

Covid- 19 Vaccine Confidence, Hesit Ancy And Refusal Among Hh Heads Of Municipality Of Pontevedra, Capiz



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ABSTRACT

This study primarily investigated the level of COVID-19 vaccine confidence, hesitancy and refusal among household heads of the municipality of Pontevedra during COVID-19 pandemic. A random sample of 372 household heads in a total of 12,071 households (PHO, 2021) in the municipality served as respondents of the study. A validated and pilot-tested researcher-made questionnaire was used as research instrument distributed using both online platform (Google Forms) and in printed questionnaire. Findings indicate that household heads in the municipality of Pontevedra are mostly females, in their mid-forties, married, Roman Catholic, College graduate, headed a household of fi e with a family member of less than 5 years old and a senior citizen, unemployed, with family monthly income below the poverty line, no medical insurance and stayed in the place for a quarter of a century. Majority of the HH heads have not been tested for COVID-19, has not been diagnosed by health care professionals based on symptoms only, had no in-person contact with anyone infected with COVID-19; and majority of them have no comorbidities or pre-existing health conditions. Moreover, HH heads are aware that they are quite unlikely to get COVID-19 and very closely complied about guidelines for COVID-19. Most of the HH heads in Pontevedra are COVID-19 Vaccine Confident, have a high level of social cohesion and trust during COVID-19, somewhat satisfied with the COVID-19 Control, and somewhat agree to receive COVID-19 Vaccination. There are significant differences on the mean vaccine confidence scores when HH heads are classified according to their age, highest educational attainment, employment status, and family monthly income. COVID-19 Vaccination response of HH Heads was significan ly related with their profile variables (highest educational attainment, employment status, and estimated monthly income), their COVID-19-related profile, their extent of COVID-19 impact, their level of social cohesion and trust, and their level of satisfaction with the COVID-19 control.

Keywords: COVID-19, Vaccine Confidence, Vaccine Hesitancy, Vaccine Refusal, Citizen, Medical Insurrance

INTRODUCTION

Will you get the COVID-19 vaccine for you and your family?

Vaccines and immunization programs have prevented major epidemics of life threatening diseases since the beginning of their widespread use in the 1900s (ECDPC, 2017). For this reason, vaccination is considered one of the greatest public health achievements of the 20th century (US CDCP,

2015). The history of public concerns about and questioning of vaccines, however, is as old as vaccines themselves. As the widespread use of vaccines has grown, so have anxieties about vaccine safety and their regulation (Larson, et al., 2011). Individuals may lack confidence in the safety or efficac of vaccines for a variety of reasons. They may lack confidence as a result of

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negative experiences with the product, providers, or those making with policy decisions. In November 2017, it was announced that the new dengue vaccine ("Dengvaxia") had risks for those not previously exposed to dengue. While some countries proceeded with adjusting quidance accordingly, the Philippines reacted with outrage and political turmoil with naming and shaming of government official involved in purchasing the vaccine, as well as scientists involved in the vaccine trials and assessment. The result was broken public trust around the dengue vaccine as well heightened anxiety around vaccines in general. The Vaccine Confidence ProjectTM measured the impact of this crisis, comparing confidence levels in 2015, before the incident, with levels in 2018. The findings reflect a dramatic drop in vaccine confidence from 93% "strongly agreeing" that vaccines are important in 2015 to 32% in 2018. There was a drop in confidence in those strongly agreeing that vaccines are safe from 82% in 2015 to only 21% in 2018; similarly, confidence in the effecti eness of vaccines dropped from 82% in 2015 to only 22%. Vaccine confidence is not merely an individual phenomenon, but a social and political phenomenon as well. When vaccine-hesitant individuals reach a critical mass in a population, and do not receive adequate attention and engagement from health authorities on the specific issues, they may have with a vaccine, they may form coalitions of varying looseness or consensus (Larson, 2015). Public confidence in vaccines is, above all, a phenomenon of public trust, Fittingly, the Oxford English Dictionary defines "confidence" as the mental attitude of trusting in or relying on a person or thing. In the context of vaccination, confidence implies trust in the vaccine (the product), trust in the vaccinator or other health professional (the provider), and trust in those who make decisions about vaccine provision (policy maker) (Larson, et al., 2015). Public confidence in vaccination is vital to the success of immunization programs worldwide. Understanding the dynamics of vaccine confidence is therefore of great importance for global public health. In an effort to measure the impact of the fears and anxiety on vaccine particularly for COVID-19, vaccine confidence, hesitancy and refusal among the household heads

in the municipality of Pontevedra, Capiz during the COVID-19 Pandemic is hereby conducted.

STATEMENT OF THE PROBLEM

The main purpose of the study is to assess the level of COVID-19 vaccine confidence, hesitancy and refusal among household heads of the municipality of Pontevedra during COVID-19 pandemic. Specificall, it sought to answer to the following questions:

- 1. What profile can be drawn from the respondents:
- 1.1 Socio-demographic variables
- 1.1.1 Sex
- 1.1.2 Age
- 1.1.3 Civil status
- 1.1.4 Religion
- 1.1.5 Highest Educational Attainment
- 1.1.6 HH size
- 1.1.7 Number of HH members aged 0-5 years
- 1.1.8 Number of HH members aged < 60 years
- 1.1.9 Employment status
- 1.1.10 Monthly Family Income
- 1.1.11 Presence of medical insurance
- 1.1.12 Length of stay(years) in the present address.
- 1.2. COVID-related questions
- 1.2.1 undergone COVID-19 test
- 1.2.2 have been diagnosed based on symptoms
- 1.2.3 with contact to anyone infected with COVID-19 infection
- 1.2.4 living with anybody infected with COVID-19 infection
- 1.2.5 Presence of pre-existing conditions
- 2. What are the level of awareness and compliance of HH heads about COVID-19?
- 3. What is the extent of COVID-19 impact to HH heads of Pontevedra?
- 4. What is the level of vaccine confidence of HH heads during COVID-19?
- 5. What is the level of social cohesion and trust of HH heads during COVID-19?
- 6. What is the level of satisfaction with the COVID-19 Control of HH heads?
- 7. What is the overall likelihood of HH heads to receive COVID-19 Vaccination?
- 8. Do the COVID-19 Vaccine responses of HH heads varies significantly when they are grouped according to their profile ariables?
- 9. Are the level of COVID-19 vaccine re-



sponse scores among HH heads significantly related with the following variables?

- 9.1 profile cha acteristics of HH heads
- 9.2 COVID-19 related questions
- 9.3 Impact of COVID-19
- 9.4 level of social cohesion and trust
- 9.5 level of satisfaction with the COVID-19 Control
- 10. What are the factors that will significan ly discriminate the HH heads that are confident, hesitant and refuser of COVID-19 vaccine in the municipality of Pontevedra?

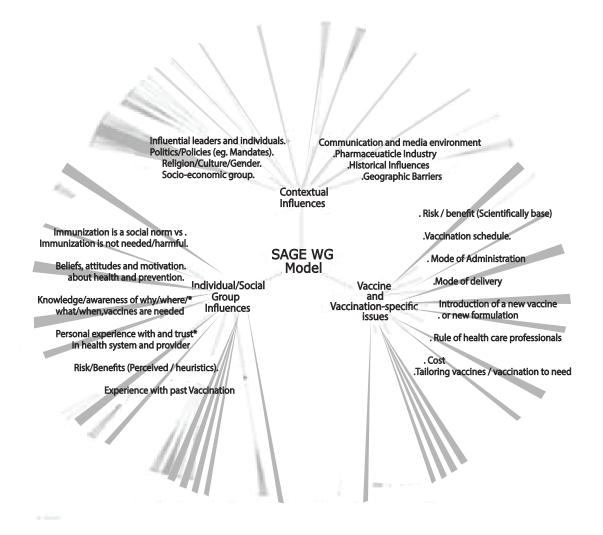
THEORETICAL FRAMEWORK

Acceptance of vaccination is an outcome behavior resulting from a complex decision-making process that can be potentially influenced by a wide range of factors. In developing the definition, this study will be patterned on the SAGE working Group Model of Determinants of Vaccine Hesitan-

cy (Larso, et.al, 2012), with reference to the barriers to vaccination. This systems approach to understanding reasons for vaccine hesitancy model designed to analyze factors influencing uptake of vaccines, focusing on HCW concerns, trust and access issues.

The WG in 2012 reviewed a number of conceptual models for

grouping vaccine hesitancy determinants. In the review, model complexity, global applicability, breadth of factors considered and potential usefulness in informing the development of vaccine hesitancy indicators and survey questions for use at the global and country levels were all considered. The WG also assessed whether the model could facilitate understanding of the concept of vaccine hesitancy for those unfamiliar with the term.





CONCEPTUAL FRAMEWORK

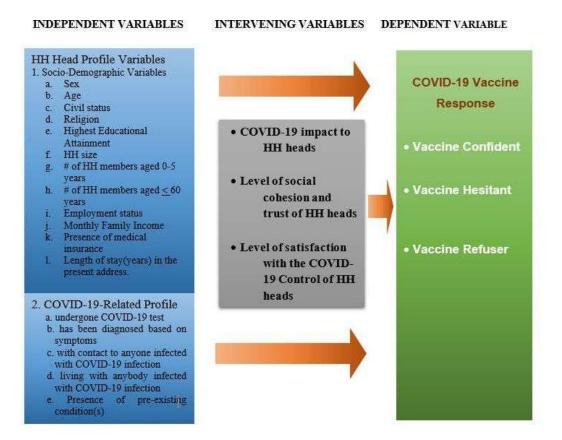


Figure 1.

A conceptual framework showing the hypothesized relation between the profile variables of the barangay and HH heads, the intervening variables, and their COVID-19 Vaccine Response.

REVIEW OF LITERATURE/PRIOR ART SEARCH

The Working Group examined the relationship between vaccine hesitancy and vaccine demand (Global Vaccine Action Plan 2011-2020). In the Global Vaccine Action Plan, approved by the World Health Assembly in May 2012, Strategic Objective 2 states that "individuals and communities understand the value of vaccines and demand immunization as both their right and responsibility" [p. 38]. Vaccine hesitancy occurs on the continuum between high vaccine demand and complete vaccine refusal, i.e. no demand for available and offered vaccines. However, demand and hesitancy are not completely congruent. An individual or community may fully accept vaccination without hesitancy but may not demand vaccination or a specific vaccine. The following examples illustrate demand aspects that go beyond hesitancy. In UttarPradesh, India, the community demanded, through the courts, public access to Japanese encephalitis vaccine to curb annual disease outbreaks associated with high morbidity and mortality among their children (Rajesh Kumar Srivastava versus Shri A.P. Verma and Others. High Court of Judicature at Allahabad, 2015). In Calgary, Canada, in school access to Human Papilloma Virus vaccine was prohibited in Catholic schools in 2008, but citizens' demand successfully overturned this ban in 2013 supported in-school access to HPV vaccination as had previously been available only in non-Catholic public schools (Guichon, et al., 2013). Because hesitancy undermines demand, to achieve the vaccine demand goal, as defined in the Global Vaccine Action Plan, countries will need to take action to counteract hesitancy. When rates of hesitancy are high, levels of demand are low, but low rates of hes-



itancy do not necessarily mean that demand will be high. To achieve high individual and community vaccine demand, context, community and vaccine specific strategies beyond those aimed at addressing hesitancy need to be developed.

RESEARCH METHODOLOGY Local/ Respondents

This study covered a random sample of 372 HH heads from a total of 12,071 HH in the municipality.

Variable Description

The variables considered in the study are profile variables of HH heads as independent variables, intervening determinant variables (level of awareness and compliance of HH heads about COVID-19, extent of COVID-19 impact to HH heads, level of vaccine confidence of HH heads during COVID-19, level of social cohesion and trust of HH heads, level of satisfaction with the COVID-19 Control of HH heads, and overall likelihood of HH heads to receive COVID-19 Vaccine in response (Vaccine Confident, Vaccine Hesitant, and Vaccine Refuser) as dependent variable.

The HH head socio-demographic profile variables include sex, age, civil status, religion, highest educational attainment, HH size, number of HH members aged 0-5 years, number of HH members aged < 60 years, employment status, nature of work/business, monthly Family Income, presence of medical insurance, length of stay(years) in the present address. The HH head COVID-related profile variables are: have undergone COVID-19 test, have been diagnosed based on symptoms, with contact to anyone infected with COVID-19 infection, and living with anybody infected with COVID-19 infection. The dependent variable was the COVID-19 Vaccine response (Vaccine Confident, Vaccine Hesitant, and Vaccine Refuser).

Sample/ Sampling Technique

Cochran formula was used in determining the sample size for HH heads, that was appropriated for the study,

$$n = \frac{\frac{t^{2}PQ}{d^{2}}}{1 + \frac{1}{N} (\frac{t^{2}PQ}{d^{2}} - 1)}$$

where:

t is the abscissa of the normal curve that cuts off an area of a at the tails with $\square = 0.05$, and degrees of freedom tn-, 1(n,-1)>30 \square 1.96 \square Z_1 -

P is the proportion in the target population estimated to have a

particular characteristic. If there is no reasonable estimate, then use 50%

Q = 1 - p

d is the margin of error (set at 0.05)

N is the total population n is the sample size

For the number of respondents, simple random sampling designed for household survey was used.

Data Gathering Procedure

After securing a permit to conduct the study, a survey was conducted to HH Heads using a combination of questionnaire administration through BHWs and online questionnaire using Google forms.

Data Analysis Procedure

A short description of the HH Heads based on their selected profile variables was made using frequency counts, arithmetic mean and percentages. Frequency counts and weighted mean were used in describing the levels and extent of intervening discriminant variables (level of awareness and compliance of

HH heads about COVID-19, extent of COVID-19 impact to HH heads, level of vaccine confidence of HH heads during COVID-19, level of social cohesion and trust of HH heads, level of satisfaction with the COVID- 19 Control of HH heads, and overall likelihood of HH heads to receive COVID-19 Vaccination).

To find out if there is a significant change on the COVID19 vaccine response when HH heads are grouped according to HH profile variables, test for comparing means of two groups (Mann-Whitney U test) or mean of at least three groups (Kruskal Wallis H test) was used. To determine the significant relationship between COVID-19 vaccine response among HH heads and independent variables, correlation analysis (Spearman's *P*) and Chi-square test were used. In order to determine the factors that would discriminate the HH heads



that are confident, hesitant, refuser of COVID-19 vaccine, three-group discriminant analysis was performed. Computations was made using IBM SPSS Statistics version 23, Statistical Analysis System (version 9.4), R and Stata (version 13.0) computer packages designed for statistical analysis.

Research Instruments

To gather the needed data, the researcher used a researcher-made questionnaire for HH head respondents. The first part of the questionnaire will gather information on the profile characteristics of the barangay, the second part will cater on the socio-demographic profile characteristics of HH heads. The third to 8th part will be based on the researcher-made questionnaire that was subjected to validation and reliability (pilot testing and measured the Cronbach Alpha = 0.81). After content validation and reliability testing, the questionnaire was then translated into vernacular dialect (Hiligaynon) by a professional translator before administration.

RESULTS AND DISCUSSIONS Profile of HH Heads

Table 1 shows the profile characteristics of household heads in the municipality of Pontevedra. More than half (213 or 57.3 percent of 372) are females and 159 (42.7 percent) are males. A greater number (127 or 34.1 percent) are in their forties; 78(21 percent) are in their fifties; 62 (16.7 percent) are at most 29 years old; 55 (14.8 percent) are in their thirties and 50 (13.4 percent) are senior citizens. Majority (254 or 68.3 percent) of the HH heads are married; 81 (21.8 percent) are single; 28 (7.5 percent) are widow/er; seven (1.9 percent) are separated; and two (0.6 percent) are in live-in status.

Majority (347 or 93.3 percent) of the respondents are Roman Catholics; 12 (3.2 percent) are Born Again Christian); six (1.6 percent) are Baptists; also six (1.6 percent) are Iglesia Ni Cristo; and one (0.3) is MCGI. A quarter (96 or 25.8 percent) of the HH heads are college graduates; 63 (16.9 percent) are in college level; 60 (16.1 percent) are high school graduates; 39 (10.5 percent) are elementary graduates;

and less than ten percent was allocated to each of the other educational achievement status.

More than half (216 or 58.1 percent) of the HH heads have a household size of at most fi e; 156 (41.9 percent) of them have more than fi e household size. Most (246 or 66.1 percent) of the of the HH heads have no HH members aged 0 to 5 years; 91 (24.5 percent) have one family member age 0 to 5 years; and 35 (9.4 percent) have more than one family member age 0 to 5 years. More than half (210 or 56.5 percent) of HH heads have no senior citizen in the family; 105 (28.2 percent) have one senior citizen; and 57 (15.3 percent) have two to more senior citizens in the household.

Almost half (175 or 47 percent) of the HH heads were unemployed; 76 (20.4) are Government permanent employees; 65 (17.5 percent) were self-employed; 27 (7.3 percent) are Government casual employees; 17 (4.6 percent) are private permanent employees; and 12 (3.2 percent) are private casual employees. More than half (193 or 51.9 percent) of the HH heads have a family monthly income of below PhP10,000; 63 (16.9 percent) of the HH heads have a family monthly income that ranges from PhP10,000 to PhP14,999; 61(16.4 percent) HH heads have a family monthly income of at least PhP30,000; 29 (7.8 percent) HH heads earned an income between PhP20,000 and PhP24,999 in a month; 20 (5.4 percent) HH heads have a family monthly income that ranges from PhP15,000 to PhP19,999; and six (1.6 percent) HH heads have a family monthly income of PhP25,000-PhP29,000.

Most (225 or 60.5 percent) of the HH heads have no medical insurance; 149 (38.7) HH heads have medical/health insurance; 107(28.8 percent) are Philhealth beneficiaries. A greater number (101 or 27.2 percent) of the respondents have stayed for 20 – 29 years in their place; 58 (15.6 percent) have stayed for 10 to 19 years; 53 (14.2 percent) HH heads stayed for 30 to 39 years; 46 (12.4) stayed for more than half of a century; and 43 (11.6 percent) HH heads stayed for 40 -49 years in their present address.



PROFILE VARIABLES	FREQUENCY	PERCENTAGE
13. Sex		
Male	159	42.7
Female	213	57.3
13. Age		
29 years old and younger	62	16.7
30 – 39 years old	55	14.8
40 – 49 years old	127	34.1
50 – 59 years old	78	21.0
At least 60 years old	50	13.4
Mean Age: 44.74 years old		
13. Civil Status	0.4	04.0
Single	81	21.8
Married	254	68.3
Widow/er	28	7.5
Separated	7	1.9
Others: Live-in	2	0.6
4. Religion	0	4.0
Baptist	6	1.6
Born Again Christian	12	3.2
Iglesia Ni Cristo	6	1.6
MCGI Roman Catholic	1 347	0.3 93.3
	341	93.3
5. Highest Educational Attainment	2	0.5
No formal Education	2 39	0.5 10.5
Elementary Undergraduate Elementary Graduate	19	5.1
High School Undergraduate	34	9.1
High School Graduate High School Graduate	60	16.1
Vocational	10	2.7
College Undergraduate	63	16.9
College Graduate College Graduate	96	25.8
with Masters Units	15	4.0
with Master's Degree	13	3.5
with Doctoral Units	11	3.0
with Doctor's Degree	10	2.7
6. Household size		
At most 5	216	58.1
More than 5	156	41.9
Mean HH size: 5.32≈5		
7. Number of HH Members aged 0 – 5 years		
None	246	66.1
One	91	24.5
More than one	35	9.4
Mean: 1		
8. Number of HH Members aged < 60 years		
None	210	56.5
One	105	28.2
More than one	57	15.3
Mean: 1		

Table 1. Profile Characteristics of HH Heads in the Municipality of Pontevedra



Table 1. Continue...

PROFILE VARIABLES	FREQUENCY	PERCENTAGE
9. Employment Status		
Unemployed	175	47.0
Self-Employed	65	17.5
Government Permanent <i>Employee</i>	76	20.4
Government Casual <i>Employee</i>	27	7.3
Private Permanent <i>Employee</i>	17	4.6
Private Casual <i>Employee</i>	12	3.2
13. Nature of Business	12	0.2
None	132	35.5
	46	12.4
Teaching Laborer	27	7.3
		-
Farming	23	6.2
Administrative	21	5.6
Health Care Workers	13	3.5
Sari-sari Store Owners	13	3.5
Vending (Food/Fish)	12	3.2
Driver	11	3.0
Fishing	10	2.7
Business	7	1.9
Construction	7	1.9
Fishpond (Operator/Caretaker)	6	1.6
Public Servant	5	1.3
Online Selling	4	1.1
Pharmaceuticals	4	1.1
Seafarer	3	0.8
DILG Contact Tracer	2	0.5
Housekeeping	2	0.5
Medical Practitioner	2	0.5
Pensioner	2	0.5
Policeman	2	0.5
Others	2	0.5
13. Family Monthly Income		0.0
Below Php10,000	193	51.9
	63	16.9
PhP10,000 – PhP14,999 PhP15,000 – PhP19,999	20	5.4
PhP20,000 – PhP 24,999	29	7.8
PhP25,000 – PhP 29,999	6	1.6
At least PhP30,000	61	16.4
Mean: PhP18,325.46		
13. Have Medical	205	20.5
Insurance No	225	60.5
Yes	147	39.5
PhilHealth	107	28.8
GSIS	4	1.1
Other Medical Insurance	43	11.6
13. Length of stay (in years) in the present address		
Less than 10 years	71	19.1
10 – 19years	58	15.6
20 – 29 years	101	27.2
30 – 39 years	53	14.2
40 – 49 years	43	11.6
At least 50 years	46	12.4
Mean: 26.33 years		



COVID-19-Related Profile

As shown in Table 2, majority of the respondents have not been tested for COVID-19 through Swab test or RT-PCR test (332 or 89.2 percent), Rapid Antibody test (22 or 94.1 percent), Saliva test (97.6 percent), and Rapid Antigen test (94.4 percent). Majority of the HH heads have not diagnosed as having COVID-19 based on your symptoms only by health care professionals (364 or 97.8 percent); had no in-person contact with anyone infected with COVID-19 (337 or 90.6 percent); had no anybody living in their house that had COVID-19 infection (369 or 99.2 percent). Majority of them have no comorbidities or pre-existing health conditions like asthma (326 or 87.6 percent), Chronic Kidney Dis ease (364 or 97.8 percent), Diabetes (338 or

90.9 percent), High Blood Pressure (260 or 69.9 percent); Immuno disorder (366 or 98.4 percent); and Obesity (353 or 94.9 percent). HH heads are aware that they are quite unlikely to get COVID-19 (2.46), quite unlikely to develop severe symptoms if he got COVID-19 infection (2.43); and quite unlikely to think that one or more of his children living in their house will get COVID-19 (2.34). HH heads very closely complied with local face mask wearing guidelines (4.81); very closely follow the COVID-19 news in any form (4.3) specifically through TV (86 percent), social media (81.2 percent), radio (68.5 percent), news websites (40.1 percent), and newspaper (12.4 percent), yet did not discussed with health care providers about COVID-19 concerns (59.2 percent).

COVID 40 DELATED DECELLE QUESTIONS	YES			N	0
COVID-19 -RELATED PROFILE QUESTIONS	Frequency	%	Freque	ncy	%
1. Have you been tested for COVID-19 through?					
a. Swab test (RT-PCR test)	40	10.8	332	2	89.2
b. Rapid Antibody test	22	5.9	350)	94.1
c. Saliva Test	9	2.4	363		97.6
d. Rapid Antigen Test	21	5.6	35	1	94.4
13. Has a health care professional (e.g., doctor, nurse) diagnosed you as having COVID-19 based on your symptoms only?	8	2.2	364	4	97.8
13. Have you had in-person contact with anyone infected with COVID-19?	35	9.4	337	7	90.6
4. Has anybody living in your house other than you had COVID-19 infection?	3	0.8	369	9	99.2
5. Do you have any of the following underlying conditions? (Select all that apply)					
a. Asthma	46	12.4	326	•	87.6
b. Chronic Kidney Disease	8	2.2	364	-	97.8
c. Diabetes	34	9.1	338		90.9
d. High Blood Pressure	112	30.1	260		69.9
e. Immuno disorder	6	1.6	366		98.4
f. Obesity	19 27	5.1 7.3	353 345		94.9 92.7
g. Other Condition					
	Weighted Mean		ndard iation		Verbal erpretation
13. How likely do you think it is that you will get COVID-19?	2.46	1.3	312	Quit	te Unlikely
13. How likely do you think it is that you will develop severe symptoms if you get COVID-19 infection?	2.43	1.2	238 Quit		e Unlikely
How likely do you think it is that one or more of your children living in your house will get COVID-19?	2.34	1.2	264	Quit	e Unlikely

Table 2. Distribution of HH Heads according to their response on COVID-related questions.



Table 2. Continue...

COVID-19 -RELATED PROFILE QUESTIONS	FREQ	PERCENTAGE	
9. Do you have someone in your household with conditions that make them high risk for severe COVID-19 infection?			
I do not know		27	7.3
No		226	60.8
Yes		119	32.0
	Weighted Mean	Standard Deviation	Verbal Interpretation
10. How closely have you complied with your local face mask wearing guidelines?	4.81	0.535	Very Closely
13. How closely do you follow the COVID-19 news in any form (TV, radio, newspaper, news websites, social media)?	4.73	0.552	Very Closely
	FREQ	UENCY	PERCENTAGE
13. What are your main sources of COVID-19 news?* TV	FREQ	UENCY	PERCENTAGE
news?* TV Radio	FREG	320	86.0
news?* TV Radio Newspaper	FREQ	320 255	86.0 68.5
news?* TV Radio Newspaper News Websites	FREQ	320 255 46	86.0 68.5 12.4
news?* TV Radio Newspaper News Websites Social Media	FREQ	320 255 46 149	86.0 68.5 12.4 40.1
news?* TV Radio Newspaper News Websites Social Media None	FREQ	320 255 46	86.0 68.5 12.4 40.1 81.2
news?* TV Radio Newspaper News Websites Social Media	FREQ	320 255 46 149	86.0 68.5 12.4 40.1
news?* TV Radio Newspaper News Websites Social Media None	FREQ	320 255 46 149 302	86.0 68.5 12.4 40.1 81.2 0.3
news?* TV Radio Newspaper News Websites Social Media None Others 13. Have you discussed with your health care provide	FREQ	320 255 46 149 302	86.0 68.5 12.4 40.1 81.2 0.3
news?* TV Radio Newspaper News Websites Social Media None Others 13. Have you discussed with your health care provide about COVID-19 concerns?	FREQ	320 255 46 149 302 1 5	86.0 68.5 12.4 40.1 81.2 0.3 1.3

Extent of COVID-19 Impact to HH heads of Pontevedra

As displayed in Table 3, HH heads are fairly worried about COVID-19 (4.11). Majority of the respondents are most worried that their other family members will be infected with COVID-19 (74.2 percent); most (58.6 percent) of them (65.9 percent) are most worried that the COVID-19 pandemic will significantly affect their economic situations/finances; more than half of them most worry that they will get COVID 19 (58.6 percent) and that their child/children will get COVID-19 (53.5 percent). They further reveal that the COVID-19 pandemic seriously affec ed them negatively (71.8 percent). Specificall, they have difficu y in accessing goods and services due to closure of public places and international borders (77.4 percent), interruption of schooling/studies (76.1 percent), financial losses (72.8 percent), death of a loved one due to COVID-19 infection (66.9 percent); loneliness or separation of loved ones (66.7 percent); loss of job or business (63.7 percent); disruption in the celebration of important life, cultural, religious or festive events (59.7 percent); lack of access to usual places of entertainment (53.2 percent); and interruption in travel plans (51.9 percent).

Level of Vaccine Confidence of HH heads during COVID-19

In general, HH heads are fairly confident with the COVID-19 vaccine with a weighted mean score of 3.70 (as shown in Table 4). They were more likely to have their child/children vaccinated for COVID-19, six months after it is approved and it shows to be safe (3.54), fairly likely to them to get vaccinated and to their children for as low as 50 percent efficac as long it is safe, and available for free. The motivations for HH heads to get vaccinated for COVID-19 (as presented in Table 4a) are to protect himself/herself (77.2 percent), to protect friends and family members who might be particularly vulnerable (76.1 percent), to contribute to having the COVID-19 pandemic controlled and getting back to normal (75 percent), to protect their children (73.4 percent), to protect the health of people



IMPACT OF COVID-19	Weighted Mean	Standard Deviation		Verb nterpret	-
How worried are you about COVID-19?	4.11	0.925	Fairly Wor		rried
		Frequency		Percent	tage
2. What is about COVID-19 that makes you most worry?* • That my other family members will be infected with COV • That the COVID-19 pandemic will significantly affect misituations/finances • That I will get COVID-19 • That my child/children will get COVID-19 • That COVID-19 will cause more social inequity and inst • Not Applicable (Not at all worried) • Others	y economic	2 2 1	276 245 218 99 83 12 5		74.2 65.9 58.6 53.5 49.2 3.2 1.3
			Frequ	uency	%
3. Has the COVID-19 pandemic seriously affected you negated to not know No Maybe Yes 4. How?* a. Difficulty in accessing goods and services due to closs international borders. b. Interruption of schooling/studies c. Financial loses d. Death of a loved one due to COVID-19 infection e. Loneliness or separation of loved ones f. Loss of job or business g. Disruption in the celebration of important life, cultural h. Lack of access to usual places of entertainment i. Interruption in travel plans j. Increased stress from caring for a child full time due to k. Loss of unpaid work hours due to an infection with CO I. Worsening of a pre-existing health condition m. Increase in domestic violence n. New diagnosis of a mental illness or psychological cools Suffered complications/disability from COVID-19 infection in the process of the pr	sure of public p , religious or fe to school closu DVID-19	estive events		6 5 94 267 288 283 271 249 248 237 222 198 193 174 138 124 119 118 117 116 11	1.6 1.3 25.3 71.8 77.4 76.1 72.8 66.9 66.7 63.7 59.7 53.2 51.9 46.8 37.1 33.3 32.0 31.7 31.5 31.2 3.0

^{*-} multiple responses

Table 3. Extent of COVID-19 Impact to HH Heads.

in their community (71.8 percent), and to protect elderly people in my household (68.8 percent). The motivations for HH heads to get their children vaccinated for COVID-19 (as presented in Table 4a) are to protect their children (75.5 percent), to protect the health of people in their

community (67.7 percent), to protect friends and family members who might be particularly vulnerable (67.2 percent), to protect himself/herself (66.4 percent), and to protect elderly people in my household (61.8 percent).



VACCINE CONFIDENCE OF HH HEADS	Weighted Mean	Standard Deviation	Verbal Interpretation
13. Would you be more likely to have your child/children vaccinated for COVID-19, six months after it is approved and it shows to be safe?	3.54	1.391	Fairly Likely
If a COVID-19 vaccine were safe and available to you for free, how likely would you be to get vaccinated if the vaccine has an efficacy of	3.72	1.218	Fairly Likely
a. 50% (in other words, it reduces the chance of getting infected in half)	3.61	1.358	Fairly Likely
b. 70% (in other words, it reduces the chance of getting infected by 70%)	3.69	1.245	Fairly Likely
c. 90% (in other words, it reduces the chance of getting infected by 90%)	3.87	1.252	Fairly Likely
If a COVID-19 vaccine were safe and available to your child/children for free, how likely would your child/children be to get vaccinated if the vaccine has an efficacy of:	3.71	1.227	Fairly Likely
a. 50% (in other words, it reduces the chance of getting infected in half)b. 70% (in other words, it reduces the chance of	3.62	1.358	Fairly Likely
getting infected by 70%) c. 90% (in other words, it reduces the chance of	3.66	1.261	Fairly Likely
getting infected by 90%)	3.84	1.261	Fairly Likely
VACCINE CONFIDENCE OF HH HEADS	Weighted Mean	Standard Deviation	Verbal Interpretation
7. How informed are you about the development of COVID-19 vaccines?	3.78	0.967	Fairly Informed
8. How important is it for the barangay you live to have a COVID-19 vaccine?	4.02	1.038	Fairly Important
9. How important is it that a majority of people in your barangay where you live get vaccinated for COVID-19?	4.04	1.043	Fairly Important
13. When a COVID-19 vaccine is approved by the public health agencies here in the Philippines, how confident are you that the vaccine will be safe and with no harmful side effects?	3.37	1.062	Somewhat confident
11. When a COVID-19 vaccine is approved by the public health agencies here in the Philippines, how confident are you that the vaccine will be effective and protect most people from getting COVID-19?	3.45	0.985	Somewhat Confident
			Fairly Confident

Table 4. COVID-19 Vaccine Confidence of HH Heads.



Motivations to get vaccinated	FOR HH I	HEADS	FOR CHILDREN		
motivations to get vaccinated	Frequency	%	Frequency	%	
1. To protect me.	287	77.2	238	66.4	
2. To protect friends and family members who might be particularly vulnerable	283	76.1	250	67.2	
To contribute to having the COVID-19 pandemic controlled and getting back to normal	279	75.0	26	7.0	
4. To protect their children.	273	73.4	281	75.5	
5. To protect the health of people in my community	267	71.8	252	67.7	
6. To protect elderly people in my HH	256	68.8	230	61.8	
7. None	33	8.9	43	11.6	
8. Not Applicable	12	3.2	10	2.7	
9. Others	2	0.5	3	8.0	

Table 4a.
Motivations to get vaccinated of HH Heads.

The top fi e prominent reasons for unwillingness or uncertainty of HH heads to get vaccinated (as shown in Table 4b) are: the vaccine is not safe and could have harmful side effects (32.8 percent), they do not believe the vaccine will be effecti e in offering much protection from COVID-19 (15.9 percent), concerned approval of the vaccine will be rushed for political reasons (8.1 percent), would like to wait and see what happens to other children first (7.3 percent), and would like to see more safety and effectiveness data among children (9.4 percent).

RANK	REASONS FOR UNWILLINGNESS	FREQUENCY	%
1	The vaccine is not safe and could have harmful side effects.	122	32.8
2	I do not believe the vaccine will be effective in offering much protection from COVID-19	59	15.9
3	I am concerned approval of the vaccine will be rushed for political reasons	30	8.1
4	I would like to wait and see what happens to other children first	27	7.3
5	I would like to see more safety and effectiveness data among children	35	9.4

Table 4b.

As displayed in Table 4c, most (232 or 62.4 percent) of the HH heads in Pontevedra are COVID-19 Vaccine Confident; 103 (27.7

percent) HH heads are Vaccine Hesitant; and 37 (9.9 percent) are Vaccine refusers.

COVID-19 VACCINE RESPONSE	FREQUENCY	PERCENTAGE
Vaccine Refuser	37	9.9
Vaccine Hesitant	103	27.7
Vaccine Confident	232	62.4
Total	372	100.0

Table 4c.

Distribution of HH Respondents according to their COVID-19 Vaccine Response.

Level of Social Cohesion and Trust of HH heads during COVID-19

The level of social cohesion and trust of HH heads during COVID-19 pandemic is displayed in Table 8. Results showed that in general, HH heads have a high level of social cohesion and trust during COVID-19 with a weighted mean score of 5.53, interpreted as "Agree". Distinctively, they provide

help and support to people beyond their close circle when they need it (5.81), agreed that they feel cared for by my family during the COVID-19 pandemic (5.80), they provide help and support to people they are close to when they need it (5.71), and they trust that the municipality where they live will provide accurate information about the safety of the COVID-19



OVERALL SOCIAL COHESION (Scale of 1 -Strongly Disagree to 7- Strongly Agree)	Weighted Mean	Standard Deviation	Verbal Interpretation
13. I trust that the municipality where I live will provide accurate information about the safety of the COVID-19 vaccines, if they are made available.	5.46	1.395	Somewhat Agree
13. I feel cared for by my family during the COVID-19 pandemic.	5.80	1.471	Agree
I feel cared for by my local community during the COVID- 19 pandemic.	5.34	1.371	Somewhat Agree
13. I feel a sense of belonging in my community during the COVID-19 pandemic.	5.34	1.323	Somewhat Agree
 I feel that in general, the policies of the government are responsive to my concerns during the COVID-19 pandemic. 	5.24	1.396	Somewhat Agree
13. I provide help and support to people I am close to when they need it.	5.71	1.230	Agree
13. I provide help and support to people beyond my close circle when they need it.	5.81	1.243	Agree
GRAND MEAN	5.53	1.098	Agree

Table 5.
Level of Overall Social Cohesion of HH Heads.

vaccines, if they are made available (5.46). HH heads somewhat agree that they feel cared for by their vocal community during the COVID-19 pandemic (5.34), they feel a sense of belonging in my community during the COVID-19 pandemic (5.34), and they feel that in general, the policies of the government are responsive to their concerns during the COVID-19 pandemic (5.24).

Level of Satisfaction with the COVID-19 Control of HH Heads

Generally, Household Heads are somewhat satisfied with the COVID-19 Control with a weighted

mean score of 5.46, interpreted as "somewhat agree" (as presented in Table 6). Specificall, they trust health science in general. (5.62), throughout the COVID-19 pandemic, their general trust in health science increased (5.55), they are satisfied with the medical group of the municipality of Pontevedra for their performance in controlling COVID-19 (5.52), they are satisfied with the health authorities of the municipality of Pontevedra for their performance in controlling COVID-19 (5.40), and they are satisfied with the political leaders of the municipality of Pontevedra for their performance in controlling COVID-19 (5.19).

SATISFACTION WITH THE COVID-19 CONTROL (Scale of 1 -Strongly Disagree to 7- Strongly Agree)	Weighted Mean	Standard Deviation	Verbal Interpretation
I am satisfied with the political leaders of the municipality where I live for their performance in controlling COVID-19.	5.19	1.404	Somewhat Agree
I am satisfied with the health authorities of the municipality where I live for their performance in controlling COVID-19.	5.40	1.390	Somewhat Agree
13. I am satisfied with the medical group of the municipality where I live for their performance in controlling COVID-19.	5.52	1.316	Agree
4. I trust health science in general.	5.62	1.254	Agree
Throughout the COVID-19 pandemic, my general trust in health science increased.	5.55	1.272	Agree
GRAND MEAN	5.46	1.179	Somewhat Agree

Table 6.
Level of Satisfaction with the COVID-19 Control of HH Heads.



Overall Likelihood of HH heads to Receive COVID-19 Vaccination

In general, HH heads is somewhat agree to receive COVID-19 Vaccination with a weighted mean score of 5.01, interpreted as "Somewhat Agree" (as shown in Table 7). Distinctively, they would be more likely to receive the COVID-19 vaccination if medical authorities of the municipality of Pontevedra recommend the vaccine and describe the vaccine development and approval process with full transparency (5.48), if the vaccine allocation/distribution process is transparent and evenhanded (5.42), if their health care provider recommends it to them (5.39), if the deployment

of the vaccination in the municipality of Pontevedra incorporates public oversight and community involvement (5.19), if their partner/relatives decide that the vaccine is safe and effecti e (5.15), if their work colleague(s) or friends recommend the vaccine (5.02), if my social media support group decides that the COVID-19 vaccine is safe and effective (4.98), if vaccination is made available in my health providers clinics and my child/children's school. (4.95), if their community leader recommends the vaccine (4.92), if the political authority of the municipality where I live recommends the vaccine (4.77), and if medical authorities of the municipality of Pontevedra have conflicting views regarding the COVID-19 vaccine (4.54),

RANK	VACCINATION (Scale of 1 -Strongly Disagree to 7- Strongly Agree)	Weighted Mean	Standard Deviation	Verbal Interpretation
I would	be more likely to receive the COVID-19 vaccination			
1	if medical authorities of the municipality where I live recommend the vaccine and describe the vaccine development and approval process with full transparency.	5.48	1.430	Somewhat Agree
2	if the vaccine allocation/distribution process is transparent and evenhanded.	5.42	1.530	Somewhat Agree
3	if my health care provider recommends it to me.	5.39	1.480	Somewhat Agree
4	if the deployment of the vaccination in the municipality where I live incorporates public oversight and community involvement.	5.19	1.566	Somewhat Agree
5	if my partner/relatives decide that the vaccine is safe and effective.	5.15	1.594	Somewhat Agree
6	if my work colleague(s) or friends recommend the vaccine.	5.02	1.596	Somewhat Agree
7	if my social media support group decides that the COVID- 19 vaccine is safe and effective.	4.98	1.591	Somewhat Agree
8	if vaccination is made available in my health providers clinics and my child/children's school.	4.95	1.719	Somewhat Agree
9	if my community leader recommends the vaccine.	4.92	1.643	Somewhat Agree
RANK	OVERALL LIKELIHOOD TO RECEIVE COVID-19 VACCINATION (Scale of 1 -Strongly Disagree to 7- Strongly Agree)	Weighted Mean	Standard Deviation	Verbal Interpretation
I would	be more likely to receive the COVID-19 vaccination			
10	if the political authority of the municipality where I live recommends the vaccine.	4.77	1.678	Somewhat Agree
11	if medical authorities of the municipality I live have conflicting views regarding the COVID-19 vaccine.	4.54	1.818	Somewhat Agree
12	if my favorite news outlet recommends the vaccine and provide transparent information on the vaccine's development and approval.	4.35	1.873	Neither Agree nor Disagree
	GRAND MEAN	5.01	1.370	Somewhat Agree

Table 7.

Level of Overall Likelihood to Receive COVID-19 Vaccination.



Mean Differences on the COVID-19 Vaccination Response Scores of HH Heads when grouped according to their profile variables As presented in Table 8, there are no significant differences on the on the COVID-19 Vaccination Response Scores of HH Heads when grouped according to their sex, civil status, religion, household size, number of HH Members aged 0–5 years

and < 60 years old, presence of medical insurance and length of stay in the present address. However, when HH heads were grouped according to their age, highest educational attainment, employment status, and family monthly income, significant differences on the on the COVID-19 Vaccination Response Scores of HH Heads were noted.

RANK	OVERALL LIKELIHOOD TO RECEIVE COVID-19 VACCINATION	Weighted Mean	Standard Deviation	Verbal Interpretation
	(Scale of 1 -Strongly Disagree to 7- Strongly Agree)			·
I would	be more likely to receive the COVID-19 vaccination			
1	if medical authorities of the municipality where I live	5.48	1.430	Somewhat
	recommend the vaccine and describe the vaccine development and approval process with full transparency.			Agree
2	if the vaccine allocation/distribution process is transparent and evenhanded.	5.42	1.530	Somewhat Agree
3	if my health care provider recommends it to me.	5.39	1.480	Somewhat Agree
4	if the deployment of the vaccination in the municipality where I live incorporates public oversight and community involvement.	5.19	1.566	Somewhat Agree
5	if my partner/relatives decide that the vaccine is safe and effective.	5.15	1.594	Somewhat Agree
6	if my work colleague(s) or friends recommend the vaccine.	5.02	1.596	Somewhat Agree
7	if my social media support group decides that the COVID- 19 vaccine is safe and effective.	4.98	1.591	Somewhat Agree
8	if vaccination is made available in my health providers clinics and my child/children's school.	4.95	1.719	Somewhat Agree
9	if my community leader recommends the vaccine.	4.92	1.643	Somewhat Agree

	COVID-19 VACCINATION RESPONSE							
PROFILE VARIABLES OF HH HEADS	Mean	Response	Type of Test	Test Value	p-value			
13. Highest Educational Attainment								
No formal Education	3.27	Hesitant	Kruskal-Wallis	24.721*	0.010			
Elementary Undergraduate	3.47	Hesitant	H test					
Elementary Graduate	3.63	Confident						
High School Undergraduate	3.45	Hesitant						
High School Graduate	3.68	Confident						
Vocational	3.45	Hesitant						
College Undergraduate	3.63	Confident						
College Graduate	3.87	Confident						
with Masters Units	4.00	Confident						
with Master's Degree	3.77	Confident						
with Doctoral Units	4.34	Confident						
with Doctor's Degree	3.70	Confident						
13. Household size			Mann-Whitney					
At most 5	3.75	Confident	U test	-1.221 ^{ns}	0.222			
More than 5	3.64	Confident						
13. No. of HH Members aged 0–5								
years None	3.69	Confident	Kruskal-Wallis	0.231 ^{ns}	0.891			
One	3.72	Confident	H test					
More than one	3.73	Confident						

Table 8.

Measure of Mean Differences on the COVID-19 Vaccination Response Scores of HH Heads when grouped according to their profile variables.



Table 8. Continue...

8. Number of HH Members aged ≤ 60					
· –				0.601 ^{ns}	0.740
years None	3.68	Confident	Kruskal-Wallis	0.001110	0.740
	3.70	Confident	H test		
One More than one	3.70	Confident	n test		
	3.76	Cornident			
13. Employment	0.00	0 5 1 1			
Status	3.60	Confident	17 1 1347 111	00 000**	0.000
Unemployed	3.38	Hesitant	Kruskal-Wallis	36.269**	0.000
Self-Employed	3.97	Confident	H test		
Government Permanent Employee	4.20	Confident			
Government Casual Employee	3.82	Confident			
Private Permanent <i>Employee</i>	4.06	Confident			
Private Casual <i>Employee</i>					
13. Family Monthly Income					
Below Php10,000	3.54	Confident			
PhP10,000 - PhP14,999	3.73	Confident	Kruskal-Wallis	25.248**	0.000
PhP15,000 - PhP19,999	3.96	Confident	H test		
PhP20,000 - PhP 24,999	3.69	Confident			
PhP25,000 – PhP 29,999	3.84	Confident			
At least PhP30,000	4.11	Confident			
13. Have Medical			Mann-Whitney		
Insurance Yes	3.78	Confident	U test	-1.121 ^{ns}	0.262
No	3.66	Confident			
13. Length of stay (in years) in the present					
address					
Less than 10 years	3.80	Confident	Kruskal-Wallis	3.484 ^{ns}	0.626
10 – 19years	3.71	Confident	H test		
20 – 29 years	3.61	Confident			
30 – 39 years	3.63	Confident			
40 – 49 years	3.83	Confident			
At least 50 years	3.72	Confident			
	J <u>-</u>				
				ne	

ns – not significant
** - highly significant
* - significant

Relationship between COVID-19 Vaccination Response and Independent Variables.

Results on the measures of relationship between COVID-19 Vaccination Response of HH Heads and independent variables (as depicted in Table 9) showed that significant correlations between COVID-19 vaccine response scores and independent variables (profile variables, COVID-19-related profile, extent of COVID-19 impact, level of social cohesion and trust, and level of satisfaction with the COVID-19 control) of HH heads were observed.

For profile variables of the HH heads, their highest educational attainment, employment status and estimated monthly family income were found to be significantly related to their vaccine response. For COVID-related profile questions, the following were found to be significantly related with their response to COVID-19 vaccination: been

tested for COVID-19 through Swab test (RT-PCR test), been tested for COVID-19 through Rapid Antigen Test, had in-person contact with anyone affe ted with COVID-19, likely to think that HH head will get COVID-19, likely to think that HH head will develop severe symptoms if they will get COVID-19 infections, likely to think that one or more of their children living in their house will get COVID-19, have someone in within household with conditions that make them high risk for sever COVID-19 infection, extent of complying to local face mask wearing guidelines, use TV, newspaper, news websites, social media as source of COVID-19 news, no source of COVID-19 news, and have discussed with health care provider about COVID-19 concerns.

For extent of COVID-19 impact, the following were found to be signifi antly related with their



response to COVID-19 vaccination: extent of worriedness about COVID-19, mostly worried that HH Head will get COVID-19, mostly worried that their child/children will get COVID-19, mostly worried that their other family members will be infected with COVID-19, mostly worried that the COVID-19 pandemic will significantly affect their economic situation/finances, mostly worried that COVID-19 will cause more social inequality and instability, whether COVID- 19 pandemic seriously affected them negatively, seriously affec ed because of disruption in the celebration of important life, cultural, religious or festive events, seriously affected in the increase in domestic violence, seriously affected because of increased stress from caring a child full time due to school closure, seriously affected because of interruption in travel plans, seriously affected because of lack of access to usual places of entertainment, seriously affected because more than 10 percent weight gain, seriously affected because of suffered complications/disability from COVID-19 infection, and seriously affected because of worsening of a pre-existing health condition. For social cohesion and trust, the following were found to be significantly related with their response to COVID-19 vaccination: they trust that the municipality will provide accurate information about the safety of the COVID-19 vaccines, if they are made available; they feel cared for by their family during the COVID-19 pandemic; they feel cared for by their local community during the COVID-19 pandemic, feel a sense of belonging in their community during the COVID-19 pandemic; they feel that in general, the policies of the government are responsive to their concerns during the COVID-19 pandemic; they provide help and support to people they are close to when they need it; and they provide help and support to people beyond their close circle when they need it. For level of satisfaction with the COVID-19 control, the following were found to be significantly related with their response to COVID-19 vaccination: satisfied with the political leaders of the municipality where I live for their performance in controlling COVID-19; satisfied with the health authorities of the municipality where I live for their performance in controlling COVID-19; satisfied with the medical group of the municipality where I live for their performance in controlling COVID-19; trusted health science in general; and throughout the COVID-19 pandemic, general trust in health science increased.

INDEDENDENT VARIABLES	COVID-19 VACCINATION RESPONSE					
INDEPENDENT VARIABLES	Chi-Square test Value	Correlation Coeff. (Spearman's rho)	p-value			
I. Profile Variables						
Highest Educational Attainment		0.317**	0.000			
Employment Status	30.061**		0.001			
Estimated Monthly Income		0.281**	0.000			

** - highly significant

	COVID-19 VACCINATION RESPONSE						
INDEPENDENT VARIABLES	Chi-Square test Value	Correlation Coeff. (Spearman's rho)	p-value				
II. COVID-19 Related Profile							
Been tested for COVID-19 through	6.414*		0.040				
Swab test (RT-PCR test)							
Been tested for COVID-19 through	7.686*		0.021				
Rapid Antigen Test							
6. Had in-person contact with anyone	9.018*		0.011				
affected with COVID-19							
7. How likely do you think it is that you		0.322**	0.000				
will get COVID-19							
8. How likely do you think it is that you		0.310**	0.000				
will develop severe symptoms if							
you get COVID-19 infections							

Table 9.

Significant Relationship between COVID-19 Vaccination Response of HH Heads and Independent Variables.



Table 9. Continue...

How likely do you think it is that one		0.290**	0.000
or more of your children living in			
your house will get COVID-19			
10. Do you have someone in your	31.297**		
household with conditions that			0.000
make them high risk for sever			
COVID-19 infection			
11.How closely have you complied		0.153**	0.003
with your local face mask wearing		0.100	0.000
guidelines			
12.Use TV as source of COVID-19	12.643**		0.002
news.	12.040		0.002
13.Use Newspaper as source of	8.193*		0.017
COVID-19 news.	0.195		0.017
14.Use News websites as source of	13.338**		0.001
	13.330		0.001
COVID-19 news. 15.Use Social Media as source of	16.272**		0.000
COVID-19 news.	10.272		0.000
	9.078*		0.011
16. No source of COVID-19 news.	9.076		0.011
17.Have you discussed with your	35.174**		0.000
health care provider about COVID- 19 concerns	33.174		0.000
III. Extent of COVID-19 impact		0.252**	0.000
18. How worried are you about COVID-		0.252	0.000
19	40.050**		0.000
19. Mostly worried that HH Head will	13.053**		0.000
get COVID-19	40.004**		0.004
20. Mostly worried that their	13.694**		0.001
child/children will get COVID-19			
21. Mostly worried that their other	47 400**		0.000
family members will be infected	17.103**		0.000
with COVID-19			
22. Mostly worried that the COVID-19	0.4.04.464		2 222
pandemic will significantly affect	21.244**		0.000
their economic situation/finances			
23. Mostly worried that COVID-19 will			
cause more social inequality and	17.837**		0.000
instability			
24. Has the COVID-19 pandemic	<u></u>		
seriously affected you negatively?	25.071**		0.000
25. Seriously affected because of			
disruption in the celebration of	7.970*		0.019
important life, cultural, religious or			
festive events.			

	COVID-19 VACCINATION RESPONSE					
INDEPENDENT VARIABLES	Chi-Square test Value	Correlation Coeff. (Spearman's rho)	p-value			
III. Extent of COVID-19 impact						
26. Seriously affected in the increase in domestic violence	6.789*		0.034			
27. Seriously affected because of increased stress from caring a child full time due to school closure.	6.901*		0.032			
28. Seriously affected because of interruption in travel plans.	16.106*		0.000			
29. Seriously affected because of lack of access to usual places of entertainment	10.898**		0.004			



Table 9. Continue...

30. Seriously affected because more	8.660*		0.013
than 10 percent weight gain. 31. Seriously affected because of suffered complications/disability from COVID-19 infection	6.554*		0.038
32. Seriously affected because of worsening of a pre-existing health condition	14.506**		0.001
IV. Social Cohesion & Trust of HH			
Heads		0.4004	2 222
33. I trust that the municipality where I live will provide accurate information about the safety of the COVID-19 vaccines, if they are made available.		0.498**	0.000
34. I feel cared for by my family during the COVID-19 pandemic.		0.278**	0.000
35. I feel cared for by my local community during the COVID-19 pandemic.		0.317**	0.000
36. I feel a sense of belonging in my community during the COVID-19 pandemic.		0.446**	0.000
37. I feel that in general, the policies of the government are responsive to my concerns during the COVID-19 pandemic.		0.387**	0.000
38. I provide help and support to		0.387**	0.000
people I am close to when they need it.			0.000
39. I provide help and support to people beyond my close circle when they need it.		0.260**	

** - highly significant *-significant

	COVID-19 VACCINATION RESPONSE					
INDEPENDENT VARIABLES	Chi-Square test Value	Correlation Coeff. (Spearman's rho)	p-value			
V. Satisfaction with the COVID-19						
Control						
40. Satisfied with the political leaders						
of the municipality where I live for		0.367**	0.000			
their performance in controlling						
COVID-19.						
41. Satisfied with the health authorities						
of the municipality where I live for		0.349**	0.000			
their performance in controlling						
COVID-19.						
42. Satisfied with the medical group of						
the municipality where I live for		0.403**	0.000			
their performance in controlling						
COVID-19.						
43. Trusted health science in general.						
44.Throughout the COVID-19		0.447**	0.000			
pandemic, general trust in health		0.429**	0.000			
science increased.						

** - highly significant



Stepwise Discriminant Analysis

For the Discriminant Analysis Procedure, all variables were used to discriminate HH heads in terms of their COVID-19 response. A total of 78 independent variables were considered, thirteen from personal characteristics, 27 variables from COVID-19-related profile questions, 26 from extent of COVID-19 impact, seven variables from social cohesion and trust questions; and fi e from satisfaction to COVID-19 Control items. The result of Stepwise Discriminant Analysis for three groups is presented in Table 10. Out of 78 variables, only fi e qualified as good discriminating variables to discriminate HH heads as confident, hesitant and refuser to COVID 19 vaccination. These were their level of trust that the municipality will provide accurate information about the safety, their level of trust in health science in general, extent of worriedness that the COVID-19 pandemic will significantly affect their economic situation/finances, extent that one or more of their children will get COVID-19, and their higher level of education attained. of less than 5 years old and a senior citizen, unemployed, with family monthly income below the poverty line, no medical insurance and stayed in the place for a quarter of a century.

- b. Majority of the HH heads have not been tested for COVID-19, has not been diagnosed by health care professionals based on symptoms only, had no in-person contact with anyone infected with COVID-19; and majority of them have no comorbidities or pre-existing health conditions.
- 2. HH heads are aware that they are quite unlikely to get COVID-19 and very closely complied about guidelines for COVID-19.
- 3. COVID-19 has a high level of impact to HH heads of Pontevedra
- 4. Most of the HH heads in Pontevedra are COVID-19 Vaccine Confident
- 5. HH Head have a high level of social cohesion and trust during COVID-19.
- 6. HH Heads are somewhat satisfied with the COVID-19 Control.
- 7. HH heads is somewhat agree to receive COVID-19 Vaccination.

		Wilks' Lambda							
		Exact F							
Step	Entered	Statistic	df1	df2	df3	Statistic	df1	df2	Sig.
1	V. Social Cohesion & Trust: 1. Level of trust that the municipality will provide accurate information about the safety of the COVID-19 vaccines, if they are made available.	.818	1	2	369	41.103**	2	369	.000
2	VI. Satisfaction with COVID-19 Control 4. Level of trust to health science in general.	.779	2	2	369	24.455**	4	736	.000
3	III. COVID-19 Impact: 4. That the COVID-19 pandemic will significantly affect their economic situation/finances	.751	3	2	369	18.844**	6	734	.000
4	II. COVID-related question: 8. likely to think that one or more of their children within household will get COVID-19	.731	4	2	369	15.486**	8	732	.000
5	I. Profile: Highest Educational Attainment	.714	5	2	369	13.368**	10	730	.000
At eac	h step, the variable that minimizes the overall W	/ilks' Lamb	da is e	entere	d.	**.	highly	signif	cant

Table 10. Stepwise discriminant summary of predictor variables.

CONCLUSIONS

- 1. a. Household heads in the municipality of Pontevedra are mostly females, in their mid-forties, married, Roman Catholic, College graduate, headed a household of fi e with a family member
- 8. Older respondents have higher COVID-19 Confidence scores compared to younger HH heads. Higher level of education attained have higher COVID-19 Confidence scores. Self-employed HH heads are COVID-19 vaccine hesitant



whereas other HH heads in other employment status were COVID 19 Vaccine Confident. HH Heads with higher family monthly income have higher COVID-19 Confidence scores

- 9. COVID-19 Vaccination Response of HH Heads was signifi antly related with their profile variables (highest educational attainment, employment status, and estimated monthly income), their COVID-19-related profile, their extent of COVID-19 impact, their level of social cohesion and trust, and their level of satisfaction with the COVID-19 control.
- 10. COVID-19 vaccine confident HH residents are identified to have higher level of trust that the municipality will provide accurate information about the safety, higher level of trust in health science in general, worried that the COVID-19 pandemic will significantly affect their economic situation/finances, perceived that very likely that one or more of their children will get COVID-19, and with higher level of education attained.

RECOMMENDATIONS

- 1. A very strong statistical evidence from this study suggests that HH heads in Pontevedra Capiz is vaccine confident, thus the LGU must allocate enough funds to purchase the vaccine ahead of time.
- 2. To specifically account the vaccine confidence among barangays, a thorough study per barangay must be conducted with the help of BHWs to specifically estimate the number of vaccines needed per barangay.
- 3. Furthermore, it is recommended for future studies to cater other factors that can explain the confidence of the public towards COVID-19 vaccine.

References:

- Badura, S. Ota, M., Ozturk, S. Adegbola R., & A. Dutta. 2020. Vaccine confidence: the keys to restoring trust. https://doi.org/10.1080/21645515. 2020.1740559.
- Bianco, A., Mascaro, V., Zucco, R. & M. Pavia. 2018. Parent perspectives on childhood vaccination: How to deal with

vaccine hesitancy and refusal? https://doi.org/10.1016/j.vac-cine.2018.12.062.

- European Centre for Disease Prevention and Control. Catalogue of interventions addressing vaccine hesitancy. Stockholm: ECDC; 2017. Stockholm, April 2017
- Larson HJ, Cooper LZ, Eskola J, Katz SL, Ratzan S. Addressing the vaccine confidence gap. Lancet. 2011;378(9790):526-35.
- Larson, HJ, Hartigan-Go, Kenneth, & Alexandre de Figueiredo. 2018. Vaccine confidence plummets in the Philippines following dengue vaccine scare: why it matters to pandemic preparedness.

 https://doi.org/10.1080/21645515.
 2018.1522468
- Larson HJ, Tucker JD, Schulz, W. 2015. Measuring vaccine confidence: Introducing a global Vaccine Confidence Index. http://currents.plos.org/outbreaks/ article/measuringvaccineconfidenceintroducingaglobalvaccineconfid nceindex/
- Mendoza, R.U., Valenzuela, S.A., and M.M. Dayrit. 2020. A Crisis of Confidence: The Case of Dengvaxia in the Philippines. ASOG Working Paper 20-002.
- Oxford University Press. Oxford English dictionary, Oxford, England: Oxford University Press; 2020.
- Tull, K. (2019). Vaccine hesitancy: guidance and interventions. K4D Helpdesk Report 672. Brighton, UK:
 Institute of Development Studies.
- US Centers for Disease Control and Prevention.

 Ten great public health achievements
 Atlanta: CDC; 2015.

 Available from:
 http://www.cdc.gov/about/history/

tengpha.htm

