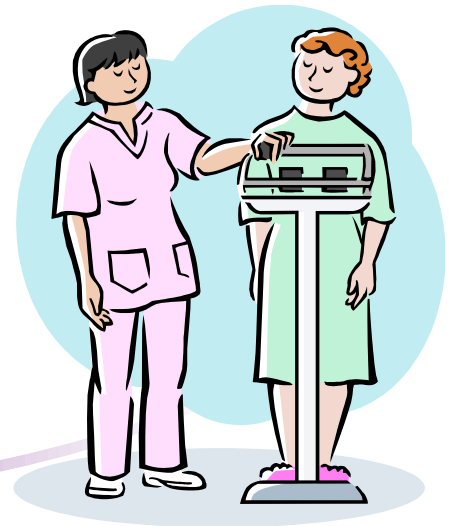# Postpartum Weight Retention and Its Related Factors in Taiwanese Women: A Pilot Study

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Background and Significance

- Obesity is a significant health issue for Taiwanese adult women.

  - 36% were overweight (BMI ≥ 24) and 17% were obese (BMI ≥ 27).[1]

  - 33.6% were central obese.[1]

  - Obesity-related diseases are the leading causes of death in Taiwan.[2]

Background and Significance

- Compare to Caucasian women with the same BMIs, Taiwanese women

  - Have higher percentage of body fat.[3]

  - Have higher mortality risk and more cardiovascular disease.[4]

Background and Significance

- Postpartum weight retention (PWR) is a contributor of the development of obesity.[5-11]

- A weight gain of 5 kg or more will increase women's risks of coronary heart disease.[12]

Review of Literature

- At 6 months postpartum, Taiwanese women
  - Retained 2.4-3.4 kg.[13-16]
  - 25 % retained more than 5 kg.[13]
  - Prevalence of overweight increased to 28%.[14]

Review of Literature

- More than 90% of Taiwanese women still follow the traditional custom of "doing the month".[17]

Limit physical activity

Increase food intake

→ Increase the risk of PWR
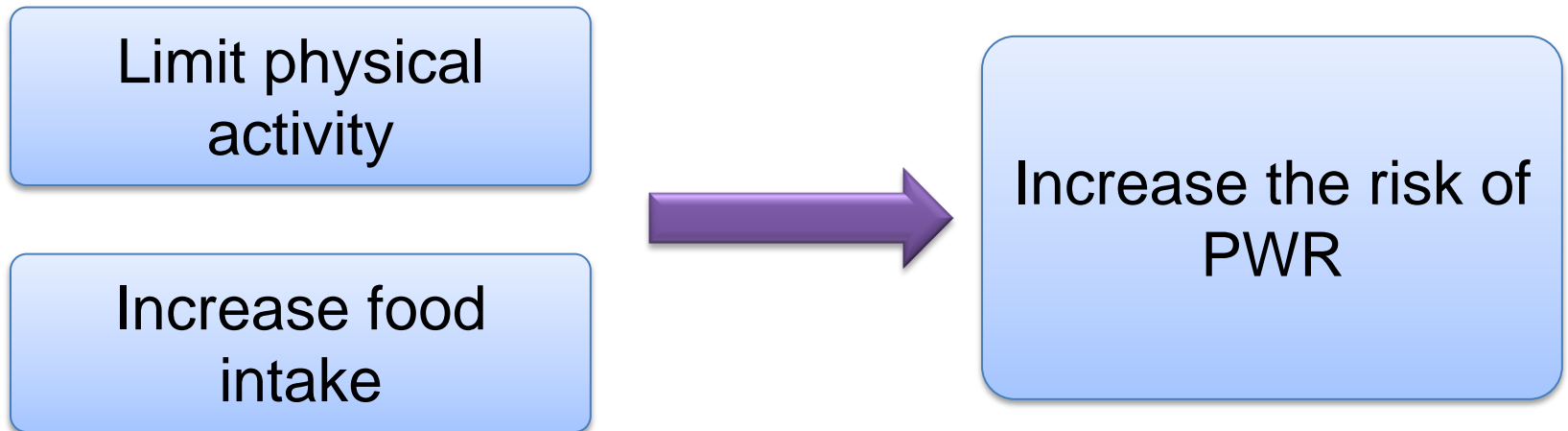
Food for Doing the Month

Sesame Oil Chicken

DuZhong Kidney-Tang (Soup)

Review of Literature

- Few studies have explored postpartum weight changes and its predictors in Taiwanese women.

- Few studies investigate the influence of psychological factors on PWR

- No studies measure waist circumference as a outcome variable.

Purposes

- To test the reliability of the questionnaires.
- To examine the magnitude of postpartum weight retention and waist circumference
- To examine the relationships among variables

Methods

- Cross-sectional design
- Setting: Two Health Care Centers in Southern Taiwan
- Convenience sample, N = 30

Sample

- Inclusion criteria: women who
  - Were ≥ 18 years
  - Had delivered a singleton and full-term baby
  - Were at postpartum 2 weeks to 6 months
  - Had no complications
 - Were not pregnant during the time of investigation

Concepts & Measures

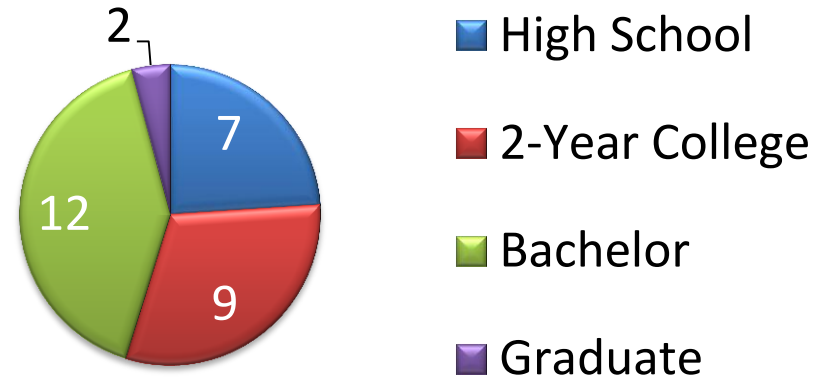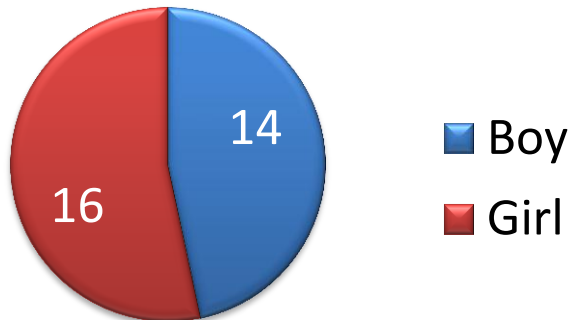| Concept s	Measures	Cronbach's α
Stress	Perceived Stress Scale (PSS)	.706
Self-Esteem	Rosenberg Self-esteem Scale (RSES)	.835
Depression	Edinburgh Postnatal Depression Scale (EPDS)	.867
Social Support	Interpersonal Support Evaluation List-12 (ISEL-12)	.734
Self-Efficacy	Exercise Self-Efficacy Scale (ESE)	.945
	Nutrition Self-Efficacy Scale (NSE)	.873

Results
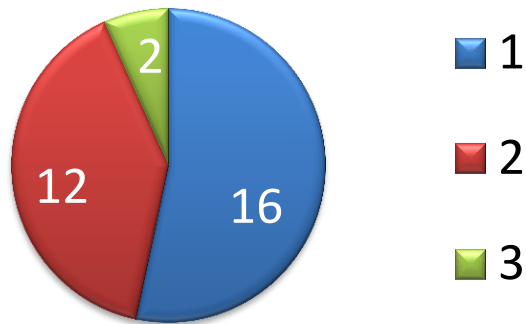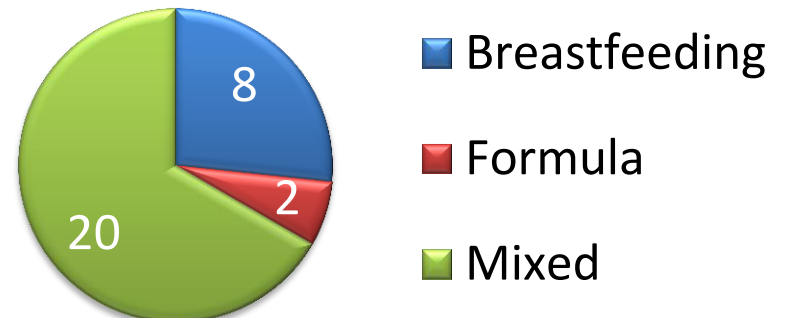
Total Score	Scale	Range	Mean	SD
Age	Years	21-42	31.93	5.05
Postpartum days	Days	16-194	80.53	52.65
Prepregnancy Body Weight	kg	38-75	54.27	5.94
Prepregnancy Waist Circumference (WC)	cm	55.9-86.5	69.11	7.80
Postpartum WC	cm	66.5-104.3	77.61	7.95
Gestational weight gain (GWG)	kg	6.5-24.4	12.61	4.23
PWR	kg	1.2-9.1	4.24	2.03

Changes in Body Weight and Waist Circumference (WC): Compared to Prepregnancy
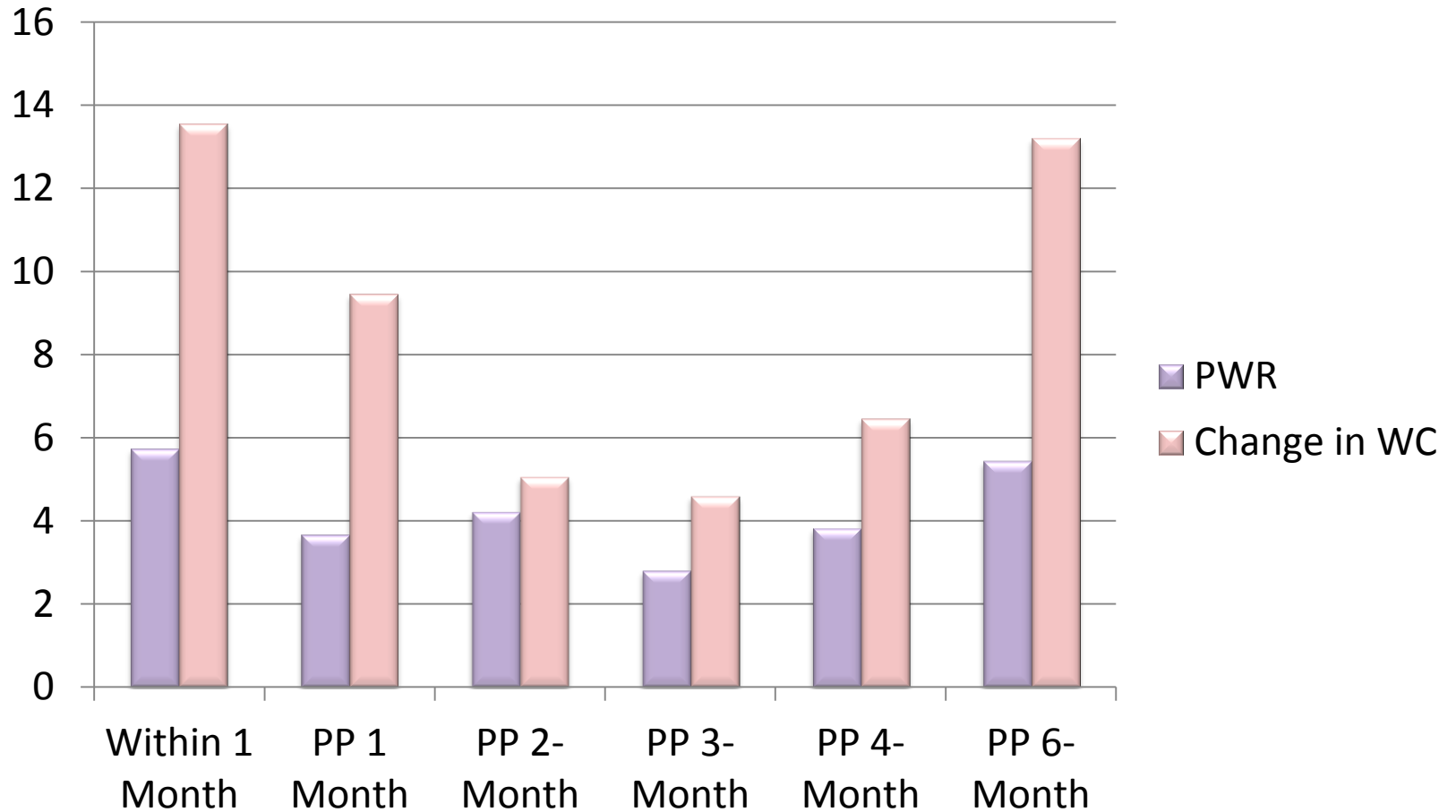
Correlation Coefficients

	PWR	Age	Parity	Pre_BW	GWG	Snack_DOM
PWR	1	-.010	-.259	.097	.331*	.382*
WC_ Change	.625*	-.082	-.405*	.168	.111	.435*

Pre_BW: Prepregnancy body weight

GWG: Gestational weight gain

PWR: Postpartum weight retention

WC_Change: Change in waist circumference

Snack_DOM: Number of snacks eating per day during doing the month

Correlation Coefficients

	PSS	RESE	EPDS	ISEL	ESE	NSE
PWR	.209	-.222	.179	-.187	-.045	.212
WC_ Change	.113	-.252	.289	-.217	-.054	.204

PSS: Perceived stress scale

RESE: Rosenberg Self-esteem Scale

EPDS: Edinburgh Postnatal Depression Scale

ISEL: Interpersonal Support Evaluation List-12

ESE: Exercise Self-Efficacy Scale

NSE: Nutrition Self-Efficacy Scale

Results

- Prevalence of overweight increased from 21.4% (prepregnancy) to 32.1% (postpartum)

- Primiparas increased their waist circumference more than multiparas did (t = 2.22, p = 0.037).

Conclusion

- Significant weight retention and increase in waist circumference were found in postpartum Taiwanese women.

- Parity, gestational weight gain, snack eating during doing the month, and psychological factors may influence postpartum weight retention and waist circumference.

Limitations

- Cross-sectional study
- Small sample size
- Limited generalization

Comments & Questions