FACTORS ASSOCIATED WITH PRE-PREGNANCY CARE KNOWLEDGE AMONG UNDERGRADUATE STUDENTS IN SHAH ALAM, SELANGOR - PILOT STUDY

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INTRODUCTION

Pre-pregnancy care (PPC) is an intervention that optimises women's health before conception with the goal to improve maternal and neonatal outcomes and reducing morbidity and mortality (WHO, 2013). There was a low prevalence of PPC service utilisation in Malaysia. The main reason was poor awareness of the PPC services. Many studies found that younger women were less likely to utilise PPC (Du et al., 2022) and had poor knowledge (Jusoh et al., 2020). However, these studies were conducted among pregnant women who attended government clinics. PPC should also be emphasized in young reproductive population. The youth are the future generation. If their awareness about PPC increases, there is a higher likelihood for them to use PPC services and help prepare for parenthood.

OBJECTIVE

This study was aimed at determining the prevalence of poor PPC knowledge and its associated factors among unmarried female undergraduate students.

MATERIALS AND METHODS

This was a cross-sectional study using voluntary sampling that involved 145 unmarried female students aged 18–25 years old from Universiti Teknologi MARA, Shah Alam, between October to December 2022. A self-administered Malay-validated online questionnaire (Talib et al., 2018) was used, and it consisted of independent variables, which were socio-demographic data, family history of unplanned pregnancy, intention to get married, perceptions of the risk of pregnancy, awareness on availability of PPC services and the outcome was knowledge of PPC. Descriptive analysis, simple logistic regression followed by multiple logistic regression analysis were conducted using SPSS version 25.0.

RESULTS

Figure 1: Sociodemographic characteristics of the respondents* (N=145)

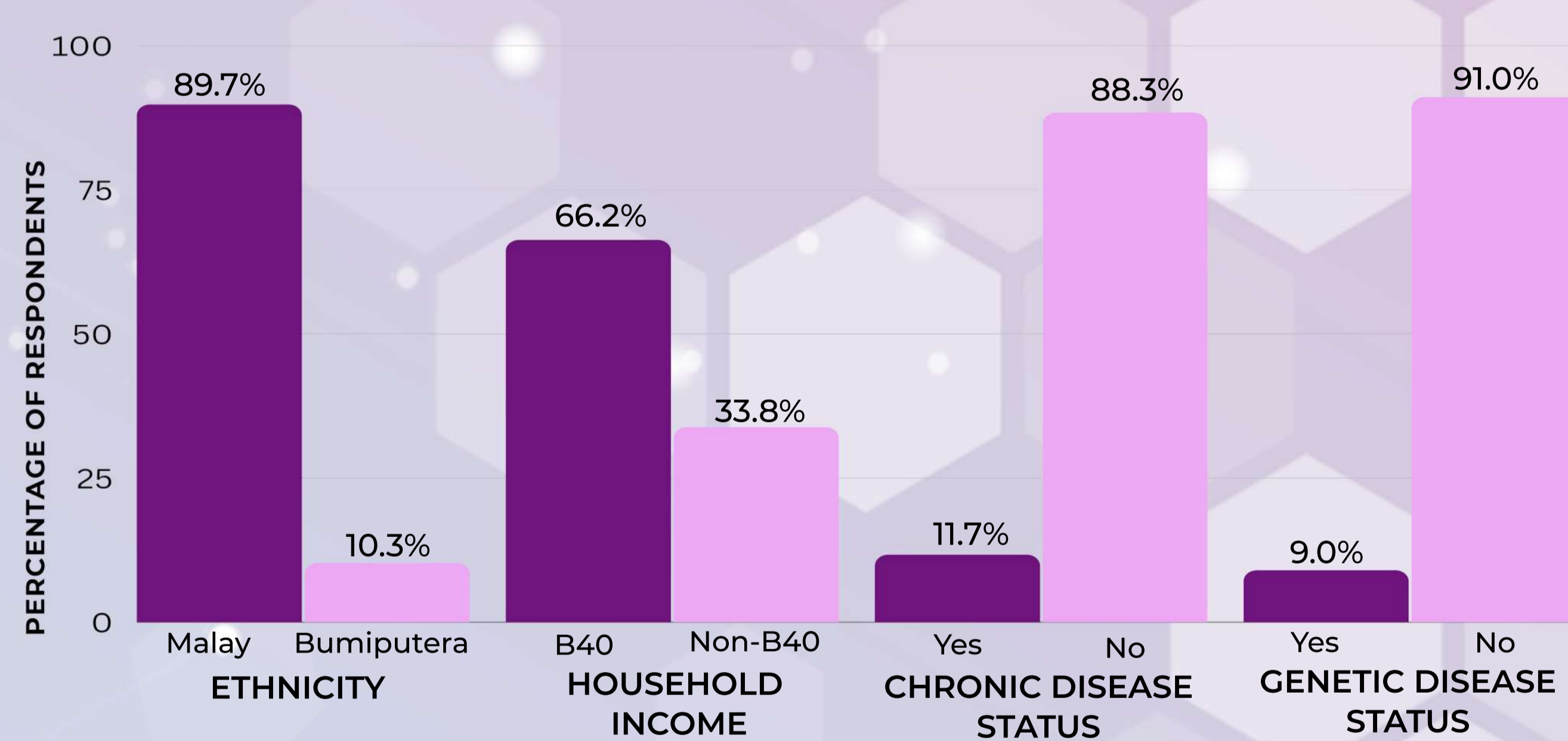*Note : Mean age of the respondents were 21.7 (SD 1.6) years old

Figure 2: Family history of unplanned pregnancy, intention to get married, perception of the risk of pregnancy, awareness on the availability of PPC services and knowledge of PPC of the respondents (N=145)
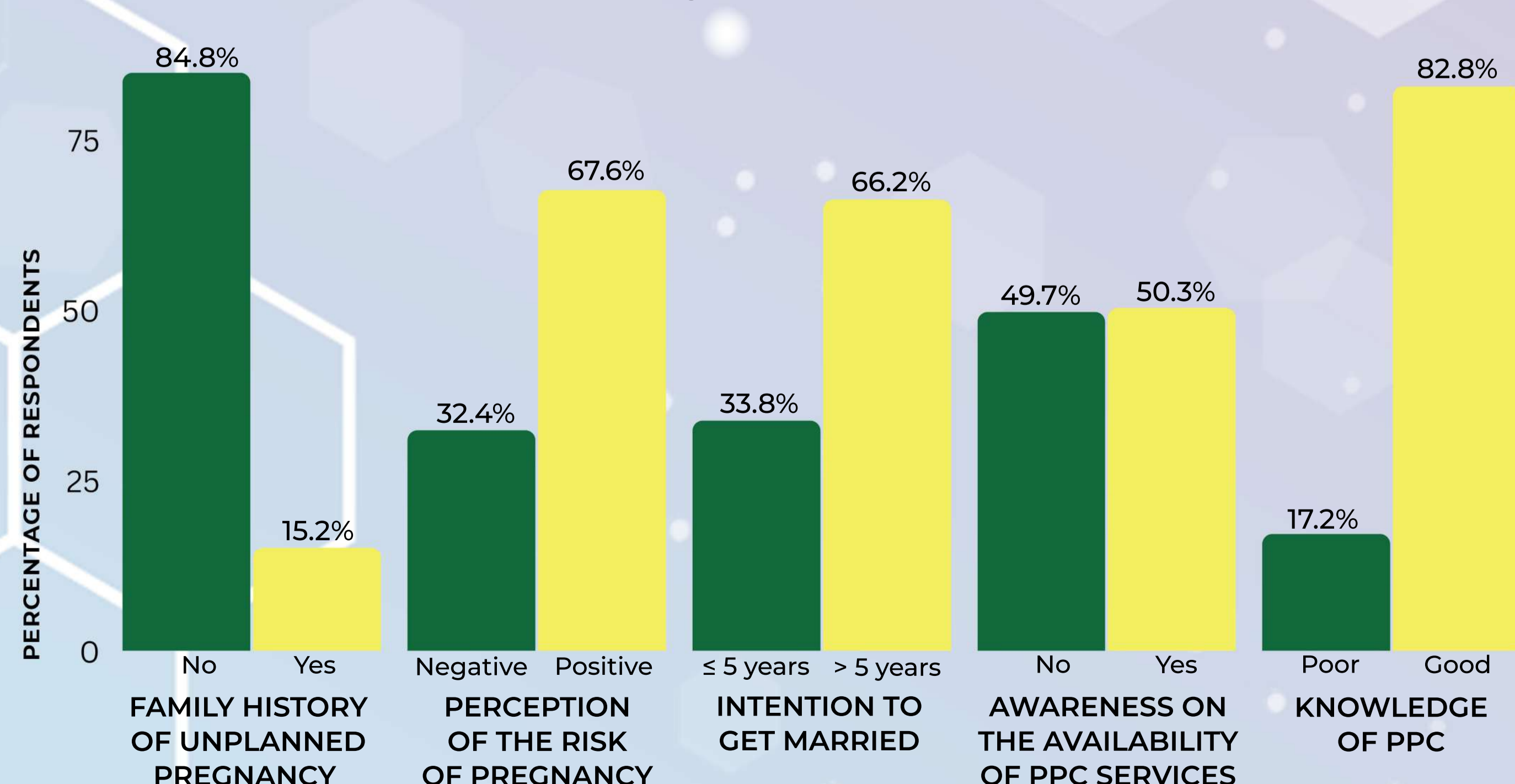

Table 1: Factors associated with poor PPC knowledge, using simple and multiple logistic regression analysis (N=145)

Variables	Simple Logistic Regression		Multiple Logistic Regression			
	Crude OR (95%CI)	p-value	B	Wald	Adjusted OR (95%CI)	p-value
Age (year)	0.97 (0.74,1.26)	0.807	-	-	-	-
Ethnicity:						
Malay	0.315 (0.04, 2.52)	0.276	-	-	-	-
Bumiputera	1					
Income:						
B40	1.10 (0.44, 2.77)	0.835	-	-	-	-
Non-B40	1					
Chronic disease:						
Yes	0.27 (0.03, 2.14)	0.216	-	-	-	-
No	1					
Genetic disease:						
Yes	0.86 (1.80, 4.15)	0.853	-	-	-	-
No	1					
Family history of unplanned pregnancy:						
Yes	0.20 (0.03, 1.53)	0.121	-	-	-	-
No	1					
Perception of the risk of pregnancy:						
Negative	0.78 (0.30, 2.02)	0.605	-	-	-	-
Positive	1					
Intention to get married:						
≤ 5 year	2.53 (1.05, 6.07)	0.038*	1.351	4.351	2.66 (1.06,6.69)	0.037*
> 5 year	1					
Awareness on the availability of PPC services:						
Yes	1					
No	5.23 (1.84, 14.7)	0.002*	1.914	9.727	5.40 (1.87,15.6)	0.002*

PPC: Pre-pregnancy care; OR: Odds ratio; CI: Confidence interval
*significant p-value <0.05

DISCUSSION

The mean age of the study population was 21.7 (SD 1.6) years old. The prevalence of poor PPC knowledge was 17%. This finding showed discrepancies compared to another study that revealed married women who attended government clinics had a higher percentage of poor knowledge, which was 52% compared to ours (17% vs. 52%) (Talib et al., 2018). In addition, a study shows that higher education levels were significantly associated with good PPC knowledge (Jusoh et al., 2020) and this may explain our findings among undergraduate students with a higher level of education compared to the general population.

In the multiple logistic regression analysis, the intention to get married in 5 years or less (adjusted odds ratio [AOR] = 2.66; 95% CI: 1.06, 6.69; P = 0.037) and low awareness on the availability of PPC services (AOR = 5.4; 95% CI: 1.87, 15.60; P = 0.002) were significantly associated with poor knowledge of PPC. Their low awareness of the existence of PPC services may be due to being young, single, unmarried and without pregnancy experience, hence no PPC exposure. Compared to students who had the intention to get married after 5 years, those who intended to get married in 5 years or less have 2.66 times the odds of poor PPC knowledge.

There were limitations in this study. Firstly, sample size is small and voluntary sampling were used. Secondly, our study population confined to Malay and Bumiputera as per the involved university's structure. It is recommended to develop a revised questionnaire tailored to a more suitable study population.

CONCLUSION

Our study found that intention to get married in 5 years or less and low awareness on the availability of PPC services were significantly associated with poor knowledge of PPC. Through PPC health education, awareness can be raised using a variety of channels, including digital health platforms.

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