Knowledge of Pelvic Floor Disorder in Pregnancy

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Introduction

Pelvic floor dysfunction is common in women. It can lead to distressing consequences such as urinary incontinence (UI), pelvic organ prolapse (POP) and fecal incontinence (FI) with adverse effects on the quality of life of women world-wide. Pregnancy is a known major risk factor for pelvic floor dysfunction. Yet women may not be clearly informed on the importance of maintenance of pelvic floor during pregnancy as a prevention for future pelvic floor dysfunction issues in life. This study aims to assess the level of knowledge of pelvic floor disorders amongst pregnant women in our local population, so as to enforce preventive measures in this targeted group.

Methods

A cross-sectional study was conducted in a population of pregnant women in their third trimester. A questionnaire of 47-questions was distributed to a random sample group. Of which, 11 questions were on demographic characteristics, 8 on obstetric history and current pregnancy, 4 on personal history of pelvic floor dysfunction and 24 on knowledge of pelvic floor disorders. Knowledge scores were calculated. Possible predictive factors for knowledge level such as age, race, parity, ethnicity and educational levels were studied.

Results

A total of 104 completed surveys were collected. 31.7% respondents reported history of urinary incontinence, 2.9% reported sensation of prolapse and 1 respondent (0.96%) reported fecal incontinence. The knowledge score for urinary incontinence was the highest at 46.2%, followed by fecal incontinence - 39.8% and lowest in pelvic organ prolapse at 35.3%. Respondents who were employed had significant higher mean knowledge scores than those unemployed. Mean knowledge scores increased significantly with age and educational level.

Educational level	N	Mean score	Std deviation	P value
Secondary school	19	31	29	0.046
ITE	24	34	29	
JC/Poly	25	42	27	
Uni and above	36	49	22	
Total	104	41	27	

Table 3. Mean overall knowledge score by education level

The nulliparous women scored higher than the multiparous women. Chinese respondents had the highest mean score. Aage and educational level showed significant impact on scores on multivariate analysis.

Conclusion

Local pregnant ladies are not well informed on the effect of pelvic floor disorders as a result of pregnancy. This is consistent with similar studies worldwide. Emphasis should be placed on pelvic floor exercises during routine antenatal care. This could be achieved through adequate counseling, and the use of interactive pregnancy applications to prevent long term pelvic floor complications in women.

Category	Mean knowledge score (95% CI)
Urine incontinence (Mean ± SD; range)	46.3 ± 0.3 (41- 51)
Prolapse (Mean ± SD; range)	35.5 ± 0.3 (29 - 42)
Faecal incontinence (Mean ± SD; range)	39.8 ± 0.3 (35 - 46)

Table 1. Knowledge scores for each category of pelvic floor disorder

	Mean knowledge score (95% CI)	P value
Employed		0.026
a. Yes	45 (39 - 51)	
b. No	33 (23 - 42)	
Parity		0.009
a. Nulliparous	45 (38 - 53)	
b. Multiparous	36 (29 - 43)	
Age		0.021
a. 15-25	24 (1 - 40)	
b. 26-35yo	42 (36 - 49)	
c. 36-41	46 (35 - 46)	
Social economic class		0.224
a. Condominium/terrace	45 (20-70)	
b. HDB 3-5 rooms/EC	41 (36-47)	
c. HDB1-2 rooms/rental	31 (1-54)	

Table 2. Overall knowledge scores by employment status, parity, age and socioeconomical class

Race	N	Mean score	Std deviation	P value
Chinese	45	48	27	0.053
Malay	41	33	25	
Indian	8	40	26	
Others	10	38	26	
Total	104	40	27	

Table 4. Mean overall knowledge score by Race