

Factor affecting maternal self-esteem in women with gestational diabetes mellitus



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BACKGROUND

Maternal self-esteem is an essential component of mothering. Low levels of maternal self-esteem have been associated with diabetes self-management.

The purpose of this study was to examine the factors affecting maternal self-esteem in women with gestational diabetes mellitus (GDM).

METHODS

Study design

Cross-sectional study using a self-administered questionnaire

Participants

This study was conducted in obstetric hospital in Japan from February 2015 to March 2016. A total of 356 women were enrolled in it. Of the 356, 76 women were diagnosed with GDM, while 280 were non-GDM women.

Measurements

- ◆ **Sociodemographic, obstetrics dates** : age, gestational week, parity, HbA1c, rate of insulin use, marital status, employment
- ◆ **Maternal self-esteem** : The Prenatal Maternal Self-Report Inventory
- ◆ **Social support** : Social Support Scale
- ◆ **Attachment** : Prenatal Attachment Inventory
- ◆ **Anxiety** : State-Trait Anxiety Inventory A-State

Statistical analysis

All statistical analyses were performed using the statistical software SPSS version 22 for Windows

Ethical Consideration

This study was approved by the ethics committee of the University of Tsukuba, Japan. The authors declare that they have no conflict of interest.

RESULTS

Table 1. Demographic Characteristics

	GDM (n=76)	Non-GDM (n=280)	P Value
Age (years)	33.5 (± 4.7)	31.5 (± 4.4)	<.01 ^{a)}
Gestational age (weeks)	24.7 (± 7.2)	24.5 (± 7.9)	n.s. ^{a)}
Parity (Primipara)	43 (56.6%)	140 (50.0%)	n.s. ^{b)}
Married	74 (97.4%)	273 (97.5%)	n.s. ^{b)}
Employed	37 (49.3%)	142 (50.7%)	n.s. ^{b)}
HbA1c (%)	5.2 (± 0.3)		
Insulin use	6 (7.9%)		

Values are presented as mean (SD) or n (%)

N.S. : non significant

^{a)} Two sample's t test ^{b)}χ² test

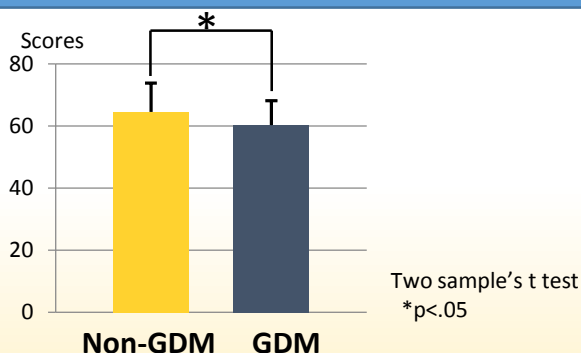


Fig 1. Mean maternal self-esteem score Non-GDM vs GDM women

Table2. Predictors of maternal self-esteem in GDM women

	Unstandardized Coefficients	Standardized Coefficients	P Value	95% Confidence Interval		VIF
	B	β		Lower Bound	Upper Bound	
Anxiety	-.29	-.344	<.01	-.43	-.14	1.11
Attachment	.28	.360	<.01	.15	.42	1.14
Parity	7.12	.398	<.01	4.07	10.17	1.15
Parental support	29.85	.273	<.01	12.02	47.68	1.05

Multiple regression analysis(forced entry method), R² for model=.55; adjusted R²=.52

Adjusted variables : age, gestational age

CONCLUSION

Women with GDM have a greater likelihood of obstetric and neonatal complications and the onset of type 2 diabetes. These threats to health may affect the maternal self-esteem. Healthcare providers should strive to reduce health anxiety about GDM and improve maternal self-esteem.