# ORIGINAL PAPER

# Discourses of Preconception Health and Care: Perspectives of Rural Women in Zhejiang, China

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#### Abstract

**Background:** Preconception health has become an integral part of global maternal and child health, whereas preconception care has been recognized as the next frontier for improving pregnancy outcomes. The literature shows that the language surrounding the concept of preconception health and care is mainly focused on risk factors and often confined within the biomedicine-oriented risk reduction framework.

Aims: This study aimed to define preconception health and care from reproductive-aged women's perspectives in rural China.

**Methodology:** This was a discourse analysis study. The study was conducted in Tonglu County, Zhejiang, China. A total of 40 in-depth individual interviews were completed from April to August 2009. Fairclough's approach to critical discourse analysis was adopted to analyze the interview text.

**Results:** All women verbalized that keeping healthy was important to both women and men before pregnancy. Participants drew from individual, family, and societal levels of social practices to form the following four main discourses of the concept of preconception health and care: (a) keeping free from diseases, (b) keeping free from menstrual abnormalities, (c) maintaining physical strength, and (d) maintaining a positive emotional and mental state.

**Conclusions:** This study affirms the prevalence of Chinese medicine in shaping preconception health and care beliefs and the need to promote a family-centered approach to preconception health promotion.

Keywords: Preconception Health, Preconception Care, Rural China, Women, Critical Discourse Analysis, Family-centered Care

#### Introduction

Preconception health has become an integral part of global maternal and child health, whereas preconception care has been recognized as the next frontier for improving pregnancy outcomes (Boulet, Parker & Atrash, 2006; Thompson, Peck and Brandert, 2008). According to the United States (U.S.) Centers for Disease Control and Prevention (CDC) Select Panel deliberations and its subsequently published recommendations, preconception care is defined "as a set of interventions that aim to identify and modify biomedical, behavioral, and social risks to a women's health or pregnancy outcome through prevention and management, emphasizing those factors which must be acted on before conception or early in pregnancy to have maximal impact" (Johnson et al., 2006: 10). The language that surrounds the concept of preconception health is focused mainly on risk factors, while the language of preconception care is that of the biomedicineoriented risk reduction framework (Johnson et al., 2006; Ponser et al., 2006). Language use is inseparable from social practices, and the language associated with dominant discourses tends to become the norm (Fairclough, 2003). In this regard, the current conceptualization of preconception, as per the literature, is mainly Western-based.

With the growing awareness of nonbiomedicineoriented health and care conceptualization in both Western and non-Western societies, however, investigate there is а need to the conceptualizations of preconception health and care in non-Western societies. Women of reproductive age are at the center of the current preconception care conceptual model (Ponser et al., 2006). Their views on preconception health and care have not been carefully studied. Thus, the purpose of this study was to examine the discourses of preconception health and care that circulate among reproductive-aged women in a rural region of China. The specific aim of this study was to define and critically analyze preconception health and care from the viewpoints of reproductive-aged women.

## Background

Significant improvements in infant and maternal pregnancy outcomes during the past 40 years have been partly attributed to the recognition of the importance of the period before conception, also known as preconception period (Atrash et al., 2006; Biermann et al., 2006; Lu et al., 2006). Growing societal awareness of preconception health and care is a result of accumulating evidence in this field of research. Curtis et al., (2006) summarized some of the evidence from preconception care efforts that have been proven to impact pregnancy outcomes. One such effort is the intake of folic acid by reproductive-aged women before conception, which can prevent neonatal neural tube defects; another is the management of preexisting diabetes to lower the risks for birth defects. Furthermore, the outcome measures of preconception care have been expanded to look at not only maternal and child health mortality and morbidity, but also to include achieving optimally spaced, planned pregnancies (Biermann et al., 2006).

China has achieved enormous improvements in maternal and child health outcomes during the last few decades (Blumenthal & Hsiao, 2005; Ma & Sood, 2008). Unique Chinese conceptualizations of health have been in existence for over two thousand years (Farquhar, 1994; Scheid, 2002; Unschuld. 2003). Such unique Chinese conceptualization of health is mainly seen in the practice of Chinese traditional medicine and different forms of folk medicine (Hsu, 1999; Kleinman, 1980). Currently, the coexistence of various health care systems is still recognized in China. The diversity of the health care systems is reflected in the operation of many Chinese traditional medicine hospitals and clinics (Kleinman, 1980; Unschuld, 2003). Traditional Chinese medicine is anchored in а nonbiomedicine-oriented belief system. Although the presence of Chinese traditional medicine is still strong in China, little attention has been paid to whether such nonbiomedicine-oriented beliefs have been applied to preconception health conceptualization.

## Methodology

## **Study Design**

This was a critical discourse analysis (CDA) study. Preconception health and care were investigated as a socioculturally constructed phenomenon, and the preconception language was examined as inseparable from social practices. CDA is not a unified methodological framework with clearly defined boundaries; rather, it is a form of inquiry with different methodological approaches. This study was informed by Fairclough's explanation of how language mediates relationships of power and domination in social interactions (Chouliaraki & Fairclough, 1999; Fairclough, 1995, 2003).

## **Data Collection**

Ethical approval to conduct the study was provided by the university's Institutional Review Board. The data reported in this study are drawn from a more comprehensive study, conducted from April to August 2009, in Tonglu County, Zhejiang Province, China. A total of 40 reproductive-aged women were interviewed. The age range was 20-29.

The semi-structured, in-depth interviews were conducted in Mandarin Chinese. The interviews were tape-recorded and transcribed verbatim. Written consent was obtained before each interview.

### **Data Analysis**

This study adapted Fairclough's (2003) CDA approach in analyzing the texts. The major analysis processes were:

(a) assessing which social networks were addressed in participants' accounts of preconception health,

(b) assessing which social networks were addressed in participants' accounts of preconception care,

(c) identifying how different discourses were constructed within participants' social networks, and

(d) reading and rereading the interview texts and identifying discourses that constructed preconception health and care.

Data analysis was conducted in the language of Mandarin Chinese to preserve the original and contextual meanings. The researcher used ATLAS.ti software for data management. To enhance the study's rigor, a variety of techniques were used, including validating the researcher's interpretations by a diverse group of experienced health professionals and member-checking the researcher's interpretation of the data.

# Results

All women verbalized that keeping healthy was important to both women and men before pregnancy. When asked to define preconception health and care, participants drew from individual, family, and societal levels of social practices to form the four main discourses of the concept, as presented below. Each discourse contains the intertwined relationship of the different levels of social practices.

#### Keeping free from diseases

When asked what status they would consider as healthy before getting pregnant, ten participants identified keeping free from disease. The phrases used to describe keeping free from disease were *"absence of any diseases,"* and *"do not become ill."* 

# One participant stated, "Being healthy means being free from disease."

Although only 10 women described the absence of disease as important to both women and men before pregnancy, all participants identified behavioral factors that put one at risk of becoming ill.

Avoiding risky behaviors was viewed by all participants as the nondisease-specific strategy to keep themselves free of disease. Although participants' views varied in regard to type of behaviors considered risky to preconception care, five major risky behaviors were recognized by the participants, i.e., smoking, drinking, gambling, staying up too late, and eating junk food.

Women viewed men's risky preconception behaviors as smoking, drinking, and gambling. They felt that, in their social networks, it would be ideal not to be friends with those who enagaged in any of the five major risky behaviors. In reality, this was not possible, and all participants described smoking and drinking as a "hard to avoid" cultural practices. In regard to male partners, they stated that it was difficult to find a man who did not smoke or drink. Women spoke of these "hard to avoid" cultural practices as factors that could have a negative impact on pregnancy outcomes.

Additionally, gynecological diseases were identified as the disease about which participants had the greatest concern in regard to one's future pregnancy. According to one participant, "It is better for the baby if a woman does not have a gynecological disease before pregnancy." Men's promiscuous behaviors or sexual infidelity, women's lack of self-respect, and poor hygiene were cited as factors that lead to gynecological diseases.

Men's sexual infidelity was phrased as "playing around" and "coming home late at night." Women's lack of self-respect was referred to as "having abortions before marriage" and "taking contraceptives blindly" (in terms of their risk) as a result of becoming sexually active. Ten participants viewed abortion as putting them at high risk of infertility.

Both sexually transmitted diseases and infertility were viewed as the major consequences of one's promiscuous behaviors and lack of self-respect.

For instance, a participant stated, "Men should not play around, and women ought to have selfrespect. There are now so many people with [gynecological diseases], it's easy to get infected with these diseases."

Keeping free from menstrual abnormalities

Nineteen women viewed menstrual abnormalities as a concern in regard to preconception health.

The phrases used by participants to describe menstruation were "monthly period," "time out," "the old problem," "big auntie," and "happening to your body."

The terms used to describe menstrual abnormalities were "irregular periods" and "abnormal periods." Five menstrual abnormality symptoms were identified by participants, i.e., "pain during menstruation or dysmenorrhea," "too small an amount of menstrual flow," "too large an amount of menstrual flow," "long menstrual period," and "irregular menstrual periods." Menstrual abnormalities were viewed as a major contributor to health problems of one's future baby.

One participant stated, "Babies born from women who have menstrual abnormalities are not healthy."

Nineteen participants identified the causes of menstrual abnormalities as "eating food you shouldn't eat," "touching water" (as explained below), "having poor menstrual hygiene," and "having a weak physique."

The care used to avoid menstrual abnormalities was described in terms of "to pay attention" or "to avoid."

Unfit foods identified by the participants included cold food, food that is cold in nature, such as melons, sour food, spicy food, and pungent food, which has a strong flavor or odor.

Touching water was identified as drinking cold water, washing one's hair, or bathing with cold water.

Participants voiced their views that unfit food and touching water during the menstrual period cause menstrual pains.

In this regard, one participant stated, "I have known this since childhood: eat less cold food and . . . when your period comes, you can't wash [your hair]. Afterwards you'll have painful periods." Participants' accounts of cold or cold in nature food and cold water were focused on the notion of making a woman's belly too cold, which would, in turn, cause infertility.

For women with abnormal menstruation, the care strategy involved the need "to regulate menstruation." Fifteen participants viewed a Chinese medicine approach, as compared to a Western one, to regulating menstruation as more desirable.

Brown sugar mixed with ginger soup was viewed as the best method to relieve menstrual cramps or pain.

Notably, the achievement of normal menstruation, before becoming pregnant, was viewed as important. Women noted that knowledge of methods to achieve normal menstruation and to care for abnormal menstruation was passed down from their families or from female friends, who were generally older and lived in the same community.

The participants also stated that, as a result of strong social and cultural changes, abnormal menstruation has become too common.

#### Maintaining physical strength

Nineteen participants viewed maintaining physical strength as the criterion of being healthy. The phrases and terms used by participants to describe physical strength were "*vitality*," "*physique*," *and* "*condition of body*."

Maintaining good physical strength was viewed as "having good vitality," "having a strong physique," and "having a good body condition." These 19 participants indicated that having good physical strength was important both to women and men before pregnancy. In men, "vitality" or "physique" was regarded as having a direct impact on pregnancy outcomes.

One participant stated, "A baby will be healthy, for sure, if the husband has strong physique." Men's physical strength was viewed not only as affecting the health of a baby but also its gender. In this regard, a participant stated, "If a man maintains good physical strength before conception, it's likely for a couple to have a baby boy."

The state of not maintaining physical strength was phrased in terms of "*diminishing vitality*," "*weak physique*," "*weak body condition*," *and* "*weak body*." Two participants noted a high risk of miscarriage among women who have weak body conditions or weak physiques.

result of abnormal diminishing vitality, a weakening physique, and a weakening body condition, which, in turn, could result in an undesirable pregnancy outcome.

a decline in physical strength.

reaches her thirties."

easilv occur."

According to one participant, "A baby would be born healthier from a couple whose ages are below 30 years old . . . once one gets older, physical strength weakens."

One participant stated, "If a woman has a weak

body when she gets pregnant, a miscarriage might

Ten participants recognized age as a contributor to

One participant stated, "The vitality of a person is

stronger in her twenties compared to when she

In regard to the best age to become pregnant,

participants described age as connected with

Nourishing or regulating one's body before pregnancy was viewed to be of paramount importance to preconception care, as stated by one participant, "To nourish one's body is the most important thing before one gets pregnant."

A participant who had experienced a miscarriage stated, "If I had taken care of and nourished my body before I got pregnant, the miscarriage would not have occurred."

Although strategies such as taking dietary supplements also were viewed as necessary, eating tonic foods was considered the most important strategy. Half of the participants described one type of tonic food, blood nourishing food, such as red dates and donkey-hide gelatin, in particular, in relation to preconception care. The participants noted that a discussion of various types of tonic foods was always a welcomed topic when they gathered with female friends from their social networks. Tonic foods are believed to both nourish and maintain the harmony and balance of the body. However, the preparation for tonic foods is not always convenient, and it is generally more convenient to take dietary supplements. The media advertise both tonic foods and dietary supplements.

Maintaining a positive emotional and mental state

Of the participants, 27 described maintaining a positive emotional and mental state as an important part of preconception health for women.

Phrases used by participants to describe maintaining a positive emotional and mental state were "having a good mental attitude," "having a good mood," "having a relaxed mood," "having a healthy emotional state," "feeling no pressure," "not being sad," and "not being depressed."

A positive emotional and mental state was reported to potentially affect the quality of eggs.

According to one participant, "It seems that the quality of an egg is better when a woman is in a good mood."

Having a positive emotional state also was reported to make conception easier.

Factors identified by participants as contributors to a positive emotional and mental state were a harmonious relationship within the family and financial security.

Fifteen participants recommended having financial stability before becoming pregnant.

For instance, one participant stated, "I think it's important to have a financial foundation before having a baby because there will be a lot of expenses after the baby is born... to raise a child these days takes a lot of money."

Discussion of considerations such as the costs of raising a child often sparked great interest and participation from both men and women at work places.

Participants, however, talked more about harmonious relationships than financial security. Of the participants, 17 viewed a harmonious relationship with their husband as fundamental to maintaining a positive emotional state.

Men's promiscuous behavior and bad temper were viewed as factors that affected a woman's emotional and mental state.

One participant stated, "A man's temper will affect a woman's emotions, and it will have an

*impact on the future baby. Further, a man should not go out and play around . . . it's the traditional value of chastity.*" The traditional value of chastity, however, is losing ground, with a resulting negative impact on families.

# Discussion

The findings from this study reveal that, for these Chinese rural women, preconception health and care were anchored to both biomedicine (Western) and non-biomedicine (non-western) perspectives. Preconception health and care was described by the participants as a multidimensional concept that encompassed similar themes for preconception health and preconception care. Participants' descriptions of preconception health related to their health prior to conception, while those of preconception care concerned their practices related to caring for themselves prior to conception. The factors presented in theses descriptions were at various levels, i.e., the individual, the partner/spouse, family, and society. Two types of social networks-friends and coworkers-played an important role in participants' view of preconception health and care. These two types social networks could be the focus of institutional- and community-level interventions in an ecological framework for preconception care (Ponser et al., 2006).

Consistent with the beliefs and practices of women who primarily use the practices of Western medicine in the United States, with respect to preconception care, the beliefs and practices of the women in this study described similar behaviors. These women, however, also engaged in culturally unique strategies to promote their own preconception health. For example, the participants believed that menstrual abnormalities were a major contributor to the ill health of a future baby and that such irregularities were viewed as an important concern in preconception care. Unlike their Western counterparts, these women described some types of foods and interactions with water to avoid during their menstrual periods. Specific practices included avoiding cold, spicy, and pungent foods as well as

not drinking, not washing one's hair with, and not bathing in cold water during one's menstrual

period. Beliefs and practices consistent with Western medicine included regulating the menstrual period, remaining healthy and diseasefree during the preconception period, maintaining physical strength, and sustaining a positive psychological state prior to pregnancy. The beliefs and practices related to maintaining physical strength are consistent with traditional Chinese medicine's concept of health that involves the maintenance of an internal and external balance, the harmony of yin-yang, and the vitality of the body (Farquhar, 1994; Furth, 1999; Unschuld, 2003).

In this study, rural Chinese women viewed men as being "interconnected" with women in achieving optimal preconception health. For example. women's emotional and mental state was dependent on how they were treated by men and their evaluation of men's fidelity in the relationship. Although reproductive-aged women are at the center of biomedicine-oriented preconception care conceptualization, men also have received attention in recent years; the focus, however, is to improve men's health before conception by addressing their preexisting medical conditions and risky health behaviors that might affect pregnancy outcomes (Frey and File, 2006). In this study, these rural women also were concerned about the consequences they might suffer as a result of men's promiscuous behavior. In this regard, men were blamed in causing women to have gynecological diseases that, in turn, could have a negative impact on the pregnancy. Thus, men were not just conceptualized as the sperm contributor but also as a factor that maintains a woman's preconception health, both physically and emotionally.

Finally, the construction of preconception health and care for these rural Chinese women included the notion that the responsibility of maintaining optimal preconception health was borne by the individuals and their families rather than by healthcare providers. The young women described various factors that could affect preconception health but failed to make references to the healthcare system or healthcare providers; rather, they referred to the larger society as cultivating or maintaining certain social practices. This finding further supports the impact of nonbiomedicine in shaping their preconception beliefs. Moreover, although biomedicine beliefs are evident in these rural Chinese women's accounts of preconception health and care, individuals cannot be viewed as the only central player in the biomedicine-oriented preconception care model (Moos, 2010; Posner *et al.*, 2006). Rather, individuals and their interconnected relationships within their family contexts are to be viewed as one, and this constitutes the core of a true familycentered care.

## Implications

The findings from this study have practice, implications research, and policy for preconception health promotion in rural China and around the world. For practice, preconception health is not only about maximizing the impact on pregnancy outcomes but also about the conservation of women and men's ability to conceive during their reproductive life span. It is important to take a family-centered approach to providing preconception health education and care. The family-centered approach can have a different emphasis at different developmental stages of a person's reproductive life span, particularly a woman's.

The Chinese have unique beliefs on what food and medicine can help to maintain physical strength, but their beliefs in exercise, adequate sleep, and avoidance of junk food are universal.

While more studies are needed to document the effect of these traditional Chinese medicine beliefs and practices on pregnancy outcomes, healthcare providers should respect these cultural beliefs and practices while educating couples about other preconception health promotion information. Alternative medicine in the area of preconception care is uncharted territory with great potential due to its rich and diverse cultural beliefs that include the Chinese perspective. Policies on raising societal awareness of preconception health and care also should take into consideration these cultural discourses that shape people's health beliefs.

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