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Healthcare needs and access in a sample of Chinese young adults in Vancouver, British Columbia: A qualitative analysis

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ABSTRACT

Objectives: Immigrants of Chinese ethnicity and young people (between 18 and 30 years of age) are known to access health services less frequently and may be at greater risk for experiencing unmet health needs. The purpose of this study was to examine the health beliefs, health behaviors, primary care access, and perceived unmet healthcare needs of Chinese young adults.
Methods: Semi-structured in-depth interviews were carried out with eight Chinese young adults in Vancouver, Canada.
Results: A content analysis revealed that these Chinese young adults experienced unmet healthcare needs, did not have a primary care provider, and did not access preventive services. Cultural factors such as strong family ties, filial piety, and the practice of Traditional Chinese Medicine influenced their health behaviors and healthcare access patterns.
Conclusion: Chinese young adults share similar issues with other young adults in relation to not having a primary care provider and accessing preventive care but their health beliefs and practices make their needs for care unique from other young adults.

1. Introduction

Young adults, between 18 and 30 years of age, are at greater risk for experiencing unmet health needs [1,2]. The transition to adulthood represents an important period of profound change with significant milestones such as leaving the family home, gaining financial independence, and entering into relationships [3]. Young adults are more likely to change residences and move between provinces than any other age group [4]. High levels of mobility may leave young adults in socially unstable and financially insecure environments compared to other age groups.

Although young adults are generally considered healthy, they are at risk for developing unhealthy behaviours, such as smoking, inactivity, and excessive alcohol consumption; such behaviours have the potential to create health problems later in life [5]. In addition to potentially participating in risky behaviours, the rates of healthcare utilization are also the lowest for young adults compared to other age groups [1,6]. Moreover, one in seven Canadian young adults between the ages of 20 and 34 reported experiencing an unmet healthcare need in the Canadian Community Health Survey [7]. Immigrants also report higher numbers of unmet healthcare needs compared with other members of the population [8]. As perceived by the individual, healthcare needs that have not received attention are considered to be unmet [9,10].

Although immigrants are initially more likely to be in good health, as required by Canadian immigration criteria, they can face challenges in accessing healthcare because of language barriers, differences in perceptions of health and illness, and limited knowledge of the healthcare system [8,11]. It has also been reported that immigrants' relative good health deteriorates with time, becoming equivalent to that of the general population [12–14].

The decline in immigrants' health, known as the healthy

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immigrant paradox, could be in part due to acculturation. Acculturation is the dynamic and complex process where individuals from a differing ethnic group adapt to a new culture, often by adopting its behaviours, attitudes, beliefs, and language [15]. Acculturation extends beyond the immigration period into the second generation; young adults from the second generation of ethnic minority groups demonstrate changes in health beliefs and behaviours over time even when compared with immigrant young adults [16]. It is unclear the relationship between acculturation and health behaviours. Some researchers have found that acculturation positively influences health behaviours while others argue that the process of adaptation to a different culture negatively influences immigrants' health outcomes [17–19].

At the same time, the health beliefs, behaviors, and primary care access of young adults are also heavily influenced by their parents and their cultural values [20]. Past work from the U.S. suggests that Asian-Americans traverse through different and sometimes conflicting cultural realities through school and family life [21] [22]. For example, while Asian-Americans youths in general have lower rates of smoking compared with other non-Asian youth, upon closer examination increased levels of acculturation have been associated with increased rates of smoking for certain subgroups [23]. It is unknown to what degree exposure to Canadian culture through school and language contribute to influencing the health beliefs and practices of Chinese young adults. The amount of time in the new country, degree of fluency in English, and the presence or absence of native 'navigators' demonstrating how and where to access primary care are factors that influence the healthcare utilization of immigrants [24].

The relationship between acculturation and health becomes even more complex when we consider different patterns of acculturation which could take the form of assimilation, separation, integration, or marginalization [25]. Regardless of the form of acculturation, it could be that young adults experience unmet healthcare needs given their context of living within different cultures. Moreover, minority and immigrant groups often experience unmet healthcare needs in the context of primary healthcare, which relate to the accessibility, acceptability, appropriateness of the care received [8,26]. There is also the influence of health beliefs that some Chinese people may ascribe to such as those encompassed in Traditional Chinese Medicine (TCM). It is known that Chinese in Canada are less likely than people from other ethnic groups to consult primary care physicians [27,28]. Even after accessing primary healthcare, satisfaction with the care provided is appreciably lower when compared to the general population [29,30]. It is likely that different patterns of acculturation affect whether or not Chinese young adults experience personal or structural difficulties in accessing healthcare.

Adding to the complexity of the issues around acculturation and health, Chinese in English-speaking countries are often perceived as the "model minority"; a model minority is one whose members are seen to achieve a comparatively higher degree of socioeconomic success than the population average through hard work and determination [31,32]. We hypothesize that alongside the desire to minimize parent-child conflict, Chinese young adults may not want to rupture this social expectation by hesitating to reveal health problems that arise from engaging in risky health behaviours to healthcare providers and their families. This may result in the reduced detection of their mental and physical health problems.

Young adults are known to be at risk for unmet healthcare needs within the context of primary healthcare. Factors such as Chinese ethnicity and immigrant status may amplify differences in accessing health services given differing beliefs and knowledge around health and healthy behaviours. Chinese young adults may have different reasons for unmet health needs when compared to other young adults related to the different patterns of acculturation.

The purpose of this research was to explore the health behaviours, health beliefs, access to primary healthcare, and any perceived unmet healthcare needs of Chinese young adults in the context of primary healthcare in Vancouver.

1.1. Theoretical framework

We examined the factors that contribute to health decision making in connection with accessing health services by utilizing Andersen's Behavioural Model of Health Services Use. The Behavioural Model specifies that health behaviours and health outcomes are predicated upon environmental and population determinants, as well as the enabling resources that are available [26]. This model was selected as the deductive framework for examining the interview data for the qualitative study because it offers a theoretical perspective for studying the factors that lead to unmet health needs, especially for ethnic minorities [33].

2. Material and methods

2.1. Design & procedure

This study was conducted in Vancouver, Canada. Vancouver is a popular destination for Asian immigrants from China, Hong Kong, and Taiwan. According to the 2011 National Household Survey, 18% of metropolitan Vancouver's population were of ethnic Chinese origin [34]. Vancouver has been referred to as the "most Asian city outside of Asia" [35]. Because of the considerable number of young adult Asian immigrants in Vancouver, coupled with a paucity of information about their health behaviours, it is especially important to explore their health beliefs, practices, unmet needs, and access to primary healthcare.

This was a complementary mixed methods study design that employed a secondary analysis of survey data from a larger study (Chinese and South Asians' Preferences and Expectations of Primary Healthcare Survey) and in-depth interviews with ethnic Chinese young adults, between 18 and 30 years of age. The secondary analysis of quantitative data preceded the qualitative interviews. The qualitative interviews were analysed using a deductive content analysis. These interviews allowed for uncovering contextual information around Chinese young adults' healthcare usage, which was not available from the quantitative survey data. The analysis of the qualitative data is reported in this paper.

The interview participants were recruited from the larger study. British Columbian residents 18 years and older participated in a telephone survey about their preferences and experiences in the primary healthcare system. The telephone survey was administered to a representative sample of Chinese-, Punjabi- and English-speaking residents ($n = 1492$) using computer assisted telephone interview techniques (CATI). The research ethics board at the University of British Columbia approved all procedures for the larger survey, secondary analysis, and the in-depth interviews.

For the in-depth interviews, Chinese young adults from the larger survey study, who had consented to being contacted for related research, received telephone calls and were asked to participate in an interview about unmet health needs and health behaviours by the first author. Voice messages were left for those who did not answer if the option was available. Purposive sampling was employed to recruit approximately equal numbers of Chinese young adults based on language preference. Language preference (either Chinese or English) was used as a proxy measure for degree of acculturation in order to capture a range of behaviours that may be relevant for Chinese young adults who may identify more with one culture (i.e., Canadian or Chinese culture) than the other, and

accordingly may have different health beliefs and practices. Those who agreed to participate were mailed a cover letter and consent form. Arrangements for interview were made following receipt of the signed consent forms. The small sample size was deemed acceptable by the team as this study was exploratory in nature.

Participants were interviewed either over the telephone or in-person. Four participants opted for telephone interviews. In-person interviews (n = 4) took place at a public space of the participants' choice (e.g., a work room at a library). All interviews were conducted in English with the exception of one conducted in Mandarin Chinese with the help of an experienced Mandarin translator.

Health beliefs were explored at the beginning of each interview; participants were questioned about what they believed was necessary for a healthy lifestyle, and asked to share the reasons behind why they felt they were able or unable to live a healthy lifestyle. They were asked about their healthcare access and utilization and if there was anything they would change in terms of their health behaviours and practices. Participants were probed about health beliefs that were influenced by culture. Finally, experiences of any unmet health needs were explored.

Interviews were audiotaped and transcribed verbatim. The interview that was conducted in Mandarin was transcribed and translated directly into English from the audio-recording. Accuracy of the Mandarin to English interview was ascertained by another fluent Mandarin and English speaker. The internal validity and credibility of the qualitative data was supported by extensive checking of the interview audio-recordings with the transcripts.

2.2. Data analysis

Deductive content analysis of the interview transcripts was conducted using open-coding and text categorization. A two-level coding tree was derived from the Behavioural Model of Health Services Use and applied to the interview transcript data in addition to the emergent themes that arose. The main components of the Behavioural Model served as the major categories for the first level of coding, and this included environment, population characteristics, health behaviours, and outcomes. The next level of coding applied identified themes within each of the major categories; for example, under population characteristics, were factors like 'enabling resources' such as individual, provider, or community related supports, and 'health behaviours' as defined by personal health choices and use of health services.

The first author performed the initial pen and paper coding and text categorization of the interview transcripts. Crosschecking of transcript coding was carried out by the second author and reviewed by the third and fourth authors. Points of divergence in coding were discussed until the team reached agreement. Strategies that were employed to enhance the trustworthiness of the study included that of thorough record keeping and audit trails through the systematic recording and collection of materials and documentation.

3. Results

3.1. Participants

Eight in-depth interviews were conducted with Chinese young adults who were between 20 to 30 years of age. Most participants were fluently bilingual in Chinese and English, with half stating the preference for speaking Chinese, and the other half for English when given the choice. Seven out of eight participants were not born in Canada; these participants had lived an average of 14 years in Canada at the time of the interview (range: 5–19 years). Five of the participants were attending university full-time while the other three had graduated from university and were working full-time. Six out of eight participants resided with parents or extended family. Of the individuals who could be reached and who agreed to participate in the interviews, one individual reported having an unmet health need. Some young adults did not have a regular care provider. Other young adults who had regular care providers still preferred to access walk-in clinic services rather than their regular care provider.

3.2. In-depth interviews themes

Data from the in-depth interviews resonated with the categories of the Behavioural Model in relation to describing predisposing characteristics, environment, health behaviours, and outcomes such as unmet health needs. Nested within these findings, three distinct themes arose from the data, which included: 1) savviness about what constitutes a health lifestyle, yet not actively seeking preventive care; 2) valuing family input in personal health choices and decision-making; and 3) engaging in culturally influenced health practices. Many participants appeared confident in conveying what health related practices were part of a healthy lifestyle, and generally speaking, they felt that they were able to enact these self-identified healthy behaviours. Nonetheless, when it came to accessing healthcare, participants only obtained care from health professionals for episodic health problems rather than for preventive or health promotion purposes.

3.3. Health behaviors

3.3.1. Predisposing characteristics

Participants named physical activity, healthy diet, adequate sleep, stress reduction, balance, and a positive outlook as prerequisites for healthy living. None of the participants talked about avoiding risky behaviors such as smoking and drinking alcohol until prompted during the interview. Participants did not mention visits to physicians or healthcare providers as part of maintaining health until they were asked about their most recent healthcare utilization experiences.

Intersecting Cultures. Some participants felt that native-born Canadians (not necessarily Caucasians) were more likely to be physically active. The participant who was newest to Canada (immigrated at age 15) saw Canadian lifestyle as distinctly different from the lifestyle of Chinese immigrants, especially those who were older:

> "*I think Canadians are more concerned about being natural and living a more active lifestyle. And Chinese people, especially the older ones, are more traditional. It's like there are some things they will not venture to try. It is hard for them to change their original lifestyle, for example, diet and outdoor activities. They know that outdoor activities are good for health but for themselves they won't spend the time to get involved in them.*" (Female, 20 years).

Although many participants echoed this difference between Canadian born individuals and their own experiences, for some, this was mitigated by acculturation to a Canadian lifestyle. For instance, one interviewee said, "because we've been living in Canada for a while, we tend to keep an open mind … we learn from the Canadian views on healthy living." (Male, 30 years).

Chinese young adults living in Vancouver navigated between different health belief systems. Traditional Chinese Medicine (TCM), in addition to Western medicine, was considered an alternative modality to meeting health needs. Some participants felt that Western or conventional medicine (i.e. prescription

medication) had more adverse effects and perceived TCM as a natural way of healing. Interestingly, two women participants stated that they did not believe in or practice TCM, yet later went on to describe how they avoid cold and foods associated with "yin" or cold energies during their menstrual periods while making an effort to eat foods associated with "yang" or warm energies during that time. All the young women interviewed followed these TCM principles.

3.3.2. Familial ties as an enabling resource for accessing primary care

Familial ties played a large role in the health beliefs and behaviors of young adults and exerted influence on whether or not young adults accessed healthcare or practiced TCM. For enabling resources, the theme of family ties was highly prevalent in being a support and resource as well as a stressor for the participants. Meeting the health needs of the family in a collective manner played an influence on these young adults' lives. One participant explained that as a family, they had decided to become vegetarian during his teen years as a result of his father being diagnosed with hypertension and diabetes. Another participant described making significant changes in diet and level of activity as a family in order to support his brother who was diagnosed with hyperlipidemia.

Parents also served as a source of motivation or a means to access healthcare. One young woman had not visited a doctor since moving out of her parents' home three years prior; the last time that she had seen a doctor was when her mother had brought her to the clinic. Another participant's mother urged him to get a full physical examination during a visit to China. Some of the participants' mothers also encouraged or facilitated visits to a TCM practitioner for minor ailments such as musculoskeletal issues and general health maintenance. Several participants still had access to their parents' family physicians. When asked, all interview participants stated that they would confide in their parents regarding any personal health matters right away.

When young adults were asked about stressors in their life, the theme of family re-emerged. A strong sense of filial piety sometimes acted as a potential detriment to health. This sense of obligation towards fulfilling parental and/or family expectations recurred as an important subject in these participants' lives and acted as a stressor that was a barrier to attaining optimal health.

3.4. Environment

Interview content relating to the environment that emerged included comparisons of the local Vancouver lifestyle to other Canadian and Asian cities. Participants generally acknowledged that living in Vancouver had a positive influence on their current lifestyle and health related behaviours in terms of being more physically active and eating healthy foods. This positive view of the community environment also translated into participants' view that living in Canada was more conducive to healthy living. When asked about how health and health behaviours of the participants and their families differed from new Chinese immigrants, they pointed out a marked dissimilarity. One participant shared, "*I just think that life in Taiwan is a busier working life, they don't really have the time to pay attention to it [health]. I think we're more laid back here, so we have time to pay attention*." (Female, 20 years).

One young woman shared that in her situation, she was planning to move back to Hong Kong after graduation from university in order to help her father with the family business:

> "*Well, it's not like I don't want to stay in Canada but the reason why I want to go back to Hong Kong after I graduate is because of my father. I promised him I will go back and help him with his business. But otherwise, I would love to stay in Canada. You know like back in Hong Kong and China, everything is so crowded. Everyone is so stressed and busy all the time. You have to rush for everything. It's like so polluted. It just makes health worse. But if I am working for my father, then I guess that's exceptional.*" (Female, 20 years).

This participant appeared willing to forgo a potentially healthier environment in order to meet family responsibilities.

All participants had shared a family physician with their parents at some point. Notably, all the family physicians mentioned were of Chinese background and spoke Chinese, which the participants mentioned as being very important to their parents in relation to being able to communicate the care that they needed. However, it was not necessarily important to all the young adults for their primary care provider to speak Chinese.

Some participants were able to access two different healthcare delivery systems. These participants talked about how they accessed healthcare in China and Hong Kong while visiting. Those who had chosen to seek healthcare for non-emergent reasons while in Asia went for elective full physical examinations, or "whole body scans", which are not offered in BC. Other participants accessed healthcare in Asia because of minor health problems that arose during their visit. One participant shared, "*Back home [Hong Kong], if you have the money, you can do it anytime. It's instant or immediate. You don't have to wait a long time. It's pretty accurate too.*" (Male, 25 years). A number of participants indicated a preference for healthcare overseas because of immediate and convenient access.

3.5. Unmet needs

When asked about unmet healthcare needs, participants did not initially feel that they had an overt unmet healthcare need; however, several trends emerged. A few participants had not seen a physician in the past year. None of the participants mentioned accessing primary care for preventive or health promotion purposes and mainly pursued physician care for episodic health reasons. A pattern of delaying care also emerged as young adults shared that they postponed visiting a care provider for health problems that they considered tolerable. For instance, one young adult shared about his shoulder pain,

> "*I've been meaning to go to a physio. This is something I've never really gotten around to. I guess it's the hurdle of finding the right person and going to them and developing and establishing rapport and relationship with them. Somehow seems too much, although I would certainly pay a lot to have that pain go away.*" (Male, 26 years).

When participants were asked why they did not see a care provider for their health concern, reasons stated for not accessing care included lacking the motivation and having competing priorities such as time and cost.

One young adult who had initially responded "no" to having an unmet need, upon being asked the same question again, recognized that he did have an unmet healthcare need,

> "*I have a family doctor, I know I can just go there and see her. But right now, I don't have a dentist. I don't know where to look for a new dentist, what the procedure would be to get one, and whether my insurance covers it … It's not like, I want a Big Mac, there's a McDonald's, boom, done. It's more where do I start looking, do I have time to actually make an appointment to do the x-rays and*

things again, what's going to happen, what do I have to pay?" (Male, 20 years).

Young adults also shared how they did not like having to wait to see a physician, with one participant stating, "*For the second time – actually now I am still waiting for my specialist to see me because my allergies are coming back. It's been two months and my appointment is in August. I think it's a really long time and it [allergies] is really bothering me*" (Female, 20 years). Another participant stated, "*going to the doctor here, you always have to wait.*" (Female, 20 years). This led to the delay in receiving treatment, resulting in short term unmet needs.

4. Discussion

This exploratory qualitative work examined the health behaviours of Chinese young adults living in Vancouver. Participants were able to elaborate easily on elements that they felt were part of a healthy lifestyle (namely good nutrition, physical activity, and a positive outlook) in relation to their health behaviours and subscribed to maintaining these behaviours. Participants accessed primary care for episodic health problems rather than for preventive or health promotion purposes. Those who had a regular provider still preferred to visit walk-in clinics for reasons of convenience. Participants engaged in TCM practices along with accessing conventional medicine. Additionally, a number of participants accessed healthcare outside of Canada.

Health behaviours were influenced by family. A strong sense of filial piety and familial ties bestow a double-edged sword. Parents and families of the Chinese young adults provide a sturdy support network, as well as encouragement to enact certain health promoting behaviours. Zhang and Ta found that strong family cohesion for Asian individuals in the United States significantly contributed to self-rating of good mental and physical health [19]. There exists a flip side, which is the pressure for Chinese young adults to meet parental/familial expectations [36]. The strong family values presented a heightened sense of obligation, which often caused stress for the participants and produced conflict between their needs and what their families expect of them. These expectations could lead to depressive symptoms if individuals are unable to balance their own values and that of their parents. Mental health issues in Asian young adults are often masked by cultural and familial practices. People of Chinese ethnicity are far less likely to see a health provider for mental health reasons than other ethnic groups [37]. Additionally, the resultant stress they experience may have negative effects on health behaviours, as stress is associated with risk behaviours such as smoking, inactivity, and unhealthy diet [38].

Although many of the young adults did not initially believe that they had an unmet healthcare need, they identified areas in their life where there were unmet needs. For instance, some young adults did not have a regular primary care provider. A number of participants relied on walk-in clinics for episodic care. Additionally, young adults delayed visiting a healthcare provider for issues that they felt were not urgent, demonstrating a divergence between their health needs and actions. Preventive healthcare is something that young adults may not be thinking about, and this may pose problems later on especially if they have pre-existing health issues [39,40].

The views expressed by these Chinese young adults reveal how healthcare needs are met in our increasingly global world. Participants take advantage of using TCM practices, Western medicine, convenient walk-in clinics, and overseas care. Predominant values place importance on convenience over the continuity of seeing the same provider over a prolonged period of time. It is notable that some young adults chose to have full physical examinations done in Hong Kong or China, something that may not be readily available without medical necessity in British Columbia [41]. This speaks to an area of unmet need, in that Chinese young adults believe in the necessity of health screening, yet feel that they cannot get what they need from Canadian primary healthcare. This may suggest that all individuals may not necessarily want a regular provider.

Culture plays a significant role in relation to family influences, health beliefs, perceptions of need and subsequent healthcare access. Participants related experiences of reconciling learned behaviours from their families, culture, and their own evolving health beliefs and practices, like for example, using TCM in a complementary manner with conventional medicine. Their negotiation between Canadian and Chinese culture may affect their health behaviours and subsequent use of primary care. Previous work suggests that both Canadians of European and Asian descent believed that TCM has less adverse effects than conventional medicine [42]. Social and cultural factors such as acceptance and recommendation by family members heavily influences attitudes toward, and motivation for the use of TCM [43]. It is important for healthcare agencies and policy-makers to be aware of, and responsive regarding the use of complementary and alternative medicines like TCM.

4.1. Limitations

This is a small study examining health behaviours and access to primary care among Chinese young adult immigrants in Vancouver, British Columbia Canada. The in-depth interviews captured a relatively homogenous group of healthy Chinese young adults, most of whom initially responded that they did not have an overt unmet health need. These views may not be indicative of Chinese young adults living in other parts of Canada. More work is needed on how patterns of acculturation and self-efficacy affect health behaviours and healthcare access in Chinese young adults.

5. Conclusions

This study examined the health beliefs, behaviours, acculturation, and unmet health needs in Chinese young adults. Cultural and familial ties play an important role in healthcare decision-making for Chinese young adults. These young adults were generally in good health and were mostly knowledgeable about nutrition and physical activity in connection with a healthy lifestyle; however, they often failed to identify and practice other important health promoting behaviours such as engaging a regular care provider and obtaining age appropriate health screening. This may potentially put them at a disadvantage for long-term health maintenance as they value convenience and have competing priorities such as career and family.

Competing interests

The authors declare that they have no competing interests.

Authors contribution

Dr. Wong and Ms. Ou conceived of the study and design. Dr. Wong provided the data set for the secondary analysis. Ms. Ou carried out the secondary analysis and in-depth interviews and performed the initial analysis and interpretation of the data, which were then checked and discussed by the rest of the authors. Dr. Saewyc and Dr. Levesque contributed to the design of the study and were involved in the analysis of data. All authors have been involved in drafting and critically revising the manuscript.

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