Running Head: Explaining Social Support among Breast Cancer Survivors

Talking about Cancer: Explaining Differences in Social Support among Chinese American and European American Breast Cancer Survivors

Becky Hsu,1 Yulia Chentsova Dutton,2 Inez Adams,3 Scarlett Gomez,4 Laura Allen,4 Ellen Huang,5 and Judy Huei-yu Wang5

Forthcoming in the Journal of Health Psychology


1Department of Sociology, Georgetown University, 37th and O Streets, N.W., Washington DC, 20057

2Department of Psychology, Georgetown University, 37th and O Streets, N.W., Washington DC, 20057

3Department of Social and Behavioral Sciences, Harvard T. H. Chan School of Public Health 401 Park Dr., Room 403-E, Boston, Massachusetts 02215

4Cancer Prevention Institute of California, 2201 Walnut Avenue, Suite 300. Fremont, CA 94538

5Department of Oncology, Cancer Prevention and Control Program, Lombardi Comprehensive Cancer Center, Georgetown University Medical Center, 3300 Whitehaven Street, NW., Suite 4100. Washington DC 20007

Corresponding Author: Judy Wang, 3300 Whitehaven Street, NW, Suite 4100, Washington, DC 20007, USA. Phone: 202-687-6306; Fax: 202-687-0305. Email: jw235@georgetown.edu
Talking about Cancer: Explaining Differences in Social Support among Chinese American and European American Breast Cancer Survivors

Abstract

Cultural models of emotional disclosure and its impact on seeking support are under studied in the context of cancer diagnosis. We argue that two different cultural norms must be considered: (1) the importance of emotional disclosure, and (2) attitudes toward seeking support from loved ones. Our interviews with 37 foreign-born Chinese American (CA) and 23 European American (EA) breast cancer survivors revealed differences in disclosure of cancer diagnosis and perception of social support. Both CA and EA survivors receive and provide emotional and social support with loved ones, but their manifestations of disclosure and help-seeking behaviors are culturally specific.

Keywords
Culture, emotional disclosure, social support, breast cancer, Chinese Americans
Introduction

Much work has focused on the beneficial effects of emotional disclosure and emotional support on the well-being of European American (EA) women with breast cancer (Helgeson and Cohen, 1996; Mols et al., 2005). Emotional disclosure is described in the literature as the process of translating emotions, particularly negative emotions, into spoken or written language (Pennebaker, 1995). Emotional support is a form of social support that focuses on emotion regulation via expression of care and concern (Burleson, 2003). Although emotional disclosure by targets of support is known to elicit emotional support from support providers (Horowitz et al., 2001), the two constructs are distinct. Despite what is known about the beneficial effects of emotional disclosure-support interactions more broadly, little research has investigated whether these results hold for cancer patients from different cultural backgrounds. Emerging work suggests that culture shapes models of emotional disclosure and support-seeking (Kim et al., 2008). We know that Chinese American (CA) women with breast cancer are concerned that disclosure of their cancer diagnosis may make their families worry (Kagawa-Singer et al., 1997) and become socially stigmatized (Ashing-Giwa et al., 2004; Wong-Kim et al., 2005). Since cultural norms influence the use of different types of social support (Wong and Lu, 2017) and attitudes toward displaying strong emotions (Chentsova-Dutton and Tsai, 2010), it is likely that cancer patients from different ethnic groups will
demonstrate distinct preferences for sharing their negative emotions with others and receiving social support. Thus, the ways in which CA women with breast cancer seek social support may systematically vary from their EA counterparts.

CAs form the largest ethnic group among Asian Americans; Asian Americans are the fastest growing minority in the US (US Census Bureau, 2014). Despite steadily increasing breast cancer incidence among CA women (Gomez et al., 2017), there is scarce research investigating how emotional disclosure is related to seeking social support in this population. One place to start is by examining CA women’s beliefs about sharing their distress with others. Beliefs are important to studying health as they often drive behavior, consequently shaping health-relevant outcomes (Kim et al., 2008).

Psychologists have identified two cultural models (i.e. common norms and scripts for social behavior) that foster different beliefs about emotional disclosure and support seeking among East Asians and others (d’Andrade and Strauss, 1992; Sasaki and Kim, 2011; Uchida et al. 2009;).

European American model.

The Cartesian model of the self that is dominant in European American cultural contexts construes the self to be defined by a subjective experience (e.g. thinking) and disconnected from social context (Wuthnow, 1989), with direct communication serving a critical role in bridging this divide (Habermas, 1981). Indeed, research in psychology and
sociology suggests that the mainstream cultural context in the US fosters an independent model of self with an emphasis on uniqueness, autonomy, and self-expression of the individual (Bellah et al. 1985; Markus and Kitayama, 1991). High levels of independence are promoted by (and, in turn, promote) the perception that relationships are voluntary in nature, with many opportunities to find novel social partners and relatively low costs of losing or weakening old connections (Oishi, 2010). These cultural factors are associated with heightened preference for and practice of emotional articulation of the self via direct emotional disclosure. Emotional disclosure fulfills dual goals of: 1) broadcasting the needs and motives of the autonomous self to others, and 2) facilitating novel relationships in contexts characterized by voluntary and relatively unstable relationships (Schug et al., 2010). Americans tend to view displays of distress as appropriate (Mortenson, 2008). Accordingly, this cultural context fosters a preference for emotional support, a form of support that acknowledges and reinforces emotional disclosure and is less likely to threaten the recipient’s autonomy than more tangible forms of support (Adams and Plaut, 2003).

*Chinese model.*

In contrast, collectivistic Chinese cultural contexts emphasize social harmony and relational goals and motives (Wei and Li, 2013). Relationships, particularly relationships with family members, are seen as a “given” fact of life. They are construed as relatively
stable and non-voluntary (Li et al., 2015; Oishi, 2010). Chinese ethics stress relational obligations (Munro, 1985), such as duty and action, while deemphasizing emotional expression. This model is encapsulated by the well-known Confucian phrase: “Actions speak louder than words” (zuo er yan bu ru qi er xing). Because negative emotion can disrupt relational harmony, Chinese contexts encourage emotional moderation (Bond, 1993; Russell and Yik, 1996). If one feels that someone is sad, one is culturally obliged to comfort the other person by showing sympathy or by putting oneself in their shoes. Knowing this, people do not want to oblige others to feel that sadness. Disclosure therefore has the risk of imposing an interpersonal demand on the other person, potentially inducing someone else to experience the same emotional vulnerability that they are feeling. Consequently, there is the sense that to truly be helpful to someone, it is preferable to avoid directly discussing the problem and to instead perform physical acts of support for them, like doing chores or preparing food. Accordingly, Chinese samples favor emotional moderation as well as informational and tangible forms of social support (Mortenson, 2008; Xu and Burleson, 2004).

Disclosure of distress and social support in breast cancer.

Breast cancer is associated with significant levels of distress (Compas and Luecken, 2002). Newly diagnosed women commonly report talking about their diagnosis to others and receiving support from others (Arora et al., 2007). Emotional disclosure and
social support are known to be important to psychological and physical health among healthy people and those with life-threatening illnesses alike (Cohen and Wills, 1985; Frattaroli, 2006; Mols et al., 2005; Salovey et al., 2000; Stanton et al., 2000). Indeed, expression of negative emotions is associated with better physical and psychological health among women with breast cancer (Robbins et al., 2014; Stanton et al., 2000). When such expression is constrained, emotional well-being and relational satisfaction suffer (Pasipanodya et al., 2012). Social support provided by professionals and family/friends alike similarly shows positive outcomes for emotional well-being and length of survival in this population (Bloom et al., 2004; Dunkel-Schetter, 1984; Fredette, 1995; McDonough et al., 2011; Spiegel, 1990). Emotional support (or support aimed at regulating the recipient’s emotions) is particularly beneficial (Arora et al., 2007; Bloom et al., 2004; Helgeson and Cohen, 1996). In sum, talking about one’s negative emotions and allowing others to attend to these emotions helps cancer patients.

Most of the research on social support has focused on the experiences of people in the United States or other individualistic cultural contexts. Research indicates that Chinese cultural contexts foster different views of personhood and interpersonal relationships from EA contexts (Hansen, 1992). Studies of EAs are therefore not necessarily representative of other groups due to varying cultural dimensions that are relevant to emotional disclosure and social support (Henrich et al., 2010). One key
question is whether these findings generalize to more collectivistic cultures, such as that of CAs.

Cross-cultural studies on disclosure and social support

Within-culture and cross-cultural studies support these ethnographically-derived differences. Research suggests that Asians and Asian Americans are concerned about seeking social support, because this behavior involves disclosure and disclosure has the potential to negatively affect relationships (Kim et al., 2006; Taylor et al., 2004). Disclosure also appears to be more beneficial for European Americans than for Asian Americans (Kim, 2002). Several studies show that EAs report higher levels of personal disclosure (much of it emotional) than East Asians (Chang et al., 2014; Chen, 1995; Ting-Toomey, 1991). Partially explaining these differences in self-disclosure is the tendency of people from East Asian cultural contexts to report higher interpersonal distance and perceive fewer opportunities to make new friends (Barry, 2003; Schug et al., 2010), although there is some counter-evidence (Wheeler et al., 1989). EAs also show higher expressivity and lower levels of emotional suppression than Chinese and CAs (Matsumoto et al., 2008; Soto et al., 2011; Tsai and Levenson, 1997).

Similarly, studies on social support demonstrate that EAs are more willing to openly and explicitly request support from others close to them (Kim et al., 2008; Mojaverian and Kim 2013; Wellisch et al. 1999), whereas Asian Americans tend to be
more concerned about violating cultural norms of disclosure and imposing on others. As expected, the specific type of support matters. EAs desire and exchange emotional support more and tangible (e.g., informational) support less than sample populations in China (Xu and Burleson, 2004). Notably, a desire to avoid imposing one's emotions on others do not always translate into negative experiences with sharing emotions. There is some evidence that emotional support can be beneficial to East Asian populations once it is perceived to be there (Morling et al., 2015; Uchida et al., 2008). More research is needed to understand the nature of cultural differences in social support preferences and the ways in which they translate into outcomes. In summary, EA and Chinese cultural contexts foster different models of how much emotional content to include when sharing problems with others, and how to obtain and offer effective support. Studies have not yet investigated how CAs disclose cancer-related emotion to family and friends.

The present study uses qualitative data from a larger research project that includes both qualitative and quantitative components (Wang et al., 2012; Wang et al., 2013) to explore how EA and CA breast cancer survivors share their illness with family and friends to seek support. Cultural models of disclosure and support as stated above may be reflected in breast cancer survivors’ accounts or it may be possible that a major stressor, such as breast cancer diagnosis, triggers culturally-universal preferences for emotional disclosure and support. This line of research work is expected to help care providers
better understand cultural variations in disclosure of cancer diagnosis and how it relates to social support. Notably, prior work among cancer survivors has tended to focus on perceived receipt of social support. We aim to identify culturally appropriate means of talking about cancer that would be understood as beneficial and supportive by Chinese patients. We know that receipt and provision of social support often go hand-in-hand, with Asian Americans benefiting from mutual support more than European Americans (Wang and Lau, 2015). Our qualitative study allowed survivors an opportunity to describe not only receiving support from others, but also providing others with support. The set of observations focusing on provided support was exploratory in nature.

**Methods**

This qualitative/inductive research used a semi-structured interview guide to investigate EA and CA women’s breast cancer experiences, including their emotional and behavioral responses post-diagnosis and treatment. The interview guide covers the following themes in this order: quality of life after treatment (e.g., physical and emotional functioning), health, presence and dynamics of social support, and educational interventions. This paper focuses on the third theme. Relevant interview questions include: “Have you talked with others when you needed support? If so, who are they? [Why or why not?]” and “Have you wanted to talk to friends or family members about your experiences? [Why or why not?]”
The interview guide was created in English, translated into Chinese, and then back-translated to Chinese to ensure linguistic equivalence. The Institutional Review Boards at Georgetown University Medical Center, the California Health and Human Services Agency, and the Cancer Prevention Institution of California (CPIC) approved this study.

**Study Sample**

Participants were randomly selected and recruited from the population-based Greater Bay Area Cancer Registry (GBACR) in Northern California. Eligible participants: 1) were CAs or EAs; 2) were aged 21 or over at diagnosis; 3) had been diagnosed with first primary node-negative breast cancer at stage 0-IIA; 4) had completed primary treatments (surgery, radiation, and/or chemotherapy) 1–4 years prior to recruitment (cases diagnosed from 2006-2008); and 5) had no incidence of recurrence or other cancers (see Wang et al., 2013 on details about patient recruitment).

We examined all interviews of foreign-born CAs and EAs that included discussion about whether the survivors talked about their breast cancer with others (37 foreign-born CAs and 23 EAs). We oversampled CAs because little is known about survivorship in this group relative to survivorship among EAs; see Table 1 for demographics.

**Data Collection**
Focus groups (two for each ethnic group) and one-on-one interviews via telephone were conducted in-person at CPIC and community centers in San Francisco’s Chinatown neighborhood. Interviews lasted 1.5 to 2 hours. Participants were given or mailed $35 gift cards after completing the interviews. All interviews were audio-recorded and then transcribed to eliminate bias in recalling information. The interviews conducted in Chinese and Cantonese were transcribed in Chinese and then translated into English for analysis. We disclose the ethnicity of the interviewers in light of the debate on matching respondents to interviewers that are of the same ethnicity (Davis et al., 2013; Sin, 2007; Egharevba, 2001). Our data were collected by interviewers from multiethnic backgrounds. Data form EAs were collected by an African American researcher and a EA assistant. Data from CAs were collected by a combination of either African American and CA researchers for English interviews or a bilingual CA researcher and assistant for Mandarin and Cantonese interviews. They all were trained to follow the structured interview guide to make sure same questions were administered and similar probes were given (such as asking if they talked about their diagnosis to parents, siblings, children, friends, and colleagues). There was room for variation in the probes (e.g. “Can you tell me more?”); it is also possible that the interviewer’s body language solicited some types of responses.

**Analysis of Interview Material**
As noted above, this paper focuses on participant responses to two questions: “Have you talked with others when you needed support? If so, who are they? [Why or why not?]” and “Have you wanted to talk to friends or family members about your experiences? [Why or why not?].” Responses were coded independently to reduce bias (Fosse et al., 2002; Saldana, 2009). Data analysis followed established qualitative methods of content analysis (LeCompte et al., 1999). The codebook we used was organized taxonomically into broad categories, which were subdivided into specific codes for each theme. Initial intercoder reliability was 86.1%. However, all text was discussed and ultimately coded to consensus. The initial coding was led by an African-American anthropologist and a CA research assistant, who coded transcripts independently after reaching 82% of inter-coder reliability.

The first author, a CA ethnographer, performed the final portion of data analysis by reviewing interview transcripts about social support. Ethnographers have increasingly adopted “interpretive reflexivity,” the acknowledgement of bias by ethnographers while placing emphasis on explaining the process by which they came to their explanations (Lichterman, 2015). This analysis focused on instances when participants reinterpreted the question to fit what they wanted to say (Pugh, 2013). The analysis was directed at determining the emotional tone of the interview material: what participants regarded as helpful, uncomfortable, or painful. Finally, participants’ meta-feelings (how they felt
about how they were feeling) were taken as indicators of what they regarded as normal and what they expected of others. As documented below, patients often described their own acts of disclosure in terms of how they felt about their conversations about their cancer diagnosis and whether they felt it was normal or not.

Results

According to the results of our analysis, there were differences in preferences among CAs and EAs with regard to talking about their cancer diagnosis. EAs characterized emotional disclosure in positive terms, focusing on its ability to elicit emotional support, while CAs described it in relatively negative terms, registering concerns about worrying their loved ones without reaping tangible benefits. The quotes we use below are representative examples taken from the full set of responses.

EAs: “You're not going through any of this alone.”

EA participants’ accounts revealed a shared belief that open conversations about their diagnoses were valuable. Interviews with EAs described emotional disclosure as triggering empathy, reciprocal disclosure, and/or offers of support. Consequently, disclosure preserved or even improved relational closeness in the context of cancer diagnosis:
When I was done [teaching a class] I called my partner because I didn't have time to call her before (the doctor told her about her diagnosis in between classes). And you know, she was great. First words out of her mouth were, “You're not going through any of this alone.”

There was an emphasis on emotional and esteem support, a theme expressed well by another survivor: “Well, sometimes I talk to my husband about it and he’s…he’s so wonderful, you know, he just…tells me he loves me and that I’m beautiful.” Acts like crying together or telling a survivor that they are not alone were stressed.

This model was at times applied to people who were not family and close friends. One EA survivor described breaking the news to a group of sorority members:

…I went to a sorority meeting and mentioned it to some people at my table, and, well, all of a sudden, I realized that half the women in that group had had breast cancer! And some were very, very supportive.

Here, confession of a cancer diagnosis unlocked the sense of community shared by this group of women, making mutual disclosure and support possible. These accounts reinforced a core assumption made by EAs that talking about distress is central to relationships:
…we were getting ready to schedule the surgery. And that's when I called and I said that I flunked my mammogram (laughs)! That was my intro, and so we just went from there and I think trying to keep it more lighthearted. And that's how we told our sons, oh, I flunked the test. And right away at my age, they thought it was my driving test (laughs). And I said, you know, mom flunked her mammogram and what mom has to have done and what we're gonna do and… I think just sitting down with them one-on-one instead of a phone call, or having them hear from somebody else, you need to do that as a family.

This EA mother conveyed a belief that talking “one-on-one” about difficult topics was an inherent part of maintaining functional family relationships and of her job as a parent. Against the backdrop of this shared cultural emphasis on emotional support, some accounts focused on violations of this shared script. These cases were clearly marked as disappointing and distressing:

EA Survivor: Um…initially, the very first person that I told was my husband.

Moderator: Okay. And what was his reaction?
EA survivor: It was…goodness, we were not in a good place at that time. He was…sitting at his desk and I said, that was the surgeon and…I said, I have breast cancer… And he looked at me and said, “Well you shouldn’t be surprised, you know, with your mom and all.” And didn’t even bother to stand up, didn’t even bother to give me a hug, nothing else. And…I was devastated.

This survivor’s husband responded by referring to her mother’s past cancer diagnosis, criticizing her “surprise” at her own diagnosis. Her husband’s lack of emotional support—neglecting to stand up to have a longer conversation or give his wife a hug—was hurtful to the survivor. Another account offered a more hopeful picture, with the survivor modeling and reinforcing emotional support in her interactions with her partner:

I just found everybody really supportive, just…um, [my significant other] was a little…freaked out at first and didn’t know how to react. But…he really, um…he just…he…he, I mean, he admitted that he was scared. That was really…for a guy to say…you know, I’m really, really scared and I don’t know what to do or say…and well I said, you just need to be with me and be supportive, and he was…uh, it was great.
In sum, EA survivors described conversations about cancer as both valuable and important because disclosure triggered emotional support and offered opportunities to strengthen close ties. Violations of this model were marked as problematic.

_CAs: “There's no use telling.”_

In contrast to the views expressed by EA survivors, CA survivors tended to frame distress disclosure in predominantly negative terms. This CA emphasized the potential to upset her daughters:

I don’t talk about this kind of stuff (fears of recurrence and her emotions coping with breast cancer) with them (her daughters)…I don’t know about this kind of stuff, and it makes them all feel bad when you talk about this. They all cried when my doctor announced that I have breast cancer.

In some cases, concerns about loved ones caused survivors to postpone or avoid disclosing their diagnoses, particularly those who are emotionally vulnerable:

All my brothers and sisters know, except my mom, because I did not want her to worry about me. She is over 80 years old. Whenever we talk, my mom would get curious and would want to know more, but we
try not to tell her. Only my siblings and my children know about [it].

But I did not tell my children until days before the surgery.

Some accounts suggested that for CAs, disclosure may be justified if it leads to valued tangible or informational support. One CA survivor focused on her friends’ inability to provide her with useful information:

Yeah [I don’t want to tell friends], they (her friends) can't help, there's no use telling, or else the news will spread…because they don't know much about it, and they are scared upon hearing that word (cancer).

Other survivors opted to share the news, but minimized their distress. One of them described finally telling her children: “I was quite calm when I told them I had cancer, and I needed to have surgery. They cried.” It was a painful experience for her to see her children crying. In an effort to reduce distress, she “…told them not to cry, because this [disease] is quite common nowadays.” By relaying a fact about breast cancer, she aimed to take her children’s focus away from their emotions surrounding her illness.

CA accounts showcased a shared cultural model that framed emotional disclosure as relatively unimportant to psychological health and relationships. When disclosure was considered, it was fraught with concerns. At times CAs evaded the question of “Did you
talk to anyone?” by jumping straight to the effectiveness of talking. While they said that
talking about their feelings “didn’t really help” or was of “no use,” they did describe
informational support as valuable. In contrast to EAs, CAs described their relationships
as relatively unaffected by conversations; friends and family remain your friends and
family, whether or not they talk about cancer. One CA described how (like an EA
counterpart mentioned above) her husband withheld emotional support. This CA survivor
was more positive about her husband’s nonchalant response:

   Moderator: ...so when you told your husband the first time, did you feel
   that it was hard to tell him?

   CA Survivor: No, I just told him, and we both felt nothing. It was just
   like telling him something [else], ha ha.

   Her husband’s lack of emotional response did not make her upset and did not
affect their relationship.

CA: Providing others with information

   CAs showed another intriguing pattern. They tended to describe providing rather
than receiving informational support, with the aim of helping friends and family avoid
cancer. One CA recounted giving friends cancer-relevant information. When asked,
“When you see your friends, will you tell them anything about your breast cancer?” she
replied, “I will tell them like what [they] should eat or not [eat]”. Other survivors focused on telling their friends about the benefits of early detection: “I will…tell them to do checkups earlier, so they can find out about things earlier…the earlier they find out the better.” One CA survivor strongly advocated screening:

…I know that most of my friends don’t go to do checkups…because I was diagnosed under a normal screening, so I called almost all of my friends and said you need to do checkups. I was lucky that I had an early diagnosis. So, I said they never had either mammogram or pap smear. They thought their doctors are guys [so they did not want to do it]. I said it’s ridiculous. I said you should do it because of the probability. So basically all my friends know about it.

Another survivor described talking to other survivors about incorporating organic food into their diet:

When I went back to work after my surgery, I met a lot of patients… I met a lot of patients doing the same surgery as me. They started with [a] biopsy, and I’ll tell them, share with them my experience. I will try to talk them into eating organic, to clear out the poison in their body. Yes, just like that. Some will start chatting with me, some will call me
afterwards, but some won’t contact me. To me, I think, at that moment, with my sickness, I let them know that it’s not the end of life.

A CA mother said that she was willing to talk about her breast cancer with her young children, focusing these conversations on the importance of a healthy diet. She described this conversation as successful, as it led to changes in her children’s eating habits:

One day…I sat still and talked to them. At that time, kids really liked McDonalds…I did not say they could not eat McDonalds, but I said I hope that they eat healthier. I said your mother is bad, and aunt is worse. It is possible that if you keep doing this for a while, you could get this. I explained to them the reasoning and now they have cut out McDonald’s. Now, they do not eat fast food anymore.

Notably, these survivors’ conversations about their cancer were motivated by wanting their close ones to be healthy rather than wanting to share distress or receive emotional support.

**Discussion**

The qualitative results of this study contribute to the understanding of the underpinnings of cultural models of disclosure and social support in the context of cancer
diagnosis. Our findings highlighted different conceptions of emotional disclosure of
cancer diagnosis and support-seeking. Research has suggested that emotional support
leads to positive outcomes (Stanton et al., 2000). Our qualitative study showed that CA
and EA breast cancer survivors understand one aspect of emotional support—disclosure
of feelings—differently. EAs described the mutual disclosure of negative emotions as a
precursor for valuable emotional support that strengthened their relationships. In contrast,
CAs saw less value in expressing their emotions or having close others attend to them.
Although disclosure was seen as at least potentially useful in the context of providing
tangible or informational support, it was also portrayed as distressing to the recipients.
Given the weight of these concerns, disclosure was often postponed, avoided, or
downplayed. Intriguingly, CAs tended to take pride in describing themselves as providers
rather than recipients of useful information based on their personal experiences,
recounting instances of encouraging others to eat better and get screened for cancer. The
receipt and provision of support tend to be associated with each other, but are distinct.
Given the research showing that providing social support may be more beneficial than
receiving it (Brown et al. 2003), the CA response—to provide health information to their
loved ones following their cancer diagnosis—may present some advantages. Although
there is work on receipt of support, less research has focused on support provision among
cancer survivors, particularly among Asian Americans (Wang and Lau, 2015). Chinese
cultural contexts foster a view of interpersonal relationships as stable and independent of emotional disclosure. To CAs, direct emotional expression is unnecessary for maintaining family relationships because such relationships are seen as unchanging and non-voluntary; this is in keeping with prior research (Li et al., 2015; Oishi, 2010).

We do not imply that either model of support is universally better for cancer survivors. Rather, different models may carry benefits by virtue of being embedded in different cultural systems of meaning. For instance, a recent study reported that ambivalence about emotional expression may contribute to depression in CAs (Lu et al., 2015). However, prior work in cultural psychology suggests that culturally sanctioned models of behavior tend to be functional (Campos, 2015; Kim et al., 2008). These models of support are important to understand and assess as they can potentially explain help-seeking and other behaviors in response to cancer diagnosis. Kroenke and colleagues (2013) reported that breast cancer survivors (including CAs) who received emotional and informational support had higher levels of emotional wellbeing. Wong and Lu (2017) further reported that positive social interactions (such as spending relaxing, enjoyable time with others) had a stronger impact than emotional/informational support on the physical and emotional well-being of low-acculturated CA (those who attended fewer social functions with (Anglo) American people, have fewer (Anglo) American acquaintances, do not speak English at home, and do not think in English) breast cancer
survivors. In contrast, emotional/informational support was more important than positive social interactions for high-acculturated CA survivors. However, these studies have not yet investigated how cultural influences in emotional disclosure affect different preferences for social support. The current qualitative results reveal that CA survivors tended to perceive low utility in disclosing distress to obtain emotional support, but tended to seek and offer reciprocal support. At this time, it is not clear whether the survivors’ accounts reflect actual patterns of association between emotional disclosure, emotional and informational support, and the physical and mental health of cancer patients. This study aims to stimulate further research that will systematically examine health-relevant outcomes of different supportive strategies across cultural contexts.

Emerging from the findings is the ubiquitous bi-directionality of social support. EA and CA breast cancer survivors alike engaged in the exchange of mutual support with their loved ones. When EAs described their experiences of sharing emotions with others, they tended to highlight reciprocal disclosure. Being privy to their spouses’ fears, for example, was crucial to EAs’ sense that their relationships were strong post-diagnosis. In turn, CAs used their experiences with illness to encourage their family and friends to engage in healthy behaviors, telling their children not to eat McDonald’s or urging their friends to get mammograms. Future studies may examine actual interactions to better understand the complex dynamics of social support in these populations. Researchers and
practitioners need to know more about the benefits of not only receiving but also giving support.

This study shows that cultural differences might affect different attitudes toward emotional disclosure. Our findings show that CA patients did not necessarily value talking about their emotions surrounding their cancer diagnosis to their parents, spouse, children, and friends. However, emotional disclosure may be framed differently in different relationships. The interview questions allowed patients to choose what experiences to disclose; they did not ask patients about specific relationships. Future studies could ask about emotional disclosure in the context of different relationships; there may be differences between CAs and EAs in this regard.

This study has some limitations. First, our sample size is relatively small to be representative of the target populations, so verification of our qualitative results in studies with larger samples will be needed. Second, our findings are limited to female breast cancer patients. The impact of gender differences and patterns on different cancer types of disclosing cancer diagnosis and seeking support are understudied and deserve further investigation.

Of course, not every person is a carbon copy of their cultural context. One cannot assume that a particular patient adheres to the shared cultural models described here. However, one can assume that most patients will be aware that others in their culture hold
these models. For example, some CAs believe that expressing emotions is not important or valuable while others believe the opposite, but CAs are likely to be aware of the existence and importance of these beliefs in their community. Supportive care providers should not automatically assume that an individual’s failure to disclose their feelings signals deficiencies in their support system. Instead, when assessing individuals’ needs, it is important to not only assess personal beliefs regarding support, but also to assess how different types of support are understood and practiced in patients’ communities.

**Conclusions**

In summary, these data suggest that breast cancer survivors commonly exchange emotional and informational support with their loved ones. Beliefs about the costs of disclosure and benefits of these types of support are culture-specific. Further research should replicate these cultural differences, accounting for the extent to which cancer patients not only receive, but also provide support to their friends and family. Providers should acknowledge and be able to assess and work with different cultural beliefs about disclosure and social support.
Acknowledgements

We appreciate field staff at CPIC, Pagan Morris, Mei-Chin Kuo, Kathie Lau, and Daisy Lubag for their efforts in participant enrollment and preparation for focus groups. We sincerely thank Dr. Rena Pasick and Dr. Frances M. Lewis for their constructive comments on our study materials, which enhanced our data collection.
Declaration of Conflicting Interests

The Authors declare that there is no conflict of interest.
Funding

This research was supported by a Lance Armstrong Foundation Young Investigator Award and the National Institutes of Health/National Cancer Institute R21 Grant# CA139408-01. This research was also supported by the National Cancer Institute's Surveillance, Epidemiology and End Results Program under contract HHSN261201000040C awarded to the Cancer Prevention Institute of California. The collection of cancer incidence data used in this study was supported by the California Department of Health Services as part of the statewide cancer reporting program mandated by California Health and Safety Code Section 103885; the National Cancer Institute's Surveillance, Epidemiology, and End Results Program under contract HHSN261201000140C awarded to the Cancer Prevention Institute of California, contract HHSN261201000035C awarded to the University of Southern California, and contract HHSN261201000034C awarded to the Public Health Institute; and the Centers for Disease Control and Prevention's National Program of Cancer Registries, under agreement #1U58 DP000807-01 awarded to the Public Health Institute. The ideas and opinions expressed herein are those of the authors, and endorsement by the State of California, the California Department of Health Services, the National Cancer Institute, or the Centers for Disease Control and Prevention or their contractors and subcontractors is not intended nor should be inferred.
References


Sin, CH (2007). Ethnic-matching in qualitative research: reversing the gaze on ‘white others’ and ‘white’ as ‘other.’ *Qualitative Research* 7(4): 477-499.


Wang JH, Adams IF, Pasick RJ, Gomez SL, Allen L, Ma GX, Lee MX and Huang E (2013). Perceptions, expectations, and attitudes about communication and
physicians among Chinese American and non-Hispanic white women with early stage breast cancer. *Supportive Care in Cancer* 21(12): 3315-3325.


Table 1. Demographics

<table>
<thead>
<tr>
<th></th>
<th>Total (N= 60)</th>
<th>Chinese American Immigrants (N = 37)</th>
<th>Non-Hispanic White (N = 23)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age mean (S.D.)</td>
<td>57.98 (9.4)</td>
<td>56.95 (9.13)</td>
<td>59 (10)</td>
</tr>
<tr>
<td>Average years in U.S.</td>
<td>--</td>
<td>22.22 (14.67)</td>
<td>a</td>
</tr>
<tr>
<td>Marital status</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>Married or living with partner</td>
<td>39 (65)</td>
<td>29 (78.38)</td>
<td>10 (43.48)</td>
</tr>
<tr>
<td>Single/divorced/widowed</td>
<td>21 (35)</td>
<td>8 (21.62)</td>
<td>13 (56.52)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ High school</td>
<td>17 (28.33)</td>
<td>15 (40.54)</td>
<td>2 (8.70)</td>
</tr>
<tr>
<td>&gt; High school</td>
<td>43 (71.67)</td>
<td>22 (46.66)</td>
<td>21 (91.30)</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>37 (61.67)</td>
<td>23 (62.16)</td>
<td>14 (60.87)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>9 (15)</td>
<td>8 (21.62)</td>
<td>1 (4.35)</td>
</tr>
<tr>
<td>Retired</td>
<td>14 (23.33)</td>
<td>6 (16.22)</td>
<td>8 (34.78)</td>
</tr>
<tr>
<td>Health insurance</td>
<td>60 (100)</td>
<td>37 (100)</td>
<td>23 (100)</td>
</tr>
<tr>
<td>Cancer Stage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>36 (60)</td>
<td>23 (62.16)</td>
<td>13 (56.52)</td>
</tr>
<tr>
<td>I</td>
<td>14 (23.33)</td>
<td>7 (18.92)</td>
<td>7 (30.43)</td>
</tr>
<tr>
<td>II</td>
<td>2 (3.33)</td>
<td>1 (2.70)</td>
<td>1 (4.35)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>8 (13.34)</td>
<td>6 (16.22)</td>
<td>2 (8.70)</td>
</tr>
<tr>
<td>Survival Months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-24 months</td>
<td>39 (65)</td>
<td>24 (64.86)</td>
<td>15 (65.22)</td>
</tr>
<tr>
<td>25-45 months</td>
<td>20 (33.33)</td>
<td>12 (32.43)</td>
<td>8 (34.78)</td>
</tr>
<tr>
<td>Unknown</td>
<td>1 (1.67)</td>
<td>1 (2.70)</td>
<td>0 (0)</td>
</tr>
</tbody>
</table>

Note. S.D.= Standard Deviation.

a Two EA participants were born outside of the US (Japan and South Africa).

b Cancer stage was obtained through patient self-reports.

c Survival months were estimated based on the intervals between the completed date of primary treatment and the mail-out date of invitation letters for participation. The completed treatment date was based on women's self-report since the cancer registry did not have an end treatment date.