



Health Status of Postpartum Women: Bladder Symptoms, Postpartum Depression, and Physical Activity

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Purpose

The overall purpose of this study was to determine levels and the associations among postpartum health outcomes. The specific research objectives were as follows; first, to describe general and obstetric characteristics, secondly to describe the levels of the bladder syndrome, postpartum depression, physical activities and postpartum fatigue, thirdly to explain the differences of health outcomes at time-points. Lastly it was aimed to show the associations of the health outcomes.

Methods

Study design was a cross-sectional research at three-time-points of 1mon, 2mon, and 3month to know the patterns of health status, fatigue, depression and overactive bladder symptoms on physical activity. Ethical approval was obtained from the Institutional Review Board (No. 2012-82). Subjects participated by two ways. Most women did using access to professional online survey organization via their smart phone or computer and answered to structured questionnaires, and others did at the waiting area of the hospital and health center. We sent the small first-aid kit to them via post. Total subject was 303 women, but we excluded twin mother and preterm labor, and finally we analyzed 290 subjects. Measurements were the modified Fatigue Symptom Check List (MFSC), the Edinbergh Postnatal Depression Scale (EPDS), the Interstitial Cystitis Symptom Index/ Interstitial Cystitis Problem Index (ICSI/ICPI), International Physical Activity Questionnaire (IPAQ) short form, and Cronbach's alphas were .95 postpartum fatigue, .86 for EPDS, .778 for women's health problem .825 for ICSI/ICPI

Results

The mean age of subjects was 32.9 (SD 3.53) and the mean BMI (body mass index) was 20.97 (SD 3.23). They got the prenatal care with the mean of 8.37 times. Health outcomes were all significantly different by the inter-subjects. The better health status, the lower depression scores. The higher physical health symptom scores, the higher bladder symptom scores ($r=.317$, $p<.001$). Also health outcomes had positively / negatively associated among themselves. Conclusion: After women had a baby, their physical health symptom was decreased over the time, and postpartum depression and fatigue were increased. So we have to aware of physical and psychological problems.

Table 1. General & Obstetric Characteristics

Variables	Mean (SD)	t/F	p
Age	32.7(3.53)	158.4	.000
BMI	20.9(3.23)	110.5	.000
Prenatal care number	8.37(6.24)	22.8	.000
Number of baby	1.40(.59)	39.9	.000
Gestational age	271.9(15.8)	292.8	.000
Baby weight	3.16(.52)	103.2	.000
Health problems	20.74(5.89)	59.92	.000
Postpartum Fatigue	87.89(18.21)	82.21	.000
ICSI/ICPI	13.07(4.76)	46.79	.000
ICSI	6.87(2.45)	47.79	.000
ICPI	6.20(2.86)	36.98	.000
Irritable Bowel Syndrome	17.82(4.38)	69.36	.000
Postpartum depression	9.34(5.78)	27.53	.000

Table 2. Differences of health problems, postpartum fatigue, ICSI/ICPI, Intestinal health index, Postpartum depression & Physical activity by 3- time points

Variables	Postpartum period	Mean(SD)	Levene	p	F	p
Health problems	1 Mo (n=43)	21.67(6.57)	.65	.521	.667	.514
	2 Mo (n=53)	20.38(5.43)				
	3 Mo (n=194)	20.64(5.87)				
Postpartum Fatigue	1 Mo (n=43)	89.72(16.2)	.936	.393	.273	.762
	2 Mo (n=53)	87.15(18.95)				
	3 Mo (n=194)	87.68(18.48)				
ICSI/ICPI	1 Mo (n=43)	17.28(5.39)	7.92	.000	29.13	.000
	2 Mo (n=53)	14.09(4.80)				
	3 Mo (n=194)	11.86(3.95)				
ICSI	1 Mo (n=43)	8.60(2.81)	6.05	.003	19.05	.000
	2 Mo (n=53)	7.43(2.59)				
	3 Mo (n=194)	6.33(2.10)				
ICPI	1 Mo (n=43)	8.67(3.29)	11.34	.000	26.11	.000
	2 Mo (n=53)	6.66(3.01)				
	3 Mo (n=194)	5.53(2.35)				
Intestinal health index (IHI)	1 Mo (n=43)	18.28(4.94)	.412	.663	.278	.758
	2 Mo (n=53)	17.77(4.31)				
	3 Mo (n=194)	17.73(4.28)				
Postpartum depression	1 Mo (n=43)	10.42(4.52)	3.90	.021	2.067	.128
	2 Mo (n=53)	8.08(5.33)				
	3 Mo (n=194)	9.45(6.10)				
Vigorous PA day	1 Mo (n=43)	.16 (.57)	3.83	.023	1.745	.176
	2 Mo (n=53)	3.47(.64)				
	3 Mo (n=194)	.38(.89)				
Vigorous PA amount	1 Mo (n=43)	3.47(11.46) ^a	8.41	.000	2.781	.064
	2 Mo (n=53)	7.36 (23.46) ^b				
	3 Mo (n=194)	13.65(32.09) ^c				

Conclusion

After women had a baby, their physical health symptom was decreased over the time, and postpartum depression and fatigue were increased. So we have to aware of physical and psychological problems.

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