ปัจจัยที่มีอิทธิพลต่อความวิตกกังวลหลังคลอดของมารดาหลังคลอด ในเมืองเหวินโจว ประเทศจีน

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บทคัดย่อ

บทนำ : ความวิตกกังวลหลังคลอดเป็นภาวะที่พบมาก อาจจะไม่รุนแรงเมื่อเปรียบเทียบกับอาการป่วยทางจิตอื่น ๆ แต่อาการดังกล่าวอาจพัฒนาไปสู่ความเจ็บป่วยทางจิตที่ร้ายแรงได้

วัตถุประสงค์การวิจัย : เพื่อศึกษาความวิตกกังวลหลังคลอดและปัจจัยที่มีอิทธิพลต่อความวิตกกังวลหลังคลอดในหญิงหลังคลอด เมืองเหวินโจว ประเทศจีน

วิธีการวิจัย : การวิจัยสหสัมพันธ์เชิงทำนาย ตัวอย่าง คือ หญิงหลังคลอด จำนวน 148 คน คัดเลือกแบบสุ่มอย่างง่าย เครื่องมือที่ใช้ในการวิจัย ประกอบ 1) แบบสอบถามข้อมูลทั่วไป 2) แบบสอบถามความรอบรู้ด้านสุขภาพจิต 3) แบบสอบถามการสนับสนุนทางสังคม และ 4) แบบสอบถามความวิตกกังวล วิเคราะห์ข้อมูลโดยใช้สถิติเชิงพรรณนา และการถดถอยพหุคูณเชิงเส้นตรง

ผลการวิจัย : ตัวอย่างมีความวิตกกังวลหลังคลอดในระดับต่ำ (M=25.45, SD=5.59) การไม่ได้เลี้ยงลูกด้วยนมแม่ ความรอบรู้ด้านสุขภาพจิต และการสนับสนุนทางสังคมสามารถอธิบายความแปรปรวนของความวิตกกังวลหลังคลอดได้ร้อยละ 30.8% (β=0.011, p=.022, β=-0.463, p<.001; β=-0.16, p=.023 ตามลำดับ) ความวิตกกังวลหลังคลอดมีผลกระทบอย่างมีนัยสำคัญในตัวอย่างที่ไม่เลี้ยงลูกด้วยนมแม่เมื่อเปรียบเทียบกับที่ให้นมแม่เพียงอย่างเดียว (β=0.188, p=.022) การเลี้ยงลูกด้วยนมแม่อย่างเดียวและการเลี้ยงลูกด้วยการผสมระหว่างนมแม่และนมผงไม่แตกต่างกัน (β=-0.028, p=.722) อายุไม่สามารถทำนายความวิตกกังวลหลังคลอดได้ (β=-0.008, p>.05)

สรุปผล : พยาบาลควรช่วยเหลือหญิงหลังคลอดให้ได้รับความรู้ด้านสุขภาพจิต และสนับสนุนให้เลี้ยงบุตรด้วยนมแม่ต่อไป สมาชิกในครอบครัวและสังคมควรสนับสนุนและดูแลหญิงหลังคลอดอย่างเพียงพอ เพื่อป้องกันไม่ให้เกิดความวิตกกังวลหลังคลอด

คำสำคัญ : ความวิตกกังวลหลังคลอด ความรอบรู้ด้านสุขภาพจิต การสนับสนุนทางสังคม การเลี้ยงลูกด้วยนมแม่

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Factors influencing postpartum anxiety among mothers in Wenzhou, China

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Abstract

Background: Postpartum anxiety is widespread. Compared to other mental illnesses, postpartum anxiety symptoms are usually mild and easily ignored though it can develop into a severe mental illness.

Objectives: To investigate postpartum anxiety and its influencing factors among mothers.

Methods: This cross-sectional study was correlational predictive research. 148 participants were recruited using simple random sampling. The questionnaires included a demographic questionnaire, the mental health literacy scale, the social support scale, and the Beck anxiety inventory. Descriptive statistics and standard multiple linear regression were used to analyze data.

Results: The study results revealed that most participants had low level of postpartum anxiety (M=25.45, SD=5.59). No breastfeeding, Mental health literacy, and social support were effective predictors and significantly explained 30.8% of the variance in postpartum anxiety (β=0.011, p=.022, β=-0.463, p<.001; β=-0.16, p=.023). Postpartum anxiety was significantly impacted when the participants were not breastfeeding compared to exclusive breastfeeding (the reference category) (β=0.188, p=.022). Meanwhile, age (β=-.008, p>.05) did not predict postpartum anxiety.

Conclusions: Nurses should assist women in obtaining good mental health literacy and encourage them to breastfeed. Family members and social circles should also be motivated to provide adequate support in order to women to protect them from postpartum anxiety.

Keywords: postpartum anxiety, mental health literacy, social support, breastfeeding

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Introduction

The uncontrollable anxiety that arises following childbirth is known as postpartum anxiety[1]. The prevalence of postpartum anxiety ranging 14% to 40%[2]. In China, the prevalence of 6 weeks of postpartum anxiety among women was 15.2%[3].

As a mental symptom with high incidence, postpartum anxiety is prone to adverse impacts on women, infants, families, and society in the long-term development[4]. Postpartum anxiety impacts mothers with physical symptoms and mental symptoms[5]. Severe anxiety can affect maternal lactation, leading to newborns' malnutrition and other disorders[6]. The mother's postpartum anxiety will affect other family member break family harmony[7]. High postpartum anxiety may increase the state budget for the treatment[8], and the mother unable to return to work from the schedule, leading to a waste of human resources in society[9].

Existing research has shown that mental health literacy, social support, age, and breastfeeding can affect postpartum anxiety[1-3]. Mental health literacy is how individuals can obtain, process, understand, and communicate health-related information needed to make informed health decisions[1-3]. Studies shows mental health literacy is positively related to postpartum anxiety. Social support is help from outside sources, including family, community, and society. Social support can reduce postpartum anxiety[10]. Age is defined as the number of year that women living which is positive related to postpartum anxiety in 18-35 years old. Stopping breastfeeding can significantly increase the incidence of postpartum anxiety[11].

Positive mental health surveillance indicator framework and literature reviewed were used as framework[12-13]. Age, mental health literacy, and breastfeeding are defined as the individual component, and social support is defined as family, community and societal components. The variable outcome of this study is postpartum anxiety. Not only the specific variables are selected from model components but also selected to be investigated based on evidence supported.

Worldwide research has focused more on comorbidity of depression and anxiety. The research on postpartum anxiety is limited to comorbidities. The hospital in this study had better medical conditions. Sufficient samples can be obtained at this hospital. In China, 42 days postpartum is the scheduled time for follow-up, which is an important period in the postpartum anxiety model. Therefore, this study purposed to investigate factors influencing postpartum anxiety among mothers in Wenzhou, China. Findings are useful for reduce the postpartum anxiety and promote postpartum rehabilitation.

Objectives

1. To identify postpartum anxiety among mothers in Wenzhou, China.

2. To examine influencing factors of postpartum anxiety including age, mental health literacy, social support, and breastfeeding.

Methods

The predictive correlational design aimed to examine postpartum anxiety and its influence. The hypothesis was age, mental health literacy, social support, and breastfeeding could combine to predict postpartum anxiety among mothers in Wenzhou, China.

Samples: Samples were obtained using simple random sampling. Participants were postpartum women visiting a 42-day-postpartum follow-up clinic at the second affiliated hospital of WMU, Wenzhou, China, who met the study inclusion criteria. 1) Age 18 years old or above 2) Had vaginal birth at the hospital 3) Had the first single baby with an APGAR score at birth, not less than 8 and the baby has been healthy till the day of postpartum follow-up. 4) Had no physical and mental condition or illness as diagnosed by the psychiatrists that affect the participation in providing information. 5) Had no obstetrical complication. 6) Can communicate in Chinese and use WeChat. The sample size was calculated by the G*Power 3.1. Regression is chosen as a type of statistical test with an alpha of .05, a power of .95, a medium effect of 0.10, and the number of independent variables as 5, 20% of the incomplete rate is used. Therefore, 158 participants are needed in total. In the process of data collection, 10 participants failed to complete the questionnaire. The actual sample size was 148. The response rate was calculated at 93.7%.

Tools: The researcher collected data via the WeChat application by using four questionnaires. Details of variables and these questionnaires were as follows:

1. General information: This questionnaire was developed by the researcher. It had two parts that consisted of demographic and obstetrical. The study recorded breastfeeding into three categories: exclusive breastfeeding, mixed breastfeeding, and no breastfeeding, exclusive breastfeeding as a reference in data analysis.

2. Mental health literacy: The Mental Health Literacy Scale (MHLS) was developed by Jung et al. based on Jorm's MHLS. The Chinese version was translated by a scholars team[14]. Studies have shown that MHLS has good validity, and preliminary experiment shows the Cronbach's alpha reliability is .85.

3. Social support: Chinese Social Support Scale (SSS) invented by Xiao. It has 14 items of two subscales: support amount (items 1-9) and support source (items 10-14). The possible total score ranges from 12-66. The higher score, the better support the women get. The social support scale has good reliability and validity. Cronbach's alpha reliability was tested for .82.

4. Postpartum anxiety: Beck Anxiety Inventory (BAI) translated into Chinese and used extensively[15] based on Beck and Steer. The possible total score in 21-84 scores. The score of BAI in three levels (low [21-41], moderate [42-62], high [63-84])[16]. The Chinese version of the BAI has been tested to shown good reliability and validity, and Cronbach's alpha in this study was .91.

Ethical considerations

The thesis proposal was submitted to the Burapha University Ethics Committee on Human Research (BUU EC) and approved with Code of Ethics Certification no. G-HS024/2562(E2), and Institution Review Board (IRB) of the second affiliated hospital of WMU with Code of Ethics Certification no. 2022-K-92-01. The approval time was from July 1 to August 31, 2022.

Data collection

1. Collecting data after passing the hospital's IRB.

2. Searching the registration records and finding the clients who met the study inclusion criteria with the help from hospital staff. And recruited participants by sample random sampling technique.

3. Identifying participants and informing them of research information. The participants signed a consent form under voluntary conditions.

4. Participants answered the questionnaires via the WeChat application. The total duration was 20 minutes.

Data analysis

Data were analyzed by SPSS 26 statistical software. The alpha level of statistical significance was set at .05. Descriptive statistics was used to description of general information data and variables. Set the categorical variable breastfeeding as a dummy variable of the three options (exclusive breastfeeding, mixed feeding, and no breastfeeding). Furthermore, exclusive breastfeeding was set as the reference frame. The influence of variables on postpartum anxiety was analyzed by standard multiple linear regression.

Results

1. Identify postpartum anxiety among mother in Wenzhou, China.

1.1 Regarding descriptive data of participants' demographic characteristics, the majority of the participants were married (96.6%), 58 participants (39.2%) were educated from senior high school or junior college, 61 females (41.2%) got bachelor's degrees, 34.5% of women were unemployed, 28.4% of women work for commercial stuff. 54.7% of households had deposit and no debt. Most of the women were living at home after delivery 83.8%. More women were cared by professional staff who accounted for 80 (54%).

1.2 Descriptive data of dependent variables: The result showed that range score of postpartum anxiety was 21-49 in which mean score was 25.45 which considered as a low level of postpartum anxiety. The mean score for physiological response was 15.44 (SD=3.21) and the mean score for the representing physiological symptoms of anxiety and anxious thoughts was 10.01 (SD=2.83).

2. The influencing factors of postpartum anxiety

2.1 Descriptive data of independent variables: Participants' age range was 20-35, the mean age for 28.56 (SD=3.52). Mental health literacy with mean score of 11.72 (SD=5.64), mental health knowledge, belief, and resource with mean score of 6.62 (SD=3.35), 3.40 (SD=2.53), and 1.68 (SD=1.62), respectively. Social support with mean score of 40.38 (SD = 6.99), social amount, and support source with a mean score of 26.61 (SD=4.51) and 13.76 (SD=3.65), repectively.

2.2 The study recoded breastfeeding into three categories: Exclusive breastfeeding, mix breastfeeding, and no breastfeeding, and used two dummy variables denoting these categories in the analyses (exclusive = reference category). Most participants chose to breastfeed (77%), with 33.1% selecting to exclusively breastfeed.

2.3 Standard multiple linear regression analysis: The data was tested for assumptions using standard multiple regression including normality of variables, homoscedasticity, no autocorrelation, linearity, and no multi-collinearity. The histogram and the Normal P - P plot showed all the variables were distributed normally. Scatterplots of the residual and partial regression plots showed the independent variables had a linear relationship with the dependent variable and the data were homoscedastic. There was no multi-collinearity as the tolerance values of the model were >.1 and VIF values were < 10. Also, the multi-collinearity could be demonstrated by the correlation ecoefficiency among predictive variables was less than .80 as shown in table 1. The Durbin-Watson value was 2.007 indicating that there was no autocorrelation. When all assumptions were met, standard multiple linear regression analysis was performed.

Table 1 Correlation coefficients between influencing factors and postpartum anxiety (n = 148)

Model	1	2	3	4	5	6
1. Postpartum anxiety	1					
2. Age	0.022	1				
3. Mental health literacy	-0.509*	-0.105	1			
4. Social support	-0.217*	0.092	0.072	1		
5. Mix breastfeeding	-0.111	0.081	-0.053	0.099	1	
6. No breastfeeding	0.310*	-0.011	-.196*	-0.11	-.483*	1

*p<.05

It showed that factors breastfeeding, mental health literacy, and social support accounted for 30.8% of the variance in postpartum anxiety (Adj R2=.308, F=14.104, p<.001). Factors significantly predicted postpartum anxiety are ordered from strongest to lowest: Mental health literacy (β=-0.463, p<.001), social support (β=-0.16, p=.023). Postpartum anxiety was significantly impacted when the participants had not breastfeeding compared to exclusive breastfeeding (the reference category) (β=0.188, p=.022). The differences among the exclusive and mixed breastfeeding were not significant (β=-.028, p=.722). Age (β=-.008, p>.05) had no statistical significance to postpartum anxiety. According to the analysis results, the standard regression equation can be summarized as y=35.713 -0.068*Age -0.459*Mental health literacy -0.128*Social support -0.319*Mix breastfeeding +2.490*No breastfeeding as shown in table 2.

Table 2 Standard multiple linear regression analysis predicting factors of postpartum anxiety (n=148)

Model	Unstandardized Coefficients		Standardized Coefficients	t	p	VIF
	B	SD Error	β			
Age	-0.068	0.626	-0.008	-0.108	.914	1.026
Breastfeeding						
Mix	-0.319	0.897	-0.028	-0.356	.722	1.355
No	2.49	1.075	0.188	2.317	.022	1.399
Mental health literacy	-0.459	0.071	-0.463	-6.475	.000	1.087
Social support	-0.128	0.056	-0.16	-2.298	.023	1.028

*R2 = .332, Adjust R2 = .308, F = 14.104, p <.001

Discussions

The result of postpartum anxiety among mothers in Wenzhou, Chinese were found at the low level of anxiety. It could explain by widely distributed of postpartum anxiety in women, but it always be overlooked[4]. Researches demonstrated the separation of mother and child are important reason for women's postpartum anxiety[3]. The participants in this study were not separated from their babies after giving birth, therefore, this scenario may be the result why the mothers had a low level of postpartum anxiety. Studies (Adding articles to support the discussion) have shown that financial stress can lead to significant postpartum anxiety[17...]. The participants in good financial condition (more than half of the participants had savings and no debt) could lead to less anxiety since they are not worried about other money issues [5]. Multiple sources of stress and worry may create more anxiety for the mothers.

Understanding the influencing factors of postpartum anxiety is an important public health concern because postpartum anxiety poses great health risks, particularly when it develops into a severe stage[18]. The results from the present study were compatible with the research hypothesizes. The result showed that mental health literacy was negative correlated with postpartum anxiety and was the strongest predictor (β=-.459, p<.001) which has consistently with previous studies. Such a strong correlation due to prenatal mental education in China, which helps women improve their mental health literacy[19]. Therefore, postpartum anxiety can be reduced by improving mental health literacy.

Moreover, the results proved that social support is negatively correlated with the occurrence of postpartum anxiety (β=-0.128, p<.05). In China, there are traditional beliefs about first month recovery with the development of medical treatment, cognition, and more people choose professional maternity matrons (54%). Women have access to good social support. Women's postpartum anxiety and their families can get professional knowledge and help with feeding and rehabilitation through professional people. Consistent with previous research, good social support can effectively reduce postpartum anxiety[20].

According to breastfeeding, women who did not breastfeed had high levels of anxiety (β=2.49, p=.022). Women who consistently breastfeed had higher self-efficacy and more intimate with their children. Therefore, consistent breastfeeding could reduce postpartum anxiety[21].

The results from this study found that age was not a significant predictor for

postpartum anxiety in this study (β=-.068, p>.05), even though, in previous studies, age was an important factor of postpartum anxiety. The explanation of this finding could be due to the age range of women in this study was 20-35 years old.

Conclusions and Recommendations

Conclusions

The study involved women with healthy mothers and babies at 42 days postpartum. Most women presented low postpartum anxiety. Among the factors, mental health literacy, social support, and breastfeeding commitment could significantly predict postpartum anxiety, which are all consistent with the findings of other research in the past. This study also revealed findings that were different from other research, age is not the predictor of postpartum anxiety.

Recommendations

The findings could provide a better understanding of the proper intervention development and policy regarding postpartum anxiety in the Chinese health care context. For further study, the data collection should be in more hospitals or regions to expand the generalization. The other risk factors and protective factors should be explored more in terms of cultural and socioeconomic contexts. These suggestions can ensure the up-to-date and complexity of the study.

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