs and feelings regarding stressors, their perceived intensity, and their effect on women residing in a low-income, rural, primarily Pacific Islander community, in order to develop a culturally- and community-appropriate scale assessing perceived stress.

Methods

Sample

This project was based at a large, rural, federally qualified, health center (FQHC) located on the west coast of the island of Oahu in Hawaii. FQHC are community-based organizations that provide comprehensive health services to underserved communities and qualify for certain federal funding support (U.S. Department of Health and Human Services. Centers for Medicare & Medicaid Services, 2016). The Community Health Center (CHC) is located about 35 miles from Honolulu and serves two communities, Waianae and Nanakuli, that are home to approximately 43,000 residents. These include the largest communities of Native Hawaiian families and a growing number of Pacific Island immigrants. Over 50% of the residents of Waianae (population 30,832) and 80% of the residents of Nanakuli



(population 12,666) are Native Hawaiian or of mixed Native Hawaiian ancestry (Hawaii Department of Business, Economic Development and Tourism, 2012). Both communities have centralized town centers with public schools, a few grocery stores, and many fast food restaurants and convenience stores. Many of the community members live in single-family dwellings that often provide shelter for large extended families.

These communities are impoverished: per capita income is among the lowest in the State, and unemployment is almost double that of the State overall. While the community is connected to numerous state funded social programs and by public transportation to downtown Honolulu, the effects of poverty and isolation permeate the lives of many community members by creating constant challenges. The population in this community is affected by many of the same stressors as other low-income communities including substance abuse, chronic and complex trauma, as well as domestic abuse and child maltreatment (Hawaii State Department of Health, Family Health Services Division, 2012). In addition, this population of Native Hawaiians and other Pacific Islanders is subjected to unique stressors including historical trauma and discrimination.

The purpose of our initial set of focus groups was to describe the experiences and identify common stressors and coping mechanisms among women in order to develop a culturally relevant and psychometrically sound stress inventory. We focused on women of childbearing age, 18-35 years of age, in order to understand the complex experiences of women managing early careers, young families, and intimate and multi-generational relationships. Initially, we conducted four focus groups with a total of 25 women living in the community to assess the types of stress women in this community experience. Ninety-four percent were of mixed Pacific Islander descent and the remaining 6% were Caucasian. Most were from lowincome families and all spoke English. While 60% of the participants were employed, many had low paying jobs and were sole income providers for their families. The maximum number of children reported was seven. Only three women had no children. Next, we convened two additional focus groups, with 11 more participants, to solicit reactions to the questions formulated by members of the initial focus groups. As in the initial groups, a majority of women were of mixed Pacific Islander descent, employed, with children, and living in the local community.

Procedures

The project was approved by both the CHC and University of Hawaii Institutional Review Committees. We used flyers and word-of-mouth messaging throughout the CHC to recruit participants. All participants provided consent prior to the start of their focus group. Participants received a \$20 gift card in appreciation of their time and travel.

The four focus groups were structured to encourage considerable free discussion within a 60–90-min timeframe. Each group began with an introduction to the purpose of the study, informed consent, and a description of focus group procedures. We then asked each participant to "Tell us a little bit about yourself" which



included: the size of their family, whether or not they were employed, and how long they have lived in the community. We next asked focus group participants, "In thinking about your daily life, what does stress mean to you?" After initial responses from each participant, focus group facilitators prompted participants to explore additional stress-related themes, especially around living conditions and finances. Finally, facilitators asked participants: "All things considered, what would you say is the major cause of stress in your life?" and "Is there anything about stress that we haven't talked about that you would like to discuss before we leave today?"

Dialogue from the focus groups was recorded verbatim on a poster board in real-time. This was accomplished in the front of the room where participants could see what was written and authenticate the content. Participants freely commented about inaccurate and incomplete transcription and added details as needed. Moreover, a focus group observer recorded non-verbal communication, as well as the flow and frequency of conversation. A clinical psychologist from the Health Center attended every session to address any immediate psychological reactions of the participants. Because of the potential sensitive nature of topics, we followed the recommendations of the CHC Research Committee and opted not to audio or video record the sessions. The collaborative research team served as the focus group moderators, recorders, and observers and consisted of clinicians and researchers from the University of Hawaii, John A. Burns School of Medicine's Departments of Pediatrics, Psychiatry, and Native Hawaiian Health, as well as the CHC. Most are life-long Hawaii residents with extensive experience working in Hawaiian communities.

The research team independently reviewed the focus group transcriptions, extracted themes, and then met to discuss and reach consensus on the major themes. The research team then carried out a second review of the transcripts to identify subthemes, quotes, and potential statements for inclusion on a future, culturally relevant scale to assess women's stress. The team generated a list of 68 questions to target the relevant concerns raised by participants, with many of the terms and phrases extracted verbatim. Next, we reviewed the list to assess cultural validity and whether or not the questions captured the content and context of the focus group transcript.

We then presented the set of questions to two more focus groups, consisting of 11 additional women. We asked participants to rate whether the question applied to them, or someone they knew. They responded to each question by holding up one of three pre-printed cards with the words "keep" for keep on the list, "toss" for remove from the list, or "?" for "I'm not sure." At the conclusion of each group of questions, we asked participants to rate the three best questions from each group, and whether they wanted to add any further questions. Finally, at the close of each focus group session, the research team again asked participants to identify any other types of stressors they felt should be included on the list. The collaboration team then reviewed the results and selected three to five of the most salient items for each topic.

Analysis

The research team used narrative analysis, based on grounded theory, emphasizing components for stress and coping. Grounded theory refers to themes emerging



inductively from exploratory qualitative data, such as stories and focus group transcripts (Creswell, 1998; Denzin & Lincoln, 1994). Our team of academic and community researchers identified and verified themes, and then confirmed them through the second set of focus groups. This process insured that the final selection of themes and questions only included information that had reached consensus. Finally, concepts of stress among women from the community were highlighted in current narrative analyses (Allen et al., 2006; Mohatt & Thomas, 2006).

Results

The results we present constitute a sub-set of data drawn from a larger study on women's stress and health conducted by university and CHC partners. Results shown in Table 1 highlight themes related to perceived stress. The first column identifies the main element of the primary stressors, the second lists the specific components of each, and the third provides exemplary quotes. They are ordered from greater to lesser relevance. We recognize that there is some overlap in these listings.

In addition to the challenging aspects of the stressors listed in Table 1, women reported some positive aspects to the stressors. For example, while many women complained about their relationships, others boasted that their primary relationship was their major source of support. Similarly, regarding the community, while some felt trivialized by their environment, others felt supported by it. We found some stressors unique to the community, including differences in cultural values and traditional gender roles. We describe details for each of these elements below.

Intimate Relationships

The topic of intimate relationships consumed the most time during the focus groups. While a few women had supportive partners, the majority experienced difficulties in their intimate partner relationships. Women reported feeling like they were "in it alone." They stated that they had no support from their husbands, boyfriends, or partners in their day-to-day home life activities, particularly if children were involved. Some felt solely responsible for raising their children. This sentiment prompted considerable nonverbal concordance from the other participants. Many commented on how their partners were more like "one of their children." Other participants experienced difficulty in trusting or confiding in their partners and/or feeling belittled.

Many identified traditional stereotypical gender expectations, in contrast to the gender egalitarianism of modern Western culture, as a significant source of stress. The stress was augmented by ethno-cultural beliefs and expectations of their partners and his family. To be sure, some women had to conform to the demanding expectations of their in-laws in taking care of their husband and family. Others found comfort and support in these traditional roles. Another theme present was "differences in values" and the unspoken rules between partners.



 $\textbf{Table 1} \ \ \textbf{Elements of common stressors among women, ages 18-35, from a rural, Pacific Islander Community}$

Main elements	Specific components	Narratives
Intimate relationships	In it alone	Ti-Leaf: "My husband doesn't work, all he does is go fishing he no help watch the kids"
		Ginger: "He only helps out when he goes to his mom's house why he cannot do that when he at home?"
		Tiger Lily: "He driving me nuts, he's like having third kid"
	Gender stereotypes	Mickey: "Mothers take more action, do more of the caretaking, and contend with traditional and modern roles as females"
		Tiger-Lily: "I'm the parent of 3 boys. I go to work and my partner helps the family financially, but he doesn't have mom roles in addition to work like I do"
	Different values	Yogi: "You have to keep your mouth shut, [other Pacific Islander] culture [is] different, especially when you are not [other Pacific Islander]"
		Ginger: "My husband only respond when I speak to him in [other Pacific Islander] language"
	Controlling	Petunia: "Don't want to listen, never talk to your husband about your problems he'll use it against you"
		Animal: "Male partners are overprotective and become jealous of other males who work or interact with me"
		Gardenia: "We have to tell them everything, but the same rules don't apply for them it's not the case for them"
Family and home	No help	Bella: "[Family] you depend on them as support system, but don't always get support. Sometimes, you give, give, give, but when you ask for something, you don't get back. I live with my mom; it'll be good for a certain amount of time, but then things eventually get bad again. It's stressful to be taken advantage of by family"
		Kitty: "My mom is homeless I will feed her if I can, but my kids come first"
	Outsider	Bella: "Skin color can be too dark or white in the family"
		Animal: "Cultural clash and family expectations here versus mainland can be stressful"
	Lack of respect	Gardenia: "My mother-in-law stresses me out she tells me how to parent she always needs the last say"
		Ginger: "What difference does it make if I go to McDonald's or Burger King?"
Childrearing	Finding quality childcare	Strawberry: "If I needed anyone's help, I depend on me"
		Mickey: "Finding a trusting baby sitter and affordable daycare in this community ain't possible"
	Worry not good parent	Mickey: "My mind is always running. I worry I'm not a good parent"
		Mystique: "I notice that they all happen at once. The 3 year old wants your attention, and at the same time, the baby starts crying; then you need to make dinner. All are pulling your attention at once—I don't know if I'm doing a good job for any of them"
	Children don't obey	Tiger Lily: "My children don't listen to what I say. They only do chores when they want something"
		Lily: "Discipline's not working especially the older they get. Time-outs don't work, they need lickens [laughter from group] they threaten to call the cops if you give them lickens"
	Different discipline styles	Animal: "We grew up with different values and different rules. Our discipline styles are so different"



Table 1 continued

Main elements	Specific components	Narratives
Time for self	Never-ending duties	Minnie: "Kids go to bed, and you think that anytime after 10 p.m. should be some me time, but you get caught up with preparing for the next day for the kids"
		Zucchini: "My son, he'll find me, I have no hide-outs"
	Too tired to enjoy	Mickey: "Mind is always running; trying to do things between work time. Hardly any sleep"
		Mystique: "I agree no sleep. Seems like everything needs to be done all at once"
	Worried about responsibilities	Strawberry: "Mentally you are not away"
		Animal: "Even if I take a half hour of me-time, I still would need to come home to address all the stressors"
Neighborhood environment	Safety	Ti-Leaf: "Some neighbors are alcoholics and drug dealers"
		Minnie: "I was living on the beach for a while. It's safer there than my old neighborhood"
	Not from/part of community	Ginger: "[My] neighbors are always in my business I feel like I'm being watched because I'm not from the community"
		Petunia: "I like leave [the community]. So much negative attitudes"
		Turtle: "People are usually friendly but you can get in trouble if you look at someone [the wrong way] in the store when you get your EBT card you never take the last box of donuts or steak"
Work	Workload	Mickey: "Work ten hours, school, building my house. Need time!"
		Minnie: "That's your mommy responsibilities"
	Transportation difficulties/distance to jobs	Cherry: "Gotta work close, cuz gotta pick up the kids"
		Celery: "I was living on the road—I'd come home mad at my kids and my husband I was hating my husband, kids and myself. So I got a job [near home] I needed quality time otherwise have a nervous breakdown"
Finances	Difficult to make ends meet	Lily: "We need the income my husband is the sole person making income right now"
		Mystique: "The bills are going up there's no money coming in"
		Ulu: "My mom had to work two full time jobs; I could see how it was stressful for her"
		Tiger-Lily: "The kids get expensive they always want name brand things, especially my teenage son"
		Zucchini: "Pay is not enough to pay rent[that's] why I only have one kid"
	Argue about money	Petunia: "The bills are going upthere's no money coming in so we end up fighting about money"

Pseudonyms were used

Finally, some individuals indicated that the manner that their partners attempted to "control" their lives was stressful, which is a stressor not presently described in standard stress scales. One participant complained that her partner prohibited her from working outside the home despite their financial need, ostensibly due to jealousy, insecurity, or traditional gender role expectations. Another participant described her partner's attempt to limit her exposure to outside friends. Her partner



would ask, "What time you coming home," and sent her multiple text messages while she was out. Some women also indicated a lack of trust in their intimate partner relationships and the existence of a double standard between women and their partners with regards to many issues including roles at home and relationships with extended family members and friends.

Family and Home

Participants expressed another topic of considerable concern as "no help." Indeed, some mothers were expected to provide not only for their children, but also for other family members. This is despite the community norm where families commonly live in an extended family setting in this low income, minority community. Other participants had parents in the community, but felt unable to rely on them when needed.

The women identified feeling like an "outsider" in the extended family as another theme. One participant expressed feeling like an outsider because of her skin color. Another disclosed that because she did not grow up in Hawaii, she found it difficult to assimilate. Another woman felt like an outsider due to her history of substance abuse. Ironically, she was still awaiting acceptance by her in-laws, who had already forgiven their son, her husband, of the same problem. Still others complained about a "lack of respect" from family members. For some, this took the form of disapproval by their mother-in-law regarding their parenting skills. In the extreme, some women felt as if they could never satisfy some of their family members, particularly their in-laws, even with simple matters such as choosing a fast food restaurant for dinner.

Childrearing

Many of the women acknowledged common stressors involving childrearing. Some participants expressed challenges related to "finding quality childcare." Several participants did not trust their children's caregivers, while others had difficulty finding affordable daycare. Some women voiced the desire for their parents and partners to assume some of their childrearing responsibilities. Unfortunately, most participants reported that their parents were of little help. Many of the women bore the burden of childrearing responsibilities without assistance or involvement from the child's father. For others, the father participated in some of the child rearing but most of the women felt that this was primarily their responsibility.

"Worrying about not being a good parent" emerged as another subtheme. Some participants reported a history of substance abuse or involvement of child welfare services. Still, many indicated a willing desire to do their best while feeling somewhat inadequate. To be sure, many women voiced their need to "put their kids' needs first," while others admitted difficulty in providing them the proper level of attention, especially when other family members were competing for their attention.

Some women voiced concern that their "children don't obey." One participant admitted difficulty in dealing with her son's bad behavior and disciplining him in the "right way." Another talked about disruption in her family routine when her



children were not cooperating. Still others raised concerns about their children being exposed to "different discipline styles" and conflicting values from their partners. Finally, one woman complained about the challenges of living with her in-laws, who were of a different ethno-cultural background, and how often she felt compelled to remain silent during their conversations about childrearing.

Time for Self

Participants described stress from having too little time for themselves. A subtheme of "never-ending duties" emerged: having too much to do because of childrearing, household, school, and work-related duties. Within this context, for many, the individual need to sacrifice time for themselves was a major stressor. One woman described the impact of self-neglect on her health. Another woman recounted that there was no space for herself or her possessions in her own home, while others voiced their agreement. The only participants who reported having time for themselves were women with older children and those without children.

Many women reported being "too tired to enjoy time for themselves." One woman reported she had difficulty in committing any thought to self-care. Other women disclosed that they lacked adequate time for sleep due to mounting responsibilities. One participant said she only relaxed when her children were asleep. Many participants reported being unable to enjoy time to themselves because they could not stop "worrying about their responsibilities." For some, time away didn't help because of the endless list of responsibilities that was awaiting upon their return.

Neighborhood Environment

Participants acknowledged concerns about their neighborhood, particularly in regard to "safety." They described scenes such as cars speeding and community members fighting in the street or dealing drugs. One woman insisted that her children remain inside her home after she witnessed a shooting and a stabbing. While she currently felt safer, she compulsively continued to locks her gates when her children played in the yard. Some women felt the need to monitor their neighbors' activities, while others had little interest in their neighbors' affairs. Others reported stress with neighbors "always in your business." But some acknowledged that neighborhood stress depended on whether or not they lived in a bad neighborhood.

Unexpectedly, some women admitted to "not feeling part of the community." They believed that they were being watched because they were not originally "from the community." One participant reported a desire to relocate because of these negative community attitudes, including "the way you look at someone in the store." Although she felt like an outsider, her sons considered themselves as "[local community] boys." Finally, one participant reported feeling like an outsider and declared: "I'm not from here."



Work

Some women recounted work related stressors, particularly "workload." Many expressed difficulties in balancing work duties with home responsibilities, including childrearing. Women described their responsibilities; working eight hours, then cleaning, cooking, and helping their children with homework. One participant commented that the responsibilities in caring for her two children made it impossible to work and assist her family financially. Other work stressors included "transportation difficulties" and "few nearby options for employment." One participant, concerned over unwelcomed attention from child welfare services, chose to live and work close to home in order to pick up her children on-time from after-school care. She explained that previously, she worked in town, spent considerable time commuting, and did not enjoy any part of her life. Other participants admitted that their children utilized public transportation to get to school and back because "my time is precious." But one woman expressed concern about the long commute times due to traffic: it was "slow going from one block to the next." Finally, several expressed the obvious benefit and utility of having a car instead of being dependent on public transportation.

Finances

Surprisingly, concern over finances was not a stressor that women, most of whom were impoverished, acknowledged without prompting. Many participants reported the "difficulty of making ends meet." Some reported challenges in paying bills, and being the sole family provider despite having a partner. One woman described her difficulties with unemployment. Another revealed how financial strains affected her mother. Some described how providing for their children made it difficult to make ends meet. One participant reported the necessity of purchasing items like diapers and gas, stating: "gotta buy the essentials." Still other women stated that kids "want more as they get older."

"Arguing about money" with their partners emerged as a related subtheme. Several women reported that their husbands controlled the money, invariably leading to arguments and conflicts. One woman reported that her financial strain was related to her partner's jealousy of other "guys" and his insistence that she remain at home and not work.

Discussion

The goal of this study was to describe personal perceptions of stress among women living in a rural, low-income Hawaii community. Participants described and agreed upon a variety of community-relevant stressors experienced in their daily lives. Stress related to "relationships" emerged as a major theme. Others included "family and home," "childrearing," "time for self," "neighborhood environment," "work," and "finances." Our results align with prior research on stressors among women, including gender-defined conflicts, the disproportionate burden of caretaking and



household duties, and conflicting priorities due to work and family demands (Shelton, Goldman, Emmons, Sorensen, & Allen, 2011).

Previous research has identified disadvantaged neighborhoods and economic strain as stressors in poverty research (Santiago, Wadsworth, & Stump, 2011). Neighborhood disadvantage refers to community exposures to crime and violence and living in close proximity to other neighbors. Economic strain results from day-to-day conflicts that arise from an insufficient budget, and the resulting disagreements among family members. Research also links poverty to: the lack of affordable quality childcare, transportation challenges, frequent moves and relocations to new communities, and exposure to discrimination (Ajrouch, Reisine, Lim, Sohn, & Ismail, 2010; Santiago et al., 2011).

Discrimination results in stress by restricting opportunities available to minority populations, low socioeconomic status, and residence in economically disadvantaged neighborhoods (Keith, Lincoln, Taylor, & Jackson, 2010). Women in such neighborhoods experience concerns over safety for themselves and their children, as well as a general sense of chaos in their lives (Hill, Ross, & Angel, 2005). Discriminatory stress can also affect day-to-day interpersonal interactions (Keith et al., 2010). Indeed, some women in our study reported discrimination from community members, as well as from members of their own families including their in-laws and intimate partners.

In our study, we observed that the choice of words and the sentence structure utilized in formulating questions, especially if framed within a context that women could relate to, was a critical factor in eliciting responses. Indeed, our focus group participants often did not relate to the language found in existing instruments, such as "social rejection." In contrast, phrases that proved relevant included: "feeling like an outsider in the community" or "outsider in their own family." Women also indicated cultural value conflicts with their intimate partners and family. This conflict presumably stems from the tenfold increase in interethnic marriages of the last few decades, involving nearly 60% of indigenous peoples (Lee & Edmonston, 2005). In Hawaii, 40% of marriages are interethnic, the highest rate in the nation (Wang, 2012). Unfortunately, individuals in interethnic relationships, or their grown children, may still encounter social stigma and discriminatory behavior (Solsberry, 1994). Finally, we emphasize that stressors related to discrimination and interethnic relationships are not found on previously validated instruments of perceived stress.

Community-participatory studies such as ours can successfully engage ethnic minority groups with the highest risk of health related disparities and the poorest access to care. We conducted our study in a rural, primarily Pacific Islander community. Our long-term partnership with the CHC providers, who fully participated in the design and conduct of the study, insured its success. As with other community-engaged studies, it is unclear whether our results are translatable to other urban and/or rural communities, although there is some evidence to support this contention in the literature (Corbie-Smith, Moody-Ayers, & Thrasher, 2004; Horn, McCracken, Dino, & Brayboy, 2008; Tunis, Stryer, & Clancy, 2003).

Our study has several limitations. First, we limited participants to women 18–35 years, primarily recruited from the CHC, where the focus group sessions were convened. While stressors identified by the participants were relevant to this



subset of women receiving care at the health center, it may not apply as well to the broader population of women residing in the community. Secondly, while we explored stressors related to cultural conflicts and discrimination, we did not deeply probe themes related to cultural or historical trauma or acculturation modes. This was beyond the scope of this preliminary study, with focus group sessions limited to 60–90 min. Nevertheless, we acknowledge the importance of historical trauma and acculturation in defining mental and physical health in minority communities (Kaholokula, Iwane, & Nacapoy, 2010; Salomon & Jagusztyn, 2008), including Native Hawaiians, and a need to incorporate these themes into future focus group discussions.

Third, we did not audio or video record the focus groups, which precluded any future independent review and analysis. However, our approach has been utilized with other rural and minority communities. Researchers who have worked in the community for many years performed the analysis. The results were then presented to a second group of focus group participants for validation and refinement. Thus, while we acknowledge the potential for bias among those conducting the focus groups and those analyzing the results, we believe that our research team remained impartial. Finally, a limitation often ascribed to qualitative research is the lack of power of the study findings. Thus, the small sample size of our study limits the strength of the conclusions made. Indeed, this supports the need for further research on a larger sample size to confirm these findings.

Understanding and reducing health disparities is a national public health priority (U.S. Department of Health and Human Services, 2015). Prior research demonstrates that chronic stress has a negative impact on women's physical and mental health, making validated measurements of stress critically important for screening vulnerable populations. Significantly, our investigation identified important, specific stressors and stresses that affect the women of this rural, low-income Hawaii community. We believe that this information will be crucial in developing a meaningful and culturally sensitive measurement tool.

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Compliance With Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

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