

临床护理专题

# 妊娠期女性妊娠压力、孕前保健行为及其应对方式的相关性研究

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**[摘要]** **目的**·了解妊娠期女性妊娠压力水平、孕前保健行为及应对方式, 分析妊娠压力的影响因素, 为妊娠期女性孕期健康管理提供参考。**方法**·纳入2022年4月—8月在遵义医科大学附属医院产科门诊就诊的265名妊娠期妇女为研究对象, 采用一般资料情况问卷、孕前保健行为问卷、妊娠压力量表、简易应对方式问卷, 取得患者同意后, 调查妊娠期女性妊娠压力、孕前保健行为及应对方式, 分析其之间的相关性。**结果**·妊娠期女性妊娠压力总平均分为(1.05±0.41)分。多元线性回归分析结果显示, 年龄、妊娠次数、先兆流产史、对胎儿性别期待、参加孕妇学校或观看相关手册是妊娠压力的主要影响因素( $P<0.05$ )。孕前保健行为得分为(10.09±2.63)分, 具备高等、中等、低等水平的妊娠期孕前保健行为人数占比分别为17.36%、54.34%和28.30%。妊娠期女性应对方式总分为(27.22±9.68)分, 其中积极应对维度得分为(17.79±9.84)分, 消极应对维度得分为(9.42±7.39)分。Pearson相关分析显示, 妊娠压力与孕前保健行为呈负相关( $r=-0.313$ ,  $P<0.01$ ), 妊娠压力与应对方式呈负相关( $r=-0.163$ ,  $P<0.01$ ), 孕前保健行为与应对方式呈正相关( $r=0.220$ ,  $P<0.01$ )。**结论**·妊娠期女性妊娠压力处于中度水平, 孕前保健行为较少, 护理人员应大力加强孕前健康知识普及和保健指导, 让育龄期女性孕前主动、积极地学习妊娠相关保健知识和应对技巧, 最大程度地减少或避免不良母婴妊娠结局, 优化母婴保健策略和提升健康水平。

**[关键词]** 妊娠期; 保健行为; 妊娠压力; 应对方式

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## Correlation study of pregnancy stress, pre-pregnancy health care behavior and coping style of pregnant women

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**[Abstract]** **Objective**·To assess the levels of pregnancy-related stress, pre-pregnancy health care behaviors, and coping styles among pregnant women, analyze the influencing factors of pregnancy stress and provide insights for the management of pregnancy health in expectant mothers. **Methods**·A total of 265 pregnant women receiving treatment at the Obstetrics Clinic of the Affiliated Hospital of Zunyi Medical University from April to August 2022 were included as participants. General information questionnaires, pre-pregnancy health care behavior questionnaires, pregnancy stress scales and simple coping style questionnaires were utilized for data collection. After obtaining the consent of the patients, assessments on pregnancy stress levels, pre-pregnancy health care behaviors, and coping styles were conducted. **Results**·The overall average score for pregnancy stress among pregnant women was 1.05±0.41. Multiple linear regression analysis revealed that age, number of pregnancies, history of threatened abortion, fetal gender expectations, attending prenatal education classes or reviewing relevant manuals significantly influenced pregnancy-related stresses ( $P<0.05$ ). The score of pre-pregnancy health care behavior was 10.09±2.63 with proportions indicating high-level, medium-level, and low-level adherence at 17.36%, 54.34%, and 28.30%. In pregnant women, the total score for coping styles was 27.22±9.68, with a positive coping dimension score of 17.79±9.84 and a negative coping dimension score of 9.42±7.39. Pearson correlation analyses demonstrated a negative association between pregnancy-related stresses and pre-pregnancy health care behaviors ( $r=-0.313$ ,  $P<0.01$ ), and a negative correlation between pregnancy-related stresses and coping styles ( $r=-0.163$ ,  $P<0.01$ ), while a positive

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relationship existed between pre-pregnancy health care behaviors and coping styles ( $r=0.220$ ,  $P<0.01$ ). **Conclusion** Pregnant women experience moderate levels of pressure during their pregnancies and have suboptimal engagement in preconceptional healthcare practices. Nursing staff should intensify efforts towards disseminating knowledge on preconceptional healthcare practices, thereby empowering women of childbearing age to actively acquire pertinent reproductive-health knowledge prior to conception so that minimizing adverse maternal-infant outcomes, optimizing maternal-infant healthcare strategies, and enhancing overall well-being can be achieved through these measures.

**[Key words]** pregnancy period; health care behavior; pregnancy stress; coping style

心理压力反映个体认知和行为的体验过程,由环境需求与应对能力失衡引起。妊娠期女性由于生理变化、年龄、医源性因素、多胎妊娠以及担心分娩疼痛、母儿安危等因素影响会产生心理压力,而持续压力刺激会对母体自身及胎儿产生负性影响,进而增加胎儿发育迟缓、早产、产后出血等不良妊娠结局的发生风险<sup>[1]</sup>。育龄妇女作为孕前保健服务的对象,既是孕前保健实践的主体,也是评价保健效果的最后一环,关系到围产保健的整体社会效益。因此,探索有效、可行的保健策略来提高育龄妇女保健知识和健康信念水平,帮助其从被动接受转变为主动参与孕前保健实践,积极应对妊娠压力,从而保障良好妊娠结局迫在眉睫。计划妊娠妇女普遍存在轻度妊娠压力,且与个体应对方式密切相关,即采用积极的应对方式可有效缓解其妊娠压力<sup>[2]</sup>。应对方式是指个体面临压力时为减轻或避免不利影响、适应环境而采用的自我调节方法<sup>[3]</sup>。育龄妇女孕前保健行为与其孕前保健知识、健康信念水平呈正相关<sup>[4]</sup>;且妊娠期女性主动学习保健知识,按时产检了解胎儿发育情况,可消除心理疑虑,提高心理健康水平<sup>[5]</sup>。孕前保健是指医疗机构为计划妊娠女性提供的系统孕前保健措施,包括健康教育及咨询、孕前健康检查,旨在保障母儿安全,促进优生优育<sup>[6]</sup>。鉴于此,本研究拟对妊娠期女性孕前保健行为、妊娠压力及应对方式现状进行调查,了解妊娠压力水平及影响因素,并探讨三者的相关性,为开展育龄女性孕前、孕期健康管理干预提供参考。

## 1 对象与方法

### 1.1 研究对象

纳入2022年4月—8月于遵义医科大学附属医院产科门诊产检的妊娠期妇女( $n=285$ )为研究对象。纳入标准:①确诊宫内妊娠者。②能独立理解问卷内

容。排除标准:①精神疾病病史者。②重大躯体疾病病史者。③语言、认知功能障碍者。④不愿参与研究者。

### 1.2 调查方法

#### 1.2.1 调查工具

(1)一般资料问卷 包括年龄、体质量、身高、居住地、文化程度、职业、平均月收入、每日睡眠时间、医保方式、妊娠次数与流产经历、目前孕周、先兆流产史、是否有妊娠合并症、胎儿性别期待、是否计划妊娠、是否参加孕妇学校或观看相关录像以及亲友是否为医务工作者。

(2)孕前保健行为问卷<sup>[4]</sup> 包括计划妊娠、孕前医学生理准备、孕前衣食住行、孕前合理避孕维度,共15分;得分 $>80\%$ 为高水平,得分在 $60\%\sim 80\%$ 间为中等水平,得分 $<60\%$ 为低水平。问卷内容效度为0.907, Cronbach's  $\alpha$ 系数为0.738,得分越高表明患者孕前保健行为实施越理想。

(3)妊娠压力量表<sup>[7]</sup> 包括因认同父母角色而产生的压力,因母子健康、安全而产生的压力,因体力和体力活动变化而产生的压力,其他因素共4个维度。所有条目按无、轻、中、重度以0~3级计分,总分0~90分, Cronbach's  $\alpha$ 系数为0.78~0.92。量表得分=总得分/项目数,其中0分为完全无压力,0.01~1.00为轻度压力,1.01~2.00为中度压力,2.01~3.00为重度压力。

(4)简易应对方式问卷<sup>[8]</sup> 包括积极方式和消极方式维度。所有条目按不采用、偶尔采用、有时采用、经常采用以0~3级计分,总分为0~60分, Cronbach's  $\alpha$ 系数为0.90。积极方式得分越高,受访者倾向于采用积极应对方式;反之则倾向于采用消极应对方式。

1.2.2 资料收集 使用在线问卷平台制作调查问卷。在获得调查对象同意后,由调查人员使用统一规范指

导语对调查对象进行调查。调查前解释研究目的和注意事项。填写结束后,调查人员当场检查问卷完整性,并指导补充问卷。数据以Excel格式导出,双人核对后行统计分析。

1.3 统计学方法

采用SPSS26.0软件进行统计学分析。定量资料描述采用 $\bar{x}\pm s$ 表示,定性资料描述采用 $n(\%)$ 表示。妊娠压力水平单因素分析采用非参数检验,多因素分析采用多元线性逐步回归分析,妊娠压力水平与孕前健康行为、应对方式的相关性采用Pearson分析。 $P<0.05$ 表示差异有统计学意义。

2 结果

2.1 一般资料

共纳入285名妊娠期女性。不愿参与研究6人,发放问卷279份,回收有效问卷265份,回收有效率为95%,结果见表1。年龄19~29岁占69.8%,学历为专科及以上179人(67.5%),居住在城市164人(61.9%),睡眠时间6~8 h为185人(69.8%),首次妊娠187人(70.6%),参加孕妇学校培训或观看相关资料153人(57.7%),亲友为医务工作者162人(61.1%),月收入2 000元以上208人(78.5%)。

表1 妊娠期女性的基本资料( $n=265$ )

Tab1 Basic data of women during pregnancy ( $n=265$ )

Variable	Participant/ $n(\%)$
Age	
<19 years	11 (4.2)
$\geq 19$ years and <24 years	84 (31.7)
$\geq 24$ years and <29 years	101 (38.1)
$\geq 29$ years and <34 years	46 (17.3)
$\geq 34$ years	23 (8.7)
BMI/( $\text{kg}\cdot\text{m}^{-2}$ )	
<18.5	42 (15.8)
$18.5\leq\text{BMI}<25.0$	164 (61.9)
$25.0\leq\text{BMI}<30.0$	42 (15.8)
$\geq 30.0$	17 (6.5)
Place of residence	
city	164 (61.9)
town	70 (26.4)
village	31 (11.7)
Education	
Middle school and below	50 (18.9)
High school	36 (13.6)

Continued Tab	
Variable	Participant/ $n(\%)$
College	154 (58.1)
Master and above	25 (9.4)
Occupation	
Worker/Farmer	22 (8.3)
Service industry	28 (10.6)
Unemployed or housewife	51 (19.3)
Medical personnel	54 (20.3)
Teacher/civil servant	66 (24.9)
Others	44 (16.6)
Daily sleep time	
<6 h	18 (6.8)
$\geq 6$ h and <8 h	185 (69.8)
$\geq 8$ h	62 (23.4)
Number of pregnancy	
First born	187 (70.6)
Second child and above	78 (29.4)
Gestational week	
<16 weeks	94 (35.5)
$\geq 16$ weeks and <24 weeks	53 (20.0)
$\geq 24$ weeks	118 (44.5)
Abortion experience	
0 time	170 (64.1)
Spontaneous abortion 1 time	25 (9.4)
Spontaneous abortion 2 or more times	10 (3.7)
Induced abortion 1 time	32 (12.1)
Induced abortion 2 or more	28 (10.7)
History of threatened abortion	
Yes	77 (29.1)
No	188 (70.9)
Complications of pregnancy	
Pregnancy with hypertensive disease	9 (3.4)
Pregnancy with thyroid dysfunction	29 (10.9)
Gestational diabetes	7 (2.6)
Intrahepatic cholestasis of pregnancy	5 (1.9)
Others	18 (6.8)
No	197 (74.4)
Fetal sex expectation	
Male	37 (14.0)
Female	29 (10.9)
Male or female	199 (75.1)
Attending a school for pregnant women or reading the brochure	
Often	42 (15.9)
Once in a while	111 (41.9)
No	112 (42.2)
Relatives and friends are medical workers	
Yes	162 (61.1)
No	103 (38.9)

Continued Tab	
Variable	Participant/n(%)
Average monthly income/RMB	
<2 000	57 (21.5)
≥2 000 and <5 000	96 (36.2)
≥5 000 and <8 000	71 (26.8)
≥8 000	41 (15.5)
Medical insurance method	
Employee medical insurance	119 (44.9)
New rural cooperative medical system	67 (25.3)
Commercial insurance	3 (1.1)
Self-financing	76 (28.7)
Maternity school	
Yes	153 (57.7)
No	112 (42.3)

表2 妊娠压力、孕前保健行为、应对方式的得分( $\bar{x}\pm s$ )

Tab 2 Scores of pregnancy stress, pre-pregnancy health care behaviors and coping style ( $\bar{x}\pm s$ )

Variable	Score range	Score
Pregnancy pressure	0-3	1.05±0.41
Pressure to identify with the role of parent	0-1.5	0.86±0.34
Stress caused by the health and safety of the mother and child	0-0.8	1.23±0.61
Stress due to changes in body size and physical activity	0-0.4	1.35±0.81
Other factors	0-0.3	1.16±0.80
Preconception health care behavior	0-15	10.09±2.63
Planned pregnancy	0-1	0.85±0.36
Medical physiological preparation	0-5	3.27±1.14
Food, clothing, shelter and transportation	0-8	5.27±1.73
Rational contraception	0-1	0.49±0.50
Coping style	0-60	27.22±9.68
Active way	0-36	17.79±9.84
Negative way	0-24	9.42±7.39

表3 妊娠压力的影响因素

Tab 3 Influencing factors of pregnancy stress

Variable	U/Z	P value
Age	9.759	0.045
BMI	8.957	0.030
Place of residence	7.400	0.025
Average monthly income	21.183	0.000
Number of pregnancies	-3.133	0.002
History of threatened abortion	-6.053	0.000
Complications of pregnancy	11.195	0.048
Fetal sex expectation	28.698	0.000
Attending a school for pregnant women or reading the brochure	54.305	0.000

2.2 妊娠压力、孕前保健行为、应对方式的得分

由表2可见，妊娠期女性妊娠压力得分为(1.05±0.41)分，处于中度压力水平。孕前保健行为得分为(10.09±2.63)分，总体处于中等偏上水平。妊娠期女性应对方式得分(27.22±9.68)分，积极应对方式得分为(17.79±9.84)分，消极应对方式得分为(9.42±7.39)分，妊娠期妇女面对压力时倾向于采用积极应对方式。

2.3 妊娠压力的影响因素分析

Mann-Whitney *U* 和 kruskal-wallis 检验结果显示，年龄、BMI、居住地、平均月收入、妊娠次数、是否先兆流产、妊娠合并症、对胎儿性别期待、参加孕妇学校或观看相关手册对妊娠压力有影响，结果见表3。

以妊娠压力得分为因变量,以年龄、BMI、居住地、文化程度、职业、平均月收入、睡眠时间、妊娠次数、医保、先兆流产史、孕周、流产经历、妊娠合并症、对胎儿性别期待、参加孕妇学校或观看相关手

册、孕前保健行为得分、应对方式得分为自变量,多元线性回归分析结果显示,年龄、妊娠次数、先兆流产史、对胎儿性别期待、参加孕妇学校或观看相关手册是妊娠压力的主要影响因素,见表4。

表4 妊娠压力的多因素分析  
Tab 4 Multifactor analysis of pregnancy stress

Variable	B	SD	$\beta$	t	P value
Constant	33.527	4.185	—	8.011	0.000
Age					
1=<19 years	8.966	3.480	0.145	2.576	0.011
2= $\geq$ 19–24 years	3.776	1.630	0.142	2.317	0.021
3= $\geq$ 24–34 years	0.209	1.978	0.006	0.106	0.916
4= $\geq$ 34 years	2.191	2.602	0.050	0.842	0.401
Number of pregnancies					
1=first pregnancy	5.398	1.761	0.199	3.065	0.002
History of threatened abortion					
1=have	8.740	1.470	0.321	5.948	0.000
Fetal sex expectation					
1=male	7.082	1.998	0.198	3.544	0.000
2=female	0.784	2.112	0.020	0.371	0.711
Attending a school for pregnant women or reading the brochure					
1=often	−8.358	1.909	−0.309	−4.379	0.000
2=occasionally	−3.576	1.569	−0.138	−2.280	0.024

Note:  $R^2=0.542$ .

2.4 妊娠压力、孕前保健行为、应对方式的相关性

Pearson相关分析显示:妊娠压力与孕前保健行为

呈负相关( $r=-0.313$ ,  $P=0.000$ );孕前保健行为与应对方式呈正相关( $r=0.220$ ,  $P=0.000$ );妊娠压力与应对方式呈负相关( $r=-0.163$ ,  $P=0.008$ )。详见表5。

表5 妊娠压力、孕前保健行为、应对方式的相关性  
Tab 5 Correlation of pregnancy stress, pre-pregnancy health care behavior and coping style

Variable	Pregnancy pressure	Preconception health care behavior	Active way	Negative way	Coping style
Pregnancy pressure	1.000	—	—	—	—
Preconception health care behavior	−0.313 <sup>①</sup>	1.000	—	—	—
Active way	−0.661 <sup>①</sup>	0.368 <sup>①</sup>	1.000	—	—
Negative way	0.667 <sup>①</sup>	−0.201 <sup>①</sup>	−0.398 <sup>①</sup>	1.000	—
Coping style	−0.163 <sup>①</sup>	0.220 <sup>①</sup>	0.713 <sup>①</sup>	0.359 <sup>①</sup>	1.000

Note: <sup>①</sup> $P<0.01$ .

3 讨论

妊娠期是指胎儿在母体中生长发育的过程,母体受妊娠影响会发生一系列身心改变<sup>[9]</sup>。本研究结果显示,妊娠期女性妊娠压力处于中度水平,略高于柳兆芳等<sup>[10]</sup>、低于李伟波等<sup>[5]</sup>的研究结果。FURBER

等<sup>[11]</sup>研究结果显示,轻度心理压力也会导致女性极度身心脆弱,若不及时干预,可能导致重度压力或产前抑郁。此外,妊娠压力还会加重子代心脏代谢负荷、呼吸道反复感染及早期神经行为发育不良等风险<sup>[12-14]</sup>。体力活动可预防体质量过度增加、焦虑和产前抑郁、尿失禁、腰痛等问题<sup>[15]</sup>,但由于妊娠变



化、环境改变、缺乏社会支持及专业活动指导等因素导致妊娠期女性体力活动水平低<sup>[16-17]</sup>。其中年龄小、首次妊娠女性压力更大,这与张颖等<sup>[18]</sup>研究结果类似,这可能与她们多为初产妇,对妊娠保健知识了解较少,缺乏妊娠和分娩经验有关。有先兆流产史妇女妊娠压力更大,这可能因为先兆流产者行保胎治疗需长时间卧床休息,保胎治疗引起生理不适,担心保胎失败,给其造成较大压力,尤其是高龄、多次流产女性<sup>[19]</sup>。期待生育男孩的女性压力更大,与刘文婷等<sup>[20]</sup>研究结果类似,这可能与她们多为经产妇,受传统思想影响而期待生育男孩有关。参加孕妇学校或观看相关资料次数越少,孕妇压力越大。这可能是由于调查地属于经济欠发达地区,育龄妇女保健意识薄弱,普遍缺乏围产保健知识。相关性分析结果显示,妊娠压力与孕前保健行为、应对方式均呈负相关。这提示孕妇保健认识和应对不足,是公共保健领域面临的一大问题<sup>[21]</sup>。因此,医护人员要及时识别妊娠压力,指导妊娠女性积极应对孕期不适,主动与他人交流妊娠体验或通过听音乐、散步等方式缓解压力;积极举办科普讲座或通过微信公众号、手机软件等为育龄女性普及正确围产保健知识;卫生健康部门、妇联组织应大力发展孕妇学校建设,为育龄女性提供系统的健康教育<sup>[22]</sup>。

综上所述,医护人员应加强育龄女性围产保健知识普及,提高其保健意识,使她们从被动接受转变成主动参与健康保护,积极应对孕期不适症状,最大程

度减轻妊娠压力,保障良好母婴结局。本研究有一定局限性:样本量稍小且仅来自一家医院,可能存在选择偏倚;且未进一步分析妊娠早、中、晚期妊娠压力差异,以及是否妊娠合并其他疾病而导致妊娠压力差异。

#### 利益冲突声明/Conflict of Interests

所有作者声明不存在利益冲突。

All authors disclose no relevant conflict of interests.

#### 伦理批准和知情同意/Ethics Approval and Patient Consent

本研究涉及的所有试验均已通过遵义医科大学附属医院伦理委员会审核批准(KLL-2022-306)。调查对象或其亲属已经签署知情同意书。

All trials involved in this study have been reviewed and approved by the Ethics Committee of the Affiliated Hospital of Zunyi Medical University (KLL-2022-306). The subjects or their relatives have signed informed consent forms.

#### 作者贡献/Authors' Contributions

刘汉梅、徐小艳参与试验设计;周倩、高艺、周璇、帅鉴参与临床数据采集;李婧菱、李静、刘汉梅参与论文的写作和修改。所有作者均阅读并同意了最终稿件的提交。

LIU Hanmei and XU Xiaoyan participated in the experimental design. ZHOU Qian, GAO Yi, ZHOU Xuan and SHUAI Ying participated in clinical data collection. LI Jingling, LI Jing and LIU Hanmei participated in the writing and revision of the paper. All authors have read the final manuscript and agreed to the submission.

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[本文编辑] 徐 敏

## 学术快讯

### 上海交通大学医学院附属仁济医院薛蔚、黄吉炜团队开展靶向免疫联合新辅助治疗局部进展期肾癌的临床研究

2024年6月11日,上海交通大学医学院附属仁济医院泌尿科薛蔚、黄吉炜团队在癌症免疫治疗领域国际著名期刊 *Journal for Immunotherapy of Cancer* 发表题目为“*Neoadjuvant toripalimab combined with axitinib in patients with locally advanced clear cell renal cell carcinoma: a single-arm, phase II trial*”的研究成果。该研究是一项研究者发起的、单臂、开放标签的Ⅱ期临床研究,纳入既往未接受过任何系统治疗、非转移性、经组织病理学确诊的透明细胞肾细胞癌患者,对其进行特瑞普利单抗(toripalimab)联合阿昔替尼(axitinib)新辅助治疗12周,之后评估和手术治疗。主要研究终点是12周新辅助靶向免疫联合治疗的客观缓解率,次要终点包括术后无病生存期、安全性和围手术期并发症发生率,探索性终点是生物标志物分析,旨在建立新辅助治疗前后肿瘤免疫微环境变化与新辅助治疗效果应答的关联模型。该研究结果显示,特瑞普利单抗联合阿昔替尼新辅助治疗局部进展期肾癌具有显著的抗肿瘤效果,且安全性良好。该研究为靶向免疫联合治疗在局部晚期肾癌围手术期的应用提供了新依据。