

## **Knowledge, Attitude and Practices of the Residents of Larion Bajo, Tuguegarao City on Viral Influenza**

**Catherine Fugaban-Hizon**

Cagayan State University, Tuguegarao, Cagayan, Philippines

### **\*Corresponding Author:**

Catherine Fugaban-Hizon.

Email: [meowfhizon28@gmail.com](mailto:meowfhizon28@gmail.com)

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**Abstract:** This study was conducted to assess the Knowledge, Attitudes, and Practices of the Residents of Larion Bajo, Tuguegarao City on Viral Influenza. There were 70 residents who were taken as the respondents using the descriptive method. Majority of the respondents belong to age bracket 31 – 40. Mostly were housewives and are high school graduates. Predominantly they are Roman Catholic and speak Ilokano as a dialect. Majority are composed of 5-6 family members with a monthly income below of P10,000. The result of the study reveals that the respondents are knowledgeable on the predisposing factors, symptoms, transmission, prevention and treatment of viral influenza. Most of the respondents know that weakened immune system is a predisposing factor to be infected with viral influenza. Fever is the most known symptom of viral influenza that the respondents know. As to transmission of the disease, majority of the respondents know that when an infected person sneezes mucus into the eyes, nose or mouth of another person, they can acquire the disease. Most of the respondents know that drinking a lot of water is a treatment of the disease. As to prevention, majority of the respondents know that proper hand washing is a way of preventing the occurrence of the disease. Most of the respondents practice doing the safety measures to prevent the occurrence of viral influenza while few of them mingle with other people suffering from the disease. The respondents have a positive attitude and practice proper measures towards viral influenza. They know the appropriate action if they or anyone in the family have the disease.

**Keywords:** Viral Influenza, fever, immune system, hand washing, personal hygiene.

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### **INTRODUCTION**

Viral Influenza, commonly referred to as the flu, is an infectious disease caused by the influenza virus which causes an acute respiratory infection [1]. In nature, the flu virus is found in wild aquatic birds such as ducks and shore birds. It has persisted in birds for millions of years and does not typically harm them [2]. A flu virus is roughly round, but it can also be elongated or irregularly shaped. Inside are eight segments of single-strand RNA containing the genetic instructions for making new copies of the virus. Flu's most striking feature is a layer of spikes projecting from its surface. Based from World Health Organization, there are three types of influenza virus, they are influenza A, influenza B and influenza C virus. The type A viruses are the most virulent human pathogen among the three influenza types and cause the most severe disease.

According to National Institute of Allergy and Infectious Disease, there are three types of flu; Seasonal flu, Pandemic and Bird (Avian) Flu. Seasonal flu outbreaks usually begin suddenly and occur mainly in the late fall and winter. The disease spreads through

communities, creating an epidemic. Because schools are an excellent place for flu viruses to attack and spread, families with school-age children have more infections than other families, with an average of one-third of the family members infected each year. Pandemic flu refers to particularly virulent strains of flu that spread rapidly from person to person to create a world-wide epidemic. Avian flu occurs in wild aquatic bird such as ducks and shore birds. It does not normally spread from birds to humans. However, pigs can be infected by bird influenza (as well as by the form of influenza that affects humans) and can pass on the flu to humans. In 1997, researchers discovered that a virulent bird influenza had skipped the pig step and had infected humans directly, causing a number of deaths in Asia [2].

Factors that may increase your risk in developing influenza or its complications includes age, living conditions, occupations and immune system [3]. Seasonal influenza tends to target young children and people over 65. People who live in facilities along with many other residents, such as nursing homes or military barracks, are more likely to develop influenza.

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Cancer treatments, corticosteroids and HIV/AIDS can weaken the immune system. This can make it easier for you to catch influenza and may also increase the risk of developing complications. Chronic conditions such as asthma, diabetes or heart problems, may increase the risk of influenza complications. Pregnant women are more likely to develop influenza complications, particularly in the second and third trimesters. People in nursing homes are at a higher risk of complications from flu because they have weak immune system and often have other medical problems [3].

The most characteristic symptoms of viral influenza are weakness, fatigue, muscle aches, headaches, fever, sneezing and may be a runny nose. Although a person with influenza feels very sick, it rarely leads to more serious complications, except for those at greater risk. Initial flu symptoms includes headaches, chills and cough. Symptoms such as fever, loss of appetite, and muscle aches are soon to follow. Other symptoms such as nausea, vomiting and diarrhea are rare in adults but more in children [4].

Influenza is contagious, which means it can spread easily from person to person mainly by airborne droplets of respiratory fluids that are sent through the air when someone infected with the virus coughs or sneezes. Other people inhale the airborne and can become infected [5]. All respiratory secretions and bodily fluids, including diarrheal stools, of patients with influenza should be considered infectious; however, the predominant source of infection is respiratory secretions.

The normal treatment for flu is rest and plenty of liquids. Treatment also includes ways to prevent spreading the flu virus, such as proper hand washing, keeping common surfaces clean, and coughing or sneezing into your arm or sleeve. Medications for specific symptoms can help. Antibiotics are not effective against viral infections like flu and cold, but they are prescribed for complications such as bacterial infections [6]. Children and teenagers with flu symptoms (particularly fever) should avoid taking aspirin during an influenza infection (especially influenza type B), because doing so can lead to Reye's syndrome, a rare but potentially fatal disease of the liver. Since influenza have no effect on the infection; unless prescribed for secondary in secondary infections such as bacterial pneumonia. Antiviral medication may be effective, but some strains of influenza can show resistance to the standard antiviral drugs [7].

Active immunization or vaccination is the best way to prevent flu, but available vaccines have several limitations. They provide only 65-80% protection against the illness in young adults and just 30-40% protection among elderly, although those who develop flu even when already immunized have lower risk of

developing complications. They have to be administered annually not only because they confer protection for just 12 months but also because the prevalent type and strains of the virus vary from one year to year and it is not technically possible to incorporate all the strains of the viruses in one vaccine. The composition of the vaccine is changed by manufacturers annually based on the recommendations of the World Health Organization (WHO) [8].

There are ways to keep the disease from developing in the system, such as the following: Getting enough sleep is the key to living a healthy life. Lack of sleep usually makes the body vulnerable to all kinds of infections. Get at least eight hours of sleep every night. This not only helps you recharge the energy your body needs daily, but it also helps build your immune system fight off viruses and contagious diseases. The more rest you get, the better chances your body can fight off the common flu [9]. Maintaining a healthy lifestyle boils down to having a proper diet by eating the right amount of fresh fruits, vegetables as well as carbohydrates and proteins. Reasonably effective ways to reduce transmission of influenza include good personal health and hygiene habits such as: not touching your eyes, nose or mouth; frequent hand washing (with soap and water, or with alcohol-based hand rubs); covering coughs and sneezes; avoiding close contact with sick people; and staying home yourself if you are sick [1].

#### **Statement of the Problem:**

This study aims to determine the knowledge, attitudes and practices of the residents of Larion Bajo, Tuguegarao City on Viral Influenza.

Specifically, it aims to answer the following questions:

1. What is the profile of the respondents in terms of:
  - a. Age
  - b. Sex
  - c. Educational Attainment
  - d. Occupation
  - e. Religion
  - f. Ethnicity
  - g. Size of the family
  - h. Family Income
2. What is the level of knowledge of respondents on Viral Influenza in terms of:
  - a. Predisposing factors
  - b. Symptoms of the disease
  - c. Transmission of the disease
  - d. Treatment of the disease
  - e. Prevention of the disease
3. What are the attitudes of the respondents towards viral influenza?
4. What are the practices of the respondents towards viral influenza?

#### **MATERIALS AND METHODS**

## Research Design

The researcher used the descriptive correlation design utilizing questionnaire as primary tool in gathering the needed data of the study.

## Research Instruments

To attain the necessary information for this study, a set of questionnaire was used as the main tool of the study. The questionnaire was divided into four parts: Part I-Socio-demographic profile of the respondents, Part II- Knowledge of respondents on Viral Influenza, Part III- Attitude of respondents on

Viral Influenza and Part IV- Practices of respondents on Viral Influenza

## Data Gathering

The researcher asked permission from the Barangay Captain to conduct the study. The questionnaire was distributed to respondents and the objectives of the study were clearly explained to them. Informal interview was done to solicit added information to substantiate the respondents' response.

## RESULTS AND DISCUSSION

### Part I. Profile of the Respondents

**Table-1: Profile of the Respondents**

	Profile	Frequency N=70	Percentage
<b>Age Bracket</b>	15-20	2	2.86
	21-30	13	18.57
	31-40	25	35.71
	41-50	18	25.71
	51 and above	12	17.14
<b>Sex</b>	Male	28	40.0
	Female	42	60.0
<b>Educational attainment</b>	Elementary Undergraduate	5	7.14
	Elementary Graduate	13	18.57
	Highschool Undergraduate	6	8.57
	Highschool Graduate	31	44.29
	College Undergraduate	4	5.71
	College Graduate	9	12.86
	With Post Grad Units	2	2.86
<b>Occupation</b>	Unemployed	32	45.71
	Farmer	8	11.43
	Vendor	13	18.57
	Business man	5	7.14
	Government Employee	7	10.0
	Private Employee	5	7.14
<b>Religion</b>	Roman Catholic	49	70.0
	Born Again	5	7.14
	Iglesia ni Cristo	8	11.43
	Jehovah's Witness	2	2.86
	Others	6	8.57
<b>Ethnicity</b>	Ilokano	52	74.29
	Ybanag	6	8.57
	Itawis	8	11.43
	Tagalog	3	4.29
	Others	1	1.43
<b>Size of the family</b>	1-4	26	37.14
	5-6	33	47.14
	7-8	10	14.29
	9 and above	1	1.43
<b>Family Income</b>	P10,000 and below	48	68.57
	P10,001-P20,000	16	22.86
	P20,001-P30,000	5	7.14
	P30,001 and above	1	1.43

Table 1 presents the data relative to age of the respondents. Of the 70 respondents, 25 or 35.71 percent of them belong to age bracket 31 - 40 years. Eighteen or 25.71 percent belong to 41 - 50 age bracket, 13 or 18.57 percent belong to 21 – 30 years, 12 or 17.14 percent belong to 51 and above age bracket, and only 2 or 2.86 percent fall under 15 - 20 years of age. This finding shows that majority of them belong to the middle age group. In terms of sex, 28 or 40.0 of them are males while 42 or 60.0 percent of them are females.

In terms of Educational attainment, 31 or 44.29 percent are high school graduate, 13 or 18.57 percent are elementary graduate. Nine or 12.86 percent are College graduate, 6 or 8.57% are High school undergraduate. Five or 7.14 percent are elementary undergraduate, 4 or 5.71 percent are college undergraduate and 2 or 2.86 percent graduated in their Post Graduate studies. This implies that the respondents are dominated by high school graduate.

Table 1 also presents the occupation of the respondents. Thirty two or 45.71 percent are unemployed, 13 or 18.57 percent are vendors, 8 or 11.43 percent are farmer. Seven or 10 percent are government employee and 5 or 7.14 percent are business man and private employee. This implies that the respondents are dominated by housewife because majority is female and unemployed.

In terms of religion, 49 or 70 percent are Roman Catholic, 8 or 11.43 percent are Iglesia ni Cristo, 6 or 8.57 percent belong to other religious affiliation. Five or 7.14 percent are Born Again and 2 or 2.86 are Jehovah’s Witness.

As regards to ethnicity, 52 or 74.29 percent are Ilokano, 8 or 11.43 percent are Itawis, 6 or 8.57 percent are Ybanag. Three or 4.29 percent are Tagalog and 1 or 1.43 percent speaks other dialects. It implies that majority of the respondents are Ilokano.

In terms of size of the family, 33 or 47.14 percent are composed of 5-6 family members, 26 or 37.14 1-4 members. Ten or 14.29 percent has 7-8 family members and 1 or 1.43 percent is composed of more than 9 family members. It implies that majority of the respondents has a medium range of family members and the spread of disease among household is manageable.

In terms of family income, of the 70 respondents, 48 or 68.57 percent has an income below P10,000. Sixteen or 22.86 percent belong to P10,001 - P20,000 income bracket, 5 or 7.14 percent belong to P20,001-P30,000 income bracket and 1 or 1.43 percent belong to P30,001 and above income bracket.

**Part II. Knowledge of respondents on Predisposing Factors on Viral Influenza**

**Table 2.1 Distribution of respondents according to knowledge on Predisposing Factors of Viral Influenza:**

Factors	Frequency	Percentage
Age	23	32.86
Occupation	50	71.43
Living Conditions	45	64.29
Weakened Immune System	63	90.0
Chronic Illness	13	18.57
Pregnancy	22	44.29

Table 2.1 provides the distribution of respondents according to knowledge on predisposing factors of viral influenza. Sixty three or 90.0% of them believes that weakened immune system is a factor of being vulnerable of the disease, 50 or 71.43 percent says occupation is a factor, 45 or 64.29 percent think that living condition is also a factor. Twenty three or 32.86 percent says age is a predisposing factor, 22 or 44.29 percent believes that pregnancy is a factor and 13 or 18.57 percent says chronic illness is also a factor. It implies that majority of the respondents know that weakened immune system is a predisposing factor of viral influenza.

It can be gleaned from table 2.2 the distribution of respondents according to knowledge on

symptoms of viral influenza. Sixty or 85.71 percent shows that respondents are knowledgeable that fever is a symptom of viral influenza. The second symptom that respondents know is headache which is 58 or 82.86 percent of the 70 respondents, followed by sneezing with 56 or 80 percent, runny nose with 55 or 78.57 percent, weakness with 41 or 58.57 percent, loss of appetite with 35 or 66.71 percent, fatigue with 25 or 35.71 percent, sore throat with 23 or 32.86 percent, muscle pain with 18 or 25.71 percent, vomiting with 12 or 17.14 percent, diarrhea with 11 or 15.71 percent and nausea with 8 or 11.43 percent. It implies that fever is the most known symptom of viral influenza of the respondents.

**Table 2.2 Distribution of respondents according to knowledge on symptoms of Viral Influenza:**

Factors	Frequency	Percentage
Weakness	41	58.57
Muscle pain	18	25.71
Fever	60	85.71
Runny nose	55	78.57
Cough	52	74.29
Vomiting	12	17.14
Sore Throat	23	32.86
Fatigue	25	35.71
Headache	58	82.86
Sneezing	56	80.0
Loss of Appetite	35	55.71
Nausea	8	11.43
Diarrhea	11	15.71

**Table 2.3 Distribution of respondents according to knowledge on transmission of Viral Influenza:**

Mode of transmission	Frequency	Percentage
When an infected person sneezes mucus directly into the eyes, nose or mouth of another person.	69	98.57
When someone inhales the aerosols produced by an infected person coughing, sneezing or spitting.	41	58.57
Hand-to-eye transmission	4	5.71
Hand-to-nose transmission	10	14.29
Hand-to-mouth transmission	18	25.71
By contaminated surfaces such as banknotes, door knobs, light switches and other household items.	42	60

**Table 2.4 Distribution of respondents according to knowledge on treatment of Viral Influenza:**

Treatment/Cure	Frequency	Percentage
Get plenty of rest.	42	60
Drink a lot of water.	65	92.86
Avoid using alcohol and tobacco.	46	65.71
Take appropriate medications.	62	88.57
Avoid taking aspirin.	29	41.43

Table 2.4 presents the distribution of respondents according to knowledge on treatment of viral influenza. Sixty five or 92.86 percent of the 70 respondents believes that drinking a lot of water is a treatment of having the disease. Sixty two or 88.57 percent take appropriate medications followed by 46 or

65.71 percent avoid using alcohol and tobacco. Forty two or 60 percent believe that getting plenty of rest is a treatment of viral influenza and 29 or 41.43 percent avoid taking aspirin. It shows that most of the respondents believe that by drinking a lot of water and other fluids is a treatment of viral influenza.

**Table 2.5 Distribution of respondents according to knowledge on prevention of Viral Influenza:**

Prevention	Frequency	Percentage
Vaccination	50	71.43
Proper hand washing	61	87.14
Getting enough sleep	53	75.71
Avoid having contact with sick people	55	78.57
Refrain from touching your face with dirty hands	31	44.29
Keeping common surfaces clean	40	57.14
Good hygiene habits.	55	78.57

Table 2.5 presents the distribution of respondents according to knowledge on prevention of viral influenza. Sixty one or 87.14 percent believes that proper hand washing prevent the spread of viral

influenza, followed by avoiding having contact with sick people and good hygiene habits with 55 or 78.57 percent. Fifty three or 75.71 percent say that getting enough sleep prevents the spread of the disease,

followed by vaccination with 50 or 71.43 percent, keeping common surfaces clean with 40 or 57.14 percent and refrain from touching the face with dirty hands with 31 or 44.29 percent. It shows that majority

of the respondents believes that proper hand washing prevents the spread of the disease.

### Part III. Attitudes of respondents on Viral Influenza

**Table 3.1 Distribution of respondents according to attitudes on Viral Influenza:**

	Yes		No	
	Frequency	Percentage	Frequency	Percentage
1.Are you worried if someone in your family suffers from viral influenza?	67	95.71	3	4.29
2.Do you feel lonely or alone if you have this disease?	54	77.14	16	23.86
3.Do you do normal activities at home even if you have viral influenza?	35	50.0	35	50.0
4.Do you feel happy because you have time to rest from your job?	28	40.0	42	60.0
5.Do you feel hopeless if a family member is suffering from the disease?	9	12.86	61	87.14
6.Are you satisfied with the measures done in your barangay in preventing the spread of the disease?	57	81.43	13	18.57
7.Do you blame yourself if you or someone in the family gets viral influenza?	3	4.29	67	95.71
8.Do you keep away from dirty places if you have the disease?	70	100.0	0	0.0
9. Do you keep away from people if you have the disease?	64	91.43	6	8.57

Table 3.1 presents the distribution of respondents according to attitudes on viral influenza. Seventy or 100 percent keep away from dirty places if they have the disease, followed by 67 or 95.71 percent are worried when someone in the family suffers from viral influenza, 64 or 91.43 percent keep away from people who have the disease. Fifty seven or 81.43 percent are satisfied with the measures done in the barangay in preventing the spread of the disease, 54 or

77.14 percent feel lonely or alone if they have the disease, 35 or 50 percent do normal activities at home even they are suffering from the disease. Nine or 12.86 percent feel hopeless if a family member is suffering from viral influenza and 3 or 4.29 percent blame themselves if someone in the family gets sick. It implies that the respondents keep away from dirty places so as not to be infected with viral influenza.

**Table 3.2 Distribution of respondents according to practices on Viral Influenza:**

	Yes		No	
	Frequency	Percentage	Frequency	Percentage
1.Do you immediately go to the hospital once you feel the signs and symptoms of viral influenza?	47	67.14	23	32.86
2.Do you take medicines against viral influenza without consulting a doctor?	26	37.14	44	62.86
3.Do you mingle with people who is suffering from viral influenza?	20	28.57	50	71.43
4.Do you treat people with influenza different from those who do not have?	32	45.71	38	54.26
5.Do you have any vaccinations against viral influenza?	44	62.86	26	37.14

Table 3.2 presents the distribution of respondents according to practices on viral influenza. Forty seven or 67.14 percent immediately go to the hospital once they feel the signs and symptoms of viral influenza, 44 or 62.86 percent have vaccinations against the disease, 32 or 45.71 percent treat people with influenza different

from those who do not have. Twenty six or 37.14 percent take medicines against viral influenza without consulting the doctor and 20 Or 28.57 percent mingle with people who is suffering from viral influenza. It implies that most of the respondents practice the safety measures to prevent the occurrence of viral influenza.

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## SUMMARY, CONCLUSION AND RECOMMENDATIONS

### Summary

#### *Profile of the Respondents*

1. Of the 70 respondents, 25 or 35.71 percent belong to age bracket 31 - 40 years and only 2 or 2.86 percent fall under 15 - 20 years of age.
2. In terms of sex, 28 or 40.0 percent are males while 42 or 60.0 percent are females.
3. Respondents are dominated by high school graduate while 2 or 2.86 percent graduated in their Post Graduate studies.
4. Majority are housewives and the least are business man and private employees.
5. Forty nine or 70 percent are Roman Catholic and only 2 or 2.86 are Jehovah's Witness.
6. As regards to ethnicity, 52 or 74.29 percent are Ilokano and only 1 or 1.43 percent speaks other dialects.
7. Thirty three or 47.14 percent are composed of 5-6 family members and 1 or 1.43 percent is composed of more than 9 family members.
8. Of the 70 respondents, 48 or 68.57 percent has an income below P10,000 and only 1 or 1.43 percent belong to P30,001 and above income bracket.

#### *Knowledge of the respondents on Viral Influenza*

1. Most of the respondents know that weakened immune system is a predisposing factor to be infected with viral influenza.
2. Fever is the most known symptom of viral influenza that the respondents know and the least say that nausea is also a symptom of the disease.
3. As to transmission of the disease, majority of the respondents know that when an infected person sneezes mucus into the eyes, nose or mouth of another person, they can acquire the disease. Least of them know that the disease can be transmitted through hand-to-eye transmission.
4. Most of the respondents know that drinking a lot of water is a treatment of the disease and least of them know that avoiding the use of aspirin is also a treatment.
5. As to prevention, majority of the respondents know that proper hand washing is a way of preventing the occurrence of the disease and the least of them know that refraining from touching the face with dirty hands prevents viral influenza to occur.

#### *Attitudes of the respondents on Viral Influenza*

1. Majority of the respondents have a positive attitude towards keeping away from dirty places if they have the disease and the least of
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them blame themselves if they or someone in the family gets infected of the disease.

2. Most of the respondents have a negative attitude towards feeling happy if they suffer from the disease and few of them have a negative attitude of worrying if someone in the family has the disease.

#### *Practices of the respondents on Viral Influenza*

1. Most of the respondents practice doing the safety measures to prevent the occurrence of viral influenza while few of them mingle with other people suffering from the disease.

### Conclusion

The result of the study reveals that the respondents are knowledgeable on the predisposing factors, symptoms, transmission, prevention and treatment of viral influenza. As presented in the tables, it indicates however; that not all the predisposing factors, symptoms, transmission, prevention and treatment of viral influenza are known to the respondents.

The respondents have a positive attitude and practice proper measures towards viral influenza. They know the appropriate action if they or anyone in the family have the disease.

### Recommendations:

1. There is a need to strengthen the effort and cooperation of the barangay officials and public health agencies to disseminate information on viral influenza.
2. Barangay health worker in cooperation with the barangay officials should give free vaccinations to the residents once a year.

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