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RESEARCH ARTICLE

ACCEPTABILITY AND WILLINGNESS TO PAY FOR INFLUENZA VACCINATION AMONG HEALTHCARE PROFESSIONALS IN VIETNAM

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ABSTRACT

BACKGROUND:

While Vietnam's Expanded Program on Immunization does not cover influenza vaccines, people must pay out-of-pocket for influenza vaccination. Healthcare professionals have a high risk of contracting influenza, but their vaccination rate is low.

OBJECTIVE:

To examine the willingness to pay (WTP) for influenza vaccination among healthcare professionals in Vietnam. It also recommends financing sources for influenza vaccination among healthcare professionals and determines possible measures to expand vaccine coverage.

METHOD:

We interviewed 130 healthcare professionals in a national hospital in Hanoi in July 2021. We used Andersen's behavioral Model (ABM) as an initial approach. The double-bounded dichotomous-choice questions were used to determine WTP for influenza vaccination among the target group. Collected responses were coded and analysed through IBM SPSS version 20 for descriptive, chi-square analyses.

RESULTS:

Most of the healthcare professionals who responded to this study were female with 75.4% of the total 130 respondents. The mean age of participants was 34.08 years old. The average maximum WTP for influenza vaccination services was 357.57 VND (USD 15.3). Most of the participants reported that individuals should pay a part of the cost, and four-fifths reported they believed that the government and medical insurance should subsidize the service (80.8% and 85.4%). The Chi-square test showed that there was a significant association between perceived severity and history of influenza vaccination with the WTP, $X^2(1, N=130) = 4.18, p = 0.04$, $X^2(1, N=130) = 7.81, p = 0.005$, respectively.

CONCLUSION:

The WTP for influenza vaccination among healthcare professionals was found relatively high. Suggesting that price is not a primary barrier. The government and medical insurance were believed to be the potential agencies for improving

vaccination uptake as these agencies were expected to be the subsidized actors. Other health interventions such as influenza literacy and communication methods are also needed to expand vaccine coverage.

KEYWORDS

influenza, influenza vaccination, Andersen's behavioral model, willingness-to-pay, healthcare professionals

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INTRODUCTION

Influenza (flu) is a disease caused by the influenza virus. When infected with the influenza virus, people will develop fever, cough, sore throat, headache, muscle pain, sheer tiredness, and runny nose. [1] It transmits through droplets from ill people when they cough, sneeze, or talk, so the flu quickly spreads. Most people who get flu will recover within a few days to less than two weeks, but some will develop complications like sinus and ear infection, inflammation of the heart and brain. [1]

Influenza virus infections are one of morbidity and mortality burden worldwide. According to the World Health Organization, influenza epidemics cause about 3-5 million severe illness cases and about 290,000 to 650,000 respiratory deaths each year. [2] People of all age groups can infect with the influenza virus. However, some groups have a higher risk for developing severe complications when getting flu, such as children under five years old, adults 65 years and older, adults with chronic health conditions, pregnant women, and health care workers. [2] The highest mortality rates of flu were estimated in sub-Saharan Africa (2.8-16.5 per 100 000 individuals), south-east Asia (3.5-9.2 per 100,000 individuals) [3]. One national survey in Vietnam showed that 22 % of patients presenting with ILI were influenza-positive. [4] Among them, 9,3 % reported as hospitalized, of which 19% were influenza positive. [4]

The influenza vaccine is the most effective way of reducing the morbidity and mortality of flu. Vaccination is vital for high-risk groups that are easy to develop severe complications from influenza. Healthcare professionals are responsible for providing health care treatment and advice for patients. It means that they contact directly with their patients and be put in a high-risk environment for getting the influenza virus. However, this population's acceptance and vaccine uptake rate is still low. [5-8]

Some studies have examined factors affecting the acceptability and willingness-to-pay (WTP) for influenza vaccine in several subjects, including the woman of childbearing age in Vietnam. [9] the general population in China. [10] However, little is known about the acceptance of WTP for influenza vaccine among healthcare professionals. In 2011, the Ministry of Health (MOH) Vietnam legislated seasonal diagnosis and treatment guidelines. HCWs were identified as one of high risk of infection and recommended to be vaccinated annually. [11] However, Vietnam's expanded program on immunization (EPI) does not cover the influenza vaccine. Moreover, social health insurance also does not include vaccination services in the benefit packages. To vaccinate against flu, Vietnamese people pay USD 5,2-7,8 for local vaccines [12] and around USD11,9-14,4 for the imported vaccine. [13] On the other hand, the average cost of ILI treatment in Vietnam was USD 88.09 per case for all age groups. [14] We can see that vaccination programs could help reduce the economic burden of influenza illness. However, there is no studies that examined healthcare professionals' WTP for influenza vaccination in Vietnam.

Andersen's behavioural model of health services use (ABM) [15, 16] is applied in various studies on health service utilization. This model provides a framework for describing and understanding individuals' decisions to use health care services, including vaccination. [17] The dependent variable in this study, the willingness-to-pay for influenza vaccination, is considered a health care utilization, like other studies. [18, 19] The independent variables included three factors: predisposing, enable, and need factors. Predisposing factors include sociodemographic characteristics like age, gender, occupation, and education. Enabling factors refer to resources for accessing health services (such as health insurance, availability of service, etc.). Need factors are about people's perceived needs to access healthcare services.

Therefore, we conducted this research to determine the acceptability and WTP for influenza vaccination and factors associated with the willingness to pay for influenza vaccination among health care professionals. It also recommends financing sources for influenza vaccination among healthcare professionals and determines feasible measures to expand vaccine coverage.

METHODOLOGY

STUDY DESIGN AND AREA

We conducted a rapid assessment among healthcare professionals at the National Hospital for Tropical Diseases in Vietnam in July 2021. This hospital focuses on infectious disease treatment, such as influenza, COVID-19. Therefore, it is essential to maintain their health through an influenza vaccination program. So, understanding healthcare professionals' acceptability and willingness to pay for this vaccine to increase the vaccine uptake could be beneficial for social health protection in Vietnam.

TARGET POPULATION

The healthcare professionals currently working in the hospital, over 18 years old, cognitively healthy, were eligible for this study, and the exclusion criteria were refusing to participate. The healthcare professionals in this study were doctors, nurses, technicians, and pharmacists.

MEASURES AND INSTRUMENT

We developed a structured questionnaire as an instrument in this study. First, the questionnaire was written in English; then, it was revised and translated into Vietnamese by a language expert.

The final version of the questionnaire was divided into five sections:

1. The first sections included questions about socio-demographic information of participants such as age, gender, living area, education level, occupation, maternal status, and general knowledge about the influenza vaccine.
2. The second section asked participants about enabling factors such as their monthly income, awareness about influenza vaccination, and the sources of information and encouraging factors they received.
3. The third section was about needs factors, which included participants' self-ranking health status, perceived needs, the experience of influenza vaccination, and the reason for getting or not getting the influenza vaccine.
4. The fourth section asked about the acceptance and WTP for influenza vaccination. We used double-bounded dichotomous-choice questions to ask how much the participants would pay for one flu shot. The initial price in our study was 200,000 VND (~USD 8,6, 2021 exchange rate from The State bank of Vietnam) which was adapted from another study in Vietnam [9]. The researcher asked the participant whether they were willing to pay 200,000 VND for one dose of influenza vaccine. Then, the double bid and half bids were then asked following the "yes" and "no" responses, respectively. Lastly, the participants will be asked an open-ended question about the maximum price they can pay for influenza vaccination.
5. The fifth section is about participants' thoughts on the responsibility of individuals, medical insurance, and government in terms of paying for influenza vaccination. They also answered about their expectations in financial support from the medical insurance and government.

PROCEDURES

Before data collection, the researcher asked permission to collect data from the National Hospital for Tropical disease. Then, the researcher went to the hospital and interviewed the eligible participants based on inclusion and exclusion criteria. The participants were randomly selected based on the list of healthcare professionals in this hospital.

STATISTICAL ANALYSIS

The data were coded and analyzed using IBM Statistical Packages for the Social Sciences (version 20).

Descriptive statistics were calculated to understand the participants' sociodemographic characteristics and the percentage of influenza vaccine uptake and WTP.

Chi-square test of independence was performed in our study to find factors affecting the WTP for influenza vaccination.

ETHICAL APPROVAL

The Institutional Review Board, Institute for Population and Social Research, Mahidol University approved the research protocol, with a certificate of approval number2021/06-136 in July 2021. The researcher explained the objectives of the study with potential risks and benefits for the participants. All the participants of the respondents were also identified as confidential. Participants were interviewed at the hospital in a private area after giving written consent.

RESULTS

GENERAL CHARACTERISTICS OF PARTICIPANTS

The total response rate in this study was 76,5 % because there were 130 respondents out of 170 healthcare professionals who were interviewed. Therefore, the final sample size used for analysis was 130. The socio-demographic characteristics of participants were shown in Table1. More than three-quarters of the participants were female. The participants' age ranged from 22 to 63 with a mean age of 34.8 years old (*SD* = 7.76). There were two-third of the participants live in an urban area. The participants who had university degrees accounted for 46.9 %, followed by the college with 30.8 %. The largest part of participants was nurses, which was 42.3 %.

The dominant part of participants were married (76.9 %) and 59.2 % of families had four to five members. Most of the participants knew the priority group for influenza vaccination (90%), while 43.8 % of them knew vaccine price. The family which had an income from 15 to 20 million VND accounted for 65.4 %.

TABLE 1. SOCIODEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS (N=130)

Baseline Characteristics	n	%
Age group		
From 21 to 30 years old	49	37.7
From 31 to 40 years old	62	47.7
Over 41 years	19	14.6
Mean = 34.8, SD = 7.76, Min = 22, Max = 63		
Gender		
Male	32	24.6
Female	98	75.4
Living area		
Urban	91	70
Rural	39	30
Education		
College	40	30.8
University	61	46.9
Postgraduate	29	22.3
Occupation		
Doctor	45	34.6
Nurse	55	42.3
Other (Technician, Pharmacist)	30	23.1
Marital status		
Married	100	76.9
Other	30	23.1
Family member		
≤3	47	36.2
4-5	77	59.2
≥6	6	4.6

Baseline Characteristics	n	%
Mean = 3.71, SD = 1.023, Min = 1, Max = 8		
Knowing vaccine price		
Yes	57	43.8
No	73	56.2
Know priority group of influenza vaccination		
Yes	117	90
No	13	10
Monthly household income (VND)		
≤15.000.000	13	10.0
15-20.000.000	85	65.4
≥20.000.000	32	24.6
Mean = 20.57, SD = 7.486, Min = 8, Max = 50		

ACCEPTANCE OF INFLUENZA VACCINATION AMONG HEALTHCARE PROFESSIONALS

The participant's health status, perceived needs, influenza vaccine uptake, and the reasons for getting or not getting the influenza vaccine were presented in Table 2. The majority part of participants showed their acceptance of influenza vaccination (95.4 %) which mean that they will vaccinate against flu if the vaccine is free. The participants who perceived that they were susceptible to influenza virus and flu as a severe illness were 76.9 % and 63.8 %, respectively. While 67.7 % of them reported an influenza-like illness in the past, only 31.5 % were vaccinated influenza vaccine in 2020. The most common reason for getting an influenza vaccine was self-protection (35.7%), and the most common reason for not getting an influenza vaccine was influenza is not severe

TABLE 2. ACCEPTANCE, AWARENESS OF INFLUENZA VACCINATION AND THE REASONS FOR GETTING OR NOT GETTING INFLUENZA VACCINE (N=130)

	n	%
Self-ranking health status		
Excellent	18	13.8
Good	89	68.5
Fair	23	17.7
Poor	0	0
Perceived susceptibility		
Yes	100	76.9
No	30	23.1
Perceived Severity		
Yes	83	63.8
No	47	36.2
History of Influenza-like illness		
Yes	88	67.7

	n	%
No	42	32.3
History of Influenza vaccination		
Yes	41	31.5
No	89	68.5
Acceptability of influenza vaccination		
Yes	124	95.4
No	6	4.6
Reasons for vaccinating		
Self protection	40	35.7%
Protect family/colleagues	30	26.8%
Protect patients	13	11.6%
Afraid of contracting the influenza virus	18	16.1%
Experienced influenza	11	9.8%
Reasons for not vaccinating (multiple-choose items)		
Never get influenza	18	13.7%
Influenza is not serious	34	26.0%
Acquire immunity from work	33	25.2%
Natural infection provides better immunity	6	4.6%
Afraid of vaccine side effect	5	3.8%
The vaccine is not effective	4	3.1%
Lack of time	18	13.7%
Vaccine shortage	1	0.8%
Difficult to access	0	0
Other	12	9.2%

WILLINGNESS-TO-PAY FOR INFLUENZA VACCINATION

Table 3 shows the participant's WTP for influenza vaccination. Among 130 participants, 116 (89.2%) reported that they were willing to pay for the influenza vaccine. Over 80% of them were willing to pay for this vaccine at equal or higher than the initial price (200,000 VND). The mean and median of the maximum amount of WTP for influenza vaccination were 357.57VND (USD 15.3) and 275.000 (USD 11.8), respectively.

RECOMMEND FINANCING SOURCES FOR INFLUENZA VACCINATION

Almost all participants (92.3 %) thought that they should participate in paying for influenza vaccination. Otherwise, most of them also agreed that medical insurance (85.4 %) and government (80.8 %) are responsible for paying for influenza vaccination services. Over 90% of them want to receive financial support from medical insurance and the government. In which, there were 34.6 % want to receive fully subsidized.

FACTORS AFFECTING WTP FOR INFLUENZA VACCINATION

There was no association between socio-demographic factors such as age, gender, education, occupation, and household monthly income with the WTP. The table showed that there was a significant association between perceived severity and history of influenza vaccination with the WTP, $X2(1, N = 130) = 4.18, p = 0.04$ and $X^2(1, N = 130) = 7.81, p = 0.005$, respectively.

TABLE 3. THE WTP FOR INFLUENZA VACCINATION

	N	%
WTP		
Yes	116	89.2
No	14	10.8
Total	130	100
Maximum amount of WTP (VND)		
< 200.000	20	17.24
200.000-400.000	68	58.62
> 400.000	28	24.14
Total	116	
Mean = 357.57, Median = 275.000, SD = 246.877, Min = 50.000, Max = 1.000.000		

TABLE 4. RECOMMEND FINANCING SOURCES FOR INFLUENZA VACCINATION (N=130)

	n	%
Responsibility of individuals	120	92.3
Responsibility of medical insurance	111	85.4
Responsibility of government	105	80.8
Percentage of financial support		
100%	45	34.6
75%	19	14.6
50%	49	37.7
25%	6	4.6
0%	11	8.5

TABLE 5. ASSOCIATION BETWEEN WTP WITH INDEPENDENT VARIABLES

	WTP		Pearson Chi-Square	p-value
	Yes n (%)	No n (%)		
Age group			4.48	.11
From 21 to 30 years old	46 (93.9)	3 (6.1)		
From 31 to 40 years old	51 (82.3)	11 (17.7)		
Over 41 years	18 (94.7)	1 (5.3)		
Gender			.70	.41
Male	27 (84.4)	5 (15.6)		
Female	88 (89.8)	10 (10.2)		
Education			3.14	.21
College	36 (90)	4 (10)		
University	56 (91.8)	5 (8.2)		
Postgraduate	23 (79.3)	6 (20.7)		
Occupation			1.10	**.34**

	WTP		Pearson Chi-Square	p-value
Doctor	40 (88.9)	5 (11.1)		
Nurse	50 (90.9)	5 (9.1)		
Other (Technician, Pharmacist)	25 (83.3)	5 (16.7)		
Marital status			.91	**.52**
Married	87 (87)	13 (13)		
Other	28 (93.3)	2 (6.7)		
Monthly household income (VND)			2.22	.33
≤ 15.000.000	13 (100)	0		
15-20.000.000	75 (88.2)	10 (11.8)		
≥ 20.000.000	27 (84.4)	5 (15.6)		
Perceived susceptibility			1.01	.32
Yes	90 (90)	10 (10)		
No	25 (83.3)	5 (16.7)		
Perceived Severity			4.18	.04*
Yes	77 (92.8)	6 (7.2)		
No	38 (80.9)	9 (19.1)		
History of Influenza-like illness			.01*	.93
Yes	78 (88.6)	10 (11.4)		
No	37 (88.1)	5 (11.9)		
History of Influenza vaccination			7.81	.005*
Yes	41 (100)	0		
No	74 (83.1)	15 (16.9)		

*p < .05

DISCUSSION

Our study highlighted the low uptake, high acceptability, and a high amount of WTP for influenza vaccination among healthcare professionals in Vietnam, showing that the price is not the gatekeeper to influenza vaccination. It is expected that we can expand the influenza vaccination program in these subjects. We also discovered that perceived severity and the history of influenza vaccination might influence the WTP for that vaccine.

Our findings show a low percentage of influenza vaccine uptake among healthcare professionals in Vietnam (31.5 %). This result was higher than other studies in Greece (28.7%) [6] and Turkey (23.1%) [7], but lower than that in the previous study in Vietnam (48 %) [5] and Spain (49.7 %) [8]. This finding can be explained by the differences in study population and policies related to vaccination programs among countries. Our study examined the influenza vaccine uptake among healthcare professionals who take care of patients directly, while other studies' populations are general healthcare workers. The flu vaccine is not mandatory in Vietnam and is not included in the Expanded Program on immunization, so people have to pay fully for the vaccine. Otherwise, in some countries like the United States, the flu vaccine is recommended for all individuals from 6 months [20].

In our study, 90 % of participants knew the priority group for influenza vaccine price, and 43.8 % knew vaccine price. These findings are much higher than the results in one study among women of childbearing age (rural. It might be because of the participant's awareness related to influenza illness and vaccination. Nevertheless, the findings in our study also indicated that the two common reasons for not getting the influenza vaccine was influenza is not severe (26 %) and acquiring immunity from work (25.2 %). Therefore, a campaign and communication program need to be done to reduce misunderstandings about influenza illness.

The mean of WTP for one dose of influenza vaccine in this study was 357.57 VND (USD 15.3), higher than the current price of both local and imported influenza vaccines, suggesting that price is not a primary barrier. Therefore, it is feasible to expand the vaccine coverage in this population. Even though over 80% of healthcare professionals in this study were willing to pay for influenza with the price of 200,000 VND, the perception of subsidization from the government or health insurance also helps us understand why the uptake rate of the vaccine is low, 31.5%. %. As 86,9 % of participants indicated that the government or health insurance should pay at least half of the vaccine's price and almost half of them need more subsidization up to 75% of the vaccine's price. Therefore, if the government wants to have a vaccination uptake rate of more than 60 percent among health care professionals in Vietnam, subsidization of at least 75% should be secured.

The findings from our study have several implications. More studies need to be conducted on the acceptability and WTP for influenza vaccination in Vietnam. Regular training and educational program should be implemented to raise healthcare professional's awareness and practices towards flu vaccination. To expand the flu vaccine coverage in healthcare professionals, the government should enforce new policies that subsidize them.

Although, our study has some limitations. Firstly, we collected data in only one hospital; therefore, the findings are a weak generalization. Secondly, the cross-sectional design makes it difficult to explain the causality between the independent variables and the WTP. However, we enhanced the study's validity by randomly selecting the participants and training the researchers' team to high-quality data collection.

CONCLUSION

This study reveals low vaccine uptake, high acceptability, and a high amount of WTP for influenza vaccination among healthcare professionals in Vietnam. It suggests that price is not a primary barrier, and expanding the immunization program to healthcare professionals would be much appreciated. Four-fifths of participants expected the government and medical insurance subsidies, so financing support up to 75% of the vaccine's price from these sources could improve the vaccine uptake rate of a healthcare professional and public at large. In addition, the training and educational program inside or outside the hospital can raise healthcare professionals' awareness about flu and change their practices related to influenza vaccination.

DECLARATION OF COMPETING OF INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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References

1. Seasonal Influenza (Flu). Flu symptoms and complications.; Available from: https://www.cdc.gov/flu/symptoms/symptoms.htm.
2. Influenza (seasonal). 2018; Available from: https://www.who.int/news-room/fact-sheets/detail/influenza-(seasonal).
3. Iuliano, A.D., et al., Estimates of global seasonal influenza-associated respiratory mortality: a modelling study. (1474-547X (Electronic)).
4. Nguyen, Y.T., et al., National surveillance for influenza and influenza-like illness in Vietnam, 2006–2010. Vaccine, 2013. 31(40): p. 4368-4374.
5. Nguyen, T.T.M., et al., Acceptability of seasonal influenza vaccines among health care workers in Vietnam in 2017. Vaccine, 2020. 38(8): p. 2045-2050.
6. Rachiotis, G., et al., Low acceptance of vaccination against the 2009 pandemic influenza A (H1N1) among healthcare workers in Greece. Eurosurveillance, 2010. 15(6): p. 19486.
7. Baguelin, M., et al., Vaccination against pandemic influenza A/H1N1v in England: a real-time economic evaluation. Vaccine, 2010. 28(12): p. 2370-2384.
8. Vírseda, S., et al., Seasonal and Pandemic A (H1N1) 2009 influenza vaccination coverage and attitudes among health-care workers in a Spanish University Hospital. Vaccine, 2010. 28(30): p. 4751-4757.

9. Le, X.T., et al., Rural–urban differences in preferences for influenza vaccination among women of childbearing age: implications for local vaccination service implementation in Vietnam. Tropical Medicine & International Health, 2021. 26(2): p. 228-236.
10. Lai, X., et al., Willingness to Pay for Seasonal Influenza Vaccination among Children, Chronic Disease Patients, and the Elderly in China: A National Cross-Sectional Survey. Vaccines, 2020. 8(3).
11. Guidlines of seasonal influenza diagnose and treatment. 2011; Available from: https://thuvienphapluat.vn/van-ban/The-thao-Y-te/Quyet-dinh-2078-QD-BYT-huong-dan-chan-doan-va-dieu-tri-cum-mua-126333.aspx.
12. Viet Nam News - Society. Made-in-Vietnam seasonal influenza vaccines are available. 2019; Available from: https://vietnamnews.vn/society/483927/made-in-vietnam-seasonal-influenza-vaccines-are-available.html#yFPhxb20VXv0sZ6Y.97.
13. Vietnam Vaccine JSC. How much does it cost to get a flu shot? ; Available from: https://vnvc.vn/faq/tiem-vac-xin-cum-het-bao-nhieu-tien/.
14. Quang Vo, T., et al., Social and economic burden of patients with influenza-like illness and clinically diagnosed flu treated at various health facilities in Vietnam. ClinicoEconomics and outcomes research: CEOR, 2017. 9: p. 423-432.
15. Andersen, R., A behavioral model of families' use of health services. A behavioral model of families' use of health services., 1968(25).
16. Andersen, R.M., Revisiting the behavioral model and access to medical care: does it matter? Journal of health and social behavior, 1995: p. 1-10.
17. Lee, H.Y., et al., Male undergraduates' HPV vaccination behavior: implications for achieving HPV-associated cancer equity. Journal of community health, 2018. 43(3): p. 459-466.
18. Al-Tawfiq, J.A., A. Antony, and M.S. Abed, Attitudes towards influenza vaccination of multi-nationality health-care workers in Saudi Arabia. Vaccine, 2009. 27(40): p. 5538-5541.
19. Liu, Z., et al., Factors Influencing Residents' Willingness to Contract With General Practitioners in Guangzhou, China, During the GP Policy Trial Phase: A Cross-Sectional Study Based on Andersen's Behavioral Model of Health Services Use. INQUIRY: The Journal of Health Care Organization, Provision, and Financing, 2019. 56: p. 0046958019845484.
20. Grohskopf, L.A., et al., Prevention and control of seasonal influenza with vaccines: recommendations of the Advisory Committee on Immunization Practices—United States, 2019–20 influenza season. MMWR Recommendations and reports, 2019. 68(3): p. 1.