

Getting Through Fertility: Self-Care Management Process of Thai Women with Abnormal Menstruation Due to Polycystic Ovary Syndrome

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Abstract

Introduction: Polycystic ovary syndrome (PCOS) is a common health problem among women of reproductive age. Little is known about self-care management experience of Thai women with PCOS.

Objectives: In this study the authors aimed at describing substantive model of self-care management process among Thai women with PCOS.

Methods: We used grounded theory approach to design this study.

Results: Getting through fertility was the core category of self-care management process among Thai women with PCOS.

Conclusion: Being diagnosed with PCOS could raise women's awareness to modify their lifestyle to treat amenorrhea and associated symptoms.

Keywords: Polycystic ovary syndrome, amenorrhea, self-care management, women health, grounded theory

INTRODUCTION

Polycystic ovary syndrome (PCOS) is a common reproductive health among women worldwide. It is characterized by abnormal menstruation, sub-fertility excess weight gain, long hair on face and extremities, and other related conditions. PCOS affects reproductive life among women worldwide. Women with PCOS are concerned of its impacts on their health. Firstly, they experience irregular menstruation. Which if left untreated, amenorrhea can occur. For married women who desire to have a baby, they seek medical treatment and would be diagnosed with PCOS. Early detection and management of PCOS would prevent further complications.

PCOS is diagnosed by using 2 out of 3 manifestations in Rotterdam criteria: 1) hyperandrogenism; 2) menstrual irregularity; 3) polycystic ovary on ultrasonography

(El Hayek, Bitar, Hamdar, Mirza, & Daoud, 2016). It is estimated that one of ten women is affected by PCOS. This high number includes 11-20% women in the United States (Dokras, Shailly, Melanie, Jay, Cooney, & Helena, 2015), 10-15% of Danish women, and the prevalence of PCOS is (Glinborg & Andersen, 2017), and 5-10% of Thai women. However, up to 70% of the women experiencing some signs and symptoms of PCOS have not been officially diagnosed because they are unable to or unfamiliar with the disease (Legro et al., 2013).

Obesity is a common symptom among women living with PCOS as it is associated with insulin resistance and impaired glucose tolerance. Known risk factors are genetic and dietary pattern. Women with a family history of female infertility are more likely to have sub-fertility or infertility due to PCOS. Moreover, research evidences show that overeating of foods

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containing high calorie, sugar, trans fat and animal fat are also associated with development of PCOS (Kachhawa & Singn, 2017).

Women with PCOS are more likely to develop reproductive health problems and other related complications. Abnormal menstruations including irregular menstrual cycle, amenorrhea, or heavy uterine bleeding are symptoms that often raise the women's concern enough to seek medical treatment. For married women, sub-infertility or infertility is the most worrisome sign of abnormal ovulation. In addition, women with PCOS usually have acne, excessive facial and body hair (Tabassam, Imtiaz, Sharafat, Shukar-ud-din, & Nusrat, 2014).

Recommended medical treatment for women with PCOS are lifestyle modification, metformin administration, and oral contraception in order to reduce insulin resistance, improve insulin sensitivity and homeostasis of reproductive hormone (Lanzo, Monge, & Trent, 2015). Most of the women did not understand risk factors and manifestations of PCOS and lack of awareness to prevent this common reproductive health problem. Health education about development of the disease and healthy behaviors would be helpful to raise their awareness. However, little is known about self-care management of women with PCOS. Therefore, the authors would like to explore and describe substantive model of self-care management process among Thai women diagnosed with PCOS.

METHODS

We used grounded theory approach to gain more understanding about self-care management process of Thai women living with PCOS symptoms. The researchers entered to gynecological clinics in order to invite participants. Then, clinical nurses informed potential clients about the project. Once they showed interest to join the study, the team of researchers then offered an ethical protection and informed consent form. Semi-structured interviews were conducted using audio tape records. Theoretical sampling was conducted to collect qualitative data until data saturation was achieved. Data were analyzed by open coding, axial coding, and selective coding (Strauss & Corbin, 2012). Firstly, qualitative data were broken down so significant statements could be obtained from the interviews. Then, categories of emerging concepts were compared using constant comparative

technique within all cases. Finally, selecting the core category among related categories that can be used to formulate a substantive theory to explain self-care management of Thai women with PCOS was formulated.

FINDINGS

The research team approached 35 potential participants for the study. However, only 30 women could complete the interviews while the other 5 women did not complete the process because of losing follow-up. Diagnosis of PCOS were made using trans-abdominal or trans-vaginal ultrasonography. The women were between 17 and 39 years old. Their education backgrounds varied from high school (8 cases), vocational education (12 cases), and Bachelor's degree (10 cases). Eighteen women were single and 12 were married. Duration of irregular menstruation before seeking medical treatment ranged from 6 to 12 months. Fourteen women were also diagnosed with impaired glucose tolerance. Twenty-four women were overweight or obese. All women have suffered from clinical androgenism including acne, excess body and face hair, or androgenic alopecia.

The authors concluded that "getting through fertility" was the core category of self-care management processes among Thai women with PCOS. Three related categories were: 1) not recognizing the disease, 2) understanding how to control it, and 3) maintaining healthier behaviors.

Firstly, the women experienced overweight or obesity for a while. Then, irregular menstruation and some other PCOS symptoms occurred. However, their lack of understanding of the manifested symptoms caused delay in seeking medical treatment.

Once the abnormality was realized, the women would then seek information and treatment, including both medical treatment and alternative therapy. Some women with PCOS pursued traditional modalities such as herbal medicine, traditional Thai medicine and Chinese medicine. However, the symptoms of PCOS still remained or relapsed. Normal menstruation did not occur. For this reason, the women felt pressed to seek help from OB-GYN specialists whose examination concluded with PCOS. Once provided with advice to manage and care for their reproductive and metabolic health, they then established understanding of how to control and modify self-care practices.

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Maintaining healthier behaviors included modifying dietary pattern, exercising regularly, continuing and following-up with self-care management plan. Once, new health regimen was followed through, normal ovulation and menstruation or pregnancy occurred. The women's reflections regarding the experiences were shown below. The suggested substantive model of "Getting through fertility" is summarized in Figure 1.

"I had experienced absence of menstruation for 6 months. While waiting and hoping for menstruation cycle to normalize. I was wondering if there was something abnormal with my body. I told my mother, then, she bought some Chinese herbal medicine for me. After 3 months, the period did not show. My mom takes me to an OB-GYN doctor. He conducted abdominal ultrasound and told me that he found cysts in my ovary, likely because of obesity. He prescribed medication and advised for me to lose weight. This mean I must avoid high-calorie diet and go to fitness club near my house. Two months later, my menstruation normalized. I now feel good and am continuing the healthier lifestyle." (NY, 21 years, Thai Buddhist woman)

"I had observed long hair growing around my lips, arms, and legs for two years then menstruation became irregular the following before complete absent for 6 months, I I felt discomfort in my pelvis. I did some research on the internet about it. I found that ovarian cyst might be a possible cause. So I decided to go to the hospital. The doctor did blood test and ultrasound. The result revealed that was due to excessive male hormone called androgen. Then, I understood my condition. I tried to follow the doctor's advices by taking medications including contraceptive pills. Two months later, I had my period and I hope that it would come regularly"(OV, 23 years, Thai Muslim woman)

"I had been married for one year and we wanted to have a child. So, we consulted the doctor. The examination result indicated that my ovaries were enlarged and had many cysts. The doctor prescribed some medications and recommended behavioral modification such as avoiding sodas, fast food and processed food. It was difficult for me at first but I tried. Four months later, I became pregnant." (LK, 28 years, Thai Buddhist woman)

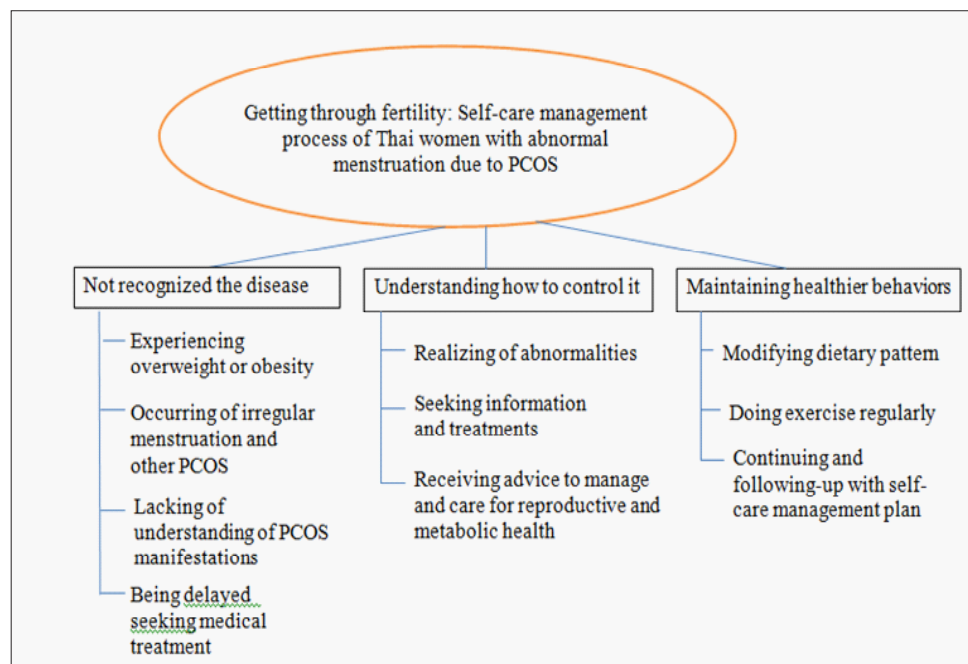


Figure 1. A substantive model of getting through fertility

DISCUSSION

Self-care management process of Thai women with PCOS is composed of three categories: not recognizing the disease, understanding how to

control it, and maintaining healthier behaviors. Initially, the women are not concerned when having abnormal menstruation due to lack of awareness or understanding. Studies support that PCOS among women is under diagnosed due to delay in seeking

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medical treatment (Glinborg & Andersen, 2017). This previous finding also reveal that 24% of women with PCOS take more than two years to make the decision to see the doctor while 39% of them receive some medical treatment from general health professional before consulting with OB-GYN doctor. In addition, 20% of the women have inadequate information about the disease and receive appropriate treatment (Gibson-Helm, Lucas, Boyle, & Teede, 2014).

The most common symptom that presses the women to seek medical advice and treatment are amenorrhea and absence of menstruation for 3-6 months for non-pregnant women. A previous study showed that 59.9% of women with PCOS had irregular menstruation (Nair, Pappachan, Balakrishnan, Leena, George, & Russell, 2012). Once the women experienced abnormal menstruation, they seek information and medical advices or treatment from doctors, health care providers, or web sites. Some women take traditional Thai or Chinese herbal medicine, because their families believe that it would be useful for their health. Prior study suggested that herbal medicine is commonly used among Chinese women with PCOS complications (Liang et al., 2017). However, appropriate self-care management is using medication and modification of health-related behaviors. Most of the women with PCOS took recommended medications such as metformin, clomiphene, contraceptive pills for 6 months or longer. In addition, they attempted to modify their dietary habits by selecting healthy food such as brown rice, fish, vegetable and fruit, while avoiding fried pork, chicken, sweetened drinks, desserts, fast food and processed food. Moreover, they started to exercise regularly such as brisk walking, station bicycling, swimming, and yoga. These findings were supported by previous PCOS management guidelines which recommend that women with PCOS should take healthy low- calorie diet and exercise daily in order to improve balance of reproductive hormone and promote normal ovulation and menstruation (Lanzo, Mong, & Trent, 2015). The proposed model of "Getting through fertility" is supported by previous construct of self-care management model comprising four steps: symptom recognition, symptom evaluation, treatment implementation, and treatment evaluation (Riegel, Lee, & Dickson, 2011).

CONCLUSIONS

Most of Thai women with PCOS did not know about the disease initially. After they experienced some symptoms of PCOS such as irregular menstruation or amenorrhea, they realized that they needed to seek medical treatment. Being diagnosed with PCOS could raise their awareness to start healthy behaviors. As a result, they could achieve reproductive health, normal ovulation and menstruation, or becoming pregnant.

IMPLICATIONS

Health care providers can use this substantive model of "Getting through fertility" to guide implementation of health education of PCOS and encourage self-care management to modify healthy lifestyles among women with PCOS. Testing of this model is suggested for further research.

CONSENT AND ETHICAL APPROVAL

This study was approved by the Institutional Review Board Committee of Prince of Songkla University. Participants' written-informed consents were obtained before collecting the data.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

AUTHORS' CONTRIBUTIONS

This work was carried out in collaboration among all authors. 'Sununta Youngwanichsetha' designed the study, managed the literature searches, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript. 'Sasitorn Phumdoung' managed the analyses of the study. All authors read and approved the final manuscript.

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