主論文の要旨

Facilitators and barriers of adopting healthy lifestyle in rural China: a qualitative analysis through social capital perspectives

（中国農村において健康的な生活習慣を実践するための促進および阻害要因：社会資本の観点からの質的分析）

名古屋大学大学院医学系研究科　総合医学専攻
社会生命科学講座　国際保健医療学・公衆衛生学分野
（指導：青山 温子 教授）

张 燕

INTRODUCTION

Non-communicable diseases (NCDs) are the major public health concerns in China, however, little has been known yet about background social factors that influence lifestyles as possible NCD risk factors. This qualitative study aimed to explore facilitators and barriers of adopting healthy lifestyles among residents in a rural community in China.

METHODS

Three focus group discussions (FGDs) were conducted in Fangshan district of Beijing in 2013. Fangshan district is located 22 km southeast of central Beijing, composed of rural farmland and hilly areas.

A total of 23 residents aged from 33 to 70 years were recruited. The participants were divided into three age-stratified groups: group of under 45 year old comprised of 7 participants, group of 46-60 year old comprised of 8 participants, and group of over 60 year old comprised of 8 participants. The socio-demographic characteristics of the 23 participants were shown in Table 1. Most of the participants were married.

A FGD guideline was designed to elicit the participants' perception and experience regarding their lifestyles (Table 2). The audio-records were transcribed verbatim, and complemented with the handwritten notes. Text data in Chinese were inputted into qualitative analysis software NVivo 10 and analyzed by thematic approach, which contains the following 5 steps:

1) Familiarization: the authors read transcript many times to obtain the whole sense of the FGDs.

2) Generating initial codes: the initial codes were generated and shared with all the analysts. During this process, we found that most of the findings of the study were resonating with social capital theory. Thus, we applied the social capital framework to investigate the additional codes.

In the present study, social capital was defined as "social connections and the attendant norm and trust" and classified as bonding, bridging and linking. Bonding social capital refers to the strong ties with individuals who are homogeneous in social composition, whereas bridging social capital refers to the weak ties with individuals who are heterogeneous in social composition. In this study, we defined bonding as strong ties with family or close friends and bridging as the networks in the community level. Linking social capital was defined as the district, provincial and national level issues, such as the vertical ties with people with the local and central government.

3) Searching and reviewing themes: the codes were clustered into sub-categories and then categories. We defined sub-categories according to the commonality of codes from the perspective of social capital. The sub-categories were sorted and assigned into 3

categories of social capital framework: bonding, bridging and linking.

4) Defining and naming themes: themes were finally created to link the categories and mapping the whole thematic system. Table 3 illustrates the process of themes generated from the transcribed text by showing some examples.

5) Reporting: vivid and compelling examples from participants' conversation in FGDs were selected and presented.

RESULTS

Through social capital framework with bonding, bridging, and linking classifications, we identified the following two themes: Theme 1 facilitators of the healthy lifestyle adoption; and Theme 2 the barriers of the healthy lifestyle adoption. Table 4 summarizes the themes, categories, subcategories emerged, and quotes of the participants' words.

Theme 1: the facilitators of the healthy lifestyle adoption

Bonding social capital

(1) Mutual support from family/friends: participants described that strong ties within kinship or friendship networks encouraged them to adopt healthy lifestyles.

(2) Motivation to participate in regular exercises: motivation to stick to regular exercise occurred when participants had many friends "alike" to do it together.

Bridging social capital

(1) Cooperative relationships with community health workers: participants mentioned the cooperative relationship with community health workers, which might encourage their health seeking behavior and enhancing health promotion campaigns.

Linking social capital

(1) Nationwide high level of awareness of healthy lifestyles: participants remarked the level of awareness were high due to various health promotion campaigns.

Theme 2: the barriers of the healthy lifestyle adoption

Bonding social capital

(1) Negative influence from family/friends: participants mentioned that unhealthy behaviours such as smoking and over-eating of fatty foods, were shared with all family members.

(2) Insufficient support from family/friends: scarce support from family members and close friends may drive the person into unhealthy lifestyles.

(3) Peer pressures: people may adopt risky behaviors such as smoking, over-drinking and over-eating, as they want to be recognized by their peers. Participants believed that entertaining relatives or friends in a restaurant and drinking a lot of alcohol were necessary to earn respect of their guests and maintain the good relationship with them.

(4) Tolerance towards unhealthy lifestyles: tolerance towards unhealthy lifestyle of the members of the close network made people think that it would be all right to adopt risky behaviors.

Bridging social capital

(1) Insufficient support from health professionals: participants clearly expressed the strong motivation of changing behaviors, although they felt that they could not succeed without professional support from health workers.

Linking social capital

(1) Inequity in allocation of public resources: inequity in allocation of public resources due to insufficient rural development policies made it difficult for rural residents to access good quality of health services.

DISCUSSION

We identified facilitators and barriers of healthy lifestyle adoption among rural residents in China through the perspective of social capital. Bonding, bridging and linking social capital would work as facilitators to adopt healthy lifestyles, however, social capital also work as a barrier. The social capital framework with bonding, bridging and linking classification enabled us to capture the function and strength of different social networks in the rural community in China. To our knowledge, it was the first qualitative study addressed to the lifestyle issues in rural China. Qualitative approach provided a very useful way to understand the underlying issues, which the previous epidemiological report alone could not achieve.

Several studies indicated the role of social capital in adherence to healthy lifestyles. In the present study, we identified similar positive effects of social capital on adopting healthy lifestyles. However, we also found that social capital would also work as a barrier for improving health by discouraging adoption of healthy lifestyles. Chinese culture emphasizes interpersonal relationships, therefore, heavy drinking, sharing tobaccos, and entertaining guests in a restaurant are considered as paying respect to others, particularly in rural communities. In addition, many Chinese regard obesity as a symbol of health and rich. Although people's perceptions of obesity changed considerably in the last decade, most Chinese still think it is acceptable for middle-aged and old people to be overweight or obese. This tolerance towards unhealthy lifestyle among the family or friends could apparently decrease the motivation to change behaviors.

The findings of the study would be very useful in setting intervention priorities in rural communities. For example, bonding social capital, which provides intensive supports to the individuals, is expected to play an important role in adopting healthy lifestyles. To mitigate the adverse effects of social capital such as peer pressures to continue smoking and over-drinking, interventions should target the whole community

rather than individuals. Taking into account of the social capital perspective, strategies and interventions to control NCDs would be effective and sustainable.

This study has several limitations. First, due to time constrain, only summary of the FGDs transcript could be translated into English. Second, younger participants (18-30 years old) could not be recruited in this study, because most of them went out of the community for part-time jobs during the slack season for farmers.

CONCLUSION

Bonding, bridging and linking social capital could work as facilitators and barriers for adopting healthy lifestyles in a rural community in China. NCD control strategies in rural China should take social capital perspective into account, to make health promotion intervention effective and sustainable.