

Coverage and vaccine hesitancy of influenza vaccination among reproductive-age women (18-49 years old) in China

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- □ This cross-sectional survey was conducted in China from March 15 to 30, 2023, and a total of 1742 Chinese reproductive-aged women were finally included.
- □ The past-year influenza vaccine coverage among women aged 18-49 years old was only 39.32% in China.
- □ Age ≥35 years (aOR = 0.72, 95% CI: 0.56-0.94), renting accommodation (0.57, 0.44-0.75), and history of COVID-19 infection (0.65, 0.47-0.89) and COVID-19 vaccine hesitancy (0.39, 0.29-0.54) were all identified as negative correlates of influenza vaccine coverage among Chinese reproductive-aged women. While participants with a history of chronic diseases (1.57, 1.23-2.01) and noticeable pandemic fatigue due to COVID-19 (1.45, 1.05-2.00) were prone to have higher vaccination rates.
- □ Among reproductive-aged women who did not receive influenza vaccination in the past year, the hesitancy rates regarding future influenza vaccination were 31.79%.
- □ Factors such as older age, urban residence, living with others, poor self-rated health status, absence of chronic diseases, completion of full COVID-19 vaccination, COVID-19 vaccine hesitancy, pandemic fatigue, and failure to perceive the susceptibility and severity of influenza might increase influenza vaccine hesitancy.

Background

- ◆ Influenza is a significant global respiratory infection. Vaccinating reproductive-age women, particularly in densely populated countries like China, cannot be overlooked.
- ◆ Previous studies neglected the attitudes of reproductive-age women, which is closely related to vaccine acceptance during pregnancy.
- ◆ In this study, we aimed to determine influenza vaccination coverage, vaccine hesitancy as well as associated factors among Chinese women aged 18-49 years old.

Online survey in China Socio-demographic characteristics Health-related factors Health-related factors Vaccine hesitancy toward COVID-19 Adjusted Pandemic Fatigue Scale (PFS) Perception of susceptibility and severity "Have you received a flu vaccine in the past year?" "If you have not received a flu vaccine in the past year, would you be willing to get one in the future?"

Results

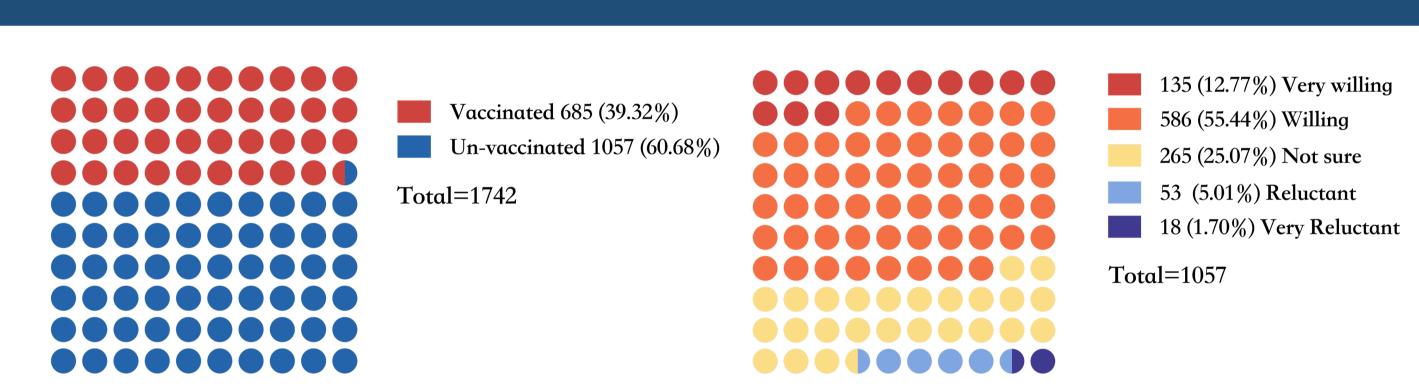


Fig 1. Coverage and vaccine hesitancy of influenza vaccination among women of reproductive age.

- Of the 1742 participants, the past-year influenza vaccine coverage among women aged 18-49 years old was only 39.32% in China.
- Among 1057 reproductive-aged women who did not receive influenza vaccination in the past year, 12.77% and 55.44% of them showed their willingness toward receiving influenza vaccines in the.

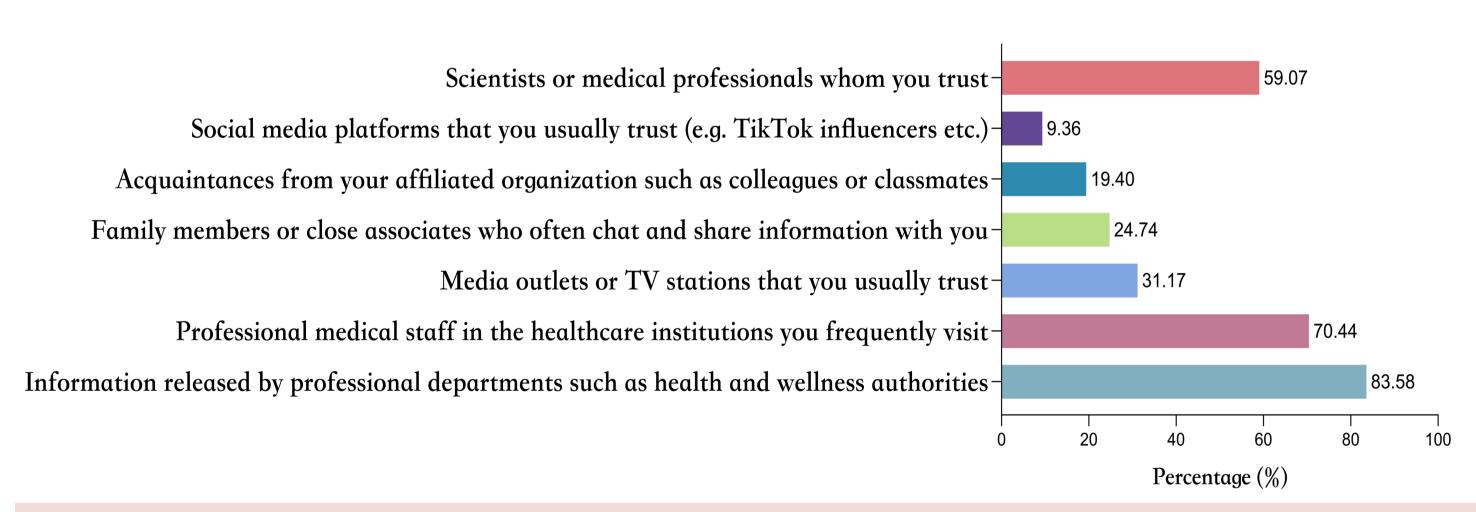


Fig 2. The proportion of the top three most trusted opinion and information providers when making vaccination decisions.

Conclusion

- ◆ A lower coverage rate of influenza vaccine was notably observed among Chinese reproductive-age women.
- ◆ While vaccine hesitancy among Chinese women of reproductive age who have not received a flu vaccine in the past year appears to be low, the critical challenge lies in translating vaccination intent into actual uptake, which warrants further examination.
- ◆ To effectively mitigate the impact of influenza and reduce the incidence of associated diseases, it is imperative to devise targeted intervention strategies and policies tailored to reproductive-age women.

Table 1. Factors associated with the coverage and hesitancy of influenza vaccination
among women of reproductive age in multivariable models

Characteristics†	Coverage	Hesitancy
Age	aOR (95% CI)	aOR (95% CI)
<35	1 (Reference)	1 (Reference)
≥35	0.72 (0.56-0.94)*	1.70 (1.18-2.45)*
Location	0.72 (0.30-0.94)	1.70 (1.10-2.43)
Urban	1 (Reference)	1 (Reference)
Rural	/ (Neierence)	0.71 (0.52-0.97)*
Housing		0.71 (0.32-0.97)
Purchased	1 (Reference)	1 (Reference)
Renting	0.57 (0.44-0.75)*	/ (Neierence)
Family member	0.37 (0.44-0.73)	
1	1 (Reference)	1 (Poforonco)
2 2	t (Reference)	1 (Reference)
2-3		1.78 (1.03-3.10)*
≥4		1.44 (1.05-1.97)*
Self-reported health	4 /D ()	4 / D C
Not good	1 (Reference)	1 (Reference)
General		0.36 (0.22-0.61)*
Good		0.25 (0.16-0.40)*
Chronic disease		
No	1 (Reference)	1 (Reference)
Yes	1.57 (1.23-2.01) *	0.61 (0.41-0.91)*
Self-reported COVID-19 history		
No	1 (Reference)	1 (Reference)
Yes	0.65 (0.47-0.89) *	
COVID-19 vaccination		
≤1 dose	1 (Reference)	1 (Reference)
Full vaccinated	/	1.56 (1.04-2.42)*
At least one booster dose	/	1.14 (0.74-1.76)
Hesitancy of COVID-19 vaccination		
Yes	0.39 (0.29-0.54) *	5.94 (4.11-8.58)*
No	1 (Reference)	1 (Reference)
Pandemic fatigue		
Low	1 (Reference)	1 (Reference)
Moderate	0.88 (0.71-1.091)	2.14 (1.55-2.96)*
High	1.45 (1.05-2.00) *	2.23 (1.36-3.66)*
Perceived susceptibility		
Low	1 (Reference)	1 (Reference)
Moderate	/	0.57 (0.39-0.83)*
High	/	0.46 (0.30-0.72)*
Perceived severity	,	
Low	1 (Reference)	1 (Reference)
Moderate	/	0.67 (0.48-0.95)*
High	/	0.44 (0.27-0.73)*
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* A p-value less than 0.05 is considered to be statistically significant.

