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Perception and Negative Effect of Loneliness in a Chicago Chinese Population of Older Adults

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Abstract

This qualitative study aims to investigate the cultural understandings of loneliness, identify the contexts of loneliness, and to examine its effect on the health and well-being of U.S. Chinese older adults. Despite loneliness is one of the main indicators of well-being, little attention has been paid to understanding loneliness among immigrant older adults. This study utilizes both survey questionnaires and semi-structured focus group methods to investigate the feelings of loneliness among U.S. Chinese older adults. Based on interviews with 78 community-dwelling Chinese older adults in Chicago Chinatown, this community-based participatory research study (CBPR) shows loneliness is common among U.S. Chinese older adults. It was frequently identified through emotional isolation and social isolation. Social, psychological and physical health factors could contribute to the experience of loneliness. In addition, the health of older adults with loneliness may be associated with worsening overall health, elder mistreatment, health behavior changes and increased health care utilizations. This study has implications for healthcare professionals, social services agencies and policy makers. Our findings point to the needs for healthcare professionals to be more alert of the association of loneliness and adverse health outcomes. Communities and social services agencies should collectively take a lead in reducing social isolation, improving intergenerational relationships, and increasing social networks and companionship for this group of vulnerable older adults.

Keywords

Aging; Psychological well-being; U.S. Chinese population

1. Introduction

Loneliness is one of the main indicators of well-being. It is manifested by intense feelings of emptiness, abandonment, and forlornness (Meis M., 1985). The insufficient quality or

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Conflict of Interest Statement

None.

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quantity of an individual's network of social relationships is closely linked to the cause of loneliness (Peplau L.A. & Perlman D., 1982). Older adults are particularly vulnerable to loneliness due to the increase of multiple losses, changes, and transitions in later life (Donaldson J.M. & Watson R., 1996; Ryan M.C. & Patterson J., 1987). The feelings of loneliness have serious consequences on the health of older adults. Studies show that loneliness predicts depressive symptoms (Cacioppo J.T., Hughes M.E., & Waite L.J., 2006; Chou K.L. & Chi I., 2004), mental health decline (Wilson R.S. et al., 2007), greater cognitive decline (Ryan M.C., 1998), lower quality of life (Jakobsson U. & Hallberg I.R., 2005), poor physical health (Stek M.L., Vinkers D.J., & Gussekloo J., 2005; Luanaigh C. & Lawlor B.A., 2008), poor sleep (Cacioppo J.T. et al., 2002), and nursing home admission (Russell D.W., Cutrona C.E., de la Mora A., & Wallace R.B, 1997). More importantly, loneliness has been associated with increases in mortality and suicidal ideation (Ryan M.C., 1998; Stravynski A. & Boyer R., 2001).

Despite its impact on the health of aging population, loneliness has not been systematically studied among immigrant older adults. As one of the fastest growing minorities in the U.S., Asian American aging community is disproportionally affected by mental health issues and psychological distress. Social isolation, stressful life events, recency of immigration, poor perceived health, dissatisfaction with family, are among the unique psychosocial stressors concerning older Asian Americans (Iwamasa G.Y. & Hilliard K.M., 1999; Kuo B.C.H., Chong V., & Joseph J., 2008; Mui A. & Shibusawa T., 2008). However, with more than twenty heterogeneous ethnic groups that make up the Asian population, studies have pointed the need to examine specific Asian subgroups to accurately reflect health disparities (Kim G. et al., 2010; Louie K.B., 1999).

Among Asian American population, Chinese is the oldest and largest subgroup with an estimate of 3.6 million people (Barnes & Bennett, 2002; Bennett C.E. & Martin B., 1995). Compared to the general population, Chinese population is older in average age (Shinagawa L., 2008), and less acculturated among immigrant groups. It is reported that more than 80% of Chinese older adults are foreign born (Huff R. & Kline M., 1999); and more than 30 % of Chinese older adults immigrated after the age of sixty (Mui A. et al., 2008). The rapid demographic growth of Chinese older adults necessitates a deeper understanding of their health and psychosocial well-being. Some studies suggest older Chinese immigrants have poorer quality of life than the national norms (Mui A., Kang S., Kang D., & Domanski M., 2007). Others argue the prevalence of depressive symptoms among Chinese older adults is higher than that of general aging population in North America (Lai D.W.L., 2004). In addition, Chinese older adults were found to have the highest suicide rate than any other racial groups nationwide. Specifically, suicide rate among older Chinese women is a higher leading cause of death compared with the general population (Centers for Disease Control and Prevention, 2010b; Centers for Disease Control and Prevention, 2010a; Foo L, 2003). A prior study noted a 3-fold higher suicide rate among Chinese women aged 65–74 years; 7-fold higher suicide rate among the Chinese women aged 75–84 years; and 10-fold higher suicide rate among the Chinese women over age 85 compared to white women of the same age groups (Liu WT & Yu E, 1985; Yu E, Chang C, Liu W, & Kan S, 1985).

However, research on loneliness among U.S. Chinese older adults remains limited. Existing studies of loneliness in P.R. China suggest that older adults' understandings of loneliness were deeply related to the cultural importance of intergenerational relationships and that childlessness was significantly related to loneliness among older adults (Chou K.L. et al., 2004). In addition, loneliness may be a significant risk factor to be mistreated by family members (Dong X., Simon M.A., Gorbien M., Percak J., & Golden R., 2007); and have strong negative impact on the health status of Chinese older adults (Liu X., Liang J., & Gu S., 1995).

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Strongly influenced by Confucian teachings, Chinese culture traditionally defines one's role and responsibility in relation to others. The "five relationships" not only strictly prescribes one's social behaviors, but also, these social relationships provide a supportive network that bind individuals together (Mencius & Lau D.C., 2005). However, during the course of immigration, traditional social relationships may be disrupted due to the vast cultural, social, and economic changes. U.S. Chinese older adults may find it increasingly difficult to maintain desired social relationships. We speculate that these structural, social and emotional challenges in the context of immigration may provide fertile ground for the feelings of loneliness among U.S. Chinese older adults.

A number of research barriers among U.S. Chinese older adults may render this critical health data relatively unexplored (Dai Y. & Diamond M., 1998). Evidence indicates that Chinese community have posed mistrust toward government and federal-sponsored activities because of anti-Chinese sentiment in the past (Lee I.C., 1992; Yu E.S.H., 1986). In addition to recruitment difficulties, vast subgroup diversity in cultures and languages has further presented challenges (Chang D.F., Chun C.A., Takeuchi D.T., & Shen H., 2000; Lauderdale D.S., Kuohung V., Chang S.L., & Chin M.H., 2003). Chinese population in the U.S. comprises at least five generations of Chinese Americans, of varying acculturation degrees, settling in from mainland China, Taiwan, Hong Kong, Vietnam as well as refuges of Chinese descent in Southeast Asia, Latin America and Caribbean countries. As a result, their diverse experience of aging in different social, political and historical contexts calls for culturally and linguistically sensitive research design (Guo Z., 2000).

In order to bridge the knowledge gap, the purpose of this study is to: 1) Examine U.S. Chinese older adults' understanding of loneliness; 2) Identify the contexts in which older adults perceive feelings of loneliness; 3) Examine the impact of loneliness on the health and well-being of community-dwelling Chinese older adults.

2. Materials and Methods

2.1 Conceptual Framework and Definition

The conceptual and theoretical perspectives on loneliness are considerably diverse. It can be defined as a subjectively experienced emotional state, which is commonly related to the unfulfilled needs in intimate and social relationships (Peplau L.A. et al., 1982). There exists the distinction between emotional and social loneliness which is particularly relevant for studies among older adults. Whereas emotional loneliness results from the absence or lost of a close, intimate attachment, social loneliness is a response to the absence of an accessible social network which may be experienced following relocation (Weiss R.S., 1973).

2.2 Community-Based Participatory Research Approach

This study was part of the National Institutes of Health-funded Partner in Research project. The strength of community-based participatory research (CBPR) approach has been noted as a paradigm shift in epidemiological research (Leung M.W., Yen I.H., & Minkler M, 2004). Guided by CBPR principles, our community-academic partnership is a synergetic effort between Chinese American Service League (CASL) and Rush University Medical Center. CBPR approach enhances the quality and quantity of research by equitably engaging community and university partners in an action- driven investigation. With the complexity of health determinants and disparities experienced by marginalized older adults and ethnic minorities, evidence-based intervention will benefit from the knowledge of and respect for community's cultural values (Israel B.A., 2000; Minkler M & Wallerstein N, 2003; Minkler M, 2005).

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This study was conducted in Chicago Chinatown community, a geographically-defined community on the near south side of Chicago. The greater Chicago area has one of the largest Chinese communities in the country, with an estimate of over 67,000 Chinese persons (Simon M.A. et al., 2008). Currently, the Chinatown community is one of the fastest-growing ethnic communities in Chicago (Goldsworthy T.D., 2010).

During the initial phase of the study, the study team and investigators invited community members through civic, health, social groups, advocacy, community centers, community physician and residents. These stakeholders constituted the Community Advisory Board (CAB), which served a pivotal role to foster community support and to guide the overall examination of health issues in the community. One of the pressing health issues identified by board members was the issues of loneliness.

2.3 Study Design and Procedure

This study utilizes both survey questionnaires and semi-structured focus group methods to investigate the feelings of loneliness among U.S. Chinese older adults. Loneliness was first assessed using a validated three-question survey derived from the Revised University of California at Los Angeles Loneliness Scale. Questions were asked regarding feelings of lacking companionship, feeling left out of life, and feeling isolated from others. The alpha coefficient of reliability for this three-question survey has been shown to be 0.72, with internal consistency of 0.82, indicating good reliability and internal validity (Hughs M.E., Waite L.J., & Hawkley L.C., 2004).

Participants were then invited to participate in semi-structured focus group discussions. Whereas questions about health, illnesses, care and interventions are highly culturally mediated, focus group design helps to uncover the unique cultural beliefs, values and motivations affecting one's health behavior and well-being. The results from focus group interviews often offer valuable insights on the health of understudied population (Krueger R., 1994). This technique is well-suited to explore relatively unexplored community health issues (Morse J.M. & Field P.A., 1995). In addition, the definition, experience as well as the strategies to cope of loneliness is highly related to perceptions informed by cultural backgrounds (Rokach A., Orzeck T., Cripps J., Lackovic-Grin K., & Penezic Z., 2001; Rokach A., Orzeck T., Lackovic-Grin K., Penezic Z., & Soric I., 2002). People can be alone but not lonely, or they can have many social relationships but nonetheless feel lonely (Hawkley L.C. et al., 2008). Therefore, qualitative information from the standpoint of older adults could help enhance researchers and healthcare professionals' understandings on what contributes to loneliness, how older adults cope with the feelings, and how it may be prevented.

Our focus group recruitment process benefited from the collaborative community-academic partnership. We approached participants after their attendance in CASL-sponsored cultural classes, such as calligraphy and Tai-Chi, according to the following eligibility criteria: (1) aged sixty years or older; (2) self-identified as Chinese; and (3) reside in Chicago. Of the 80 participants approached, 78 Chinese older adults aged sixty and older gave consent to the study.

Prior to survey questionnaires and focus group interviews, study participants gave written consents. All materials were prepared in simplified Chinese, traditional Chinese, and English. In order to ensure cultural sensitivity of the study, participants were then divided into focus groups according to their dialect of preference (Mandarin or Cantonese) (Suh E.E., Kagan S., & Strumpf N., 2009). This preference reflects the linguistic diversity among U.S Chinese community (Norman J., 1988).

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2.4 Data Analysis

For analysis purpose, we performed descriptive statistical analysis based on survey results. An independent chi-square test was used to analyze the bivariate associations between loneliness symptoms and the participant's sociodemographic, socioeconomic, family composition and health characteristics. Regarding qualitative data, a bilingual research assistant first transcribed audio recordings into Chinese transcripts (different dialects use the same Chinese characters), and then translated the transcripts into English. Another assistant subsequently back translated the English transcript into Chinese. Texts were further examined by bilingual principal investigator to ensure the accuracy of meaning.

The English transcripts, imported into NVivo software (NVivo, version 8) for analysis, were scrutinized for discussion on the descriptions, perceived determinants and health consequences of loneliness. Two independent coders followed grounded theory to analyze data iteratively (Glaser B.G. & Strauss A.C., 1967; Strauss A.C. & Corbin J., 1990). Each coder first independently labeled the texts with key words and phrases. The key words were coded and analyzed for emerging categories representing filial piety values and examples expressed by participants. Two coders then compared and discussed their sets of categories collectively to evolve dominant themes. The categorization of each response was not finalized until two coders reached consensus. Each category was reviewed and a short summary was written for each category. Quotes from the English transcripts that captured participants' opinions were incorporated to support each theme (Curry L.A., Nembhard I.M., & Bradley E.H., 2009; Glaser B.G. et al., 1967; Strauss A.C. et al., 1990). This study was approved by the Rush University Medical Center Institutional Review Board.

3. Results

3.1 Characteristics of the Study Population by the Presence of Loneliness

A total of 78 participants enrolled in the study. Among these, 39 participants (50 %) reported the experience of loneliness (Table 1). There were more women with loneliness than men (27 % vs. 23.1%). Participants with loneliness were more likely to be older. The majority of participants with loneliness understood or spoke little English. With regards to health status, 28 participants with loneliness (36.0%) reported fair or good. Most of the participants with loneliness described quality of life as fair (34.6%), and reported no change in health in the past year (25.6 %). For detailed symptoms of loneliness among participants, please see Table 2.

3.2 Perceptions of Loneliness

Participants' perceptions of loneliness fall into two categories, including emotional loneliness and social loneliness (Table 3). Participants most often described the embodiment of emotional loneliness in terms of the absence of intimate partnership, lack of satisfying children-parent relationship, and absence of close friendship. At the same time, loneliness was also regarded as a negative experience. As one participant commented, "Say, if you are missing your lifelong spouse and living by yourself, would you be happy?"

In addition, participants identified loneliness with respect to the absence of social integrations. Limited or lack of social contacts as well as the lack of participation in social activities were two main themes that emerged from the discussions. In most cases, participants described their daily lives in comparison with lives in their country of origin. One participant reported his observation as the following: "In Canton (in China), people can play Taichi every morning. Then there is dancing and picnic with your friends. Here in Chicago you cannot go anywhere and have nothing to do." Some participants spoke of loneliness in relation to the role of community and concurred that in order to prevent

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feelings of loneliness, community must step up to “establish a networking organization for old people to reach out to other people.”

3.3 Determinants of Loneliness

This study asked participants to provide contextual factors in which the feelings of loneliness may occur. We found that social, psychological and physical health correlates were three contributing factors to loneliness (Table 4).

Among all vignettes given by participants, social correlates were most commonly mentioned. Participants described the poor quality of relationships as a major determinant of loneliness; in particular, their sometimes frustrating relationships with adult children and spouses. As one participant commented, “What type of reasons that make them (older adults) feel lonely? I think it is the odds and ends at home with their kids that make them unhappy. They don’t feel (their needs) were understood (by their children). They have nowhere to go.” In addition to the quality of relationships, participants also pointed to the insufficient quantity of social relationships that triggered loneliness. It is reported that except co-residing family members, older adults did not have social contacts in Chicago. Others described living alone would also lead to “terrible feelings”.

Furthermore, the feelings of loneliness may be intensified by the broader social stress, such as language and cultural barriers. One participant described such barriers as if setting up “several iron bars” around them, leaving older adults “even more isolated.”

A number of participants described elder mistreatment as a potential reason that triggers the feeling of loneliness. As a participant commented, “I have heard of this story. An old lady earned some money from washing dishes and used her money to support her grandchildren’s medical school. But her daughter-in-law did not accept her and kicked her out of the house. That is why she is sad and lonely.”

Psychological correlates, including migration grief, depression, perceived stress and anxiety were also described as precursors of loneliness. During the course of immigration, a variety of losses, such as status or money, may have impacted individual immigrants differently. One participant articulated relocation as a perceived determinant of loneliness: “Here we don’t have everything like what we had back in China. It is literally nothing. That is from the bottom of my heart.” Furthermore, participants stated the feelings of loneliness may be the by-product of the “feeling of helplessness” and “stressed mindset”. One participant reported the following: “Our mindsets need to be calm. If our mindset is stressed, then every negative feeling intensifies. Eventually your health suffers.”

Last, due to physical changes and declining health in aging, participants expressed the need for more support and care. Conversely, unmet needs may lead to the feelings of loneliness. One participant perceived health and feelings of loneliness as follows: “Old people’s health determines the quality of their life and whether they are happy or not.” In addition, participants were more likely to perceive older adults who are functional impaired or have chronic illnesses with the experience of loneliness. As one participant commented, older adults with functional impairment may have feelings of loneliness and “cannot really find a solution.”

3.4 Negative Effects of Loneliness

Last, this study investigates the potential impact of loneliness on the health and well-being of older adults. We elicited participants’ opinions regarding the effect of loneliness (Table 5). For many participants, the feelings of loneliness were related to depressive

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symptomatology. As one participant described, “When a person is lonely, he would not be happy.”

Other participants described the impact of loneliness in light of cognitive impairment. According to one participant, “these lonely folks who sit in their apartments all day often have problems such as headaches, fuzzy memory, and slur speech and so on.” Participants voiced that the quality of life may be low among older adults with loneliness, which is conducive of “lack of contacts and leisure”.

Our findings suggest that participants in our study were likely to perceive loneliness symptoms associated with elder mistreatment. One participant described an isolated older adult who was financially exploited by his daughter: “I know a story of a girl who takes several hundred dollars of food stamp from his father. The father lives in a nursing home and does not speak English. He is always by himself. This daughter ignores his needs (…) and this girl even told me that she got all of his food stamps. Poor soul.”

Furthermore, participants articulated instances in terms of health behavior changes and changes in health care utilization. The effect of loneliness may trigger poor health behaviors. One participant commented that the habit of “smoking and drinking” may easily delve into the daily routines of older adults with loneliness. Other participants reported associations that fall into the category of health care utilization. In situations which older adults are suffering from loneliness, “moving to the 18th street (where nursing home is)” becomes a potential socializing strategy in order to feel less isolated.

4. Conclusions

4.1 Summary

In this CBPR study of U.S. Chinese older adults, we found that the feelings of loneliness were common. Loneliness was frequently identified through emotional isolation and social isolation. Social, psychological and physical health factors could contribute to the experience of loneliness. In addition, the feelings of loneliness may be detrimental to the health and well-being of this vulnerable group of immigrant older adults.

4.2 Contribution to Existing Literature

First, our findings contribute to understanding the characteristics of U.S. Chinese older adults in the presence of loneliness, as well as the specific symptoms of loneliness. Our current study did not find significant associations between loneliness and socio-demographic variables. The result is likely due to the small sample size. Nonetheless, our quantitative data confirms that the feelings of loneliness is common among Chinese older adults, and provides additional insights on the issues of loneliness in the Chinese aging community. Future population-based study among U.S. Chinese older adults is needed to improve the knowledge base available to health care professionals and researchers alike.

Second, our qualitative analysis sheds light on the cultural understandings of loneliness from the perspectives of U.S. Chinese older adults. Existing qualitative studies suggest that there are cultural differences among the perceptions of loneliness which subsequently affect its coping strategies. In the international literature, loneliness is most commonly described as a negative experience, or feelings of suffering, with some instances of positive terms (Dahlberg K., 2007; McInnis G.J. & White J.H., 2001). However, older adults from Western societies may perceive loneliness in lights of the disconnection from contemporary society, whereas older adults informed by familism may give importance to the lack of intimate relationships (Hauge S. & Kirkevold M., 2010; Heravi-Karimooi M. et al., 2010). Our results suggest that U.S. Chinese older adults placed more emphasis on the absence of a

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satisfying intergenerational relationship. We suspect this emphasis on the relationship with family members may be informed by the belief in traditional familial values. Study shows that support from family members, especially emotional support, contribute more to life satisfaction of Chinese older adults than support from friends (Yeung G.T.Y. & Fung H.H., 2007). Therefore, Chinese older adults may be more prone to emotional distress when the expectation from family support was not met. Whereas further study is needed to investigate the mechanism, our study aids in understanding factors behind why Chinese older adults experience loneliness, and thus contributes to envisioning culturally relevant interventions to alleviate loneliness (Luanaigh C. et al., 2008).

Third, our qualitative data sheds light on the potential protective factors of loneliness among immigrant older adults. Evidence suggests that among Asian American older adults, satisfaction with social support was among the largest predictors of loneliness (Kim O., 1999). Furthermore, greater social support could modify loneliness as a risk factor for elder mistreatment (Dong X. et al., 2007). However, there has been limited qualitative study to provide in-depth understandings on the contextual factors relating to loneliness. Our findings suggest that formal as well as informal social support may serve as protective mechanism against loneliness (Ernst J.M. & Cacioppo J.T., 1998; Hawkley L.C. et al., 2008; Kim O., 1999; Heravi-Karimooi M. et al., 2010). In addition, our findings support the view that both the micro aspect of social relationships, and the macro societal support, are related to the feelings of loneliness (De Jong Gierveld J., Kamphuis F., & Dystra P., 1987; Pinquart M. & Sorensen S., 2003; Pinquart M. et al., 2003). Psychological correlates and physical health correlates should be given equal weigh as social correlates in preventing loneliness among this group of older adults who tend to view health with a holistic approach (Dong X. et al., 2010).

Fourth, this study confirms that loneliness is associated with adverse health consequences from physical, cognitive and mental points of view. Furthermore, we speculate that the immigration process may have exacerbated U.S. Chinese older adults' vulnerability of loneliness. Traditionally, Chinese culture dictates children's obligatory roles and filial responsibility to aging parents. In the context of immigration, however, adult children may not be able to adhere to the time-and-honored filial piety expectations due to the impact of U.S. culture, as well as their socioeconomic disadvantages as immigrants (Pang E.C., Jordan-Marsh M., Silverstein M., & Cody M., 2003; Wong S.T., Yoo G.J., & Stewart A.L., 2006). Therefore, family support and caregiving behaviors may be significantly influenced by immigration, acculturation, economic distress, as well as cultural and linguistic issues. Our findings confirm that Chinese immigrant older adults may be even more prone to the experience of loneliness and its negative health impact. In particular, our findings suggest elder mistreatment may be a major contributing factor in the feeling of loneliness, while conversely, loneliness may also lead to increase the risks to be mistreatment by a trusted other (Dong X. et al., 2007). Similarly, depression emerged as a main theme in both perceived determinant of loneliness, and in major negative health outcome of loneliness among Chinese older adults. Current studies support that depression and loneliness are considered to be separate constructs (Cacioppo J.T. et al., 2006; Prince M.J., Harwood R.H., & Blizard R.A., 1997), however, our findings point to the need to establish a deeper understanding and clearer association between depression and loneliness based on longitudinal studies. Furthermore, the intersection of immigration, cultural expectations, and loneliness and its health impact deserves exploration and in-depth investigations.

Last, strictly guided by CBPR principles, this study contributes in producing locally-relevant and context-specific findings, which is critical in designing preventions and interventions of loneliness in Chinese aging community (Leung M.W. et al., 2004). With community's full engagement, our academic-community partnership facilitated the design of culturally and

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linguistically appropriate research measures. Participants were comfortable in conversing in their dialects of preferences with trusting study staff. As a result, researchers were able to collect insightful responses on culturally sensitive issues of loneliness.

4.3 Limitations

There are limitations in our present study. First, our findings may not be generalizable to other Chinese subgroups due to vast ethnic and cultural diversity. The sample we used is purposively selected from the Chicago's Chinatown community and may not be generalizable to other Chinese populations, including other Chinese ethnic minority groups, suburban or rural Chinese populations, as they may be subjected to varying degrees of social and economic influence (Li W., 2009; Mo B., 1992; Chen H., 1992). Second, future population-based studies are needed to explore these issues in the Chinese community. Particularly, longitudinal studies that examine predictors of loneliness and differences in trajectories of loneliness over time will enhance researchers' understanding of factors that contribute to loneliness pertaining to Chinese older adults. Third, despite that focus group sessions contribute to uncovering cultural aspects of loneliness, the gropu discussions may have also made it challenging for older adults to talk about experienced loneliness openly. Future in-depth semi-structured interviews may be helpful to investigate loneliness based on their lived experiences. Fourth, this study did not address how older adults may be assisted in combating loneliness, which may be more helpful in determining intervention strategies with culturally appropriate measures. Nevertheless, our qualitative findings fill in the void in aging minority loneliness literature by confirming loneliness and its relationship to the cultural importance of intergenerational relationships and furthermore provides unique window on understanding loneliness among older adults that lays the groundwork for future research on the well-being of Chinese aging population.

4.4 Implications

This study has wide implications for healthcare professionals, social services agencies and policy makers. First, loneliness is common among U.S. Chinese older adults. The results underline the need for public awareness of this issue. Healthcare professionals should be alert of the association of loneliness and adverse health outcome. Our findings show that the health of older adults with loneliness may manifest in the forms of worsening overall health, elder mistreatment, health behavior changes and increased health care utilizations. Therefore, early identification of loneliness may help maintain the health of older adults, and promote the well-being and functioning of older adults.

Second, interventions should be directed toward enhancing social support of Chinese older adults. Community service centers with bilingual services and staffers may play a crucial role. On the one hand, social workers may help Chinese older adults establish satisfying social network, better supporting relationships, and physical and mental health, thus reducing the levels of loneliness. On the other hand, social services agencies could contribute in facilitating the capacity of family members of Chinese older adults to offer adequate support, and prevent older adults from being isolated.

Last, this study has implications for the provision of culturally-sensitive older adult care. From the policy perspectives, communities, cities and states, could take a critical lead in reducing social isolation, and increasing social networks and companionship for this group of older adults. Policy interventions will be instrumental to helping U.S. Chinese older adults as well as their family members overcome structural challenges in the context of immigration. Loneliness may be prevented when more support is available.

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4.5 Conclusion

We conclude that loneliness is common, yet understudied among Chinese older adults in the U.S. Investigating how U.S. Chinese older adults understand and perceive loneliness is a critical step in promoting the health and well-being of this increasingly growing population.

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Table I

Characteristics of the Study Population by the Presence of Loneliness

Any Loneliness	Yes (N= 39)	No (N= 39)	χ^2 -test	d.f.	P-Value
Age group, Number (%)					
60–69	9 (23)	11 (28.2)			
70–79	21 (53.9)	21 (53.9)			
80+	9 (23)	7 (18)	0.45	2	0.7985
Sex, Number (%)					
Men	18 (46.2)	19 (48.7)			
Women	21 (53.9)	20 (51.3)	0.0514	1	0.8206
Education levels, Number (%)					
0–8 years	12 (30.8)	4 (10.2)			
9–12 years	18 (41)	24 (53.9)			
13 or more	11(28.2)	14 (35.9)	5.0357	2	0.0806
Marital status, Number (%)					
Married	23 (62.2)	29 (82.9)			
Single	0(0.0)	1 (2.9)			
Widowed	14 (37.8)	5 (14.3)	5.9045	2	0.0522
Number of children, Number (%)					
0–1	4 (10.5)	5 (12.8)			
2–4	25 (65.8)	31 (79.5)			
5 or more	9 (23.7)	3 (7.7)	3.6429	2	0.1618
Number of people in the household, Number (%)					
1	19 (48.7)	12 (30.8)			
2–3	19 (48.7)	25 (64.1)			
4 or more	1 (2.6)	2 (5.1)	2.7322	2	0.2551
Origin, Number (%)					
Mainland	27 (69.2)	29 (74.4)			
Hong Kong	9 (23.1)	9 (23.1)			
Taiwan	2 (5.1)	0(0.0)			

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Any Loneliness	Yes (N= 39)	No (N= 39)	χ^2 -test	d.f.	P-Value
Others	1 (2.6)	1 (2.6)	2.0714	3	0.5577
Number of years in the US, Number (%)					
1–10	5 (12.8)	11 (28.2)			
11–20	19 (48.7)	15 (34.2)			
21–30	8 (20.5)	10 (23.7)			
31 or more	7 (17.9)	1 (2.6)	5.0478	3	0.1683
Understand English, Number (%)					
Well or very well	1 (2.6)	2 (5.1)			
Fair	1 (2.6)	0(0.0)			
Poor or very poor	36 (94.7)	37 (94.9)	1.3343	2	0.5132
Speak English, Number (%)					
Well or very well	1 (2.6)	1 (2.6)			
Fair	1 (2.6)	1 (2.6)			
Poor or very poor	37 (94.8)	37 (94.8)	0	2	1.0000
Overall health status, Number (%)					
Very good or excellent	9 (23)	9 (23)			
Fair or good	28 (71.8)	29 (74.4)			
Poor	2 (5.1)	1 (2.6)	0.3509	2	0.8391
Quality of life, Number (%)					
Good or very good	11 (28.2)	18 (46.2)			
Fair	27 (69.2)	21 (69.2)			
Poor or very poor	1 (2.6)	0(0.0)	3.4397	2	0.1791
Change in health in the past year, Number (%)					
Improved or significantly improved	8 (20.5)	12 (30.8)			
No change	20 (51.3)	21 (53.9)			
Worse or significantly worse	11 (28)	6 (15.4)	2.2950	2	0.3174

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Table II

Specific Symptoms of Loneliness in Chinese Population

	N=78	**%**
Lacking companionship		
Hardly ever	43	55.1
Sometimes	26	33.3
Often	7	8.9
Left out of life		
Hardly ever	51	65.4
Sometimes	24	30.8
Often	3	3.8
Feeling isolated		
Hardly ever	54	69.2
Sometimes	20	25.6
Often	3	3.9

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Table III

Perceptions of Loneliness

Themes	Subthemes	Sample statements
Emotional loneliness	Absence of intimate attachment such as intimate partnership (widowhood)	"Say if you are missing your lifelong spouse and live by yourself, would you be happy?" "I think it (loneliness) is like an old man, who I know of, his wife is gone and now he is all by herself and does not want to go anywhere."
	Lack of satisfying children-parent relationship	"The worst scenario is that children don't visit their parents."
	Absence of close friendship	"Old people will feel less lonely if they go out and talk to their friends and relax. Then they won't feel too bad even if their kids are not around." "We need to seek friends when we are not happy. We cannot miss friends."
Social loneliness	Lack of social contacts	"The Chinese proverb puts it well. Distant relatives are not as good as your next door neighbors. You have to look after each other so you won't feel lonely." "The community should establish a networking organization for old people to reach out to other people. It will be an outlet to prevent this dead end."
	Lack of participation in social activities	"In Canton, people can play Taichi every morning. Then there is dancing and picnic with your friends. Here in Chicago you cannot go anywhere and have nothing to do." "Why a person feels lonely? It is because he has too much time in his hands, but he does not know what to do."

Note: Table presents a summary of findings from focus group discussions among participants.

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Table VI

Determinants of Loneliness

Themes	Subthemes	Sample statements
Social correlates	Poor quality of relationships	"What type of reasons that makes them (older adults)feel lonely? I think it is the odds and ends at home with their kids that make them unhappy. They don't feel (their needs) were understood (by their children). They have nowhere to go." "Loneliness can even (happen) at the elderly apartments. The two old couple can themselves have problems and conflicts. The key is to relax and take things easy. A person's life last only a few decades. So do not get so serious. This applies not only to the children and grandchildren, but also to the couple themselves."
	Limited social network	"I don't know many people here. My daughter is gone for work. The kids go to school. Whom will you talk to?"
	Living arrangement	"When a person lives alone, he or she will feel terrible." "When we get old, it is better to live together. The idea of living separately is not good. It is important to live together. Older folks will feel less lonely."
	Social stress, including language and cultural barriers	"I talked to my daughter on the phone and mentioned that the old people here (at the elderly apartment) would have several iron bars. Due to language barrier, the management staff does not provide Chinese TV despite our suggestions to them. Some of my neighbors feel even more isolated." "One is the environment problem. Winter is cold and old people are not used the surrounding. It is not like in Canton. So they are confined at home."
	Elder mistreatment	"I have heard of this story. An old lady earned some money from washing dishes and used her money to support her grandchildren's medical school. But her daughter-in-law did not accept her and kicked her out of the house. That is why she is sad and lonely."
Psychological correlates	Migration grief	"We need to take things easy here. American society is very different than Chinese society. It is a different culture and a different tradition. Here we don't have everything like what we had back in China. Literally nothing. That is from the bottom of my heart."
	Depression	"People easily feel helplessness. So I think we need to view things with an open mind. Take things easy as if no frustration has occurred. Sit down and keep a calm mind. Then review your life's past like a movie. You will feel less lonely."
	Perceived stress	"Our mindsets need to be calm. If our mindset is stressed, then every negative feeling intensifies. Eventually your health suffers." "Old people don't feel happy because old people tend to takes thing by heart. Any minor events would lead to misunderstanding and then they themselves feel isolated."
	Anxiety	"I cannot sit alone at home. I cannot stand it. A know a lot of older adults like me. I need to go

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Themes	Subthemes	Sample statements
		out and do something.”
Physical health correlates	Poor perceived health	“The most important thing for old people is health. Without it you would be in trouble. Everything is dependent on health. A healthy person is happy. ” “Old people’s health determines the quality of their life and whether they are happy or not.”
	Functional impairment	“To prevent a person from having nothing to do, the important thing is to be capable of walking.” “Being immobilized, you cannot really find a solution (to loneliness).”
	Chronic illness	“You are referring to the question of health. In our building (elderly apartments) many people are having problems such as heart disease, bronchitis, stomach and colon diseases. They sit in their apartments all day long. Very sad.”

Note: Table presents a summary of findings from focus group discussions among participants.

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Table V

Negative Effects of Loneliness

Themes	Subthemes	Sample statements
Overall health	Depression	"When a person is lonely, he would not be happy." "I have noticed that my neighbors on the 4th, 5th, and 7th floor in the building (elderly apartment), they are lonely and unhappy and it seems like they are waiting to die. "
	Cognitive impairment	"These lonely folks who sit in their apartments all day are often have problems of headaches, fuzzy memory, and slur speech and so on. They are simply isolated from others."
	Low quality of life	"Old people do not understand and cannot read English when they come here. It makes them isolated. Besides, the old people are not interested in speaking English (…). What is the quality of life, if there is lack of contacts and leisure, even no Chinese TV to watch!"
Elder mistreatment	Increased risks of elder mistreatment	"I know a story of a girl who takes several hundred dollars of food stamp from his father. The father lives in a nursing home and does not speak English. He is always by himself. This daughter ignores his needs (…) and this girl even told me that she got all of his food stamps. Poor soul. He had no one to talk to."
Health behavior change	Poor health behaviors	"I think lonely old people may easily tend to get the habit of smoking and drinking. They need to take care of their own health, even if no one else is around."
Health care utilization	Nursing home	"Folks who are lonely may move to the 18th street. It is because they are not happy. Their children are not taking good care of them. The only way (to th prevent loneliness) is to move to 18 street (nursing home), at least there are other folks to keep you company."

Note: Table presents a summary of findings from focus group discussions among participants.