IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

PREVALENCE OF COVID-19 IN THE PROVINCE OF TARLAC

Aileen L. Javier
Nurse
Tarlac State University

Chapter 1

THE PROBLEM AND ITS BACKGROUND

Introduction

Over 5.5 million new COVID-19 cases and over 90,000 deaths were reported worldwide this week, a modest drop from the previous week. The number of cases and fatalities is still at its highest point since the pandemic started, though. While the number of new cases per week declined in Europe and the Eastern Mediterranean, the South-East Asia Region continued to rise for nine weeks and reported an additional 6% increase last week. The Western Pacific and South-East Asia regions had an increase in the death rate. While India continues to be responsible for 95% of cases and 93% of fatalities in the region of South-East Asia, as well as 50% of cases and 30% of deaths worldwide, alarming patterns have been noticed in nearby nations. There are nations in each WHO Region that have had a consistent rise in cases and fatalities over the past several weeks. Over 4 million new cases have been reported in the previous week, continuing a global trend that has been going on for more than a month. The Eastern Mediterranean and Western Pacific regions reported significant increases of 37% and 33%, respectively, as compared to the previous week, while the South-East Asia region reported a 9% increase. The other three regions either reported similar weekly case incidence or a slight decrease as compared to the previous week. With nearly 64,000 deaths reported, the total number of deaths reported this week declined by 8% as compared to the prior week. In contrast, the Western

Pacific and Eastern Mediterranean Regions reported 48% and 31% increases in new deaths, respectively, as compared to the prior week (Pal, M. et al. 2021). While most COVID-19 infections result in recovery, the death toll in Asia-Pacific is high, and many patients who recover from the acute stage continue to experience lethargy and other symptoms for months. The elderly and those with pre-existing medical issues have the greatest death rates. Over 140,300 deaths, or about 12% of all reported deaths worldwide, were attributable to COVID-19 in the Asia-Pacific area at the beginning of October 2020. India experienced the highest death toll of them, totaling more than 102,600. Wuhan City has the highest rate of coronavirus mortality after population adjustment, with nearly 426 deaths per 1 million residents.

Although there was a similar number of new cases worldwide to the number of cases the week before, there is a significant difference between countries. The second wave of new cases is exceeding past peaks in many nations, and this can be partly ascribed to improvements in surveillance capabilities over time. In other nations, such as Brazil, Colombia, and Peru, we have observed a progressive decrease in new cases from prior peaks in August. Although they continue to report high numbers, the number of new cases in India and the Philippines appears to have stabilized.

According to Bong CL. et al. (2020), there are significant worries regarding the capacity of the health systems in low- and middle-income countries to handle the COVID-19 pandemic as it spreads. It is becoming clear that applying the same strategies utilized in high-income countries in low- and middle-income countries may not be feasible because health-care systems were already overburdened before the pandemic. The majority of current guidelines emphasize hospital-based treatments, however given the limited resources available, it may not be possible to solve the present shortages of hospital beds, oxygen, ventilators, and personal protective equipment.

As a preventative measure to curb the COVID-19 outbreak, the Philippine government issued an Enhanced Community Quarantine (ECQ) on March 16, 2020, putting all of Luzon under complete lockdown. This ECQ is frequently cited as having one of the longest lockdowns ever. Under the ECQ, all internal travel was outlawed, including travel by land, air, and sea. Only emergencies were allowed for residents to leave their houses. Entry restrictions and border closures were also put into place. For the purpose

of ensuring that locals complied with the lockdown directives, thousands of police officers and military personnel were stationed at checkpoints.

Although the virus's initial rate of transmission in the Philippines was moderate, public health measures failed to stem the infection's spread. In order to stop further transmission, the Philippine government implemented broad preventive measures, such as an enhanced community quarantine in areas where COVID-19 cases were common (Office of the President of the Philippines). Strict house quarantine and lockdowns were also implemented in areas with positive COVID-19 case on January 30, 2020 (Department of Health Republic of the Philippines). However, as of April 27, 2020, 7579 COVID-19 cases had been confirmed, and the number of cases is still growing rapidly (JHU CSSE. 2020).

The Vaccine Alliance is providing immediate funding to healthcare systems so that countries can provide protection for medical personnel, conduct crucial surveillance and training, and purchase diagnostic testing. GAVI'S 2021. With COVID-19 now present in almost all Gavi-eligible nations, Pampanga. In order to adjust immunization programs, restart them, rebuild community trust, and catch up with individuals who lagged both before and during the epidemic, countries will benefit from maintaining, restoring, and enhancing Gavi. It will also make investments to strengthen immunization programs, making them stronger and more receptive to the needs of the communities they serve. Gavi is co-leading COVAX as part of the international effort to guarantee an equal and successful response to COVID-19. Gavi will assist in identifying and swiftly accelerating the development, manufacture, and delivery of COVID-19 vaccinations using its particular knowledge to make sure that everyone who need them receives them. Tarlac Province started a thorough early surveillance program. The province took advantage of COVID-19's delayed arrival in Tarlac to learn more about the disease and better prepare its healthcare personnel through instruction, training, and the purchase of personal protective equipment (PPE). Early precautions were screening visitors at the provincial border, which involved keeping track of those who came and went because Tarlac is one of the biggest transportation hubs for the northern Philippines. Case management and infection control are now at the forefront of Tarlac's response to COVID-19 because to the PHC system. While the broader Philippines has so far verified almost 51,000 cases, these measures have been crucial in keeping the number of positive cases to

about 47. It has been possible to establish effective case management and infection control by coordinating provincial-wide initiatives and implementing grassroots, neighborhood-focused tactics.

Thus, being a Public Health Nurse and a Front liner during this Covid-19 pandemic the research evaluated Prevalence of COVID-19 pandemic in the Province of Tarlac. This is in response to improve the quality of service in times of pandemic especially to the healthcare providers, in order to prevent further transmission of COVID-19 virus in the province, through this study, Provincial Government of Tarlac and Provincial Health Care providers would be enlighten on the current situation in order to determine the right preventive measures in Prevalence of COVID-19 in the Province of Tarlac.

Statement of the Problem

This study is focus on finding the Prevalence of COVID-19 in the Province of Tarlac.

Specifically, it was sought to answer the following questions:

1. How is the prevalence of COVID-19 in the province of Tarlac be described in terms of:
    1.1 Age
    1.2 Sex
    1.3 Health Status
    1.4 Comorbidities
    1.5 History of Exposure
2. What is the prevalence rate of COVID-19 among Local Government Units in the province?
3. What are the problems encountered by the Local Government Unit in managing COVID-19?
4. What intervention measures can be proposed to prevent the spread of COVID-19 in the province?
5. What are the implications of Health Management in the study?

Significance of the Study

The results of this study may benefit the following sectors: Department of Health, Provincial Health Office and future researchers.

To the Department of Health, the findings on the demographic profile of the respondents will fill in as an instrument in figuring new strategy with the prevalence of COVID 19 in the Health Care facilities.

To the Provincial Health Office, the result of the document analysis on prevalence will serve as a basis of to evaluate the current standing of the COVID 19 cases in terms of providing services. Hence, can be a benchmark in contrasting further monitoring and assessment.

To the Health Workers, this can be a guide for them to determine the challenges concerning the program and this will help them develop their plans and strategies towards the pandemic COVID 19.

To the Local Government Unit, this study will serve as a template for identifying the issues. in the prevalence of COVID-19 pandemic in the local government to further increase the awareness of every municipality in strictly implementation of COVID-19 protocol.

To the Inter-Agency Task Force, this will be used as tool to hereby adopts and approves the COVID-19 Mass Testing Guidelines after exhausting all options to improve the nation's COVID-19 testing capacity.

Future Researchers, the significant difference on the client satisfaction can serve as a tool in expanding target groups in similar focal interest in providing genuine and eminence distinguish new and various routes in improving and giving exceptional services and to make more successful approach in managing the health concerns of the general population.

Scope and Delimitations

The study focused on the evaluation of the Prevalence Rate in Province of Tarlac thru the Provincial Epidemiology and Surveillance Unit under the Provincial Health Office of Tarlac. Descriptive research designs are useful for outlining, contrasting, assessing, and comprehending many elements of a study problem. Data Collection is through the use of Provincial Epidemiology and Surveillance Unit Database thru the use of Case Investigation Form. Furthermore, this study is delimited to age, sex, municipality, health status, comorbidities and history of exposure.

Definition of Terms

The following definitions and operational presentations of terminology used in the study are provided for your further understanding.

Comorbidities. It refers to a disease or medical condition that is simultaneously present with another or others in a patient.

Health Status. Refers to the existence of medical issues (both physical and mental), claims experience, health care utilization, medical history, genetic information, proof of insurability, and evidence of impairment.

History of Exposure. A patient's exposure history offers hints that lead the doctor to look into the likelihood of harmful exposure.

Prevalence Rate. Is it the percentage of people in a population who have a specific illness or trait at a specific time or over a specific amount of time? In contrast to incidence, which only counts newly discovered cases, prevalence includes all cases—both new and preexisting—in the population at the time in question.

Chapter 2

REVIEW OF RELATED STUDIES AND LITERATURE

This chapter offers literature, theories, concepts, research findings, journals, and studies relevant to the investigation being conducted from both domestic and foreign sources. Discuss the pertinent literature with a

focus on the relationships between a few COVID-19-related variables. The researcher used the available tools, including written materials like books, journals, theses, and other printed works.

Related Literature

The greatest method to keep kids safe, according to Kerkhove (2021), is to focus on prevention. All throughout the world, we want to stop as many infections as we can. And doing everything is the goal. The entire set of strategies that we frequently discuss also apply to children. ensuring that children wash their hands properly with soap and water, sing the songs to create enough bubbles, and ensure that their hands are truly clean. Or apply a rub that contains alcohol. Ensure that they sneeze into their elbow as per respiratory etiquette. Even my youngest child, who is now two years old, will sneeze and cough into his elbow. But as kids become older, these are healthy behaviors to establish.

Numerous preventive measures were taken in reaction to the COVID-19 global pandemic, according to Paital et al. (2020). There are some nations where the government has enacted a global curfew. In order to stop the spread of COVID-19, the media also promoted the hashtag "#StayAtHome." Although a vaccine is currently being developed, there is still no effective cure for COVID-19 infections. The only choices for recovery are inpatient hospitalization and intensive care management. Policymakers and public health experts must predict the virus's duration and eventual size in each country in order to stop the outbreak from spreading further given the lack of initial treatment options.

In response to the global COVID-19 outbreak, certain preventative measures were put into place. There are some nations where the government has enacted a global curfew. In order to stop the spread of COVID-19, the media also promoted the hashtag "#StayAtHome." Although a vaccine is currently being developed, there is currently no effective treatment for COVID-19 infections. Hospitalization and intensive care management are the only available therapy options at the moment. Policymakers and public health experts must predict the virus's duration and eventual magnitude in each country due to the lack of initial treatment options in order to stop the outbreak from spreading further (Paital et al., 2020).

Therefore, it is crucial to comprehend how the general population feels about COVID-19 and how they react to it in order to plan and carry out successful pandemic responses in LMICs, especially by assessing current public health messaging and communication strategies. LMIC households may not have consistent access to sources of knowledge about the causes of disease, leaving them ill-prepared to lower their risk of infection during expanding epidemics (Dodson, 2019).

Human-to-human transmission is currently the main source of SARS-CoV-2 transmission, which is causing the virus to spread more quickly. SARS-CoV-2 is spread by sick individuals by droplets released during coughing or sneezing (Y. Han and H. Yang 2020). Furthermore, it has been established that COVID-19 has a reproductive number (R0) of 1.4 to 2.5 and that SARS-CoV-2 may survive for at least 3 hours in aerosols (produced by a nebulizer). R0, however, was estimated by additional research to be 3.28. 2020 (Y. Liu et al.).

Individuals with COVID-19 experience different symptoms. Sometimes it cannot even show any symptoms. Fever, dry cough, tiredness, nausea, vomiting, sore throat, loss of taste or smell (or both), nasal congestion, conjunctivitis, headache, various skin rashes, diarrhea, shivering, and dizziness are some of the early symptoms of COVID-19 infection. Less frequently occurring signs include severe shortness of breath, low blood oxygen levels (hypoxia), lung damage, and organ failure (Gavriatopoulou, M. et al. 2020).

Overly optimistic and undervalued pandemic predictions could frighten the public or give them a false sense of security. People are further in danger of contracting an infection because there is a lack of basic knowledge regarding how to stop virus exposure and transmission (Bedford J. et al. 2020).

According to Vallejo BM, Ong RAC, the Philippines moved its attention from legislation requiring adequate facial coverings, physical distance, and hand hygiene between October 2020 and March 2021 in place of community quarantine restrictions. 2020. They offer a data-driven COVID-19 model that takes into account age structure, various contact patterns, time-varying testing rates, and macro- and micro-distance in order to comprehend the Philippines pandemic during the first wave of transmission.

In addition to stroke, encephalitis, psychosis, and nerve damage, Kumar (2020) lists COVID-19 disease's other severe and unusual neurological side effects. COVID-19 is brought on by a cytokine storm brought on by acute respiratory distress syndrome (ARDS). The "cytokine storm" is an aggressive inflammatory reaction that is defined by the release of massive numbers of cytokines. It is brought on by the host's immune response to the SARS-CoV-2 virus and is associated with lung damage, multiple organ failure, and a poor COVID-19 prognosis.

Additionally, lower middle-income nations (LMICs) are required to provide emergency aid to vulnerable populations, such as impoverished individuals and families. Misinformation can prevent public health actions, which is another cause for concern. WHO Director-General Dr. Tedros Adhanom Ghebreyesus said, "We're not only fighting an epidemic; we're fighting an infodemic" (WHO 2020).

Coronavirus is an RNA virus with particle sizes ranging from 120 to 160 nanometers, according to S. Riedel et al. (2019). The main hosts of this virus are animals, especially bats. Prior to the COVID-19 outbreak, six different coronavirus types were capable of causing human infection: SARS-CoV, betacoronavirus HKU, alphacoronavirus 229E, beta coronavirus HK43, alphacoronavirus NL63, and beta coronavirus OC43 Middle East Respiratory Coronavirus Syndrome (MERS-CoV).

As per Cui, J.; Li, F.; and Shi, Z.L. (2019) The genome is encased in an envelope after the nucleocapsid protein (N) creates a helical capsid around it. There are three structural proteins that are connected to the viral envelope. The membrane protein (M) and envelope protein (E) mediate virus assembly, while the spike protein mediates virus entry into host cells (S). These structural proteins have a crown-like appearance because of the spike-like structure of the viral surface.

Similar to SARS-CoV, the viral RNA genome is believed to be released into the cell's cytoplasm and translated into two polyproteins and a structural protein when the virus enters the cell, according to E. De Wit and colleagues (2016). After then, the viral genome will begin to grow. The glycoprotein of the freshly formed virus envelope enters Golgi cells or the endoplasmic reticulum membrane. Nucleocapsids are made up of RNA genomes and nucleocapsid proteins. Viral particles will form in the golgi cells and endoplasmic

reticulum. In the last phase, virus-containing vesicles will link to the plasma membrane, releasing additional viral components.

As stated by Burrell C. According to et al. (2016), SARS-CoV-2 is a member of the Nido virales order and family Corona viridae. Corona virinae and Toro virinae are the two subfamilies of the family, and members of the Corona virinae subfamily are divided into four genera: Human coronavirus (HCoV)-229E and HCoV-NL63 are examples of Alpha coronavirus; Beta coronavirus includes HCoV-OC43, SARS-HCoV, HCoV-HKU1, and Middle Eastern respiratory syndrome coronavirus (MERS-CoV).

According to Haw NJL et al., one of the countries in the Western Pacific Region that is most badly impacted by COVID-19 is the Philippines (2020). The effectiveness and sensitivity of micro distancing guidelines are examined, and the epidemiology of COVID-19 during the first wave of transmission in the Philippines is also looked at. A initial wave of transmission that peaked in August 2020 in the LMIC of the Philippines caused over 580,000 confirmed illnesses and over 12,000 fatalities. The Philippines is currently experiencing a second, more severe wave of transmission, which is not being examined in this study. Numerous National Provider Identifiers (NPIs) have been implemented throughout the nation, with variations in the length of the limitation and its severity by location. One of the NPIs used is the implementation of various levels of community quarantines, including the closing of schools.

Between January 27 and February 16, Cebu City had a total positive rate of 13% and an attack rate of 16.6 percent, according to Macasero (2020) of OCT A Research. The percentage of people that test positively out of all the people who take tests during a specific time period is known as the positivity rate. The percentage of the population who test positively overall is known as the attack rate. Health agencies view an attack rate of above 7% as high risk, while a positivity rate of 5% is thought to signal that a locality has the pandemic under control. On February 18's Wednesday evening, Cebu City reported 245 additional cases. Out of the 15,308 COVID-19 cases in the city, there are now 2,668 active cases.

Leachon (2021) According to the Department of Health, the more contagious Delta form is currently being found in three of every four newly reported COVID-19 cases. A country should have a positive rate of no more than 5% to be considered in control of an outbreak, according to the World Health Organization

(WHO). In the National Capital Region, the Delta variety of concern had been found, Health Under-Secretary Maria Rosario Vergeire told reporters in Manila. Vergeire highlighted that reported new COVID-19 cases in Metro Manila, which makes up roughly a third of the nation's economy, had been rising recently, rising by an estimated 13%. Despite a month-long shutdown that started on August 6, the increase in instances is continuing.

Austria and Pasiliao (2021) As of August 31, Pangasinan had a total of 16,266 recoveries out of the 20,175 confirmed Covid-19 cases, with a total of 766 fatalities and 3,143 active cases. Until September 7, Pangasinan, with the exception of the three places that are subject to a higher quarantine status, remained under modified general community quarantine (MGCQ). The provincial government made this announcement on its website on adding that it was still awaiting the National Inter-Agency Task Force for the Management of Infectious Diseases' (IATF-EID) judgment on its request to transition to a stricter general community quarantine, the statement was made on Tuesday afternoon (GCQ). The national government has been requested by the Pangasinan Inter-Agency Task Force for the Prevention and Control of Covid-19 to implement GCQ with tougher restrictions from September 1 to September 15 over the whole province, including Dagupan City. In a letter to the IATF-EID last week, Governor Amado Espino III said that if the quarantine risk rating is raised to GCQ with more restrictions, the province will be able to implement stronger regulations to slow the rapid spread of the disease.

Malig (2021) On September 11, 439 new cases and 26 fatalities were reported in Pampanga. 37,445 COVID-19 cases have been reported in the province overall since the epidemic started last year. 29,881 of them have recovered, while 1,897 have passed away. As of Sunday, there were 1,822 active cases in the City of San Fernando, followed by 604 cases in Guagua Town and 535 cases in Mabalacat City. The number of COVID-19 cases that are still active in Pampanga has surpassed 5,000 since last week. Residents are being urged by the province government, which has been enforcing rigorous border restrictions, to adhere to basic health standards such adequate face mask and face shield use and physical separation.

The governor of Tarlac Province, has emphasized numerous times that people' health is one of the top governmental concerns, according to Dr. Role (2020), Tarlac Province undertook intensive early monitoring

as COVID-19 expanded quickly in Wuhan, China, and started to show up in the Philippines. The province took advantage of COVID-19's delayed arrival in Tarlac to learn more about the disease and better prepare its healthcare personnel through instruction, training, and the purchase of personal protective equipment (PPE). Early security efforts were screening visitors at the provincial border, which involved keeping track of those who came and went because Tarlac is one of the biggest transportation hubs for the northern Philippines. Case management and infection control are now at the forefront of Tarlac's response to COVID-19 thanks to the province's Primary Health Care System. While the broader Philippines has so far verified almost 51,000 cases, these measures have been crucial in keeping the number of positive cases to about 47. It has been possible to establish effective case management and infection control by coordinating provincial-wide initiatives and implementing grassroots, neighborhood-focused tactics.

Although there are several studies on precautionary actions in other nations, there is a critical paucity of scholarly study on the Philippine COVID-19 crisis. On March 17, 2020, a six-month community quarantine was imposed on the nation. (CSIS, 2020). On July 16, 2020, it was determined that the Philippines had the most active cases in Southeast Asia. Dr. Ramos, as of July 17, 2020, the Philippine Department of Health (DoH) reported 1,643 fatalities and 61,266 confirmed cases of the virus in the Philippines (2020).

Our study has some restrictions. Some variables were lacking because of the retroactive nature of our study and dependence on the CIF's data that was readily available. Also unavailable were specifics regarding the patients' experiences in the wards and the care they got. When interpreting the findings in the context of the general community, care should be used because they come from an infectious disease referral hospital. Finally, we present a number of sociodemographic and clinical factors linked to higher COVID-19 mortality among hospitalized patients in Metro Manila, the Philippines. Our findings confirm the national COVID-19 vaccine recommendation for the nation, which gives priority to healthcare workers, the elderly, and those with comorbid conditions and immunodeficiency states.

Related Studies

A. Foreign

The severity of COVID-19 symptoms varies with age and preexisting comorbidities, and can be minor to severe. In 81% of cases, people with COVID-19 disease in China reported only minor symptoms. The emergence of serious health issues in 14% of cases, and severe illness in 5% of instances. In contrast to previous results, it was found that pediatric patients experienced only minimal symptoms, such as fever and cough, and recovered fast. In one study, 80% of the patients started off with a low temperature, 50% of these patients had a high fever, and in 20% of the instances, there was no fever at all. Myalgia, fatigue, and coughing were also evident. The COVID-19 diagnosis was overshadowed by the fact that few individuals experienced issues with their cardiovascular, neurological, or digestive systems (Fang, Y. et al. 2020).

This study was about the possible signs and symptoms of COVID-19 positive, which is related to the pass Global Pandemic, Fang, Y. et al.(2020) was focused to the effect of Covid-19 in the body of one person.

Even if it's possible that human-to-human transmission began earlier, Yu W. Tang G., too. According to information supplied by (2020), the virus entered the market via an unnamed source, where it spread more fast. Person-to-person transmission has been confirmed in groups of affected family members and medical personnel; after January 1, fewer than 10% of patients had market exposure, and more than 70% of patients had none at all. The main method of transmission between people is thought to be respiratory droplets that are expelled by an infected individual when they cough or sneeze among close contacts. Given that SARS-CoV may survive on surfaces for up to 96 hours and other coronaviruses for up to 9 days, feces may be a substantial source of transmission. The mentioned study was similar to the current study because the research was also about the signs and symptoms of a Covid-19 positive. Likewise, Yu W and Tang G, (2020) is focused on the transmission process of covid-19 to a one person to another.

According to Robert C. et al., respiratory droplets generated when an infected individual coughs or sneezes among close contacts are thought to be the main method of person-to-person transmission (2020). It was then found that the researchers had not directly interviewed the patient, who did, in fact, exhibit symptoms prior to transmitting the disease, regardless of whether there is asymptomatic transmission. Similar claims were made in a more recent study, although any such study would not have been feasible given that SARS-CoV has been shown to persist on surfaces for up to 96 hours and other coronaviruses for up to 9 days.

This study was similar to the past studies which about the asymptomatic transmission prior to COVID-19 diseases, Rothe C. et al. (2020), is focus on the observation of infected person if it is asymptomatic or symptomatic.

More people have died from the new coronavirus of 2019 (COVID-19), which is still in the early stages of a global pandemic, than from the coronavirus that caused severe acute respiratory syndrome (SARS). The index case is thought to have happened on December 8, 2019, in Wuhan, China. Since that time, cases have multiplied both domestically and abroad. The first suspected case in the Philippines was examined on January 22, 2020, and as of March 1, there have been 633 reported suspected cases. According to the Department of Health of the Republic of the Philippines, there were 183 of them in the National Capital Region of Manila, with many of them being admitted to San Lazaro Hospital, the country's main referral center for infectious diseases. They detail the clinical and epidemiologic characteristics of the first two confirmed COVID-19 cases in the Philippines as well as the first mortality outside of China (Zhu N. et al. 2020). This study was mention on where, when and what the COVID19 virus has been started and how many people was died with that unknown disease. (Zhu N. et al. 2020) is focus on the data where the unknown disease has started and what is the effect in the human body.

Apparently, Some case reports indicate that asymptomatic careers are passed, although the precise mechanism is uncertain, according to D. M. Yan Bai et al. (2020). A history of close interaction with COVID-19 patients is frequent in cases of transmission from asymptomatic careers. There is evidence of SARS-CoV-2 infection in babies, according to several studies. On the other hand, definitive proof of vertical transfer from expectant moms to the fetus has not been found. Even if it were conceivable, there is little chance of vertical transmission, according to the findings.

This mentioned study was similar to the pass study which the COVID-19 is transmitted in every person, which is more delicate to the pregnant woman. D. M. Yan Bai et al. (2020) is focus on the vertical transmission to a pregnant woman and slim.

Amniotic fluid, umbilical cord blood, and breast milk from COVID-19-positive mothers all tested negative for virological contamination. According to the results of biopsy tests on gastric, duodenal, and rectal

epithelial cells, SARS-CoV-2 has been found to infect the gastrointestinal system. Even if the virus is absent from airway samples, it can still be detected in feces. In reality, 23% of people who claim to have one have a virus in their feces. These two observations are consistent with the fecal-oral transmission hypothesis (F. Xiao et al. 2020).

This study is connected to the past study which the COVID-19 Virus affects the body of a pregnant woman which is infect the digestive tract of pregnant woman, F. Xiao et al. (2020) is focus on the fecal-oral-transfer to a pregnant woman which is detected by feces.

According to S, considerable environmental pollution was observed in the restrooms and rooms of COVID-19 patients with moderate symptoms. W X Og and others (2020). Viruses can be found in other places besides doorknobs, washrooms, light fittings, blinds, cupboards, and blowers, but not in air samples. With the exception of areas where lots of people congregate, such as the vicinity of mall patrons' entrances and patients' and visitors' entrances to hospitals, the general populace in the public area outside the hospital has a low concentration of SARSCoV-2.

This study was the COVID-19 is an Unknown disease that we cannot say how it has been transmitted to others. S. W. X. Og et al. (2020) focus on possible cause of transmission of COVID-19 to the thing that positive person contaminate.

Another research performed by Sean Ong (2020) produced similar outcomes. The results of the study in the hospital room showed that SARS-CoV2 concentrations existed in 13 out of 15 positive rooms before cleaning, and in three out of five positive toilets, particularly on the toilet seat, faucet, and door handle. All air samples were found to have zero SARS-CoV-2 amounts. Indicating that the droplet may be in an unexpected position, positive findings for the virus were also found in specialized treatment rooms with unique airflow in the air exchange room. As a result, we take care to regularly use disinfectants to clean the air ventilation system. It should be noted, however, that it is unknown whether the virus's RNA particles are still alive and may infect humans or culture. However, for the purpose of safety and to limit the danger of infection, nurses must consider how to manage regions that may be unanticipated.

This study is connected to the past study which the COVID-19 virus is transmitted through air born, or through contact to a positive patient by holding or using the things that has already contaminated. Sean Ong (2020) is focus on the transmission on the area that the positive patient has been use while they are in a hospital cause its already contaminated.

Huang et al. (2020) examined the psychological correlates of possible worry among FDHs in Hong Kong during the COVID-19 outbreak. FDHs (n = 295) were chosen by purposeful sampling and invited to participate in a cross-sectional study. The following factors were assessed: anxiety symptoms, coping skills (social support, information literacy related to COVID-19), COVID-19-specific worries (contracting COVID-19, losing your job if you contract COVID-19), and COVID-19-specific fears. The lack of protective gear (OR = 1.58, 95 percent CI: 1.18, 2.11), an increased workload (OR = 1.51, 95 percent CI: 1.02, 2.25), and concerns about getting COVID-19 and losing your job (OR = 1.32, 95 percent CI: 1.04, 1.68) were all found to be significantly associated with probable anxiety in multivariate regression. This was one of the first studies to demonstrate how the nature of the job and issues related to the COVID-19 affected FDHs' anxiety levels.

The study which is the signs and symptoms of a positive patient can influence their job. Huang et al. (2020) focus on the significance of intervening to discuss employment-related rights and pandemic-specific issues among FDHs in Hong Kong amid pandemic scenarios.

The effectiveness of quarantine and isolation determines the trend of COVID-19 epidemics in the final stage of the current outbreak in China, according to a study. Suspected and quarantined patients play a significant role in the epidemics' trajectory. The anticipated total numbers of suspicious cases and cases placed in quarantine have practically stopped, their inflection points have been reached, and the epidemic's peak is rapidly approaching. Model-free and model-based techniques predict that the rates of effective reproduction and new infections are declining, but the rate of newly reported cases is rising. Existing models have ignored the fact that the majority of contaminated patients have been quarantined or labeled as dubious. Since the outbreak is yet unknown, it is crucial to continuously enhancing the mainland China quarantine and isolation approach as well as the detection rate Biao Tang et al (2020).

This study is correlated to the past study which is the cases of Covid-19 is grow more and the sources of data is the list of suspected cases in every municipalities/City. Biao Tang et al. (2020) is focus on the assessment of epidemics' trajectory largely determined by quarantined and suspected patients.

A new severe acute respiratory syndrome coronavirus 2 was found to be the source of an outbreak of coronavirus illness in Wuhan City, Hubei Province (SARS-CoV-2). The epidemic was deemed a Public Health Emergency of International Concern by the World Health Organization on January 30, 2020. 49,053 cases with laboratory confirmation and 1,381 fatalities had been reported internationally as of February 14, 2020. Many countries have put in place a variety of control measures in response to the perceived risk of contracting a disease. To gather knowledge on the virus and the present epidemic, they conducted a literature assessment of data that was easily accessible to the general public. Harapan & Itoh et al. (2019) cover the causal agent, pathogenesis and immunological responses, epidemiology, diagnostics, therapy, and management of the condition, as well as control and prevention methods, in their assessment of the literature.

This study mention is related to the past study based on the outbreak of covid-19 virus which affect a lot of country and cause of death of other people in the whole world. Harapan & Itoh et al. (2019) is focus on the study of outbreak of covid 19 and how did it start and what is the control and prevention of spreading of the virus.

Perceived severity significantly increased when COVID-19 was understood. The tendency of people to adhere to prescribed prescriptions and subsequently submit to treatment protocols has been linked to behavioral control perception and health understanding. A key predictor of many medical activities, including medication adherence, is perceived behavioral control. However, make sure to emphasize that it is the patient's responsibility to take their medication as prescribed. Additionally, skipping preventative care is linked to worse results in many chronic medical disorders. This is because persons with poor health literacy often have misconceptions about and are unaware of the instructions for prescription pharmaceutical goods (Berkman et al.). As a result, patients frequently misuse or disregard prescribed prescription regimens owing to ignorance (Berkman et al., 2020).

The study made by Berkman et al., (2020) are similar to the past study because the study focused Health literacy and perceived behavioral control have both been found to be reliable indicators of an individual.

Our study has some restrictions. Some variables were lacking because of the retroactive nature of our study and dependence on the CIF's data that was readily available. Also unavailable were specifics regarding the patients' experiences in the wards and the care they got. When interpreting the findings in the context of the general community, care should be used because they come from an infectious disease referral hospital. Finally, we present a number of sociodemographic and clinical factors linked to higher COVID-19 mortality among hospitalized patients in Metro Manila, the Philippines. According to Zhou et al., "Our findings are consistent with the national COVID-19 vaccination recommendation of the country, which gives priority to healthcare workers, the elderly, and individuals with comorbid conditions and immunodeficiency." Al. (2020). (2020).

This study is related to the past study which is the data is being gathered in every hospital. Zhou ET. Al. (2020) is focus on the CIF that the hospital uses to get the information of the patient before they do the RTPR test to the suspected positive patients.

B. Local

They conducted a secondary analysis on the first 500 SLH inpatients with COVID-19 who had been confirmed in the lab between January 25, 2020, and October 24, 2020. Using COVID-19 case investigation forms (CIF), the SLH Epidemiology Department provided anonymous data on illnesses that were confirmed and suspected to exist within the hospital (SLH-ED). We only included participants in our study who had complete case categorization and patient outcome data. Gregorio and Glenn (2020).The study of Gregorio and Glenn (2020) is focus on data information of the patient which is related on the past study which the positive patient will undergo RTPCR test to know if they are positive or negative.

Clinical status was rated as asymptomatic, mild, moderate, and severe in accordance with the Philippine Department of Health's Interim Guidelines on the COVID-19 Disease Severity Classification and

Management. The most recent laboratory data on cycle threshold (Ct) value were acquired from the hospital's laboratory department. They considered individuals who were listed in the CIF as confirmed COVID-19 instances for the analysis, regardless of the presence or absence of clinical signs and symptoms, as defined by the Department of Health (DOH) of the Philippines as "any individual who is laboratory-confirmed for COVID-19 in a test conducted at the national or subnational reference laboratory, and/or officially accredited laboratory testing facility." For the purposes of the analysis, we treated individuals who were identified in the CIF as confirmed COVID-19 cases. We consulted the SLH-ED specialists to clarify any unclear data in the dataset (Cameron et al., 2020).

This study Cameron et al., 2020 is focused on the availability of laboratory data cycle which the specimen of one suspected positive patient will be check and get the result which is related to the past study that the suspected positive patient will undergo a Rapid test and the given information will get, weather you are child or adult.

In order to determine descriptive statistics of cases, fatalities, and recoveries, the study analyzed sociodemographic information and clinical presentation. We utilized percentages and proportions to characterize the characteristics of the study population. The means (SD) and medians (interquartile range), if the continuous data had a normal distribution, were used to describe the data. We calculated the number of days from the onset of symptoms to hospital admission, as well as the length of stay at the hospital, to death or discharge. Categorical variables were analyzed using 2 testing. All deaths, with the exception of one, occurred in this group, hence the examination of mortality connections was restricted to non-healthcare workers. Utilizing Stata IC 16.1, each analysis was carried out (Nelson 2020). This study Nelson 2020 is focus on the breakdown of cases, fatalities, and recoveries by sociodemographic characteristics and clinical presentation which is related to the past study that has been evaluated that the effect of COVID-19 has a severe effect to the body.

They performed a phone survey of 909 residences in Cox's Bazar, which were chosen from a panel of Rohingya refugees and the local population. The study's focus was on the incidence of COVID19 symptoms in refugee and host communities and their correlates with current and pre-COVID19 living situations. They

evaluated COVID19 risk using a symptom checklist in accordance with WHO guidelines. They included inquiries regarding jobs, food security, and re-immigration. Additional questions regarding health knowledge and behaviors were asked of a randomly selected subsample (n=460). The results show that 134 percent of people living in host towns and 246 percent of people living in camps, respectively, had at least one COVID19 symptom. Most people who sought medical attention went to a pharmacy (423 percent in camps, 696 percent in host communities). Despite the fact that most respondents claim to have good respiratory hygiene, 767 percent of campers and 522 percent of the host community claim to have gone to a group prayer in the preceding week. Another 474 percent of the camps and 344 percent of the host community attended a nonreligious social event.

This study Lopez-Pena P. et al. (2020) is focus on the returning migrants, respondent mobility, and food insecurity are all major predictors of COVID19 symptoms. Pharmacies and religious leaders appear to be viable sources of lifesaving information which related to the past study about Covid-19 Virus in every country.

The study by Prasetyo and Castillo et al. is one of the first to look at the variables influencing how COVID-19 preventative efforts are considered as effective during the global pandemic (2020). The 63 questions in the online survey received responses from 649 Filipinos overall. The causal links between the latent variables were determined using structural equation modeling (SEM).The results showed that perceived severity and vulnerability are directly impacted by understanding COVID-19. Additionally, follow-through intention was significantly influenced indirectly by perceptions of fragility and harshness. Real and adaptive behavior was directly influenced by the intention to follow, which in turn influenced perceived efficacy. The combined PMT and extended TPB employed in this study are recommended for use in evaluating the perceived effectiveness of COVID-19 initiatives in other nations currently dealing with the pandemic.

The objective of this study by Prasetyo, Castillo, et al. (2020), which is connected to earlier research on the prevention of the Covid-19 pandemic, is on how perceptions of vulnerability and harshness during the worldwide Covid-19 pandemic have an indirect impact that is considerable.

It is believed that the coronavirus (COVID-19), a highly contagious sickness that threatens the whole human population worldwide, will be the third pandemic of the twenty-first century (Perlman, 2020). A novel SARS-like coronavirus was discovered in December 2019 following the emergence of the Middle East respiratory syndrome coronavirus (MERS-CoV) in Saudi Arabia and the severe acute respiratory syndrome coronavirus (SARS-CoV) in China. When an unusual infection was found in a group of patients who were accustomed to pneumonia by the local hospitals, the virus was connected to a wholesale seafood market in Wuhan, China (Zhou et al., 2020).

The Coronavirus (COVID-19), a highly contagious disease that threatens the global human population and kills a significant number of people, is the subject of the study by Zhou et al. published in 2020. This work is related to a previous investigation into the origins of the COVID-19 virus.

The epidemic is better understood and seen by healthcare workers, who also frequently show modest levels of concern. The way in which people perceived COVID-19 had a big direct impact on how the Philippines' preventive efforts were seen. Contrarily, research from Ethiopia advised thorough training for medical professionals due to their lack of awareness and false assumptions regarding the Ebola virus. A survey carried out in Trinidad and Tobago during the H1N1 pandemic in 2016 revealed that a sizable section of the general people was unaware about the seriousness of the virus and the preventative measures to deal with it (Johnson and Hariharan, 2019).

This study Johnson and Hariharan, (2019) is focus on the intensive preparation of heath care practitioners to exhibit a greater understanding of pandemic, and the precautions to take in order to deal with the outbreak cause by Covid-19 virus which is related to the past study regarding on the prevention of Covid 19 virus in the Philippines.

This report describes the clinical and epidemiological characteristics of the first 500 confirmed COVID-19 cases admitted to an infectious disease referral hospital in Metro Manila. There were observable differences in the characteristics, symptomatology, and outcomes between healthcare and non-healthcare workers. Due to changes in policy about admission and access to testing in the early stages of the outbreak, some frontline healthcare workers with minimal symptoms were admitted to hospitals. In addition to cough,

fever, and breathing issues, non-healthcare professionals also had a higher rate of pneumonia and more severe sickness (Adrukiz 2020).

The study's conclusions, as summarized here, are extremely pertinent to my proposed research topic. According to the research, the current COVID-19 epidemic represents an unheard-of disaster in healthcare as well as social and economic development. It underlines the harsh fact that CoVs are continually changing and have the genetic flexibility to develop into highly harmful organisms in people. A review of CoV illnesses and their molecular virology is presented at the outset of this study, stressing the similarities and differences between SARS-CoV-2 and its highly pathogenic and low-pathogenic cousins. The pathogenesis of SARS-CoV-2 and other CoVs is then covered, along with how they interact with hosts with an emphasis on the human immune response. In the past, it was hypothesized that people who had caught the coronavirus in China would have traveled to Wuhan because live animals were sold there. Chinese researchers later learned that the virus was transmitted from person to person. The new virus was initially known as Wuhan coronavirus or 2019 novel coronavirus (2019-nCoV) by Adnan Shereen et al (2020).

Conceptual Framework

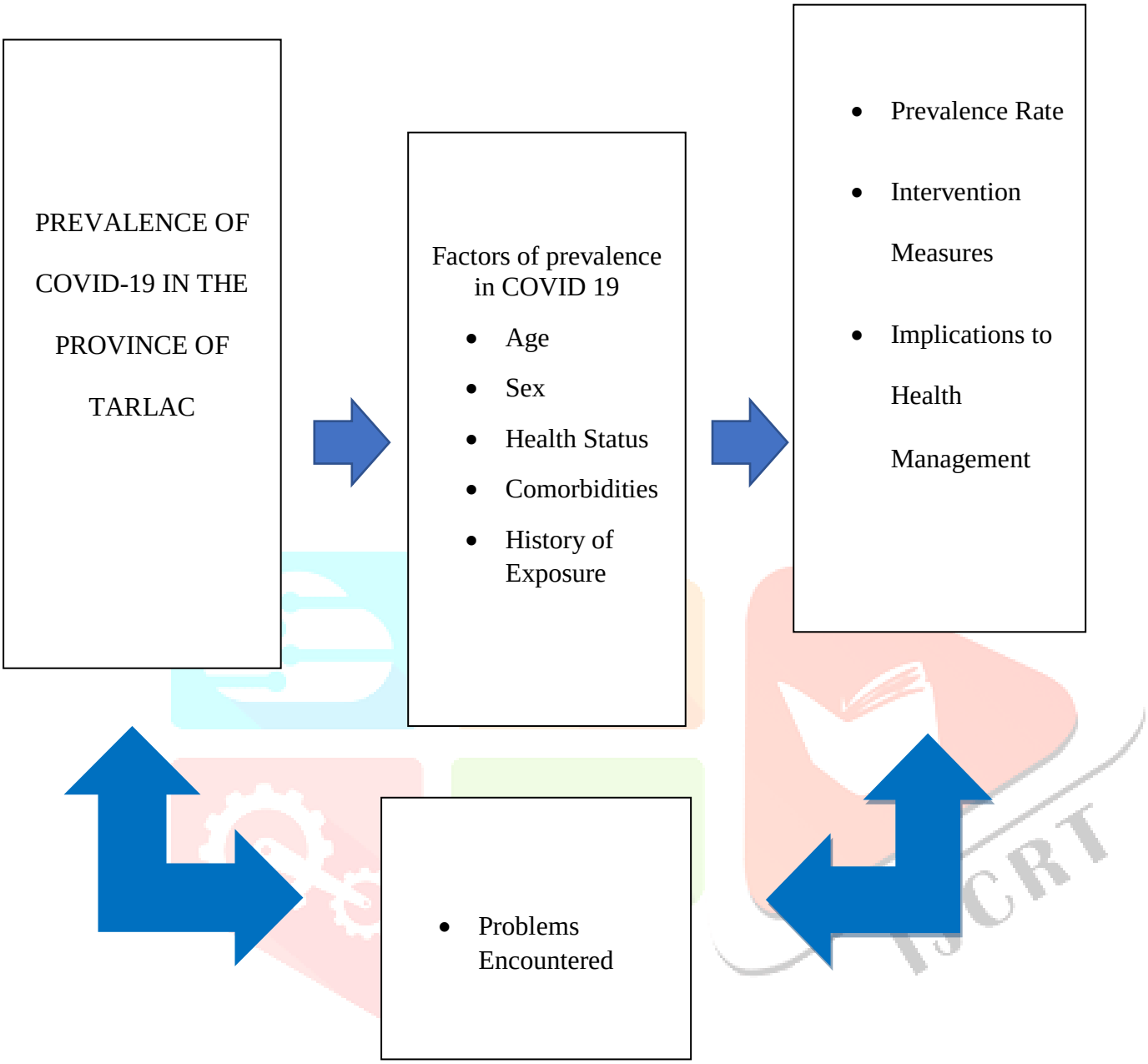


Figure 1: Paradigm of the Study

Chapter 3

METHODS OF RESEARCH AND SOURCES OF DATA

This chapter outlines the research methodology, the study's topic, the data collection process, the research tools or instruments, and the statistical analysis of the collected data.

Descriptive Research Design

Covid 19 prevalence in the province of Tarlac was determined by the study using the descriptive research approach. Descriptive data evaluative analysis is crucial because it offers a great amount of data on which clinical judgment can be focused and supports the present facts about the type and number. Furthermore, there are some restrictions on our analysis. Some variables were lacking because of the retroactive nature of our study and dependence on the CIF's data that was readily available. Also unavailable were specifics regarding the patients' experiences in the wards and the care they got. Since the results are from an infectious illness referral hospital, caution should be taken when interpreting them in the context of the general population. Finally, we list many clinical and sociodemographic characteristics that are associated with higher COVID-19 mortality among hospitalized patients. Our results support the national guideline for the COVID-19 vaccine, which prioritizes healthcare personnel, the elderly, and people with comorbid illnesses and immunodeficiency states.

Research Locale

The Tarlac Province undertook the study to assess the strategy used in the province during the present COVID-19 crisis. As of October 19, 2021, there have been 681 deaths, 15, 758 recovered cases, 17, 164 positive results, and 725 active cases in the province.

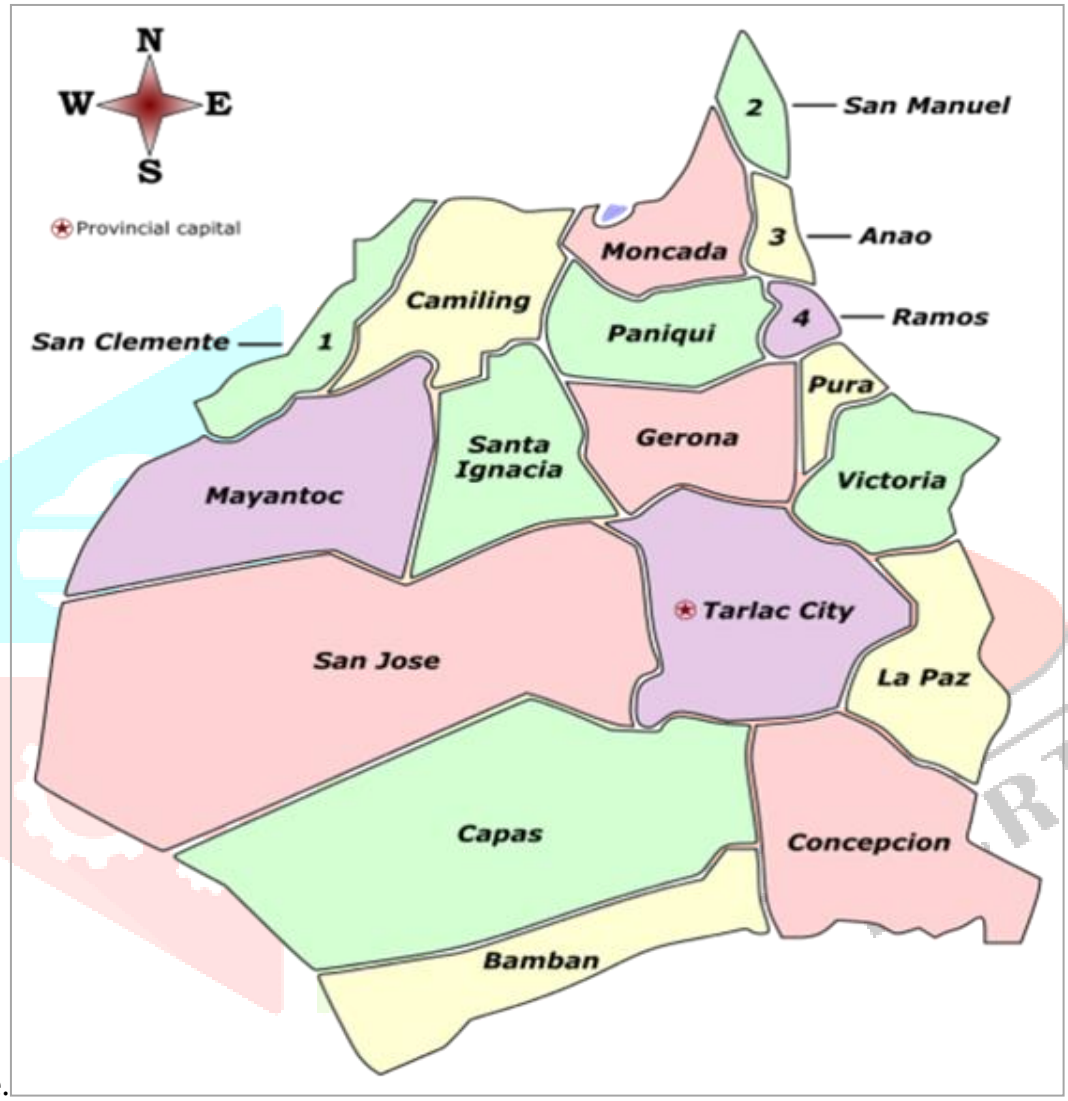


Fig. 2 Map of the Province of Tarlac

Respondents of the Study

The research's participants are purposefully chosen from among the Provincial Health Office 4, COVID-19 Patient 20, Heath Facility 38 and DOH Point Person per Facility 38 with the total respondent of 100 persons answered the questionnaire and were subjected to interview.

Research Design

The real prevalence of COVID-19 in a population can be calculated by purposive and pooling of RT-PCR results. The researcher runs simulations to examine how experiment sample size and levels of sample pooling affect the precision of prevalence estimates and the potential for lowering the total number of tests required to reach individual-level diagnostic results.

Method of Gathering Data

The researchers utilized three (3) instruments in total, including (1) Document analysis. (2) An interview ; (3) a questionnaire.

Documentary Analysis. A form of quantitative research that follows a rigorous process to review documentary evidence and address specific research issues. By highlighting problems that need to be solved or situations that need to be investigated, document analysis can help you make sure that your research is important and thorough (Bowen, 2009). The researcher requested authorization from the provincial health office to access their data using the Case Investigation Form, a researcher tool that was consistent with the study.

Interview. The researcher performed an interview to gather more precise and trustworthy information for correlating the findings of the citizen survey. Interviews were conducted with the Provincial Epidemiologist and the Surveillance Unit Data Based to learn how they gathered information on the 19 positive cases of the pandemic. Additionally, the people' inquiries and/or uncertain replies may not instantly be clarified.

Questionnaire. The case investigation form from the Department of Health served as the basis for the questionnaire utilized in this study. It was used to interview patients prior to swabbing and provides information on each patient to help determine what to do if the results are positive. The questionnaire's

answers have to be double-checked by the respondents. The purpose of this study, which involved giving respondents questionnaires, was to count the number of municipalities in Tarlac that provided both good and negative responses. the verification of the data using the data collected from the respondents.

Ethical Consideration

The opinions of the respondents were kept confidential, and they were not under any obligation to answer the questions. The confidentiality of the respondent's personal information was further protected, and the informed consent of the participants was also attempted to be protected.

Statistical Treatment

The obtained data were totaled and shown on tables to aid in interpretations and analysis.

Simple percentages and the frequency count continuum mean were also utilized. How often a periodic function repeats the same set of values over the course of a unit change of the independent variable (Merriam, 2008)

Percentage. an amount given as a compensation, commission, or interest rate. You can figure it out by multiplying the total by 100. With the following formula, this may be stated:

% = r/b x 100, where:

% = Percentage

r = Number of percentages in the group

b = Total number of respondents in the community

Ranking. well-known or highly esteemed. This was used in the study to determine how a piece of evidence related to the group. From highest to lowest, the data were arranged.

Mean. This is calculated by summing together all of the barangay's data points and dividing the result by the number of data points. to serve or intend to convey, demonstrate, or suggest (Merriam, 2008)

The respondents' response options were described using the formula below, and a matching value was then assigned to determine the weighted mean for each item.

The formula that was used is as follows:

Weighted Mean = f (3) + f (2) + f (1),

3, 2, 1 = corresponding value

F = frequency of every response option

N = total number of respondents who answered.

Chapter 4

PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

The prevalence of Covid-19 in the Province of Tarlac is covered in this chapter. Using the necessary statistical techniques and tools, the information acquired through the use of documentary analysis, interviews, and questionnaires was arranged in textual, graphical, and tabular forms before being categorized and reviewed. In light of the specific questions that the investigation raised, interpretations were made.

1.Description of cases of COVID-19

The COVID-19 patient was analyzed in terms of their information and experience when they get diagnosed of COVID-19 by using questionnaire and data based on the recommendation of the surveyors.

1.1 Age.

Age is a notion that describes a person's age at a specific period. Age increase has reportedly been linked to COVID-19 catastrophic consequences. Many studies, however, fail to take into account how comorbidities change with age and affect how a disease develops. Protection tactics frequently target those above a specific age and may not always be supported by facts. There is no discernible age threshold at which the risk of COVID-19 disease severity due to the single influence of aging increases. Age-related increases in the risk of COVID-19 catastrophic outcomes have been quantified as accurately as possible.

Table 1

Age

Age Group	*f*	*R*
0-9	888	8
10-19	1074	7
20-29	4558	1
30-39	4525	2
40-49	3341	3
50-59	3070	4
60-69	2269	5
70-79	1289	6
80-89	497	9
90 above	33	10

Source of Data: TPHO-PESU

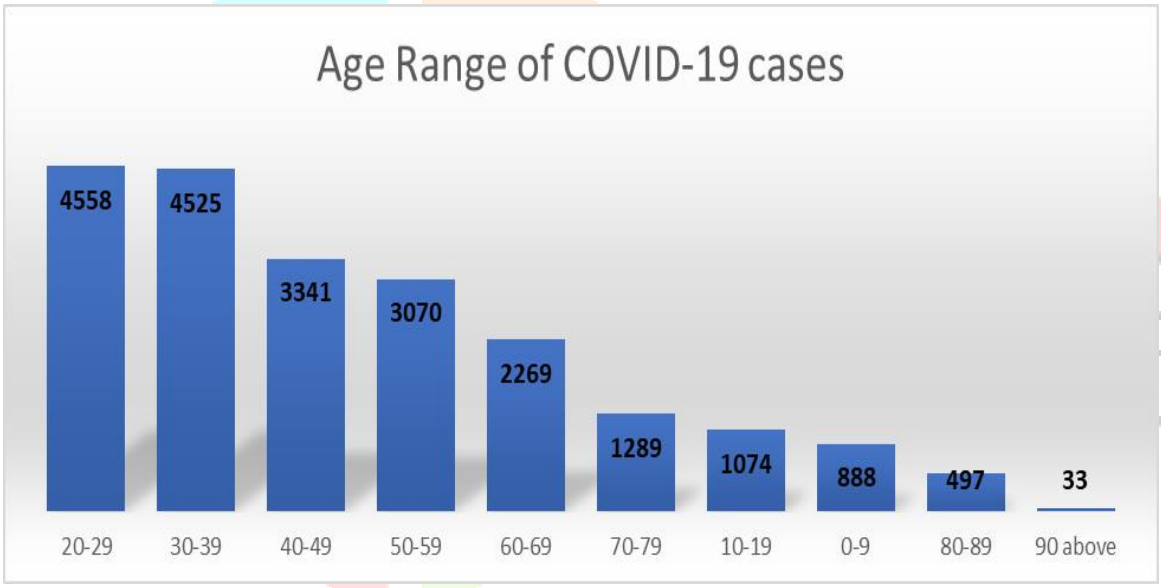


Figure 1. Age

The study is similar based on the older adult population's prevalence of Covid, which has atypical symptom presentations and may be pauci-symptomatic even in the context of life-threatening medical conditions. The patient's capacity for reporting may also be impacted by age and disease severity. This could result in a delay in diagnosis and treatment, worsening the prognosis for COVID-19. When assessing people 65 years of age and older with suspected COVID-19, special consideration should be given.

According to the data, the province had 4,558 COVID-19 cases for people aged 20 to 29 (rank 1), 4,525 for people aged 30 to 30, 3,341 for people aged 40 to 49, and 3,070 for people aged 50 to 59 (rank 4). These age groups had the most cases in the province because they are the working group or Authorize Persons Outside Residence. They are more likely to become infected with the virus.

The province got 2,269 COVID-19 cases for the age group 60-69 years old (rank 5), for 70-79 years old there are 1,289 COVID-19 cases (rank 6), these are the close contacts of the index cases and some of them they are hospitalize and tested positive for COVID-19.

The province got 1,074 COVID-19 cases (rank 7) for the age group 10-19 years old and 888 COVID-19 cases (rank 8) for the age group 0-9 years old, these cases were the close contact of the index cases and most of them were quarantine at home.

The province recorded 497 cases of COVID-19 in people aged 80 to 89 and 33 cases in people aged 90 and older; the majority of these cases were hospitalized, tested positive for COVID-19, and some of them were close associates of the index cases.

1.2 **Sex.**

Additional risk factors that contribute to the diverse COVID-19 outcomes include sex and gender. In fact, sex bias in COVID-19 case mortality has been documented in a number of investigations. Since the COVID-19 pandemic began, both men and women have seen substantial changes in their work and personal lives. To avoid major health consequences, people should be aware of the dangers related to their recent life changes and practice self-care.

Table 2

Sex

Sex	*f*	*R*
Female	11,074	1
Male	10,470	2

Source of Data: TPHO-PESU

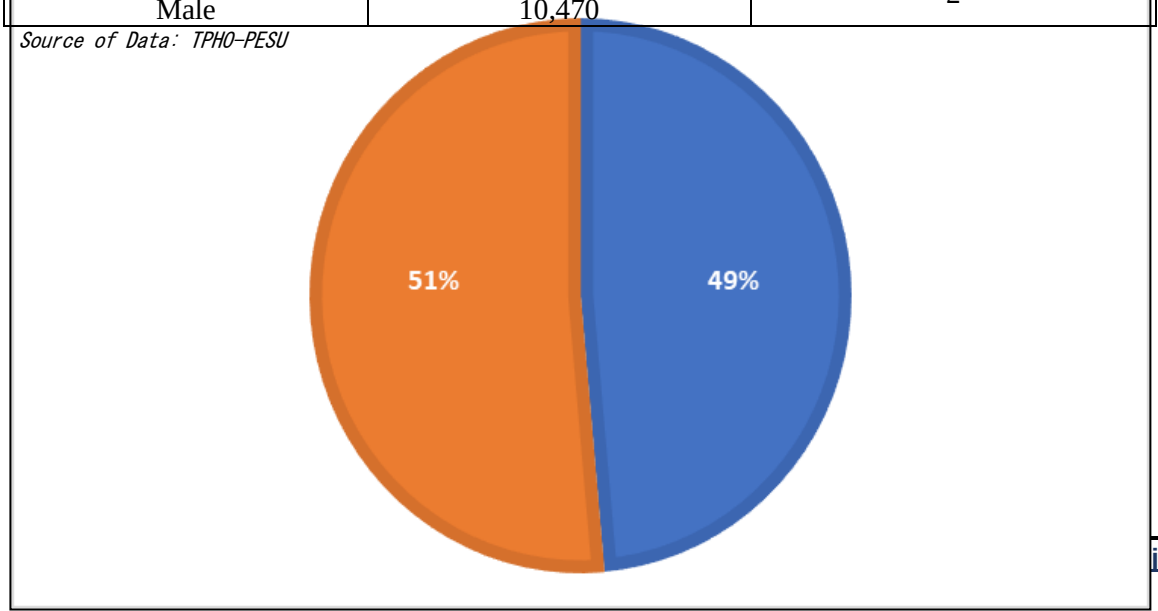


Figure 2. Sex

Men were found to have a higher prevalence of symptomatic COVID-19 than women. The increased

frequency of COVID-19 among men was influenced by the high rates of smoking and alcohol use. It is suggested that more research be done on the differences between men and women's COVID-19 mortality rates and severity, as well as the underlying causes.

Based on the data of the province, female is more probable of COVID-19 rather than male. Female found to be higher with 51% and male got 49%, based on the data from the Provincial Epidemiology Unit, female found to have higher rates with co-morbidities. And based on health seeking behavior, female tends to seek consultation than men.

1.2 **Health Status**.

Over the past few months, there has been a significant expansion of the body of research on the COVID-19 inpatient course of illness; nevertheless, nothing is known about the long-term recovery from severe COVID-19 disease. In comparison to other viral pneumonias, COVID-19 exhibits unusually high rates of hypoxia in hospitalized patients, reports of disorientation and encephalopathy, hypercoagulability, and a high rate of intubation and mortality. However, it's unclear how long health effects will last after a patient leaves the hospital.

Table 3
Health Status

Health Status	*f*	*R*
Mild	12757	1
Asymptomatic	6365	2
Moderate	1294	3
Died	911	4
Severe	284	5
Critical	21	6

Source of Data: TPHO-PESU

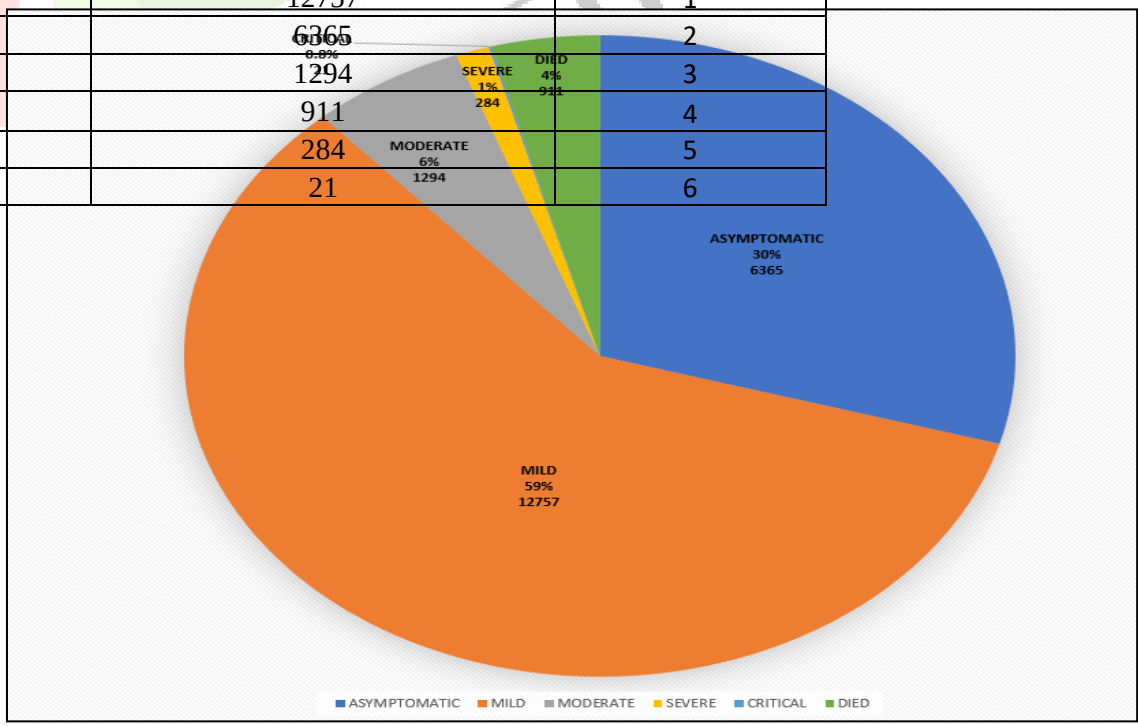


Figure 3. Health Status

Measures of health status can differ as well depending on whether they are founded on factual data collected from standardized

tests or medical records or on information gathered directly from the subject. In order to offer a more thorough and complete assessment of health status than would be achievable from any one technique, individual health surveys should be designed to capture a variety of characteristics of health status. Measures of health status should be developed so that they may be used for trend monitoring as well as epidemiologic analysis of risk variables.

According to provincial data, there were 12,757 COVID-19 instances with moderate symptoms (rank 1); these patients had fever, cough, lethargy, anorexia, and myalgia. Before the beginning of respiratory symptoms, there may be other vague symptoms such a sore throat, nasal congestion, headache, diarrhea, nausea, vomiting, loss of smell (anosmia), or loss of taste (ageusia), without any indications of pneumonia or hypoxia.

The province received 6,365 (rank 2) COVID-19 instances for asymptomatic cases, with these individuals exhibiting no symptoms at all.

The province received 1,294 (rank 3) COVID-19 cases for moderate instances; these patients had fever, cough, dyspnea, a respiratory rate of 21–30 breaths per minute, peripheral capillary oxygen saturation (SpO2) >92% on room air for adults, and fast breathing or coughing for children.

The province received 911 (rank 4) COVID-19 cases for deaths; these cases were recorded while the patients were under quarantine.

In terms of severe cases, the province received 284 (rank 5) COVID-19 cases; these patients had fever, cough, dyspnea, respiratory rate greater than 30 breaths per minute, severe respiratory distress, or peripheral capillary oxygen saturation (SpO2) greater than 92% on room air in both adults and children who also had difficulty breathing, fast breathing, grunting, extremely severe chest tightness, inability to breastfeed or drink, lethargy or unconsciousness, or convulsions.

The province received 21 (rank 6) COVID-19 cases, or critical cases, with patients exhibiting acute respiratory distress syndrome, sepsis, and/or septic shock.

1.3 Comorbidities.

As a person's number of underlying medical issues rises, so does their risk of developing a serious illness from COVID-19. Due to a medical condition and its treatment, some persons are immunocompromised, or have a weakened immune system. Included are those who have cancer and are receiving chemotherapy, as well as those who have received a solid organ transplant and are taking medicine to maintain their transplant. COVID-19 is more likely to affect patients who must take specific medications for an extended period of time, such as corticosteroids, which weaken their immune systems.

Table 4
Co-Morbidity

Co-Morbidity	*f*	R
No	15188	1
Yes	6444	2

Source of Data: TPHO-PESU

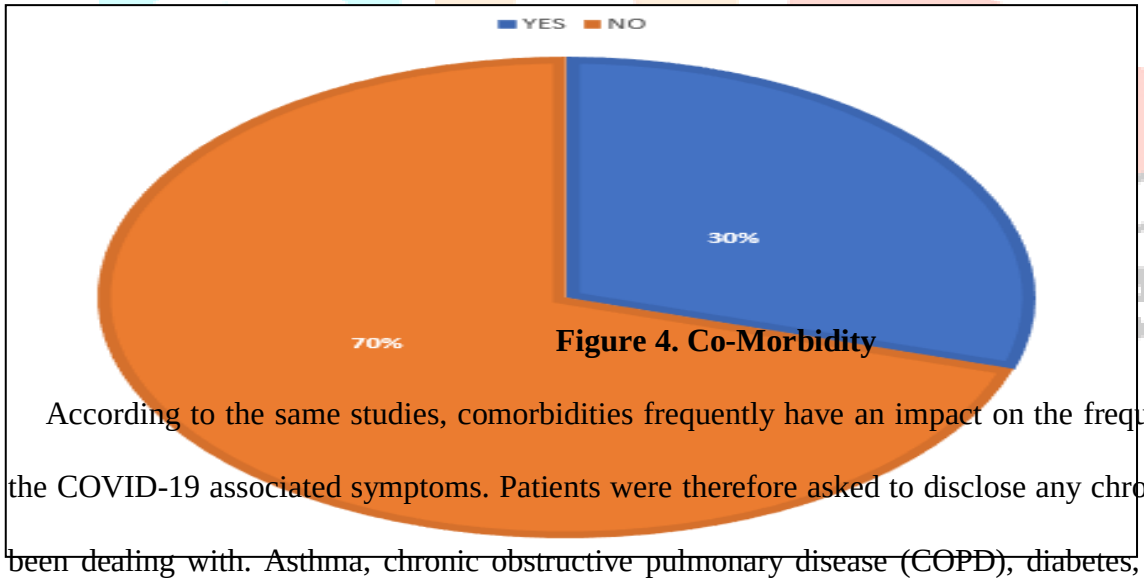


Figure 4. Co-Morbidity

According to the same studies, comorbidities frequently have an impact on the frequency and intensity of the COVID-19 associated symptoms. Patients were therefore asked to disclose any chronic illnesses they had been dealing with. Asthma, chronic obstructive pulmonary disease (COPD), diabetes, hypertension, stroke, heart attack, other heart diseases, kidney disease, allergy, arthritis, liver disease, and obesity are the main reasons why COVID are more likely to people with pre-existing illness. Other participants reported having other chronic diseases or comorbidities before becoming infected with the coronavirus.

From mild to severe, COVID-19 symptoms can range in severity. Only a few symptoms may be present in some persons. Even if a person has no symptoms at all, they can still transfer the disease. Around a week after symptoms first appear, some patients may suffer increased symptoms, such as worsened shortness of breath and pneumonia.

1.4 **History of Exposure.**

The individual does not display any other signs or symptoms that are consistent with infection, but they do fit the criteria for history of exposure due to past travel and/or close contact with a confirmed case. A state or local public health agency establishes regular contact with an individual or group of individuals who may have been exposed to the virus because of past travel to certain places or close contact with confirmed cases.

Table 5

History of Exposure

Exposure	***f***	R
Unknown	14688	1
Yes	6944	2

Source of Data: TPHO-PESU

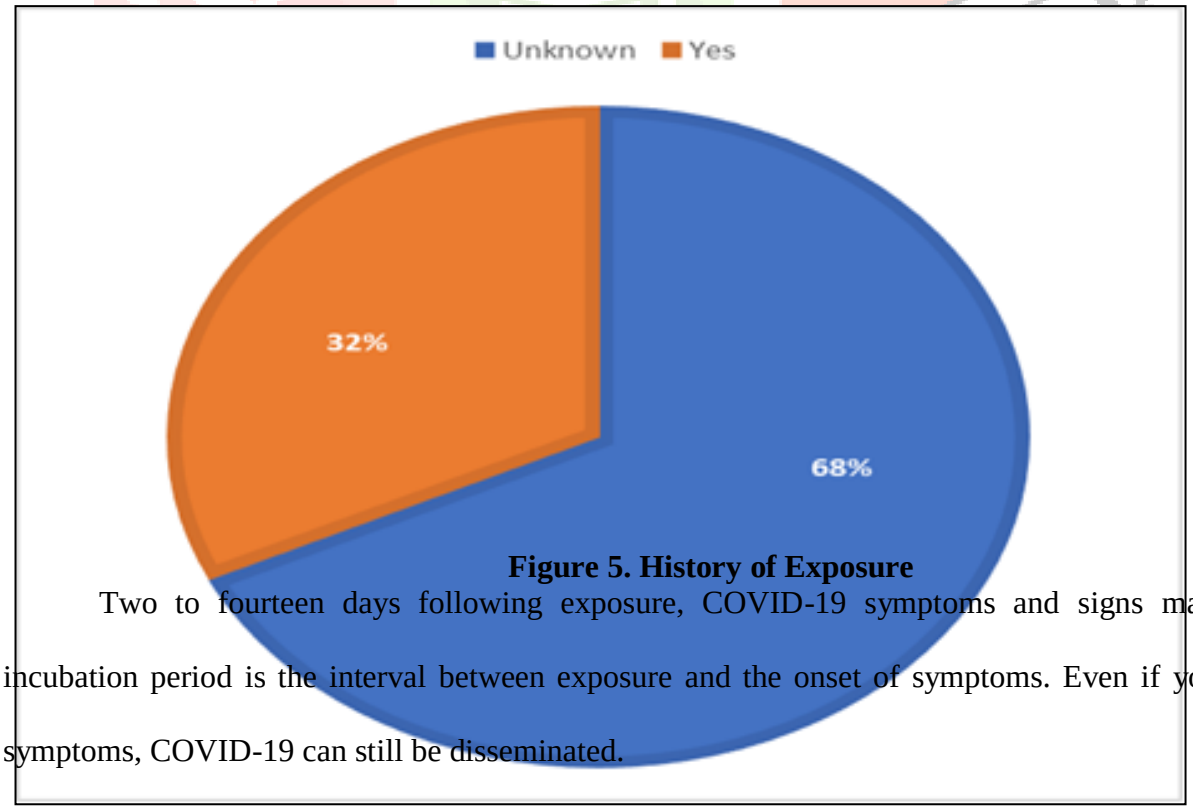


Figure 5. History of Exposure

Two to fourteen days following exposure, COVID-19 symptoms and signs may manifest. The incubation period is the interval between exposure and the onset of symptoms. Even if you don't yet have symptoms, COVID-19 can still be disseminated.

Based on the data the exposure of the Covid-19, unknown exposure has 14,688 patients (rank 1), they cannot track the source of the virus usually they are asymptomatic, with this Tarlac start to have the contact tracing to find the source of transmission and strict implementation of quarantine protocol to the asymptomatic patients. Sometimes the asymptomatic is the one who have the virus and transmitted to the person that he/she encountered, Numerous populations have been touched by COVID-19, with specific clinical effects connected with age groupings. The majority of the pediatric group's clinical manifestation exhibits less symptoms when compared to adults.

Furthermore, the province recorded 6,944 patients (rank 2) who had close contact with the index cases. Close contact is defined as being within six feet of an individual who has COVID-19 symptoms and has been doing so for at least 15 minutes, as well as being within six feet of an infected person who initially exhibits no symptoms but later tests positive for the coronavirus. Regardless matter whether one or both were wearing masks, this qualifies as exposure.

2.0 Prevalence Rate

Epidemiological studies aim to solve these knowledge gaps by gathering information to promote the development of care strategies at various levels, reduce the danger of the spread of SARS-CoV-2 and its variants, and assist governments in making wise and secure decisions. In order to stop the number of COVID-19 cases from rising further, physical distance should be loosened along with effective contact tracking and isolation of those who have been diagnosed.

Table 6

District 1 of the Province of Tarlac

Date	Anao	Camiling	Mayantoc	Moncada	Paniqui	Pura	Ramos	San Clemente	San Manuel	Santa Ignacia	%
Jan-21	0	10	1	7	22	1	1	1	2	0	0.40
Feb-21	0	0	2	42	22	4	0	1	1	2	0.66
Mar-21	3	9	8	29	54	9	11	0	2	15	1.21

Apr-21	40	148	24	77	148	73	52	20	16	49	5.57
May-21	18	102	10	61	110	54	19	16	13	43	3.78
Jun-21	8	71	11	23	63	43	15	9	9	15	2.31
Jul-21	12	29	9	18	46	21	7	9	8	12	1.44
Aug-21	22	186	65	70	200	95	12	52	37	111	6.91
Sep-21	36	384	96	144	307	239	45	47	33	161	12.64
Oct-21	11	121	18	57	119	26	15	16	7	53	3.73
Nov-21	1	16	6	10	21	5	0	3	2	12	0.62
Dec-21	1	3	2	6	10	0	0	0	1	4	0.23
Jan-22	26	179	54	103	205	57	27	36	16	105	6.72
Feb-22	10	40	19	31	53	11	10	8	7	26	1.79
Mar-22	2	10	10	6	10	1	3	1	2	4	0.42

Source of Data: TPHO-PESU

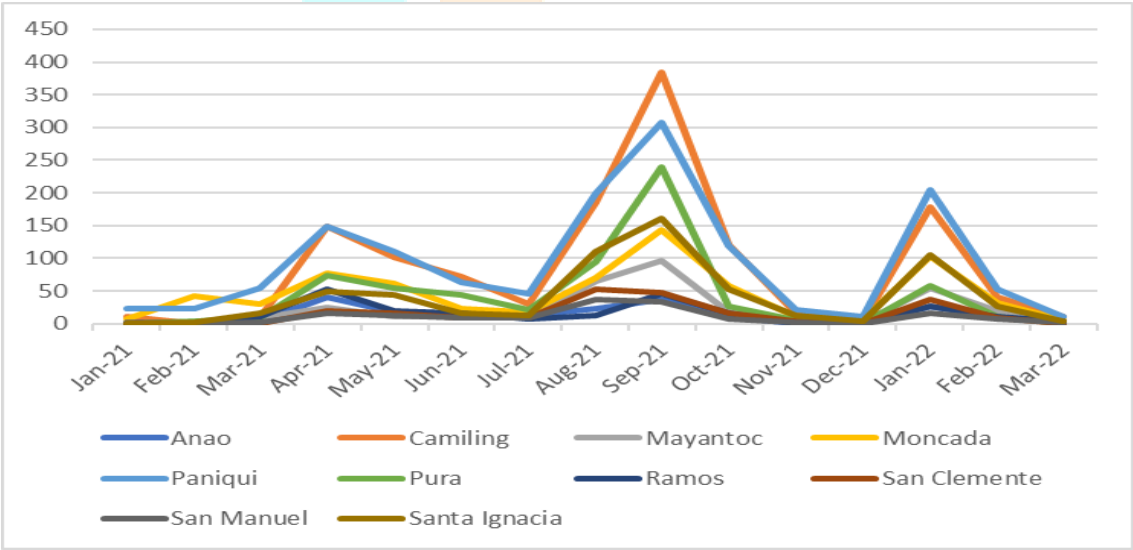


Figure 6. Trend of COVID-19 in District 1 of Province of Tarlac

In summary, the municipality of Paniqui recorded 1,390 COVID-19 cases in district 1 of the province for a period of time. The effort of the frontliners in doing contact tracing and information dissemination is one of the strategies that the municipality implemented. They also have an isolation facility for asymptomatic and mild cases of COVID-19. Daily monitoring of establishment was also done to ensure minimum safety protocols.

The municipality of Camiling recorded 1,308 COVID-19 cases in district 1 of the province for a period of time. The municipality disseminate proper information to prevent the virus and make their constituents more knowledgeable about COVID-19. Contact tracing was also done by the municipality.

Weekly monitoring was also done by the sanitation team of the municipality. They also have isolation facility for asymptomatic and mild COVID-19 cases.

The municipality of Moncada recorded 684 COVID-19 cases in district 1 of the province for a period of time. The municipality fast COVID-19 response assisted them in reducing instances in their area by properly disseminating information to their residents on the best method to avoid the virus through rigorous adherence to COVID-19. No negative rapid test or medical certificate stating no COVID-19 symptoms or signs was used by the municipality. Additionally, granular lockdown was put into place in the barangay with the highest number of instances. Additionally, they have an isolation unit for mild and asymptomatic COVID-19 infections.

For some time, district 1 of the province had 639 COVID-19 instances, according to the municipality of Pura. Although the municipality provides its residents with the necessary information to stop the virus's transmission, some of them did not abide by the necessary safety precautions, which led to a high number of COVID-19 cases in the province. No negative quick test or medical certificate stating no COVID-19 symptoms or signs was used by the municipality. Additionally, they have a COVID-19 isolation unit for mild and asymptomatic patients.

For a while, district 1 of the province saw 612 COVID-19 cases reported by the municipality of Santa Ignacia. The town implemented the IATF suggestions to safeguard the safety of its residents, but the holiday season was to blame for the increase in instances. No negative quick test or medical certificate stating no COVID-19 symptoms or signs was used by the municipality. Throughout the Christmas season, the APORs are continuously monitored. Additionally, they have a COVID-19 isolation unit for mild and asymptomatic patients.

The municipality of Mayantoc recorded 335 COVID-19 cases in district 1 of the province for a period of time. The municipality do the proper information dissemination this is the most effective way to prevent the virus. Increase number of going to the health center was notice by our health care provider, upon investigation, one of the zones in the municipality did not follow the protocol regarding burial of a COVID-19 suspect. They mourned until the result came out. The result in the community is that all the people who went to the wake experienced COVID-19 symptoms. The municipality immediately locked down the said community and acted immediately on the cases before they were transmitted to others.

The municipality of San Clemente recorded 219 COVID-19 cases in district 1 of the province for a period of time. The municipality implemented the rules and regulations of the IATF guidelines, which also helped them to get the low numbers of positive patients. However, APORs contribute numbers of cases in the municipality. The municipality set up a stringent border checkpoint, and everybody entering the municipality had to have a medical certificate or a negative quick test showing no indications or symptoms of COVID-19.

For a while, district 1 of the province's municipality of Ramos recorded 217 COVID-19 cases. The municipality applied the IATF recommendations for COVID-19 for the safety of its citizens. Contact tracing and monitoring was done during the stay of the APORs in the community because they have high numbers of cases from the workers outside the municipality. They also have isolation facility for asymptomatic and mild cases of COVID-19.

The municipality of Anao recorded 190 COVID-19 cases in district 1 of the province for a period of time. The municipality provide quick action that can prevent the spread of the virus and continuing contact tracking of the person that has a symptom can help to find those who have encountered the positive patients. They also have isolation facility for asymptomatic and mild cases of COVID-19.

The municipality of San Manuel recorded 156 COVID-19 cases in district 1 of the province for a period of time. The municipality offers prompt action that can stop the infection from spreading. They controlled the spread of the Covid-19 virus by properly coordinating and involving their constituents. In the

neighborhood, contact tracing and monitoring were also carried out. Additionally, they have a COVID-19 isolation unit for mild and asymptomatic patients.

Table 7

District 2 of the Province of Tarlac

Date	Municipality				%
	Tarlac City	Gerona	San Jose	Victoria	
Jan-21	61	10	2	6	0.36
Feb-21	36	9	1	7	0.24
Mar-21	316	40	3	21	1.74
Apr-21	933	132	12	93	5.34
May-21	804	112	13	79	4.60
Jun-21	496	86	30	28	2.92
Jul-21	333	32	4	24	1.79
Aug-21	1102	147	31	203	6.77
Sep-21	1676	356	61	253	10.71
Oct-21	438	108	13	48	2.77
Nov-21	75	16	5	6	0.47
Dec-21	35	14	2	8	0.27
Jan-22	1714	182	60	140	9.57
Feb-22	261	57	24	32	1.71
Mar-22	53	7	3	14	0.35

Source of Data: TPHO-PESU

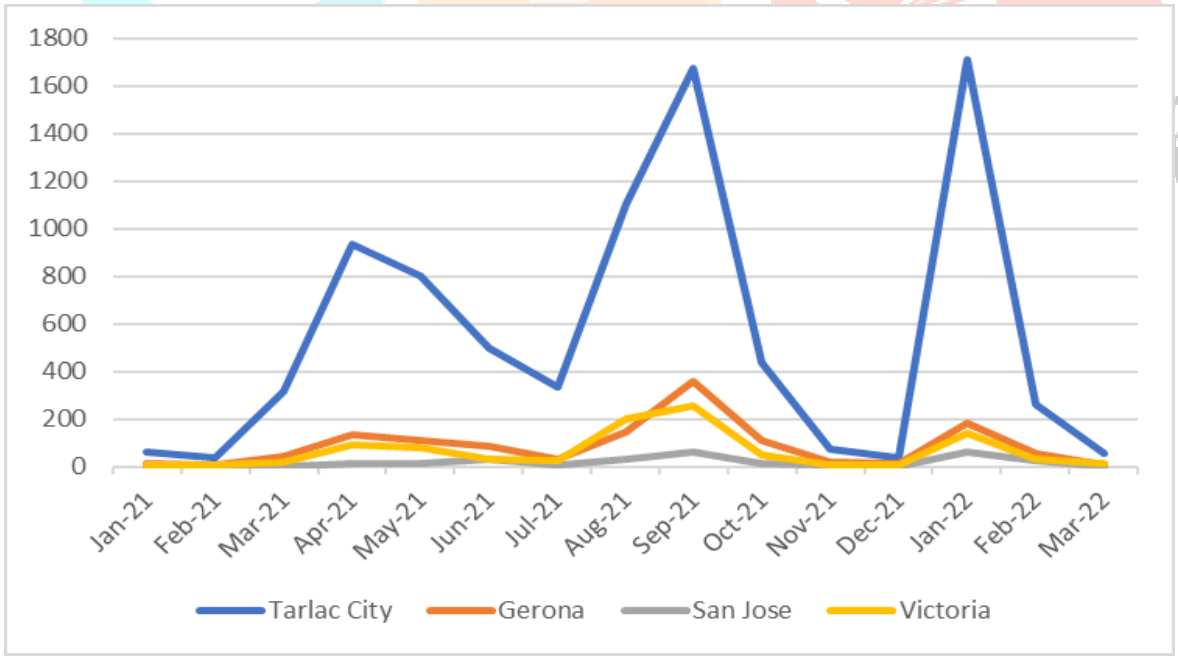


Figure 7. Trend of COVID-19 in District 2 of Province of Tarlac

In summary, the City of Tarlac recorded 8,333, the highest number of COVID-19 in district 2 of the province for a period of time. The city safeguards the safety of its citizens, the city followed the IATF guidelines to the extreme. However, some of the company situated in the city got lockdown because almost of their staff got tested positive for COVID. Contact tracing to the various establishments, as well as their family members, takes effect instantly. Following the 14-day lockdown, the Tarlac administration begins frequent monitoring of the establishment. Some of the cases comes from

APORs, contact tracing to the contacts of the index cases was done and the city continue to monitor the suspected persons with symptoms and refer them for swabbing if they are fit to the criteria. The city also put up an isolation facility for asymptomatic and mild cases of COVID-19 cases.

The municipality of Gerona recorded 1,308, COVID-19 cases in district 2 of the province for a period of time. The municipality implemented strictly boarder check point specially coming from outside the province, they should present negative rapid test or medical certificate indicating no signs and symptoms of COVI-19 before entering to the community. They are also vigilant in checking the protocols to the establishment in the municipality and gives warning if they break the protocols. Contact tracing and monitoring with symptoms was done in the municipality. The municipality also have an isolation facility for asymptomatic and mild cases of COVID-19 cases.

For quite some time, district 2 of the province had 962 COVID-19 instances, according to the municipality of Victoria. With exposure to the index case, the municipality instituted contact tracing and isolation. Within the municipality, information was also disseminated. Before entering the community, APORs must show a medical certificate stating they have no signs or symptoms of COVID-19. Once inside, they must also be checked every day for any evidence of the virus. Additionally, they have a facility for short-term isolation of moderate and asymptomatic COVID-19 infections.

In district 2 of the province, the municipality of San Jose kept track of 264 COVID-19 instances at one point. By properly informing their residents about the best way to avoid the virus by adhering strictly to COVID-19 regulations, the municipality is able to reduce the number of COVID-19 cases in the area, but APORs returning to the municipality increase the number of cases. Before entering the neighborhood, they did not use any negative quick tests or medical certificates indicating no indications or symptoms of COVI-19. For asymptomatic and mild COVID-19 cases, they also offer a temporary isolation facility.

Table 8

District 3 of the Province of Tarlac

Date	Municipality				%
	Bamban	Capas	Concepcion	La Paz	
Jan-21	10	49	16	5	0.37
Feb-21	2	18	15	1	0.16
Mar-21	30	117	58	12	0.99

Apr-21	64	455	118	53	3.15
May-21	75	219	120	67	2.20
Jun-21	61	114	110	57	1.56
Jul-21	55	149	68	37	1.41
Aug-21	160	363	199	107	3.79
Sep-21	119	374	274	157	4.22
Oct-21	47	112	128	36	1.48
Nov-21	11	14	18	7	0.23
Dec-21	10	12	16	4	0.19
Jan-22	128	298	239	112	3.55
Feb-22	21	60	49	23	0.70
Mar-22	5	5	11	7	0.13

Source of Data: TPHO-PESU

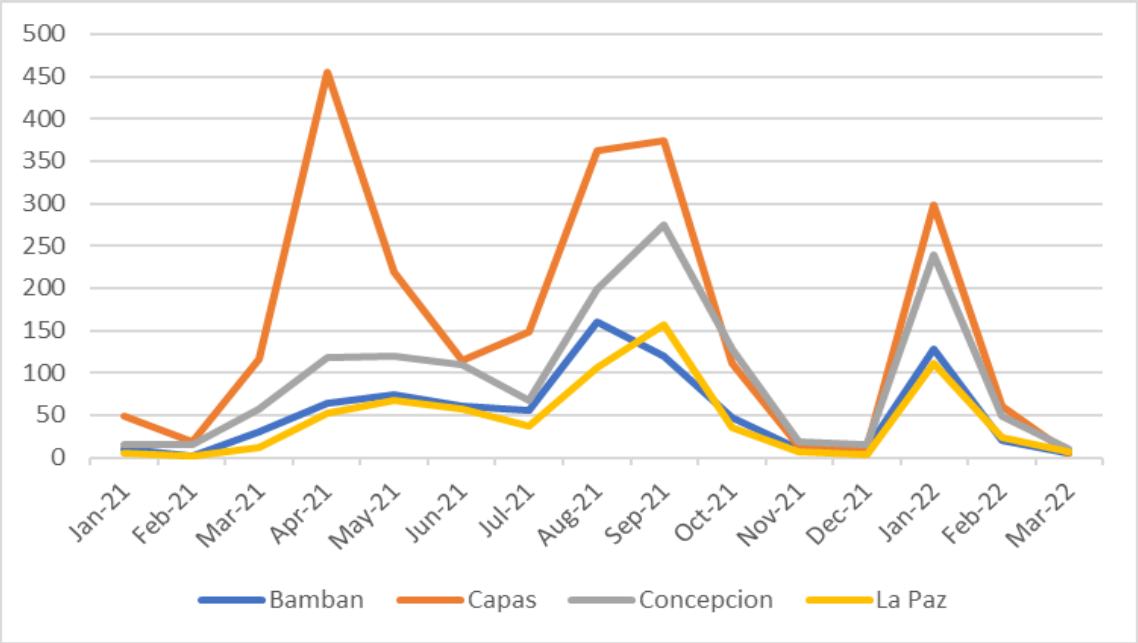


Figure 8. Trend of COVID-19 in District 3 of Province of Tarlac

In summary, the municipality of Capas has recorded 2,359, the highest number of COVID-19 in district 3 of the province for a period of time. The municipality implemented immediate contact tracing among the index cases, and allocated budget for swabbing for the exposed persons that presented symptoms. They put up a quarantine facility for those asymptomatic and mild cases. Health team of the municipality has alerted all chairman of barangays. The province suggested the locked down to the barangay that contributed high COVID-19 cases for a period of time. The municipality is also vigilant in checking all the establishments that break the protocol regarding COVID-19. They also implemented the checking of the Authorized Persons Outside Residence during their stay in the community, they are also required to go to health center for some information before going to the community.

The municipality of Concepcion has recorded 1,439 COVID-19 cases in district 3 of the province for a period of time. Some of the cases came from the working group of the municipality. The municipality implemented the strict boarder control that comes and go the municipality. Before entering the town, visitors

must show a negative quick test and a medical certificate stating they have no symptoms or indicators of COVID-19. The town also issues warnings to businesses that violate the rules.

For a while, the municipality of Bamban kept track of 798 COVID-19 instances in district 3 of the province. The local government is actively reminding the populace of the safety precautions to stop the virus's spread. One of Tarlac's entry points is the municipality, through which several of the bordering provinces frequently pass. And this is what's causing the municipality's increase in cases. Prior to entering the municipality, visitors must take a no-negative quick test and present a medical certificate attesting that they are free of COVID-19 symptoms and indicators. In their municipality, they also built an isolation unit for COVID-19 patients who are asymptomatic or have mild cases.

The municipality of La Paz recorded 685 COVID-19 cases in district 3 of the province for a period of time. The municipality implemented contact tracing and information dissemination takes place in the municipality. Same with the other municipality the main reason for these numbers were the workers outside the province. The municipality monitored the APORs during their stay in the community. The municipality also implemented immediate contact tracing to the index case and immediately refer for swabbing if they are qualified with the guidelines. The town adopted the requirement that visitors receive a no-negative quick test and a medical certificate attesting to their lack of COVID-19 symptoms and indicators before being allowed entry. For the asymptomatic and moderate instances of COVID-19 in their municipality, they also built an isolation unit.

Table 9

COVID-19 cases of the Province of Tarlac

Municipality/City	*f*	%
Tarlac City	8333	38.05
Capas	2359	10.77
Concepcion	1439	6.57
Paniqui	1390	6.35
Gerona	1308	5.97
Camiling	1308	5.97
Victoria	962	4.39

Bamban	798	3.64
La Paz	685	3.13
Moncada	684	3.12
Pura	639	2.92
Santa Ignacia	612	2.79
Mayantoc	335	1.53
San Jose	264	1.21
San Clemente	219	1.00
Ramos	217	0.99
Anao	190	0.87
San Manuel	156	0.71

Source of Data: TPHO-PESU

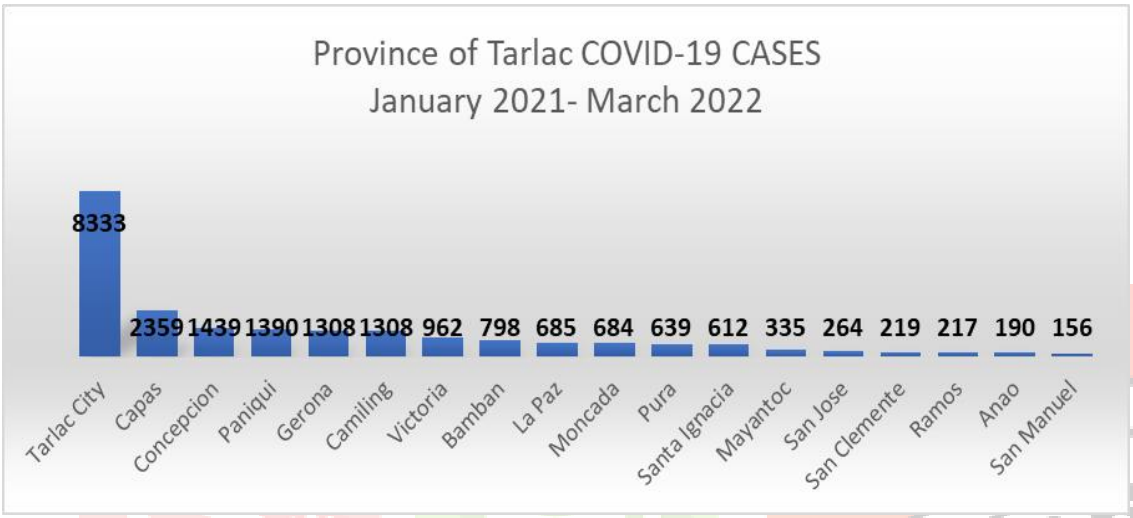


Figure 9. Covid - 19 Prevalence Rate

In summary the prevalence rate in Province of Tarlac is in total high risk of Covid-19, the data that has been gather is based on the real counting's of the Provincial Epidemiology Unit, the rapid action of the Tarlac Province in response to improve the quality of service in times of pandemic. They limit the further transmission of COVID-19 in different municipality, with this the province of Tarlac are more alert and ready in cased the Covid-19 will start again.

3.0 Problems Encountered

Table 10 shows the Problems that has been Encountered on the Covid-19 response among Municipalities in Province of Tarlac.

It shows that Inadequate number of qualified medical personnel and medical equipment with the total of 50.66 or 76 rank as first among the recommendation of the respondents is the main problems encountered

in the province of Tarlac, LGU's must be aware of the things and personnel needed in every municipality because better be prepared not only for COVID but for future disasters or pandemics that are not expected.

Table 10

Problems Encountered

Problems Encountered	f	%	R
Inadequate number of qualified medical personnel and medical equipment. (*Hindi sapat na bilang ng mga kwalipikadong tauhan sa medicina at kagamitan sa medesina).*	76	50.66	1
Lack of discipline in following minimum heath standards. (*Kakulangan ng disiplina sa pagsunod sa pinakamababang pamantayan ng kalusugan.)*	70	46.66	2
Lack of inter LGU cooperation and partnership for appropriate response and measures to curtail and eliminate the COVID – 19 threats. (*Kakulangan ng kooperasyon at pagtutulungan ng inter LGU para sa naaangkop na pagtugon at mga hakbang para mabawasan at maalis ang banta ng COVID-19.*)	68	45.33	3.5
Lack of clear vision in reproducing and disseminating Information materials from DOH and WHO. (*Kakulangan ng malinaw na paningin sa Reproducing at disseminating information materials mula sa DOH at WHO.*)	68	45.33	3.5
Limited funds for meeting the needs of covid patients. (*Limitadong pondo para sa pagtugon sa mga pangangailangan ng mga pasyente na may COVID.)*	50	33.33	4

Lack of discipline in following minimum heath standards with the total of 46.66% or 70 rank as second among the recommendations of the respondents, LGU's are lack of strictly Implementation of the minimum health standard which cause of the increased of persons who have a COVID-19 virus.

Lack of inter LGU cooperation and partnership for appropriate response and measures to curtail and eliminate the COVID – 19 threats and Lack of clear vision in reproducing and disseminating Information materials from DOH and WHO got the total of 45.33% or 68 rank as third and fourth respondents suggest that cooperation of the LGU's to LGU's can help to make ideas and measure to eliminate the Virus in the province with the proper coordination of Provincial and LGU's and the Information dissemination must have reached all people even in the other secluded place.

Limited funds for meeting the needs of covid patients with the total of 33.33 or 50 rank as fourth among the recommendations of the respondents, LGU's must put a lot of funds on the Disaster and Health not

just only for the infrastructures because calamities, disease, and any kind of virus is always there so we must be prepared in case it happened.

4.0 Intervention Measures

Table 26 shows the Intervention Measures on the Covid-19 response among Municipalities in Province of Tarlac.

From the Problems Encountered the Intervention Measures must need an Objective, Strategy, Responsible Person and Expected Output which they can analyze what is the real problem that needs to Fix and it can also help the health management to estimate the total cases of the Province of Tarlac since the Covid 19 Virus is spreading.

Table 11

Intervention Measures

INTERVENTION MEASURES	OBJECTIVE	STRATEGY	RESPONSIBLE PERSON	EXPECTED OUTPUT
Hiring of medical personnel and emergency procurement of medical equipment	To reduce the work load of the present personnel in the facility and to enhance the procedure given by the facility	To hire job orders and designate them in the community to list all ongoing/outgoing and symptomatic individuals	Local Government Unit	Engaged the community in surveillance of diseases
Strict compliance should be maintained always especially in indoor setting	To reduce the transmission and spreading of the virus	No mask, no entry policy in all establishment and prohibiting people to go out without wearing mask	Local Government Unit	Decrease in number of cases
Meeting with the Local Government Units regarding some policies in regards to COVID-19	To reduce confusion on their constituents regarding COVID-19 policies	Interchangeable ordinance regarding inter local cooperation and partnership	Local Government Unit	Same rules were applied in all boarders of the province
Local Reproduction and disseminate Information materials from Local Government Units	To easily understand and get information correctly	Materials are interpreted in local dialect for the community	Local Government Unit	Lessen fake news that will circulate in the community
Emergency fund and reallocation of budget to sustain the needs during pandemic	To be able to augment the needs of the COVID-19 patients	Creation of halfway house and isolation facilities for asymptomatic and mild patients	Local Government Unit	Monitored and lessen the transmission to the community and to prevent worsening of the symptoms

Despite of having inadequate medical personnel and medical equipment, the Local Government Unit are still trying to cope with the situation and setting some alternatives to deliver the needs of the people in

terms of health services. During the peak of the pandemic, the LGU's hired nurses and medical technologists to augment the needs of the facility during the pandemic. The Department of Health hired nurses to deploy in different municipality in the province to reduce the workload of the organic personnel and to continue the different programs or services that the facility is giving to the public. Re-alignment of budget was done to upgrade the equipment needed for COVID-19 response.

Public measures have been implemented especially in indoor settings. The compliance within the establishment was randomly checked by the LGU's to check if they are compliance with the safety measure given by Inter- Agency Taskforce. The public should know about this protocol given by the IATF to reduce transmission, spreading of the virus and it also helps the province to decrease in the number of cases.

The Local Government Units communicates to provide uniform decisions to public as pe IATF. The LGUs reminds the public about the safety protocols, boarder protocols upon entering the province to stop the infection from spreading.

The number one platform used to disseminate information regarding COVID-19 was the social media. Some of the municipality have their own Facebook Page to reached their constituents easily. The province reproduces local materials and give it to the Barangay Health Worker to disseminate in their respective area to lessen fake news in the community.

The funding required for COVID-19 response was increased by the re-allocation of monies from several offices in order to provide free COVID-19 services. To stop the virus from spreading throughout the neighborhood, they created isolation facilities for asymptomatic and moderate cases using the allocated funds. In order to stop the virus from spreading, they also purchased personal protective equipment to do contact tracing and community monitoring.

4.0 Implications of the Study to Health Management.

The study's relevance to health management is that it can be given the management and leadership knowledge, abilities, and competences. Knowing the fundamental ideas and procedures, including planning, implementing, monitoring, and controlling, is essential when addressing the wellbeing of your community and

every member of it. the science and practice of preserving and enhancing community health, including through preventive healthcare, health promotion, the management of communicable diseases, the implementation of sanitary practices, and the observation of environmental dangers. A change in support towards more targeted investments in transnational activities is necessary for development finance for health. Additionally, it must transition from providing targeted assistance for a few specific communicable diseases to providing more comprehensive resources to avoid chronic illnesses and addressing the issue of universal health coverage.

The summary of findings will assist the Health Management in promoting best practices in financing policy and financial responses to the crisis, and it may offer a forum for discussion of sectors of intervention where development finance providers may be able to find synergies in reducing the effects of COVID-19 while bolstering current development initiatives. This might involve making investments in urban infrastructure that puts more space between residents, offering facilities for water and sanitation, and creating contactless payment systems. These remedies ought to be located, discussed, and spread. As part of a mutually reinforcing strategy to construct resilient health systems, health management measures for prevention, alert, and response to disease outbreaks like COVID-19 need to be conducted concurrently with health system strengthening. Lockdown procedures can also decrease the need for medical care while necessitating increased monitoring of vulnerable groups. There are significant connections between increasing health security and obtaining universal health coverage. High immunization rates prevent outbreaks, early warning is provided by ensuring that everyone, men and women, have access to healthcare, and improved response is made possible by dependable infrastructure and a skilled healthcare team. We discovered that few patients with COVID-19 symptoms underwent testing, and that fewer than half of those who experienced symptoms spent all of their time at home. This exploratory and intervention-based study's goal is to propose the COVID-19 Care Management Model, which is an integrated framework for healthier management that represents comprehensive care for society as a whole, including patients and healthy participants. Better results in COVID-19 prevention and care can be obtained by shifting policies in favor of technologically oriented approaches with synchronized infrastructure.

The best strategies for early diagnosis and infection control, along with public health model of sanitization, distancing, and contact less behaviors practices, involve planned development of technical healthcare models for prognosis and improved treatment outcomes that take into account not only perspectives from genomics, nanotechnology, and materials science, but also the potential contribution of advanced digital technologies. The opportunity for improving the worldwide response to COVID-19 lies in positive action at designated research, technology, and management segments, more especially public health, patient health, technological selection, and political influence.

Chapter 5

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter gives a summary of the findings, the inferences made from the data, and the suggested course of action. The Covid 19 Patient and Provincial Epidemiology Unit's perceptions on the Covid 19 Prevalence in the Province of Tarlac are the focus of this study.

On Covid-19 patient Profile Age, Sex, Health Status, Comorbidities and History of Exposure were undertaken.

Summary of Findings

The evaluation of COVID-19 prevalence led to the conclusions that are listed below.

1. The result of the Age confirmed COVID-19 cases as of March 31, 2022, ages 20 – 69 years old got the highest number of positive patients in Province of Tarlac.
2. The result of the Sex of confirmed COVID-19 cases as of March 31, 2022, Female got the highest number of positive patients rather than male with the total of 11,074 in the data of Province of Tarlac.
3. Based on the patient's health status as reported in the Province of Tarlac's statistics as of March 31,2022, Mild cases had the highest number of positive results (12757), followed by asymptomatic cases (6365), and moderate cases (1294).
4. The result of Status of confirmed COVID-19 cases with other Illness is based on the pre-existing health condition like hypertension, obesity and diabetes this illness is prone to Covid 19.
5. With 14688 confirmed COVID-19 cases in the Province of Tarlac, the history of exposure is still unknown.
6. The result of the evaluation on prevalence of Covid 19 among local government unit in the province, there are 6th municipalities that got the highest number of positive patients, first is City of Tarlac got the highest number of Covid 19 patient with the total of 8246, workers outside the city were the reason for the spike of cases.
7. According to a study on the prevalence of Covid 19 among local government units in the province, Capas had the second-highest number of Covid 19 cases, totaling 2247. This is because the company

in the municipality, where the majority of the employees were asymptomatic and continued to work despite an outbreak there, was located there.

8. According to a study on the prevalence of Covid 19 across local government units in the province, Concepcion had the third-highest number of Covid 19 patients with a total of 1447; the increase in cases in the municipality is due to the adjacent provinces and cities.
9. With a total of 1399 patients, Paniqui had the fourth-highest number of Covid 19 patients in the province according to the examination of the disease's prevalence across local government units. Cockfighting is the primary cause of the rise in cases.
10. According to a study on the incidence of Covid 19 among local government units in the province, Gerona had the fifth-highest number of Covid 19 patients, totaling 1317. During the vacation season, employees from outside the municipality traveled home. Additionally, some of the restaurants' staff had positive test results. According to an assessment of the frequency of COVID-19 among local government units in the province, Camiling had the sixth-highest number of Covid 19 patients, totaling 1306, and the municipality's increase in COVID-19 cases was due to the Authorized Person Outside Residence. The 1st rank in the problems encountered is the lack of Inadequate number of qualified medical personnel and medical equipment followed by the Lack of discipline in following minimum heath standards 3rd is the Lack of inter LGU cooperation and partnership for appropriate response and measures to curtail and eliminate the COVID – 19 threats.

Conclusions

Such were drawn based from the findings namely:

1. The overall findings show that the top most problems that are encountered are inadequate numbers of qualified medical personnel and medical equipment, because during this pandemic I've noticed we have a lack of manpower and equipment that has been used in COVID facilities and areas. Yes, we all know that we have a lack of medical personnel, but we have a lot of funds for buying equipment and because of corruption, we've lost a lot of that. And who will suffer: the provinces, cities, and municipalities.

2. The findings show that lack of discipline in following minimum health standards is because of a lack of strict implementation by the higher officials. For the record, the most reprehensible is the person with authority in not following the minimum standard.
3. The third most common problem encountered is the lack of inter-LGU cooperation and partnership for appropriate response and measures to curtail and eliminate the COVID-19 threats. Because of the lack of coordination of each of the municipal mayors and RHU's in the province, the COVID-19 was spread and the result of lockdowns in every municipality.
4. Lack of clear vision in reproducing and disseminating information materials from DOH and WHO is also the third most encountered problem, because when COVID 19 is spreading, the citizens are not aware of what they can do to avoid it, so the spread continuously affects every one of them.
5. There are limited funds for meeting the needs of COVID 19 patients because of which the patients choose to stay at home rather than go to the COVID 19 facilities.
6. Municipal case management and infection control efforts were significantly impacted by community outreach and engagement as well. Community health workers and community health officers led education campaigns in the barangays to inform residents about the symptoms, indications, and treatment of COVID-19.
7. The goal of these educational initiatives is to increase health-seeking behavior, foster a sense of shared responsibility, and equip people with the information to recognize and manage their personal COVID-19 risk.
8. The necessity for a coordinated case management and infection control framework was obvious, and it was possible to use the PHC's already-existing electronic health information systems to connect the province's several regions and work together to contain the COVID-19 outbreak.
9. Workforce shortage and discontent can result to a work place complexity, increasing automation, and a graying work force are all contributing to this issue of Covid 19.
10. People are at risk of infection due to a lack of fundamental knowledge on how to prevent virus transmission and exposure. Instead of paying attention to regulations mandating correct facial

covering, physical distance, and hand hygiene, they are failing to pay attention to community quarantine orders.

Recommendations

The following recommendations are made in light of the study's results and conclusion.

1. They should have prioritized purchasing equipment or other items required in the event of natural disasters and pandemics. Local government must think about the future problems and not just stick to the personal problems, because thinking outside the box is the best way to think about the solution to the problems.
2. Early government actions and early individual measures can slow and control the spread of the epidemic because the more you are alert, the more you can survive.
3. They should conduct more seminars and training for the medical personnel and also the BHW and BNS because they are also needed in providing health services. The more knowledgeable they are, the better they will be able to assist in future crises.
4. They should provide a mobile emergency hotline in every barangay and municipality so that in case of an emergency, their constituents can easily contact them and the service can be easily given.
5. To reduce the pandemic's economic impact while limiting the number of illnesses and deaths, it is important to adopt pandemic-related actions in every community.
6. The detection of acute infectious diseases, the reporting and prevention of transmission, or the management of outbreaks are all examples of ways to stop the spread of infectious disease.
7. Changing settings, procedures, or regulations to promote healthy living and prevent unhealthy living.
8. Addressing concerns of health equity or population health, as well as disseminating knowledge about healthy communities or the state of the people's health.
9. Assessing the availability of local health services and identifying gaps and constraints are just a few of the activities involved in ensuring health services.
10. Providing guidance in community-based public health preparedness and developing, carrying out and regularly reviewing public health threat response schemes

References:

A. Riedel S, Morse S, Mietzner T, Miller S. Jawetz, Melnick. (2019). Medical Microbiology, 28th ed. New York, 2019.

Adam D. (2020). The Effects of Physical Isolation on the Pandemic Quantified. April 2 020.

Adnan Shereen M, Khan S., Kazmi A., Bashir N., Siddique R. (2020). COVID-19 infection: origin transmission and characteristics of human coronaviruses. and middle-income countries. Anesth Analg. 2020.

Bai Y, Yao L, Wei T, Tian F, Jin DY, Chen L, et al. (2020). Presumed asymptomatic carrier transmission of COVID-19. JAMA 2020.

Bedford J, Enria D, Giesecke J, Heymann DL, Ihekweazu C, Kobinger G, et al. (2020) COVID-19: towards controlling of a pandemic. Lancet. 2020;395:1015-8.

Bong CL, Brasher C, Chikumba E, McDougall R, Mellin-Olsen J, Enright A. The COVID-19 pandemic: effects on low

Bowen, G. A. (2009). Document analysis as a qualitative research method. Qualitative Research Journal, 9(2), 27-40. doi:10.3316/QRJ0902027

Burrell C, Howard C, Murphy F. Fenner (2016). White's medical virology. 5th ed. United States: Academic Press; 2016

Chan JF, Yuan S, Kok KH, To KK, Chu H, Yang J, et al.(2020). A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: a study of a family cluster. Lancet 2020.

Chen, Z.M.; Fu, J.F.; Shu, Q.; Chen, Y.H.; Hua, C.Z.; Li, F.B.; Lin, R.; Tang, L.F.; Wang, T.L.; Wang,W.; et al. (2020). Diagnosis and treatment recommendations for pediatric respiratory infection caused by the 2019 novel coronavirus. World J. Pediatr. 2020.

CSIS (2020). Retrieved from https://www.csis.org/programs/southeast-asia-program/southeast-asia-covid-19-tracker-0.

Cui, J.; Li, F.; Shi, Z.L. Origin and evolution of pathogenic coronaviruses. Nat. Rev. Microbiol. 2019, 17, 181–192.

D. M. Yan Bai, Lingsheng Yao, TaoWei, Fei Tian, Dong-Yan Jin, Lijuan Chen (2020). "Presumed Asymptomatic Carrier Transmission of COVID-19," Am. Med. Assoc., pp. 1–2, 2020.

Department of Health Republic of the Philippines. DOH confirms first 2019-ncov case in the country; assures public of intensified containment measures. 2020.

Dhama, K.; Sharun, K.; Tiwari, R.; Sircar, S.; Bhat, S.; Malik, Y.S.; Singh, K.P.; Chaicumpa, W.; Bonilla-Aldana, D.K.; RodriguezMorales, A.J. (2020). Coronavirus Disease 2019–COVID-19, 2020. Clin. Microbiol. Rev. 2020.

Dodson S, Good S, Osborne R. (2015). Health literacy toolkit for low- and middle-income countries: a series of information sheets to empower communities and strengthen health systems. New Delhi: World Health Organization, Regional Office for South-East Asia, 2015.

E. De Wit, N. Van Doremalen, D. Falzarano, and V. J. Munster (2016). "SARS and MERS: Recent insights into emerging coronaviruses," Nat. Rev. Microbiol., vol. 14, no. 8, pp. 523–534, 2016.

F. Xiao, M. Tang, X. Zheng, Y. Liu, X. Li, and H. Shan (2020). "Evidence for gastrointestinal infection of SARS-CoV-2.," Gastroenterology, 2020.

Fan J, Liu X, Shao G, Qi J, Li Y, Pan W, et al. The epidemiology of reverse transmission of COVID-19 in Gansu Province, China. Travel Med Infect Dis 2020;101741.

Gavriatopoulou, M.; Korompoki, E.; Fotiou, D.; Ntanasis-Stathopoulos, I.; Psaltopoulou, T.; Kastritis, E.; Terpos, E.; Dimopoulos, M.A. (2020). Organ-specific manifestations of COVID-19 infection. Clin. Exp. Med. 2020, 20, 493–506.

Gregorio, Glenn & Ancog, Rico. (2020). Assessing the Impact of the COVID-19 Pandemic on Agricultural Production in Southeast Asia: Toward Transformative Change in Agricultural Food Systems. Implications for Rural. Asian Journal of Agriculture and Development.

H. Chen et al. (2020). "Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records," Lancet, vol. 395, no. 10226, pp. 809–815, 2020.

Harapan, Harapan & Itoh, Naoya & Yufika, Amanda & Winardi, Wira & Keam, Synat & Te, Heyhpeng & Megawati, Dewi & Hayati, Zinatul & Wagner, Abram & Mudatsir, Mudatsir. (2020). Coronavirus disease 2019 (COVID-19): A literature review. Journal of Infection and Public Health.

Haw NJL, Uy J, Sy KTL, Abrigo MRM. (2020). Epidemiological profile and transmission dynamics of COVID-19 in the Philippines. Epidemiol Infect 2020.

Hojyo, S.; Uchida, M.; Tanaka, K.; Hasebe, R.; Tanaka, Y.; Murakami, M.; Hirano, T. (2020). How COVID-19 induces cytokine storm with high mortality. Inflamm. Regen. 2020, 40, 37.

JHU CSSE. (2020). Coronavirus COVID-19 Global Cases by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins. 2020.

Kampf G, Todt D, Pfaender S, Steinmann E. (2020). Persistence of coronaviruses on inanimate surfaces and its inactivation with biocidal agents. J Hosp Infect 2020.

Khatoon, F.; Prasad, K.; Kumar, V. (2020). Neurological manifestations of COVID-19: Available evidences and a new paradigm. J. Neurovirol. 2020, 26, 619–630.

Khaykelson, D.; Raviv, U. Studying viruses using solution x-ray scattering. Biophys. Rev. 2020, 12, 41–48.

Kupferschmidt K. (2020). Study claimingnew coronavirus canbe transmittedbypeople without symptoms was flawed. In: Science news; 2020.

Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, et al. (2020). Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. N Engl J Med 2020;382(13):1199–207.

Lopez-Pena P, Austin Davis C, Mushfiq Mobarak A & Raihan S. Prevalence of COVID-19 symptoms, risk factors, and health behaviors in host and refugee communities in Cox's Bazar: a representative panel study. [Preprint]. Bull World Health Organ. E-pub: 11 May 2020.

Lu R, Zhao X, Li J, Niu P, Yang B, Wu H, et al. (2020). Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding. Lancet 2020.

Lui, K.; Fang, Y.-Y.; Deng, Y.; Wei L.; Wang, M.-F.; Ma, J.-P.; Xiao, W.; Wang, Y.-N.; Zhong, M.-H.; Li, C.-H.; Li, G.-C.; Liu, H.-G. Clinical characteristics of novel coronavirus cases in tertiary hospitals in Hubei Province. Chin. Med. J. 2020.

Moorhead SA, Hazlett DE, Harrison L, Carroll JK, Irwin A, Hoving C. A new dimension of health care: systematic review of the uses, benefits, and limitations of social media for health communication. J Med Internet Res. 2013;15:e85.

Office of the President of the Philipines. (2020) Memorandum from the Executive Secretary: Community Quarantine over the Entire Luzon and Further Guidance for the Management of the Coronavirus Disease 2019 (COVID-19) Situation. 2020.

Paital B, Das K, Parida SK. Inter nation social lockdown versus medical care against COVID-19, a mild environmental insight with special reference to India. Sci Total Environ 2020;138914.

Pal, M.; Berhanu, G.; Desalegn, C.; Kandi, V. Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2): An Update. Cureus 2020, 12, e7423.

Perlman S. Another decade, another coronavirus. N Engl J Med 2020.

Prasetyo, Yogi & Castillo, Allysa Mae & Salonga, Louie John & Sia, John Allen & Seneta, Joshua Adam. (2020). Factors Affecting Perceived Effectiveness of COVID-19 Prevention Measures among Filipinos during Enhanced Community Quarantine in Luzon, Philippines: Integrating Protection Motivation Theory and Extended Theory of Planned Behavior. International Journal of Infectious Diseases.

Republic of the Philippines Department of Health. 2019-NCOV CASE TRACKER. [cited 2020 Feb 6].

Rothe C, Schunk M, Sothmann P, Bretzel G, Froeschl G, Wallrauch C, et al. (2020). Transmission of 2019-nCoV infection from an asymptomatic contact in Germany. N Engl J Med 2020.

S. W. X. Ong et al. (2020). "Air, Surface Environmental, and Personal Protective Equipment Contamination by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV2) from a Symptomatic Patient," JAMA - J. Am. Med. Assoc., pp. 3–5, 2020.

Su, S.; Wong, G.; Shi, W.; et al., Epidemiology, Genetic recombination, and pathogenesis of coronaviruses, Trends Microbiol. 2016, 24, 490-502.

Tang, Biao & Xia, Fan & Tang, Sanyi & Bragazzi, Nicola & Li, Qian & Sun, Xiaodan & Liang, Juhua & Xiao, Yanni & Wu, Jianhong. (2020). The effectiveness of quarantine and isolation determine the trend of the COVID-19 epidemics in the final phase of the current outbreak in China. International journal of infectious diseases: IJID: official publication of the International Society for Infectious Diseases.

Vallejo BM, Ong RAC. (2020) Policy responses and government science advice for the COVID 19 pandemic in the Philippines: January to April 2020. Prog Disaster Sci 2020.

Van Doremalen N, Bushmaker T, Morris DH, Holbrook MG, Gamble A, Williamson BN (2020). "Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARSCoV-1," N. Engl. J. Med., pp. 1–3, 2020.

Wang C, Horby PW, Hayden FG, Gao GF. A novel coronavirus outbreak of global health concern. Lancet [839_TD$DIFF]2020;395(10223):470–3.

WHO. Munich Security Conference 2020. . Addressing Health-Related Misinformation on Social Media. JAMA. 2020.

World Health Organization. Updated WHO Recommendations For International Traffic In Relation To COVID-19 Outbreak. World Health Organization; 2020.

Wu JT, Leung K, Leung GM. (2020). Nowcasting and forecasting the potential domestic and international spread of the 2019-nCoV outbreak originating in Wuhan, China: a modelling study. Lancet. 2020;6736:20.

Wu, Z.; McGoogan, J.M. (2020).Characteristics of and Important Lessons from the Coronavirus Disease 2019 (COVID-19) Outbreak in China: Summary of a Report of 72314 Cases from the Chinese Center for Disease Control and Prevention. J.A.M.A. 2020.

Y. Han and H. Yang (2020). "The transmission and diagnosis of 2019 novel coronavirus infection disease (COVID-19): A Chinese perspective," J. Med. Virol., no. 1, pp. 0–2, 2020.

Y. Liu, A. A. Gayle, A. Wilder-Smith, and J. Rocklöv (2020). "The reproductive number of COVID-19 is higher compared to SARS coronavirus," J. Travel Med., no. February, pp. 1–6, 2020.

Yeung, Nelson & Huang, Bishan & Lau, Christine & Lau, Joseph. (2020). Feeling Anxious amid the COVID-19 Pandemic: Psychosocial Correlates of Anxiety Symptoms among Filipina Domestic Helpers in Hong Kong. International Journal of Environmental Research and Public Health.

Yu W, Tang G, Zhang L, Corlett R. (2020). Decoding the evolution and transmissions of the novel pneumonia coronavirus (SARS-CoV-2) using whole genomic data. ChinaXiv 2020. Preprint.

Zhou P, Yang X-L, Wang X-G, Hu B, Zhang L, Zhang W, et al. A pneumonia outbreak associated with a new coronavirus of probable bat origin. Nature 2020.

Zhu N, Zhang D, Wang W, Li X, Yang B, Song J, et al.(2020). A novel coronavirus from patients with pneumonia in China, 2019. N Engl J Med. 2020; NEJMoa2001017.

Zhu Perlman S, Geleris J, Doremalen Nvan, Cao B, China Novel Coronavirus Investigating and Research Team, & NHC Key Laboratory. A novel coronavirus from npatients with pneumonia in China, 2019. NEJM 2020;(February).

Republic of the Philippines
Tarlac State University
COLLEGE OF PUBLIC ADMINISTRATION AND GOVERI
Romulo Blvd., San Vicente, Tarlac City

Date (Petsa): _____

Sir/Madame:

Good day (Magandang Araw)!

I am Aileen A. Javier RN. a Master of Public Administration- Health Management student and I am currently conducting a thesis entitled, "**PREVALENCE OF COVID-19 IN THE PROVINCE OF TARLAC"** which is one of the requirements for the degree Master of Public Administration - Health Management.
Ako ay si Aileen A. Javier RN isang mag-aaral ng Master of Public Administration - Health Management at kasalukuyan akong nagsasagawa ng isang pag-aaral na pinamagatang, "PAGLAGANAP NG COVID -19 SA

LALAWIGAN NG TARLAC*" na kung saan ay isa sa mga kinakailangan para sa degree na Master of Public Administration- Health Management.*

In this regard, I am kindly requesting your participation and support through answering the attached questionnaire. Rest assured that your name would not be shown on the research conducted. Furthermore, data given would be treated with utmost confidentiality and shall be used for academic purposes only. I am hoping for your affirmative response. Thank you very much!

Kaugnay nito, mabait akong humihiling sa iyong pakikilahok at suporta sa pamamagitan ng pagsagot sa nakalakip na talatanungan. Sinisigurado ko na ang iyong pangalan ay hindi maipakita sa pagsasagawa ng pananaliksik. Bukod dito, ang data na ibinigay ay itituring nang lubos na kumpidensyal at gagamitin para sa mga layuning pang-akademiko lamang. Inaasahan ko ang iyong pagtugon. Maraming salamat!

QUESTIONNAIRE

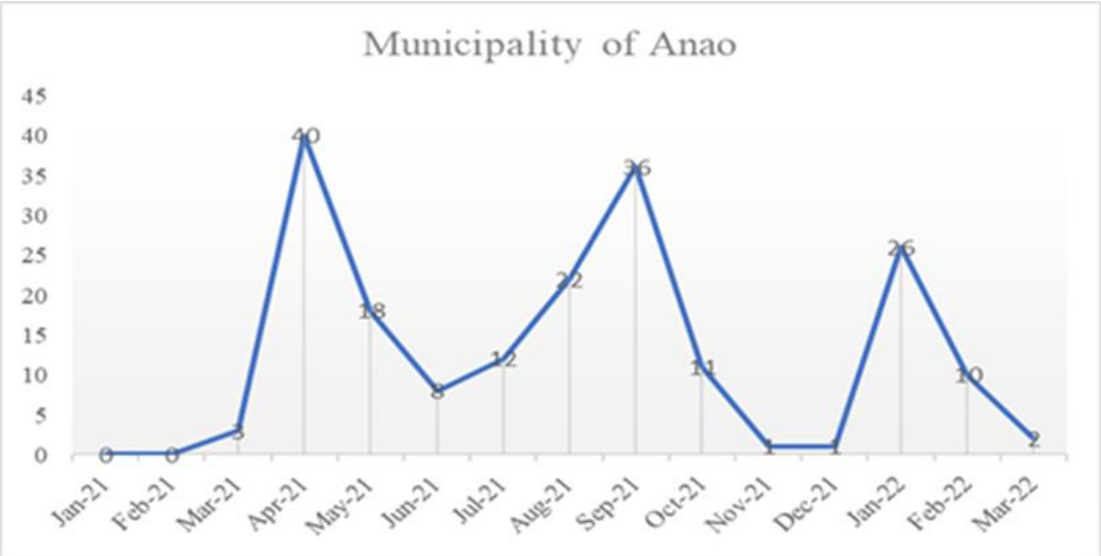
Name (Optional): _____ Sex: _____Age: _____
Civil Status: _____

Instruction: Kindly answer the following questions.

PROBLEMS ENCOUNTERED

What are the challenges you encountered in assessing the COVID-190 response among Municipality in province of Tarlac? Please put a check ( ) inside the box which corresponds to your responses. You may select multiple answer in this question. (*Ano ang mga hamon na nakasalamuha sa pag taas ng COVID-19 na tugon sa mga Municipalidad sa lalawigan ng Tarlac? Mangayaring maglagay ng tsek () sa loob ng kahon na tumutugma sa iyong mga tugon. Maaari kang pumili ng maraming sagot sa katanungang ito).*

Problems Encountered	
Limited funds for meeting the needs of covid patients. (*Limitadong pondo para sa pagtugon sa mga pangangailangan ng mga pasyente na may COVID.)*	
Inadequate number of qualified medical personnel and medical equipment. (*Hindi sapat na bilang ng mga kwalipikadong tauhan sa medicina at kagamitan sa medesina).*	
Lack of clear communication among authorities regarding Covid-19 decisions. (*Kakulangan ng malinaw na communicasyon sa mga awtoridad hinggil sa mga decisyon sa COVID-19*)	
Lack of clear vision in reproducing and disseminating Information materials from DOH and WHO. (*Kakulangan ng malinaw na paningin sa Reproducing at disseminating information materials mula sa DOH at WHO.*)	
Citizens face a lack of support on health and safety. (*Ang mga mamamayan ay nahaharap sa isang kakulangan ng supporta sa kalusugan at kaligtasan.)*	
Lack of inter LGU cooperation and partnership for appropriate response and measures to curtail and eliminate the COVID – 19 threats. (*Kakulangan ng kooperasyon at pagtutulungan ng inter LGU para sa naaangkop na pagtugon at mga hakbang para mabawasan at maalis ang banta ng COVID-19.*)	
Lack of discipline in following minimum heath standards. (*Kakulangan ng disiplina sa pagsunod sa pinakamababang pamantayan ng kalusugan.)*	



APPENDIX I

Table 12
Municipality of Anao

Date	*f*	*R*
Apr-21	40	1
Sep-21	36	2
Jan-22	26	3
Aug-21	22	4
May-21	18	5
Jul-21	12	6
Oct-21	11	7
Feb-22	10	8
Jun-21	8	9
Mar-21	3	10
Mar-22	2	11
Nov-21	1	12.5
Dec-21	1	12.5
Feb-21	0	14.5
Jan-21	0	14.5

Source of Data: TPHO-PESU

Figure 10. Municipality of Anao

Table 13
Municipality of Bamban

Date	No. of COVID-19 cases	*R*
Aug-21	160	1
Jan-22	128	2
Sep-21	119	3
May-21	75	4
Apr-21	64	5
Jun-21	61	6
Jul-21	55	7
Oct-21	47	8
Mar-21	30	9

Figure 11. Municipality of Bamban

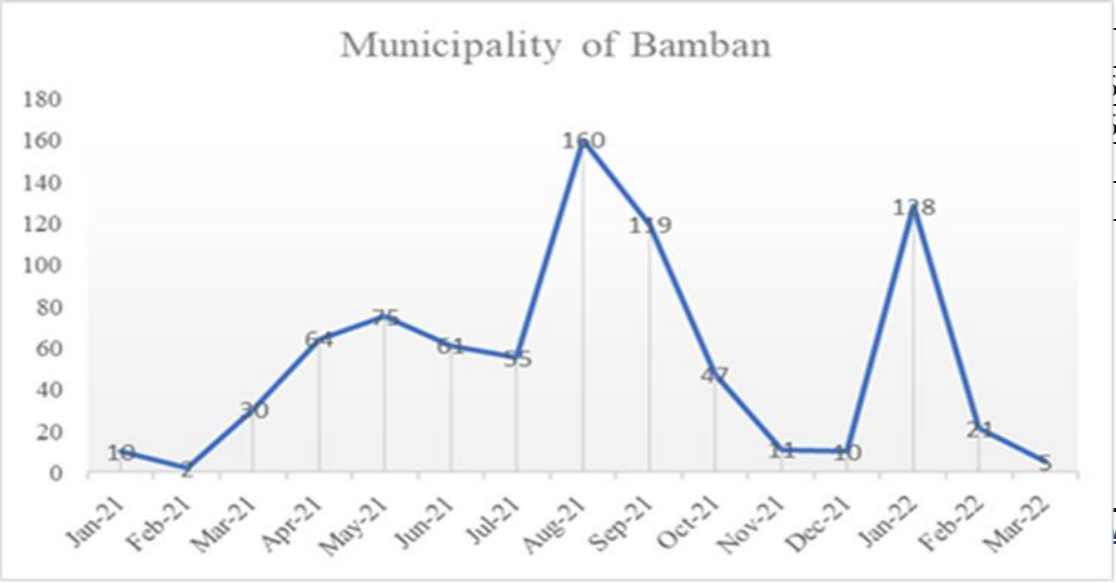


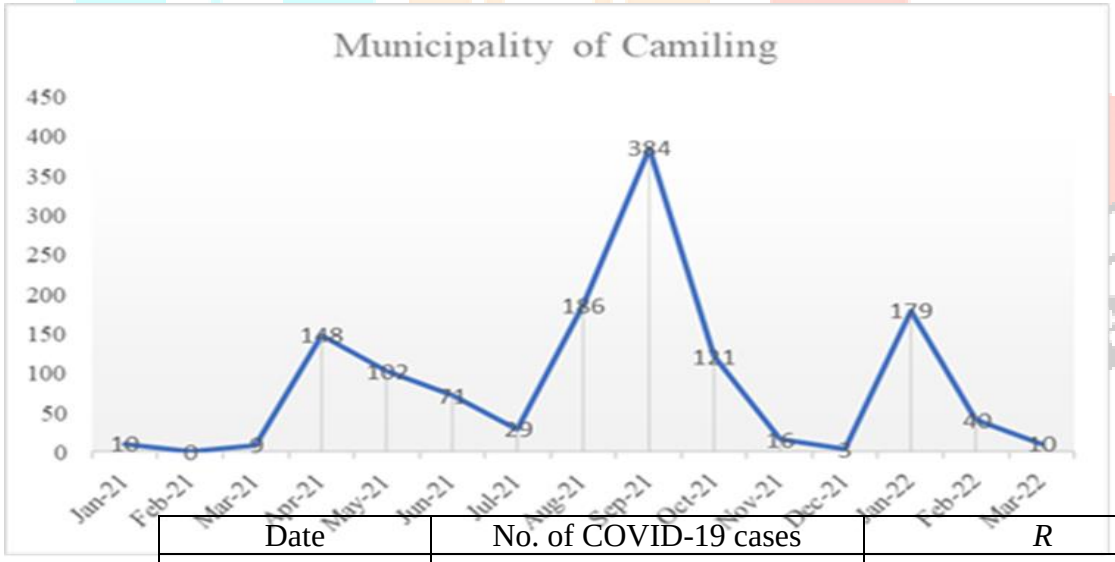
Table 14

Municipality of Camiling

Figure 12.

Date	No. of COVID-19 cases	*R*
Sep-21	384	1
Aug-21	186	2
Jan-22	179	3
Apr-21	148	4
Oct-21	121	5
May-21	102	6
Jun-21	71	7
Feb-22	40	8
Jul-21	29	9
Nov-21	16	10
Jan-21	10	11.5
Mar-22	10	11.5
Mar-21	9	13
Dec-21	3	14
Feb-21	0	15

Source of Data: TPHO-PESU



Municipality of Camiling

Table 15

Municipality of Capas

Date	No. of COVID-19 cases	*R*
Apr-21	455	1
Sep-21	374	2
Aug-21	363	3
Jan-22	298	4
May-21	219	5
Jul-21	149	6
Mar-21	117	7
Jun-21	114	8
Oct-21	112	9
Feb-22	60	10
Jan-21	49	11
Feb-21	18	12
Nov-21	14	13
Dec-21	12	14
Mar-22	5	15

Source of Data: TPHO-PESU

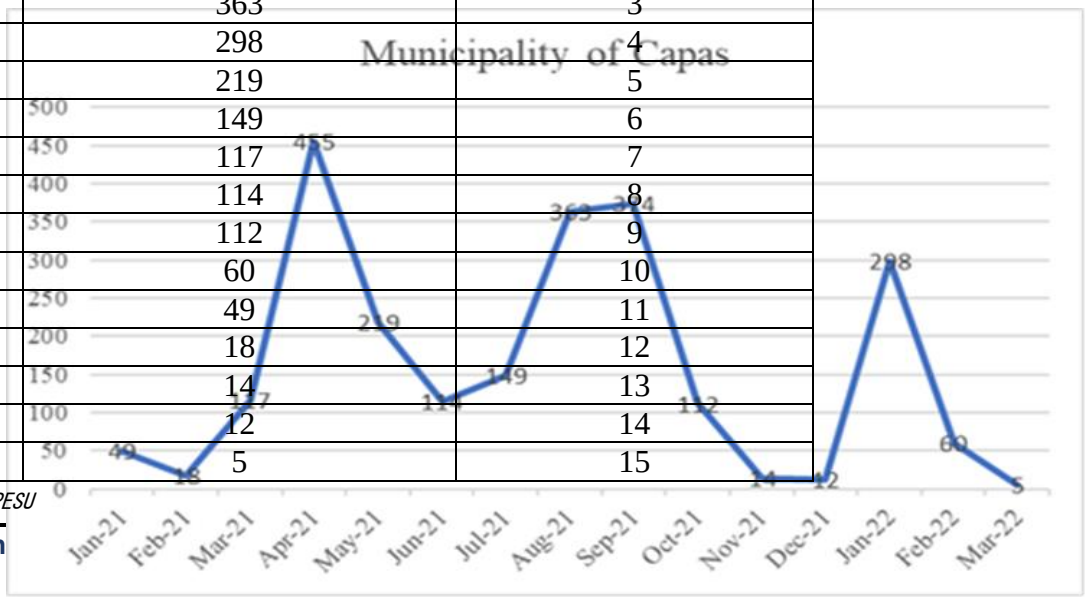


Figure 13.

Municipality of Capas

Table 16

Municipality of Concepcion

Date	No. of COVID-19 cases	*R*
Nov-21	18	11
Jan-21	16	12.5
Dec-21	16	12.5
Feb-21	15	14
Mar-22	11	15

Source of Data: TPHO-PESU

Figure 14.

Municipality of Concepcion

Table 17

Municipality of Gerona

Date	No. of COVID-19 cases	*R*
Sep-21	356	1
Jan-22	182	2
Aug-21	147	3
Apr-21	132	4
May-21	112	5
Oct-21	108	6
Jun-21	86	7
Feb-22	57	8
Mar-21	40	9
Jul-21	32	10

Nov-21	16	11
Dec-21	14	12
Jan-21	10	13
Feb-21	9	14
Mar-22	7	15

Source of Data: TPHO-PESU

Figure 15. Municipality of Gerona

Table 18

Municipality of La Paz

Date	No. of COVID-19 cases	*R*
Sep-21	157	1
Jan-22	112	2
Aug-21	107	3
May-21	67	4
Jun-21	57	5
Apr-21	53	6
Jul-21	37	7
Oct-21	36	8
Feb-22	23	9
Mar-21	12	10
Nov-21	7	11.5
Mar-22	7	11.5
Jan-21	5	13
Dec-21	4	14
Feb-21	1	15

Source of Data: TPHO-PESU

Figure 16. Municipality of La Paz

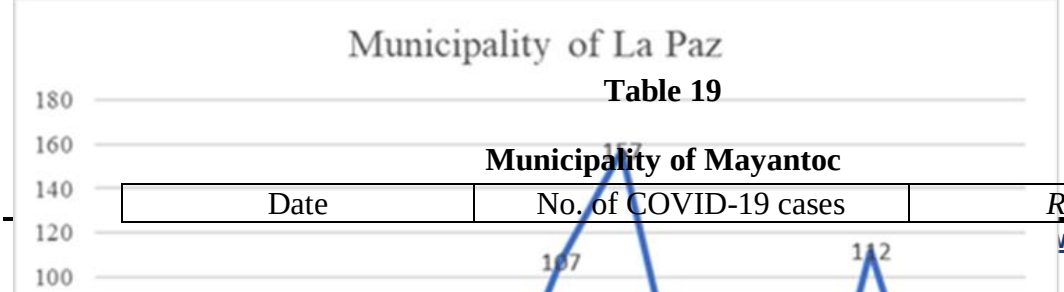


Table 19

Municipality of Mayantoc

Date	No. of COVID-19 cases	*R*

Sep-21	96	1
Aug-21	65	2
Jan-22	54	3
Apr-21	24	4
Feb-22	19	5
Oct-21	18	6
Jun-21	11	7
May-21	10	8.5
Mar-22	10	8.5
Jul-21	9	10
Mar-21	8	11
Nov-21	6	12
Feb-21	2	13.5
Dec-21	2	13.5
Jan-21	1	15

Source of Data: TPHO-PESU

Figure 17.

Municipality of Mayantoc

Table 20
Municipality of Moncada

Date	No. of COVID-19 cases	*R*
Sep-21	144	1
Jan-22	103	2
Apr-21	77	3
Aug-21	70	4
May-21	61	5
Oct-21	57	6
Feb-21	42	7
Feb-22	31	8
[illegible]	[illegible]	9
		10
		11
		12
		13
		14.5
		14.5

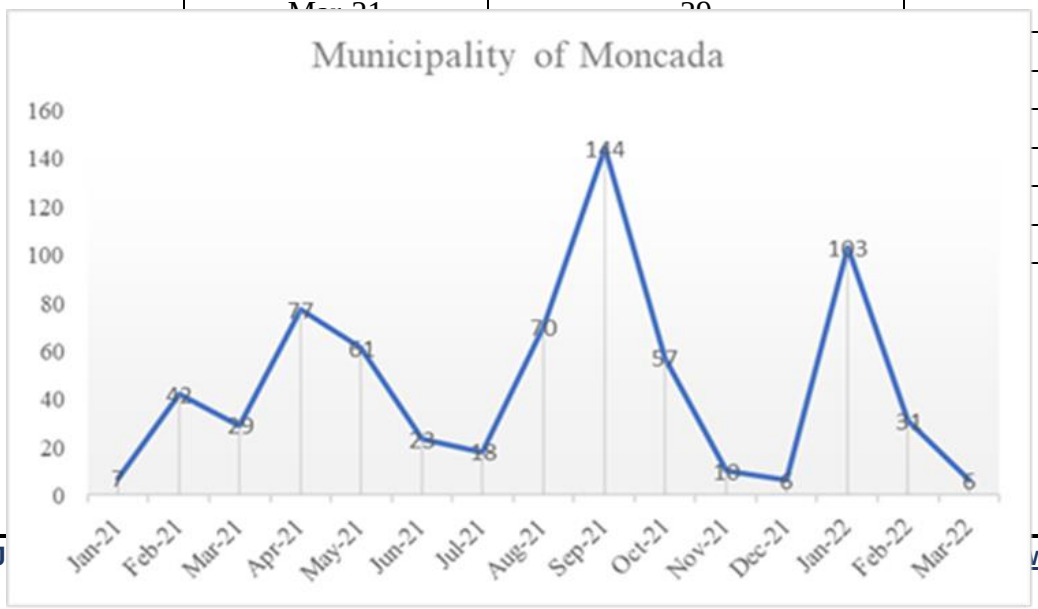


Figure 18. Municipality of Moncada

Table 21

Municipality of Paniqui

Date	No. of COVID-19 cases	*R*
Sep-21	307	1
Jan-22	205	2
Aug-21	200	3
Apr-21	148	4
Oct-21	119	5
May-21	110	6
Jun-21	63	7
Mar-21	54	8
Feb-22	53	9
Jul-21	46	10
Jan-21	22	11.5
Feb-21	22	11.5
Nov-21	21	13
Dec-21	10	14.5
Mar-22	10	14.5

Source of Data: TPHO-PESU

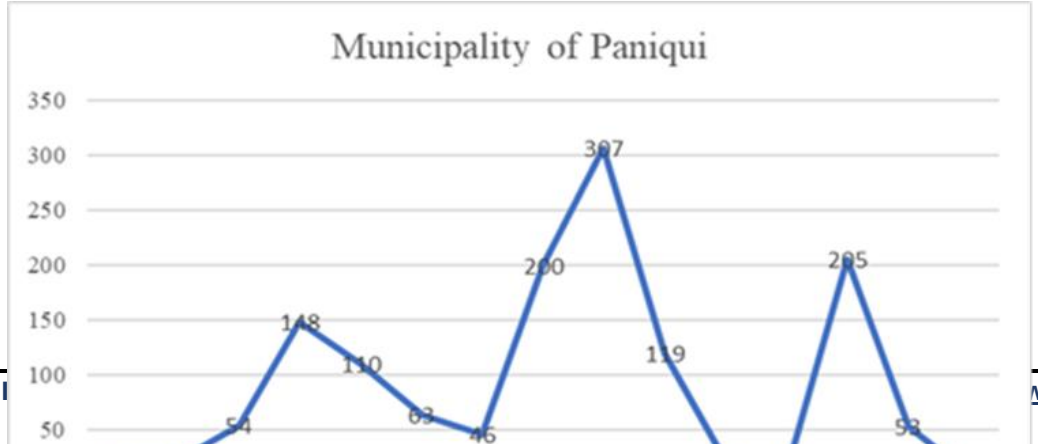


Figure 19. Municipality of Paniqui

Table 22

Municipality of Pura

Date	No. of COVID-19 cases	*R*
Sep-21	239	1
Aug-21	95	2
Apr-21	73	3
Jan-22	57	4
May-21	54	5
Jun-21	43	6
Oct-21	26	7
Jul-21	21	8
Feb-22	11	9
Mar-21	9	10
Nov-21	5	11
Feb-21	4	12
Jan-21	1	13.5
Mar-22	1	13.5
Dec-21	0	15

Source of Data: TPHO-PESU

Figure 20.

Municipality of Pura

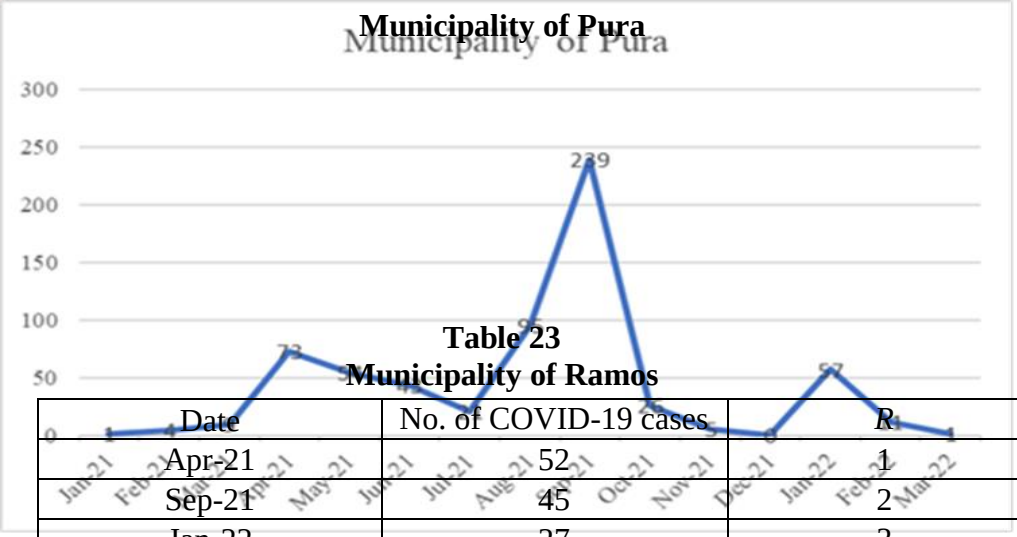


Table 23

Municipality of Ramos

Date	No. of COVID-19 cases	*R*
Apr-21	52	1
Sep-21	45	2
Jan-22	27	3
May-21	19	4
Jun-21	15	5.5
Oct-21	15	5.5
Aug-21	12	7
Mar-21	11	8

Feb-22	10	9
Jul-21	7	10
Mar-22	3	11
Jan-21	1	12
Feb-21	0	1.5
Nov-21	0	13.5
Dec-21	0	15

Source of Data: TPHO-PESU

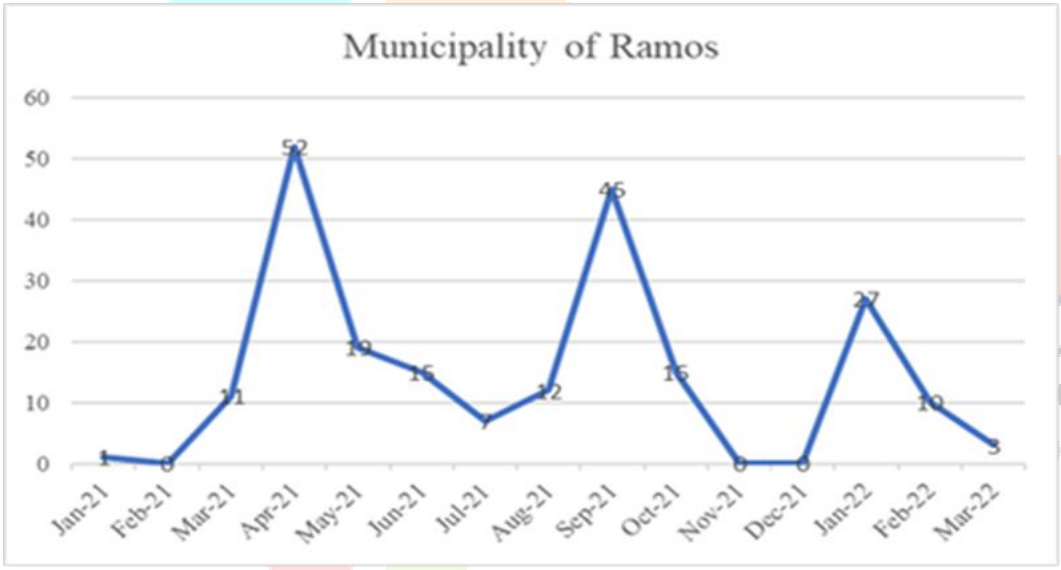


Figure 21.

Municipality of Ramos

Table 24

Municipality of San Clemente

Date	No. of COVID-19 cases	*R*
Aug-21	52	1
Sep-21	47	2
Jan-22	36	3
Apr-21	20	4
May-21	16	5.5
Oct-21	16	5.5
Jun-21	9	7.5
Jul-21	9	7.5
Feb-22	8	9
Nov-21	3	10
Jan-21	1	11.5
Feb-21	1	11.5
Mar-22	1	13

Mar-21	0	14.5
Dec-21	0	14.5

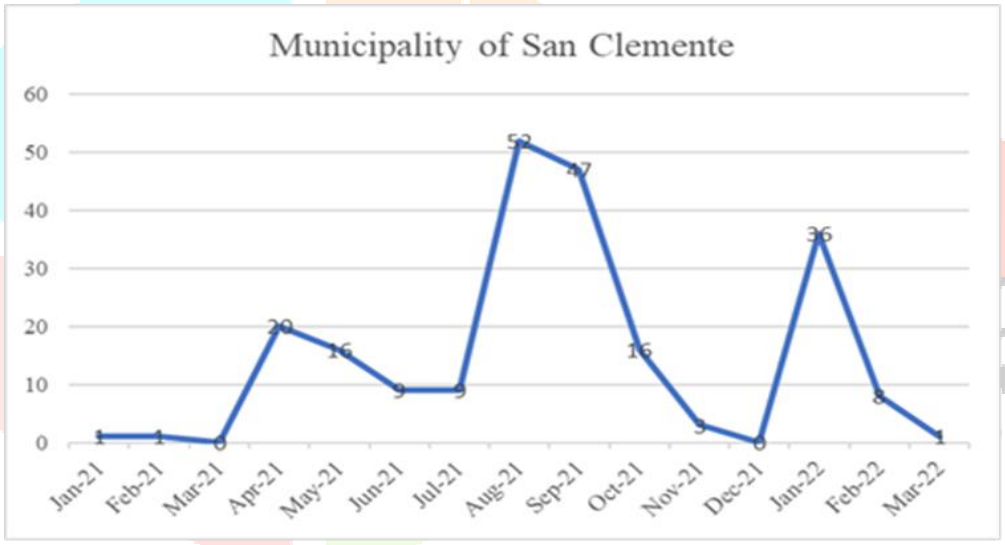


Figure 22. Municipality of San Clemente

Table 25
Municipality of San Jose

Date	No. of COVID-19 cases	*R*
Sep-21	61	1
Jan-22	60	2
Aug-21	31	3
Jun-21	30	4
Feb-22	24	5
May-21	13	6.5
Oct-21	13	6.5

Apr-21	12	8
Nov-21	5	9
Jul-21	4	10
Mar-21	3	11.5
Mar-22	3	11.5
Jan-21	2	13.5
Dec-21	2	13.5
Feb-21	1	15

Source of Data: TPHO-PESU

Figure 23. Municipality of San Jose

Table 26
Municipality of San Manuel

Date	No. of COVID-19 cases	*R*
Aug-21	37	1
Sep-21	33	2
Apr-21	16	3.5
Jan-22	16	3.5
May-21	13	5
Jun-21	9	6
Jul-21	8	7
Oct-21	7	8.5
Feb-22	7	8.5
Jan-21	2	10.5
Mar-21	2	10.5
Nov-21	2	12.5
Mar-22	2	12.5
Feb-21	1	14.5
Dec-21	1	14.5

Source of Data: TPHO-PESU

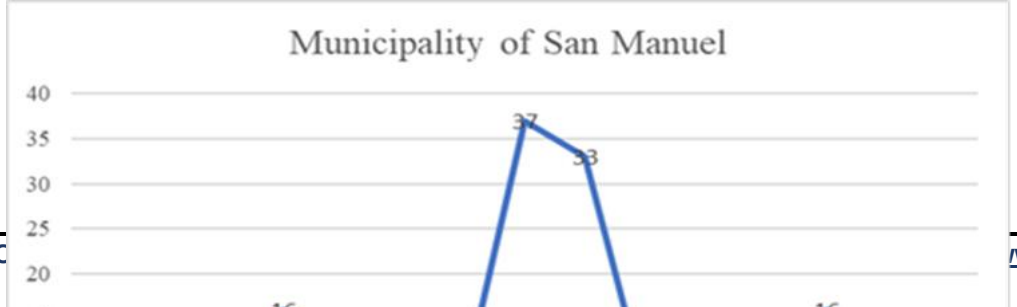


Figure 24. Municipality of San Manuel

Table 27
Municipality of Santa Ignacia

Date	No. of COVID-19 cases	*R*
Sep-21	161	1
Aug-21	111	2
Jan-22	105	3
Oct-21	53	4
Apr-21	49	5
May-21	43	6
Feb-22	26	7
Mar-21	15	8.5
Jun-21	15	8.5
Jul-21	12	10.5
Nov-21	12	10.5
Dec-21	4	12.5
Mar-22	4	12.5
Feb-21	2	14
Jan-21	0	15

Source of Data: TPHO-PESU

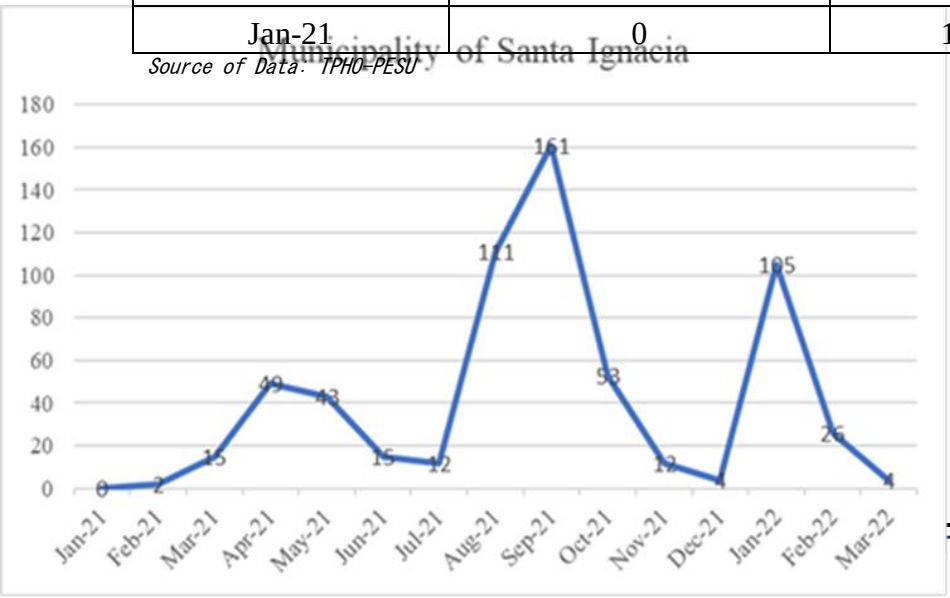


Figure 25 Municipality of Santa Ignacia

City of Tarlac

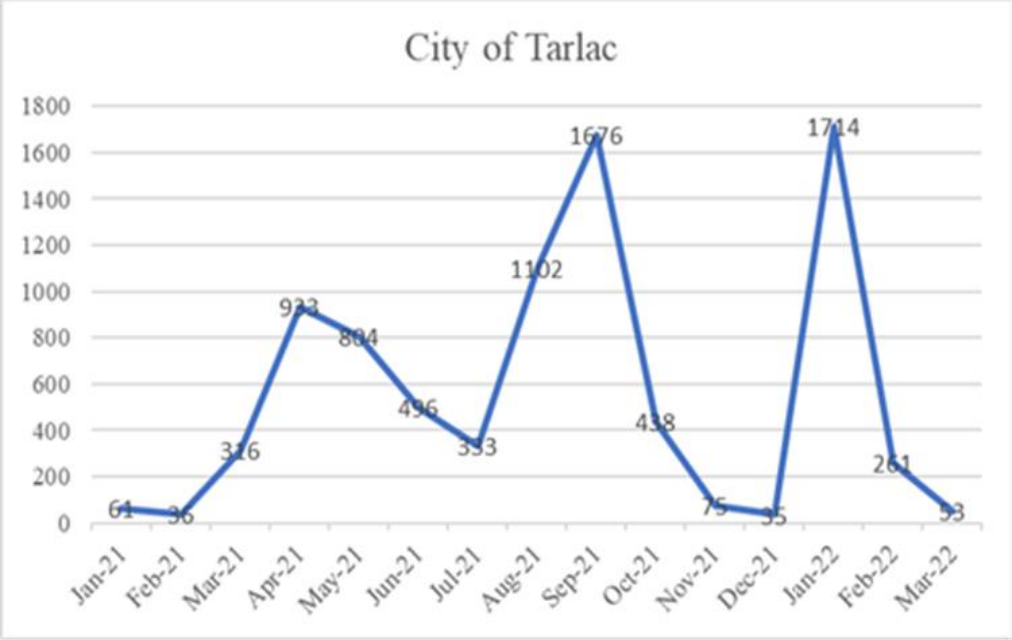
Table 28

Figure 26. City of Tarlac

Table 29

Date	No. of COVID-19 cases	*R*
Jan-22	1714	1
Sep-21	1676	2
Aug-21	1102	3
Apr-21	933	4
May-21	804	5
Jun-21	496	6
Oct-21	438	7
Jul-21	333	8
Mar-21	316	9
Feb-22	261	10
Nov-21	75	11
Jan-21	61	12
Mar-22	53	13
Feb-21	36	14
Dec-21	35	15

Source of Data: TPHO-PESU



Municipality of Victoria

Date	No. of COVID-19 cases	*R*
Sep-21	253	1
Aug-21	203	2
Jan-22	140	3
Apr-21	93	4
May-21	79	5
Oct-21	48	6
Feb-22	32	7
Jun-21	28	8
Jul-21	24	9
Mar-21	21	10
Mar-22	14	11
Dec-21	8	12
Feb-21	7	13
Jan-21	6	14.5
Nov-21	6	14.5

Source of Data: TPHO-PESU

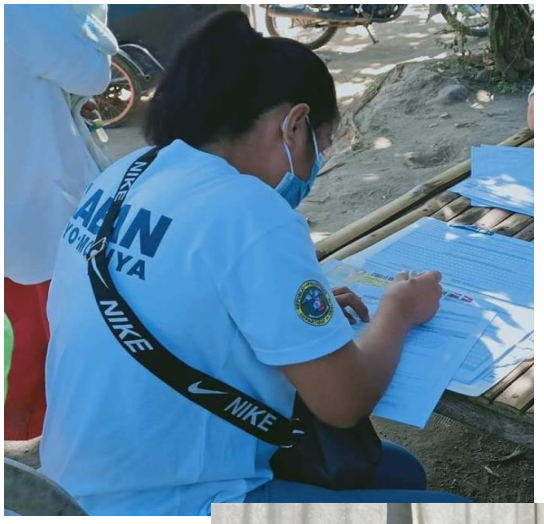
Figure 27. Municipality of Victoria

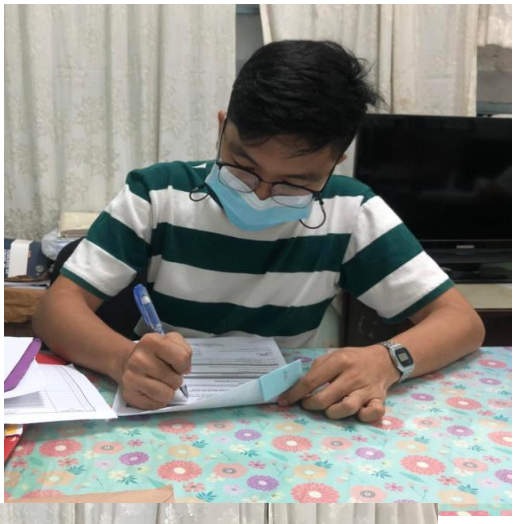
PHOTO DOCUMENTATION

Data Gathering and Interview

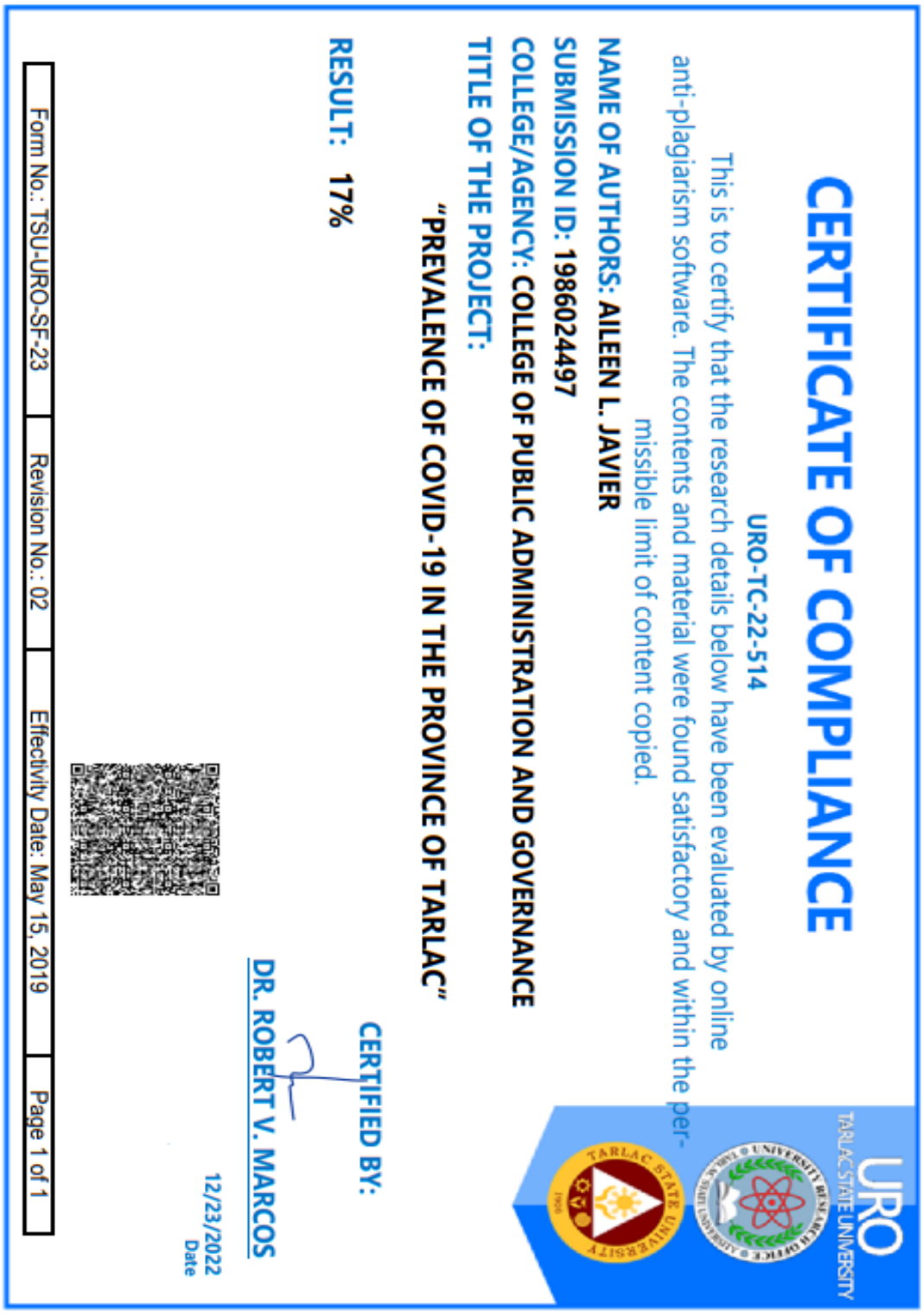
Provincial Health Office

Provincial Epidemiology and Surveillance Unit


NIKE



Actual Interview



URO
TARLAC STATE UNIVERSITY

CERTIFICATE OF COMPLIANCE

URO-TC-22-514

This is to certify that the research details below have been evaluated by online anti-plagiarism software. The contents and material were found satisfactory and within the permissible limit of content copied.

NAME OF AUTHORS: AILEEN L. JAVIER

SUBMISSION ID: 1986024497

COLLEGE/AGENCY: COLLEGE OF PUBLIC ADMINISTRATION AND GOVERNANCE

TITLE OF THE PROJECT:

"PREVALENCE OF COVID-19 IN THE PROVINCE OF TARLAC"

RESULT: 17%

CERTIFIED BY:

DR. ROBERT V. MARCOS

12/23/2022
Date

Form No.: TSU-URO-SF-23	Revision No.: 02	Effectivity Date: May 15, 2019	Page 1 of 1

CURRICULUM VITAE

PERSONAL BACKGROUND

Name Aileen L. Javier

Age 34

Birthday June 6,1988

Address 125 Tibag, Tarlac City

EDUCATIONAL BACKGROUND

Tertiary Ecumenical Christian College
Bachelor of Science in Nursing
2005-2009

Secondary Tarlac National High School
2001-2005

Elementary Tarlac West Central Elementary School
1995-2001

WORK EXPERIENCE

Wireless Access for Health, Inc.
Project Implementation Staff
2011-2015

Provincial Government of Tarlac
Provincial Health Office
Nurse II
2016- present