

# Family Health History and Mate Selection: A Qualitative Study of Chinese Americans' Views

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**Abstract:** Frequent and better use of family health history (FHH) may affect individuals' reproductive decision-making. Yet, its impacts on mate selection are unclear, given that selecting partners for dating or marriage often comes before pregnancy, and the attitudes and decisions for having children and selecting mates are somewhat different. As Chinese Americans are understudied in FHH-related research, we carried out the first qualitative study (to the best of our knowledge) to examine whether or not knowing someone's FHH influences dating or marriage decisions among this fast-growing ethnic minority group in the United States. In a community-based setting, we conducted in-depth interviews with 49 Chinese Americans. Interviews were audio recorded, transcribed, and analyzed using a content-analysis approach. Our findings revealed that about one-third of participants believed that FHH does not matter in their choice of mate, love is more imperative than FHH, and using FHH for mate selection is against God's will. Nevertheless, nearly half of participants perceived a number of negative impacts that FHH might have on dating or marriage. These negative thoughts were attributed to fears of (1) certain unacceptable, FHH-related, severe, chronic, or infectious diseases; (2) the potential of passing diseases to the next generation; and (3) the burden of taking care of the sick partners and the inability of the sick partners to care for participants' offspring. This study contributes to existing literature in FHH-related studies. Health education efforts are needed to educate Chinese Americans in order to improve their FHH knowledge, reduce unnecessary fears, and promote informed decision-making in mate selection.

**Keywords:** Family health history, Mate selection, Chinese American, Qualitative, Attitudes.

## INTRODUCTION

In this post-genomics era, family health history (FHH), advocated by leading health agencies [1-3] and researchers [4-6], can be utilized as a valuable tool in preventive medicine for identifying genetic risks and to improve the accuracy of disease risk assessments [4-6]. Along with those health benefits, frequent and better use of FHH may also have an influence on reproductive decision-making [7, 8]. Studies have found that people with certain diseases and traits may frequently worry about passing "bad genes" to their offspring, and consequently choose to have fewer children [9, 10]. Others may be reluctant to disclose their FHH diseases to partners and would rather risk the chances of having affected children instead [11].

Although FHH may affect individuals' decisions at the reproductive stage, its impacts on mate selection are unclear. Given that selecting partners for dating and marriage often comes before pregnancy, the attitudes and decisions for having children and selecting mates may be somewhat different. From a theoretical standpoint, the human mate selection theory has been well studied in evolutionary psychology. According to evolutionary psychology theory, the evolutionary pressure to have healthy offspring may affect the mate selection process [12]. Yet, it is

unknown whether FHH *per se* may affect individuals' decision-making in mate selection.

As the first study (to the best of our knowledge), we attempted to explore whether or not Chinese Americans would consider FHH in selecting mates, and to what extent FHH plays a role in that decision. We chose Chinese Americans as our sample for three main reasons. First, while Chinese Americans currently make up about 1.6% of the United States (U.S.) population, Asian Americans are the fastest-growing ethnic minority group in the U.S [13]. Second, Chinese Americans, as a group, are traditionally overlooked in FHH-based studies. Third, limited FHH-based research has found that Chinese culture is the main obstacle preventing Chinese Americans from collecting their FHH and communicating openly about it with other family members and physicians [14]. In line with other Chinese cultural value of stigma against families afflicted by FHH-related diseases, Chinese Americans are also in favor of prenatal genetic testing for FHH-related diseases in order to terminate affected pregnancies [15]. Thus, exploring the role of FHH in the mate selection process would further help us understand Chinese Americans' views on FHH.

## MATERIALS AND METHODS

### Study Design and Data Collection

We adopted semi-structured, hypothetically-based, open-ended, in-depth interviews for this study. Our

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research team first developed the interview guide, which was further revised based on the comments from the leaders and members of two major Chinese American communities located in the southern United States. Adults over 18 years of age were then recruited from these two communities. Before the interview, we explained the purpose of our study to participants. All participants consented to participate in this study and gave us permission to publish their thoughts. Given the importance of a wide range of perspectives in qualitative research, we used a snowball sampling technique to select our participants so our final sample would be diverse in sociodemographic features [16]. Based on the data saturation, we interviewed 49 participants in our final sample. Ten-dollar gift cards and health education brochures were given to participants as incentives.

The interviews were conducted in a private environment to ensure participants' confidentiality and privacy. Among 49 interviews, 46 were face-to-face interviews, two were Skype interviews, and one was a telephone interview. During the interviews, we inquired participants regarding their perspectives on FHH-related decisions in dating or marriage (which is the focus of this study) among other FHH- and genetic testing-related issues. In particular, we asked participants the following question: "Do you think knowledge of someone's FHH would influence your decision to date or marry him/her? Why or why not?" The duration of these interviews was 45 minutes on average. All interviews were audio recorded, and field notes were taken with the permission of participants. Forty-eight interviews were conducted in Mandarin, Taiwanese, or Cantonese, which were later transcribed into Mandarin verbatim. One interview was conducted in English and then translated into Mandarin by one interviewer who was fluent in both languages. The details of the study design can be found in our previously published articles [14, 15].

### **Researchers' Biases**

In qualitative research, it is vital to acknowledge researchers' biases, because researchers act as the instruments of data collection and interpretation [16]. In other words, researchers' backgrounds, values, and cultural beliefs often shape study findings. All researchers for this manuscript are Chinese American immigrants who share similar backgrounds and cultural values with the participants of this study. Recognizing that Chinese Americans are generally understudied in health research, we were eager to conduct studies that

would ensure our community's voice is heard. Understanding the impact of FHH on Chinese Americans' mate selection processes is especially interesting to the research team.

### **Data Analysis**

We adopted a content-analysis approach by using the constant comparative method [16, 17]. Data were coded, categorized, and classified according to theme using QSR NVivo 10 software. The data analysis was completed independently by two coders, who are also authors of this manuscript (Q.J. and S.Z.), and then crosschecked and discussed. After all of the themes were generated, the two coders worked together to finalize the data interpretation. These procedures ensured the inter-rater reliability of the qualitative data.

## **RESULTS**

### **Sample Characteristics**

The final Chinese American sample consisted of 22 (44.9%) males and 27 (55.1%) females. Except one participant born in the U.S. (n=1; 2.0%), the remaining were born in Mainland China (n=29; 59.2%), Taiwan (n=13; 26.5%), Hong Kong (n=5; 10.2%), or Thailand (n=1; 2.0%). The average age of participants was 43 years-old, varying between 18 and 75. Among the participants, 67.3% (n=33) had college degree or higher, 4.1% (n=2) went through some college, and 28.6% (n=14) finished high school or below. In terms of occupation, excluding 4.1% (n=2) respondents who were students, 81.6% (n=40) were employed, 8.2% (n=4) were housewives, 4.1% (n=2) had no jobs, and 2.0% (n=1) was retired. Less than half (47.0%; n=23) of the participants had no religion preference while 30.6% (n=15) believed in Christianity, 16.3% (n=8) in Buddhism, and 6.1% (n=3) in other religions. With regard to the annual household income, the range can be summarized as: 34.7% (n=17) over \$75,000, 14.3% (n=7) between \$50,000 and \$75,000, 12.2% (n=6) between \$35,000 and \$50,000, 14.3% (n=7) between \$25,000 and \$35,000, and the rest 24.5% (n=12) below \$25,000. As for marital status, 79.6% (n=39) were married, 18.4% (n=9) were single, and 2.0% (n=1) were divorced. Based on the criteria defined by a previous study [18], 38.8% (n=19) were categorized as highly acculturated (*i.e.*, having lived in the U.S. for 10 or more years and also self-identified as very good or excellent in English listening, speaking, reading, and writing on a five point Likert scale) and 61.2% (n=30) had low level of acculturation (*i.e.*, having lived in the

U.S. for less than 10 years and/or self-identified as poor, average or good in English listening, speaking, reading, and writing on a five point Likert scale). The majority of Chinese American in our sample (73.5%; n=36) had children, and about half (46.9%) of their children were born in the U.S.

**Findings**

We asked participants whether someone’s FHH would affect their decision to date or marry a person as well as the underlying reasons associated with their decision. Table 1 details their responses.

**FHH would Affect Participants’ Decisions to Date or Marry (n=22; 44.9%)**

About half (44.9%; n=22) of the interviewees believed that someone’s FHH would affect their decision to date or marry the affected individual for three reasons. The first reason was their concern about certain “FHH-related” severe, infectious, or chronic diseases such as diabetes, hepatitis, leprosy, leukemia, tuberculosis, dwarfism, rheumatism, glomerulonephritis, cardiovascular diseases, mental disorders, lupus erythematosus, or Acquired Immune Deficiency Syndrome (AIDS). According to one male participant (#37), who was a father of two children and had lived in the United States for sixteen years:

“FHH would definitely have an impact on my decision to date or marry. Certain severe and life-threatening diseases would do. But non-severe diseases such as diabetes or cardiovascular disease would also have an influence on my decision too. Back when I was married, I

didn’t give too much thought to health. If I had another opportunity to make such a choice again, I would take FHH into consideration.”

Another reason for why FHH might be a deciding factor in dating or marrying an individual, as expressed by 11 participants, involved worry about passing diseases to the next generation. These participants were anxious that someone’s FHH could make their children more susceptible to certain diseases, including genetic disorders (e.g., thalassemia), mental disorders, chronic diseases, and infectious diseases (e.g., AIDS and hepatitis). Thus, they asserted that they would consider someone’s FHH in dating or marriage.

Finally, eight participants claimed that FHH would affect their decisions in dating or marriage because they preferred to have a healthy partner. They believed that if their partners could not take care of themselves due to FHH-related diseases, this would then affect whether or not their children receive appropriate care from their partners (if they later married). In addition, they were also concerned about the burden of taking care of their partners, as one female participant (#32), who was divorced with no children, pointed out:

“I feel that everyone would want the person she or he is dating to be healthy. From a selfish point of view, a healthy person would not bring any extra burden to either side. When I was young, I would have had no problem taking care of my sick partner. But now I would definitely not date a sick person. I would prefer a healthy one.”

**Table 1: Frequency of Reasons Affecting Chinese American Participants’ Decisions to Date or Marry Based on FHH**

Whether or not FHH Would Affect One’s Decision to Date and/or Marry	Number of Participants	Percentage	Reasons for Decision (Number of Participants)
Yes	22	44.9%	Concerned about certain diseases (n=12)
			Do not want to pass diseases to children (n=11)
			Prefer to have a healthy partner (n=8)
No	16	32.7%	It does not matter (n=8)
			Love is more important than FHH (n=7)
			God’s will (n=1)
Not sure	11	22.4%	Depends on the type of disease in partner’s FHH (n=5)
			Depends on the severity of the disease in partner’s FHH (n=4)
			Never thought about this issue (n=3)

Note: Participants might give more than one reason for their answers; thus, the sum of the percentage of reasons is greater than 100%.

### **FHH would Not Affect Participants' Decisions to Date or Marry (n=16; 32.7%)**

Among 49 interviewees, 16 reported that FHH would have no influence on their decision to date or marry. In particular, eight participants thought that FHH should not matter when making a decision on dating or marriage, as stated by a male interviewee (#47) who had been working in the United States for nine years and had one child:

"FHH should pose no problem to my decision on marriage. Everyone is going to die one day. You should not use FHH as an excuse."

Moreover, seven participants replied that love was more important than FHH. According to one father of four children (#12) who had lived in the United States for thirty-eight years:

Interviewer: Do you think knowledge of someone's FHH would influence your decision to date or marry?

Interviewee: No, not at all. I think the decision of dating or marriage should not be affected by FHH.

Interviewer: Why?

Interviewee: Because I love her; I will care for her.

Lastly, another male participant (#1) commented that it was against God's will for one to be affected by another's FHH in considering dating or marriage. According to him:

"If I know my girlfriend's FHH, I would certainly not be affected by it. This is what I think. Since I am a Christian, God plans everything for us. If the decision [on dating or marriage] is based on FHH, then it is a fake selection, and fake selection is against nature."

### **Not Sure (n=11; 22.4%)**

Eleven Chinese participants were unsure about whether or not FHH would affect their dating or marriage decision. Specifically, five participants claimed that their decisions would depend on the type of diseases. A father of two United States-born children (#29) told us:

"I will definitely consider FHH. But if it is just high blood pressure, I don't mind since high blood pressure is very

common. Heart diseases, cancer, and blood diseases such as leukemia would affect my decision. As for other diseases, such as high blood pressure, high cholesterol, or even diabetes... these would not affect my decision. I don't need to consider this issue now since I am already married and have kids. But I would certainly remind my son about all of this stuff."

Another four participants said their decisions would be determined by the severity of the diseases. For example, a female participant (#38), who was a school teacher, offered this perspective in the following conversation with the interviewer:

Interviewer: Do you think knowing someone's FHH would affect your decision to date or marry him?

Interviewee: To some extent, it would. But it would depend on the severity of his FHH.

Interviewer: What kinds of diseases might concern you?

Interviewee: Well, how should I say this? Those diseases that have an impact on your normal daily life. For instance, severe heart diseases. If it is something like color blindness, it should be okay with me. If it is something life-threatening or very severe, I would definitely reconsider my decision.

Finally, three participants reported that they never thought about this issue. The response from one mother of two sons (#23) was typical: "This question has never occurred to me."

## **DISCUSSION AND CONCLUSION**

This is the first qualitative study conducted to explore Chinese Americans' perspectives on the role of FHH in mate selection. Although a number of studies focus either on FHH or mate selection, few researchers have examined the connection between FHH and mate selection. In this study, about one-third of Chinese American participants believed that FHH does not matter in their mate choice, love is more imperative than FHH, and using FHH for mate selection is against God's will. Nevertheless, nearly half of the participants perceived a number of negative impacts that FHH may have on dating or marriage. These negative thoughts were attributed to fears of (1) certain unacceptable, FHH-related, severe, chronic, or infectious diseases;

(2) the potential of passing diseases to the next generation; and (3) the burden of taking care of the sick partners and the inability of the sick partners to care for participants' offspring.

There seemed to be some misunderstandings regarding the definitions and negative impacts of FHH-related diseases among participants in this study. In particular, alongside genetic disorders that are often severe as well as mental disorders that are traditionally stigmatized in Chinese culture [15], several other FHH-related diseases were also mentioned by participants as being concerning, including cardiovascular disorders and diabetes, which are very common and treatable. Another issue is that while FHH-related diseases are defined as disorders caused by a mixture of genetic, lifestyle, and environmental elements (e.g., heart diseases and high blood pressure [19]), some participants misconceived infectious and contagious diseases (e.g., hepatitis, tuberculosis, and AIDS) as FHH-related diseases. Moreover, certain diseases mentioned by participants, such as leukemia, leprosy, and glomerulonephritis, are rare in the U.S. We speculate the reasons for participants to choose those diseases are because that some participants might have misunderstood the meaning of FHH-related diseases, and the diseases they referred to might have come from their own FHH or personal experience. The other possible cause is that all of our participants are immigrants. Some diseases, such as hepatitis and tuberculosis, are common in the places that participants grew up. Participants in this study might think of these diseases out of intuition. Future researchers are recommended to conduct similar studies in order to clarify the underlying motives for Chinese Americans' choices for those diseases.

Recognizing the limitations of this study is important. First, our interview questions are hypothetical. As dating and marriage are a complex process, Chinese American participants might have different views when facing the real situation. Second, due to the restriction of qualitative research, our findings cannot be generalized to all Chinese Americans, especially that our sample is mainly first-generation Chinese immigrants. Third, this study only focuses on whether or not FHH would influence participants' mating decisions. The converse question of whether or not participants believe their own FHH would affect other people's decision to date or marry them may provide more insights for this topic.

In summary, this study contributes to existing literature by examining whether or not FHH affects Chinese Americans' mate selection processes. There are several implications of this study for FHH research and practice. First, while leading health agencies [1-3] and researchers [4-6] have advocated the need for Americans to collect and communicate their FHH, the drawbacks of FHH disclosure in the mate selection process may need to be addressed. Second, past research has found that African American carriers of sickle cell diseases often "obfuscate (obscure, confuse, and confound [11, p26])" their health information in order to secure their reproductive autonomy. Chinese Americans might have similar attitudes in order to protect their dignity and value on the dating and marriage market. Future research, however, is needed in this area. Lastly and most importantly, because our study suggests that several Chinese Americans had biased misconceptions regarding FHH-related diseases and the associated consequences, health education efforts are necessary in order to dispel myths about FHH and promote informed decision-making in the mate selection process. Moreover, studies on other ethnic minorities are also needed to understand whether or not they have similar attitudes to those of Chinese Americans.

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