



COVID-19 Vaccine Hesitancy and Related Factors among Thai Adults

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The COVID-19 vaccine hesitancy in Thai adults was likely at 20.5%. Vaccine knowledge, perception of risk of infection, severity of disease, and perceived benefit of vaccination were good. Perceived barriers to vaccination were low. The main reason for hesitancy was concern about the safety and efficacy of the vaccines. Associated factors for hesitancy were different occupations, lower educational levels, and less information about COVID-19 vaccines.

BACKGROUND

The coronavirus (COVID-19) outbreak has affected globally. The WHO has named "Vaccine Hesitancy" an essential factor in the well-being of people. To reduce vaccine hesitancy, it is important to give credible and reliable information about the safety of vaccines and to eradicate misinformation. The COVID vaccine hesitancy in Thailand is limited.

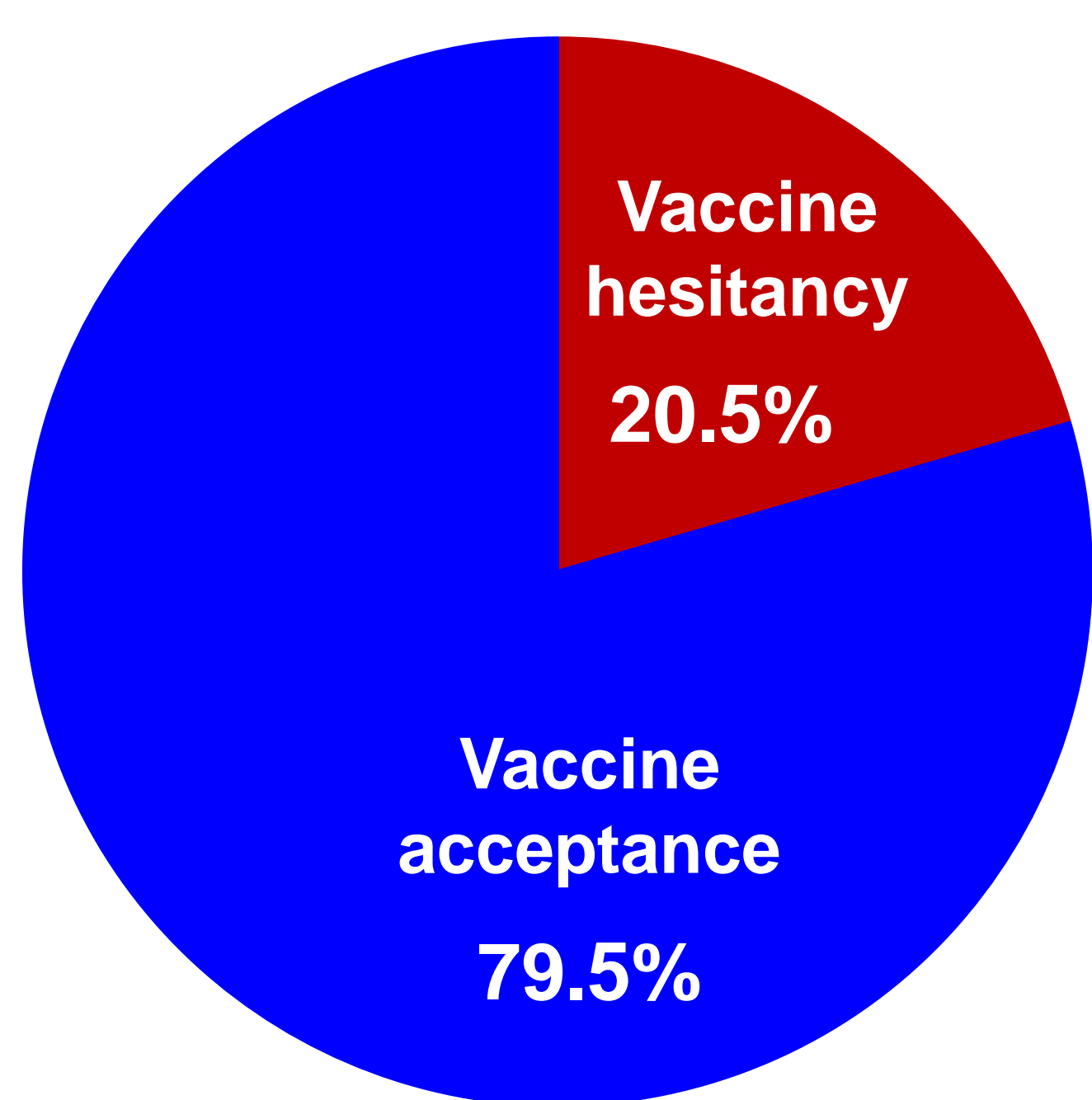
OBJECTIVES

This study aimed to determine the extent of hesitancy and identify its related factors, and to investigate how well-informed Thai adults are about COVID-19 vaccination. The levels of knowledge and awareness about COVID-19 and vaccinations by applying the Health Belief Model were also assessed.

METHODS

A cross-sectional study was carried out. Data were collected from June-August 2021 in out-patients at Rajavithi Hospital aged 20 years and over, totaling 550 people. Knowledge of vaccines, awareness of diseases, and the need for vaccine information were collected. Binary logistic regression was analyzed. The Ethics Committee Rajavithi Hospital approved this study.

RESULTS



Reasons for vaccine hesitancy
1. Concern about vaccine side's effects and risks (81.9%)
2. Concern about vaccine efficacy (69.6%)
3. They believe sufficiently protect themselves from infection (14.6%)

Figure 1 Vaccine hesitancy and reasons

Most were female, mean age of 41.56±15.00 years and bachelor. Getting a COVID-19 vaccination was high at 79.5% and vaccine hesitancy was 20.5%. The most reason for vaccine hesitancy is concerns about the safety and efficacy of vaccines (Figure 1) The vaccine knowledge, perceived threat of COVID-19, perceived severity of COVID-19, and the perceived benefit of vaccination were at high level. The perceived barriers to getting the vaccine are low (Figure 2). The three most accepting sources of information on COVID-19 vaccines were family 89.3%, doctors 87.6%, and government 82.2%. Factors associated with vaccine hesitancy were private employee (OR 2.68, 95% CI 1.39–5.18), self-employed (OR 2.23, 95% CI 1.07–4.65), and other occupations (OR 3.69, 95% CI 1.62–8.42), lower educational levels (OR 2.05, 95% CI 1.30–3.22), low perceived severity of COVID-19 (OR 2.67, 95% CI 1.29–5.54), and less obtaining information to the vaccine. (OR 1.79, 95% CI 1.07–3.01) (Table 1).

RESULTS CONTINUED

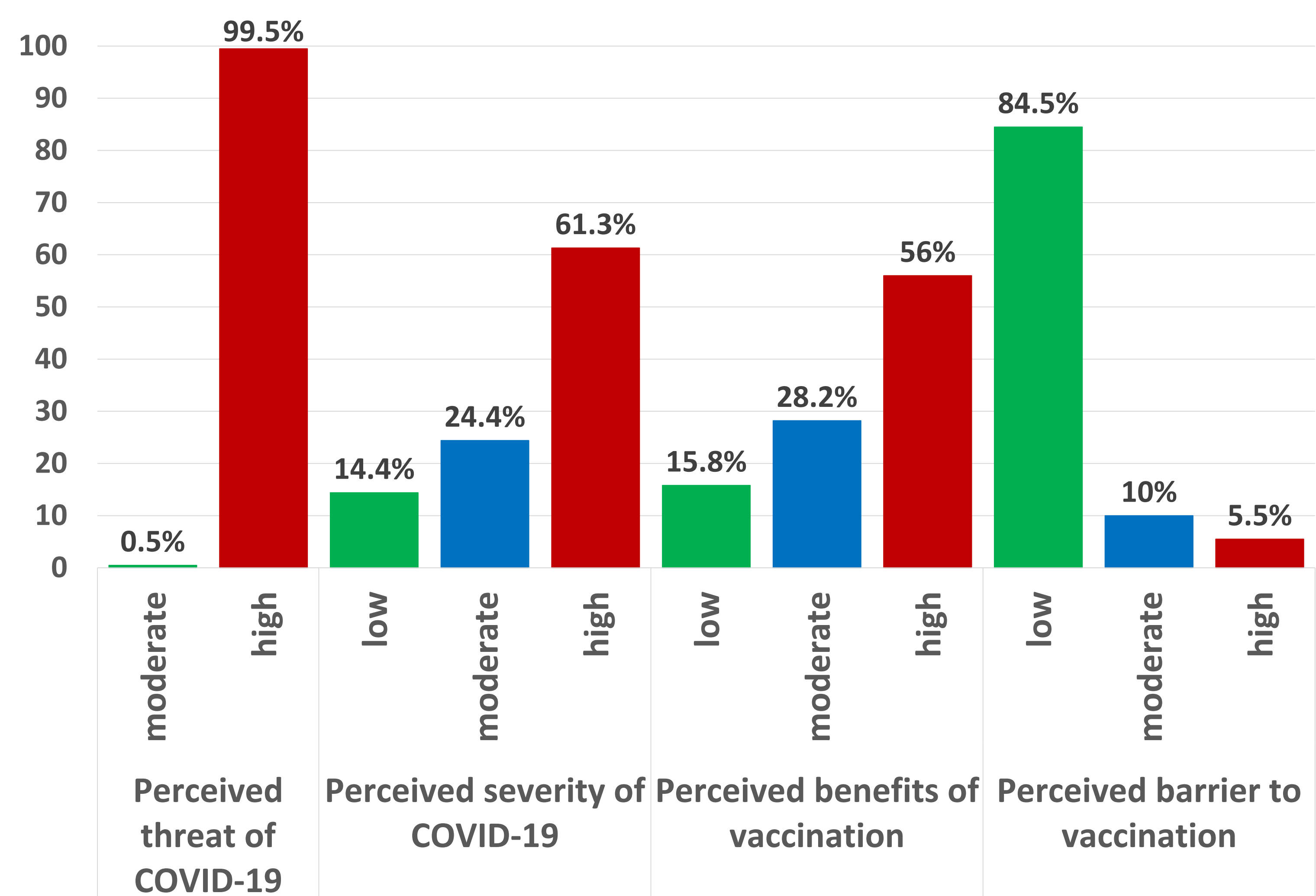


Figure 2 Perception towards vaccine using health believe model

Table 1 Factors associated with vaccine hesitancy

Factors	Crude OR(95% CI)	p-value	Adj OR (95%CI)	p-value
Occupation				
- Civil servant	ref		ref	
- Private employee	3.47(1.90-6.33)	<0.001	2.68(1.39-5.18)	0.003*
- Self-employed	2.54(1.29-5.01)	0.007	2.23(1.07-4.65)	0.033*
- Others	4.20(1.97-8.95)	<0.001	3.69(1.62-8.42)	0.002*
Education				
- Bachelor or above	ref		ref	
- Below bachelor	2.64(1.73-4.03)	<0.001	2.05(1.30-3.22)	0.002*
Perceived severity of COVID-19				
- High	ref		ref	
- Low	3.23(1.86-5.60)	<0.001	2.67(1.29-5.54)	0.008*
- Moderate	2.16(1.33-3.52)	0.002	1.13(0.60-2.10)	0.710
Obtaining information about vaccine				
- High	ref		ref	
- Less and moderate	2.56(1.62-4.05)	<0.001	1.79(1.07-3.01)	0.028*

CONCLUSIONS

The vaccine hesitancy is low. People have knowledge and perception of the risk of infection, the severity of COVID-19, and the perceived benefit of vaccination at a reasonable level. Factors associated with hesitancy were occupation, education, perceived severity of COVID-19, and information about COVID-19 vaccine.

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